

**Strengthening Coordination Among Extension Service Providers for Improved Provision of Agricultural Extension and Advisory Services: A Case Study from Kenya**

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**Abstract**

*Implementation of decentralized and pluralistic policies in provision of extension services has led to increased availability of actors providing extension services to farmers in most developing countries including Kenya. What is unique about extension services providers is that they have a shared goal of improving agricultural productivity. However, in some cases these providers differ in their knowledge regarding the practices or knowledge that is required to improve agricultural productivity. Lack of shared knowledge among providers has contributed to delivery of uncoordinated and duplication of efforts thereby limiting the effectiveness of efforts in extension services delivery. Moreover, in some cases lack of shared knowledge has contributed towards provision of conflicting information which has left farmers confused. Enhancing coordination and collaboration among these representatives is of paramount importance if their efforts to improve agricultural productivity are to be successful. Having structures in place that bring together organizations that have shared goals is an important step in facilitating coordination. This is based on findings of a case study that was conducted in Kenya with the Kenyan Forum for Agricultural Advisory Services (KeFAAS). The results of the study provide insights that can be used as a starting point when strengthening coordination in extension services delivery in decentralized and pluralistic environments.*

**Keywords:** coordination, improved productivity, shared goals, pluralism

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### **Introduction**

Several sub-Saharan African countries including Kenya have been implementing various reforms aimed at improving delivery of agricultural extension services. The Kenyan Extension service delivery, has evolved over time starting when the government was the sole provider of extension services (Davis & Place, 2003) to the time when the provision of agricultural extension services has been commercialized (Poulton & Kanyinga, 2014). However, at present not only has delivery of extension been privatized, the Kenyan government is also implementing a pluralistic demand driven extension policy where farmers are expected to demand and pay for the services that they need (Ong'ayo, Onyango, & Ochola, 2016). The commercialization of extension service provision and the implementation of the pluralistic demