

How Managers of Kenyan-based Agribusiness Firms Perceive Matching Funds for Innovation Financing

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Abstract

Agribusiness innovation is vital for economic growth and diversification, and funds to support it are a major point of debate among innovation scholars and policy makers. Most investors or donors require agribusiness firms to provide matching funds contribution either in kind or cash to the innovation projects they finance. An explorative study of 12 Kenyan based agribusiness firms providing matching funds contributions revealed that managers of the firms perceive matching funds for financing their innovation to be a good thing because it shows their commitment to the project, promotes ownership, and contributes to longer term utilization of project results. This notwithstanding, the study further showed that majority of the agribusiness firms did not have policies to inform their decisions on matching funds contribution. Managers considered future business opportunity the project would create, and if the project was well aligned with the firm's core business. The study established that matching funds contributions can be improved if firms properly quantify in-kind matching funds, and by strengthening enforcement of matching funds requirement. The paper provides preliminary empirical evidence of feasibility of implementing a matching funds scheme for agribusiness innovation financing in Kenya. Key words: agribusiness, financing, firms, innovation, matching funds, Kenya.

1.0. Introduction

Agribusiness innovation stimulates economic growth and creates more job opportunities in the private sector (Food and Agriculture Organisation of United Nations [FAO] & Economic Commission for Africa [ECA], 2018; FAO et al., 2018). However, its financing is limited and complex, especially for small and medium sized agribusinesses. The predominant financing model is through credit, but most agribusinesses do not have collateral that is usually required to secure the credits (World Bank, 2016). Their income is not consistent, and they have limited capacity for good record keeping, which are attributes that commercial banks would require to prove their credit worthiness. Therefore, agribusiness financing is considered risky, thus limiting lending opportunities by financial institutions (Ngare et al., 2015).

Consequently, agribusinesses look for matching grants to finance their innovations from non-credit sources. A "matching grant" is non-reimbursable fund that is availed to a firm or group of project beneficiaries usually by an investor or donor. It is for a specific project and is provided on the condition that the recipient makes a specified contribution (matching funds) for the same project (IFAD, 2012; Sberro-Kessler, 2017). "Matching funds" are also referred to as co-funding, matching support, charity support or beneficiary's contribution towards a grant. Matching funds could be in-kind such as staff, infrastructure and any other organizational support, and/or cash contributions. Matching funds emphasize beneficiary commitment, participation and fulfillment of the intended goal of a project that is financed. The beneficiary may provide matching funds from any other sources of funds including a public granting agency (Ernstberger & Rajalahti, 2010; World Bank, 2011).

Even though matching grants remains the most popular way of financing development interventions, especially in the private sector, there are challenges to its implementation (Sberro-Kessler, 2017). The most critical challenge is that details of what matching funds should constitute, and how to operationalize these constituents are seldom explained neither in literature nor in project contracts. The interpretation of the matching funds constituents is usually left to the grant recipient and is poorly captured in financial statements.

This paper is based on an exploratory study that examined how managers of Kenyan based agribusinesses perceive matching funds to co-finance their innovation activities. The agribusiness firms that participated in study were beneficiaries of a matching grant provided by the International Centre for Insect Physiology and Ecology (*icipe*)/BioInnovate Africa (BA) initiative between 2017 and 2021. These firms were competitively selected to receive a grant for innovation that required them to collaborate with a university or public research institute. They in turn were required to provide matching funds of 25% of the total grant they received from *icipe*/BA.

2.0. Materials And Methods

2.1. Sampling method

The study focused on Kenyan-based agribusiness firms that participated in the *icipe* / BA initiative between 2017 and 2021. The sample space comprised of 16 Kenyan-based agribusiness firms.

2.2. Data Collection

Key informant interviews were conducted with the senior managers of the firms. The informants were invited to participate via emails, followed by telephone calls to confirm the time, mode and place for the interview. Out of 16 firms contacted, 12 consented to participate in the interviews. The interview took between 30 to 45 minutes: 2 were conducted via zoom, 2 via phone and 8 were conducted in-person. The questions were modified on the first 3 interviews to suit the flow and trend. Probing to further understand the respondents' ideas was done where it was deemed necessary. The interviews were recorded and transcribed. Memos and notes were written from the observations made.

2.3. Coding Process and Data Analysis

Manual coding of interviews was done considering that only 12 informants were interviewed. A total of 18 anchor codes were assigned to informants' research questions to organize data. The recorded interviews and the short notes were transcribed into text in Microsoft Word as per the anchor codes. The text lines were then numbered, and the first stage coding done by indexing using the new comment to highlight the relevant statement by first typing the respective anchor codes followed by sub-codes.

Using multiple coding strategy, a total of 342 codes were generated in the first stage coding. The codes were then extracted using the DocTool and transferred to Microsoft Excel where they were analyzed by sorting into their respective anchor codes and tallying each code. The codes were categorized, synthesized and examined (Elliott, 2018; Saldama, 2013). Data condensation was done to organize, make sense and generate themes, used to address the research questions.

3.0. Results And Discussion

Of the 12 informants, 4 were females. Eight informants had experience of more than 6 years on their current job. Ten were executive positions like managing director, while two were senior managers like production manager, who were directly involved in proposal development and project execution. Ten informants had previous experience of providing matching funds while only 2 were handling matching funds for the first time. Those with previous experience demonstrated understanding of the requirement for matching funds and had structured their operations to accommodate the investors' demands for matching funds. Firms experiencing matching funds for the first-time had to realign their operational procedures to fit the donor's demand for a matching fund contribution. They acknowledged that this was an opportunity to learn and standardize their operations. Eleven firms acknowledged that the requirement for matching funds enhanced their participation in, commitment to and a feeling of mutual partnership in the project. However, the informants had varied opinions on the blanket matching fund rate applied to all projects or agribusinesses regardless of the project type, stage of development or size of the firm.

The following sub sections presents a thematic analysis of four key themes, namely: 1) managers' perception of matching fund; 2) institutional factors that influence the choice of matching funds; 3) matching funds constraints; and, 4) how a matching fund model could be improved.

3.1. Managers' Perception of Matching Funds

In this study, perception is defined as the way in which agribusinesses understand, interpret and cost matching funds.

The informants were generally in agreement that the requirement for matching funds was appropriate and working well for them. They considered it a win-win approach to both the investor and the beneficiary (agribusinesses). Some informants viewed the investor's contribution as bridging capital or seed money, and matching funds contribution as the beneficiary's input toward the success of the innovation project. In addition, managers believed that matching funds enabled them to focus beyond the project timelines since their resources were also committed to the project. One informant explained that over-time, the project had improved his negotiation skills with other potential investors when discussing similar grants, especially what to consider before committing to a project.

Informants who were experiencing matching funds for the first-time reported an improvement in their operational procedure to accommodate the donor's requirements. Managers of firms with previous

matching funds experience reported that projects with a matching fund requirement promoted innovation much faster than projects without. Such projects also opened opportunities for investment that may otherwise would not have been possible as reported in verbatim as follows:

“R11 ... that was a good way of doing things to promote innovation for sustainability. It created a positive impact on implementation ...value addition on the innovation in terms of translating into investment much easier than normal research”.

“R01 ... it made it easier for us to invest to match the fund. That meant that we are putting up a facility that would be used in the production of a product that can be sold to the market ... the matching fund allowed us to invest in the facility for the project ... and in future we can look at expanding the facility”.

Some informants, however, held the view that the matching funds terms and conditions were rigid. Other informants felt that matching funds required by the donor were too high and out of reach for Small and Medium sized Enterprises (SMEs) and start-ups to afford. They also said that occasionally, the matching fund may not be available when needed especially if it was not budgeted for by the firm.

“R05 ... Well, matching fund projects have a bit of a challenge in that sometimes, what they are asking from people to match as a grant become [s] too much for people to haveso they abandon the project not because of expertise but because their request was too much. What will they do especially when dealing with SMEs and small firms?”

Ten out of the 12 informants agreed that a matching fund requirement was justified. They said it was necessary for firms to be committed to the project, emphasizing stakeholder ownership and partnership in the running of the business. They also reported that it elicited greater responsibility, accountability and guaranteed output from the beneficiary. However, a few felt that the requirement for matching funds created longer administrative bottlenecks or bureaucracy that made firms feel they were not being in control of the business.

“R05 ... I don't think it was fair, because there are so many administrative issues that you cannot do anything about, and yet, they want you to match. For example, our project had been stuck for the last 2 years... it is not fair. Matching fund should be used when both of you are all in control of the whole issue. You are telling me to give you an open cheque and you give me a postdated cheque”

All informants agreed that private sector should provide matching funds to show some level of commitment and ownership of the project. They equated matching funds requirement to collaterals required by financial institutions in order to provide finance to the firm. Their inspiration to provide matching funds was based on the value the project created of promoting agribusiness innovation that once adopted, would make the firm more efficient and effective in its operation. They also felt that private sector being in the business of making profits, had a duty and should endeavor to provide matching funds since they would benefit from the innovation.

“R12: As private sector we should provide matching funds in order to show some level of commitment. A 100% will bring some laxity in project implementation but when you put in some funding, you will be committed... Maybe it should be flexible both in kind and cash ... Private sector are in business to make profits. For them to gain in certain technology and they have to invest to get money”.

From the contract documents, agribusinesses were required to provide matching funds either in kind, cash or both. Different types of matching funds were provided. Majority of the informants preferred in-kind matching funds to cash. The informants confirmed that what they provided, was much more than the project requirement of 25% of the grant amount received. Majority of the informants estimated their contribution to be above 50% of the total project cost. The in-kind matching funds that most firms provided included staff salaries, allowances and expertise followed by marketing, product commercialization, rent, farm, office space and administration cost. Other firms provided consultancy or service fee as a matching contribution. Firm network, subsidizing production cost, raw material, cash and telephone costs were the least provided.

“R06: We provide support remotely, do direct calls with partners on my cost and marketing ... we do not have a cut-off point.... at the end of the project my business does not close down. For me it is not about the project, it is about the return on investment. It goes beyond the project cycle ... there is a lot that we are doing that we are not even charging the project ... the firm’s contribution is much more than 50% of the grant provided”

Firms with prior experience of working with matching funds projects had structured ways of determining and reporting their matching contribution/funds. The structured format included: using staff equivalent for costs that involved staff allowances, per diem and salaries; sharing the cost for running expenditure such as facility and utility in alternate months; prior evaluation of the facility provided as matching contribution; using market rates to determine costs such as office space and land rent; applying standard rates and fees of similar works especially when dealing with expertise and consultancy work; and finally, application of firms costing policy that governed firms operations.

“R05: We consider basically as a normal thing, we have a policy which state that if it is below 10% of office space, we do not charge. But anything more than that we charge. What we do normally when above 10%, we always sit down and consider the number of days in a week utilized in a project. The number of people occupying the office and the total is divided by the number of people. We like very simple procedure ...for staff who at least spent over 20% of their time we will use the staff equivalent, but when a staff has been brought in to take care of BioInnovate Africa Programme, we charge full time staff equivalent. In a situation where we spent more for example 100%, and BioInnovate provided 50%, we only charge 50% and that is a loss for us for”.

“R02: We consider the cost for training ... where we consider the following: the facilitator, the no of people to be trained, number of trainings, meal costs. If the training is project oriented, then we cost the entire amount to the project, but if not then we just apportion the relevant proportion”.

Majority of the informants with first time experience of managing matching funds employed unstructured ways of costing matching funds. They simply estimated the cost of matching funds to be provided. The informants acknowledged that they had challenges especially while quantifying in-kind matching contribution and would prefer reporting it in a non-monetary way. For instance, if they offered to provide training as a matching contribution, then they would only report the number of trainings held and not the cost of training. Furthermore, in-kind matching contributions such as farmer networks, linkages and intellectual property rights were very difficult to quantify.

“R10: ... It is not possible to decide how much is utilized. We never went to that extend ...They are difficult to quantified and were never quantify, we just estimate”

3.2. Institutional Factors that Influence Choice of Matching Funds

Firms possess tangible assets such as machinery, staff, land, and office space. They also have intangible assets such as farmers’ networks and linkages, intellectual property rights and good will. It is difficult for firms to select the best preferred matching contribution among many alternatives. While making choices, firms consider possible risks and opportunities they are likely to encounter with the choices made. Various firms had developed different mechanisms of determining what to provide as matching funds. The choice of matching fund was mostly governed by firm practices and implicit guidelines used over time as discussed below.

3.2.1. Firm Practices

A firm’s decision making on matching funds were dependent on the nature of the project that was funded, the level of investment and the expected project deliverables. Before committing a firm’s resources, the informants would assess the value of the project to the firm. Firms provided matching funds if the project would potentially increase market share or improve the quality of their products. The level of investment also played a key role in deciding the choice of matching funds to be provided. For instance, if a firm has assets and required only running expenses, then, it was likely to provide assets as matching funds and vice versa. The lifespan of the project and production burden experienced by the firm was also considered before decided on a matching fund.

“R02 ... I think our decision on matching funds was informed by the desire for technology adoption. The project road map that includes the activities to be done at what point. The level at which the program had reached, the lifespan of the project and the expected deliverables”

Firms also ensured that matching funds provided were aligned to the core business of the firm. Firms did not just get into a project, but they critically evaluated the project’s benefit before committing firms’

resources as matching funds. All the firms were already in operation at the start of the project, hence, the matching funds provided were aligned with the firms' road map or strategic plans.

"R01: ...we had our own property and had decided to set up offices any way and had not established ... in long run we save on operational cost. Going forward it can be channeled to product promotion, product campaign"

Furthermore, the business opportunities of the firm were considered before deciding on matching funds to be provided. Firms were more interested in the present and future benefits of their investments in the project. They considered agribusiness innovation as an opportunity to increase their profit margins by either reducing their production costs or increasing quality of their products.

"R05: For us, it is more or less about what moves the project. We look at a business opportunity if not, we don't get into it. We push it because at the end of this there is a business opportunity. We ask what do we need to move our goal? It is not cast on stones. It is dependent on the situation and circumstances. ... if need be, to change, we do it to attain our goals"

The informant's professional background and experience also played a role in selecting matching funds. Firms that had prior experience with matching fund requirement were able to use their experience with different investors in choosing the matching funds. Professionalism, interests in innovation and training of finance and administration staff of the firm offered by *icipe/BA* also featured in the selection criteria.

"R01: Basically, coming from a background in research and technology transfer and being able to deliver experience necessary, guided or inspired my decision"

All the respondents appeared to be contented with their respective practices they had employed in making choices of matching funds to be provided. The practices allowed them to be flexible and reallocate resources based on need. The informants acknowledged that the practices employed were not perfect, and were willing to continue reviewing the practices to suit the matching funds requirements.

3.2.2. Firm Guidelines

Majority of the informants reported that they did not have any formal guidelines in form of rules, regulations or policies governing decisions on matching funds. Some informants felt that developing guidelines in form of policies to govern the provision and implementation of matching funds were uncalled for since matching funds were always the discretion of the investors or donors of the project. They felt they had little room to alter the investors' policies regarding matching funds, and that agribusinesses are at the receiving end; they either take it or leave it.

Informants were divided on the need to develop a matching fund policy within their firms. They felt that there was no need as their production was based on market trends. Furthermore, the scale of production was a hindrance to any substantive policy development. Large firms considered the grant as "a drop in

the ocean” that is, a small thing, that had little influence on the output, and hence may not necessitate a policy. However, majority of the firms felt that there was need to develop a matching funds policy and suggested that the policy should be realistic and within the firm’s capacity to implement.

“R03: No those are not possible. Some of those things are just in writings. There are so many variables ... this is an SME, we can’t start having such policies, we will burn our fingers, there is a lot of competition. So, there is no policy at the SME scale, ... it is all about what the market wants. The level of our operation and the players involved also hinders policy development: we deal with university, private sector SMEs, and research institutions”.

Out of the 12 informants only 2 had used guidelines for their operations including travel, equipment, salaries, office space costs and, investors/donor engagement to calculate the firm’s cost and determine matching funds to be provided. The guidelines determined, for instance, the ownership of the machinery after being provided as a matching fund contribution.

“R02: ...oh yes, we have some guidelines that state what needs to be followed for example, when we are dealing with the donor or a competitor. We need to declare our interest in the project and vet them to understand their interest in the project so as not to appear like there is a conflict of interest”

Informants said they had different policy enforcement mechanisms. Key among these mechanisms included negotiation, regular audits and updates in meetings and reports. Some informants reported that before signing the project contract, they sit down as a team with the investor to have a common understanding of what to provide based on the firm’s resources, background and business opportunity foreseen. Regular project updates during the board meetings and audits were also employed to enforce the firm practices. Other mechanism employed included regular evaluation of the project performance, strict adherence to the project manual and exercising high level of integrity.

“R02: ... It comes with regular updates to the management, project performance presentation at least 3-4 times within a year ... through meetings to keep everyone at the top of the projects progress. To me I think these guidelines are good coz they ensure accountability and keeps everyone in picture of what is happening”.

3.3. Matching Funds Constraints

Firms encountered several constraints while providing matching funds. Several informants complained that providing matching funds required a lot of documentation, which was energy and time consuming. The complaint was about the long procurement procedures when dealing with contracted works. *Icipe/BA* also required a standardized reporting format for matching funds that the informants felt were cumbersome and amounted to delay in delivery of output.

“R01: ... there is just so much of documentations and paper work that is crazy and takes a lot of time and energy that pulls you away and can easily demotivate you from the main activity. So, we just make it as

simple as we can ... having to deal with the contractors. We are dealing with very small contractors and we have to do the work the way the project wants. It is a real push to get them do the right thing. We are a small organization to get an established contractor. In documenting there is a lot of duplication ... being the owner, I do not sign anywhere, yet I am expected to provide a time sheet as a proof for offering my time as matching fund ... the project needs to let the result speak for itself.”

3.3.1. Difficulty of Quantifying Matching Funds

The respondents felt that the project contract document was not clear about matching funds to be provided. Thus, it was felt that this might have been the cause of laxity in reporting matching funds. In addition, the contract documents were silent on operationalization of the matching funds requirement.

“R03... It is very difficult to quantify matching funds. There are a lot of variables ... but to determine how much you have put in ... we can only talk of the cost of doing that. But for the purposes of determining the cost, you can put all that scope and say training was meant for 10 agro-processing firms the total grant was KES. 2.5 million ... we were meant to provide KES. 600,000 as matching fund, you will realize we do much”.

3.3.2. Potential failures of innovation

Informants said they commit firm resources as matching funds to the project with anticipation that the project will benefit the firm. Innovation projects may have some setbacks, for instance, if the product uptake is too slow for the firm to recoup its investment in a short period of time or if the technology fails because it is too expensive to deploy.

“R05 ... Occasionally, projects do not run the way they should run especially because we get involved with inventory projects a lot, we do not know the roadblocks that we are likely to encounter in innovation”.

3.3.3. Matching Fund is Dependent on the Firms’ Financial Stability

Matching funds are fully dependent of the firm’s capacity to meet its financial obligations. Firms that are struggling financially may find it difficult to set aside some resources for the project and may prefer a pure grant than one with a matching fund requirement.

“R09: ...Yes, if the company is not stable in such cases, matching will be a challenge too.”

3.5. How a Matching Funds Model could be Improved

Informants discussed how to improve the matching funds model. They believed investors should consider the level of investment, the firms’ tangible and intangible assets and the human capacity that

would be required to support the project.

“R02: ... Re-align the financial year with the project’s matching funds requirement. Look at the financial muscles of the company, the professional capacity, the history of the project delivery status with other organization. Consider asset depreciation, exchange rate for example dollar depreciation.”

One suggestion was the need to consider the potential business opportunity likely to be created by the innovation project, especially the technical feasibility and commercial viability. Another consideration should be the time frame required for delivering the project’s output.

“R01: ... Market down approach is very important. You will be able to find out the more on the market information: what is the speed of adoption rate? ... how is the target market? ... how quick can the product be adopted in order to recoup their money to be able to break out for that period? You may have a product that has been funded, there is a niche for it but the uptake of the product is not as fast as envisaged. You need to go up there and promote the product. So, these market issues may come later after the project funding because the budget provided may not be sufficient”.

“R10: ... Some technology that are moved from lab to field need to be given some patience... the donor may not be able to evaluate ... What I know is that the entrepreneurs can never go wrong ... there are some projects that cannot go far. If it is a project, it is ok, but if it is an entrepreneur, then you must think about its continuity and technological viability in the market”.

Further, the informants believed that the investor or donor should consider the firms’ interest, its core business, firms’ policies for accountability and the size of a firm.

“R10: ... The first thing is you should have an interest of the project from the word go. You can do it with or without BAP ... What is my interest in the project? Is it to my interest that the project succeeds?”

It was observed that more emphasis is usually placed on the results and progress reports than on matching funds, since the latter is an expense that stays with the firm. Therefore, there is need to develop an enforcement mechanism that puts firms to the task of accounting for matching funds before the next batch of funds are disbursed.

“R10: ... We write proposals and they are so beautiful... but the money is not phased with the 25% matching fund. In reality it is not there. It is based on results and the progress, not the matching fund. No progress, no money. The project has been using the progress reports but not matching fund.... they write it so well that the money will be provided based on the progress and results”.

4.0. Conclusion

Managers of Kenyan based agribusiness firms perceive matching funds for financing their innovation to be a good thing because it shows their commitment to the project, promotes ownership, and contributes to longer utilization of project results. This notwithstanding, majority of agribusiness firms do not have

policies to inform their decisions on matching funds contribution. They rely on undocumented firm practices informed by professional background and experience of the managers. They also consider future business opportunity the project will create, and if the project is well aligned with the firm's core business.

Low rates of reporting matching funds were associated with difficulty in quantifying in-kind matching funds. Weak enforcement of matching funds requirement and, lack of clarity in the project contract document on the type of matching funds contribution to be made were partly responsible for the firm's laxity to document and report matching funds contribution.

Matching funds contributions can be improved by clarifying the requirement at contract signing. Firms also need to be trained on how to appropriately cost their matching funds contributions. This study confirms the feasibility of implementing a matching funds scheme for agribusiness innovation financing in Kenya.

Declarations

Availability of Data: The datasets used and analyzed during this study are available from the corresponding author on reasonable request.

Competing interest: The authors have read and understood JIE policy on declaration of interests and declare that they have no competing interests.

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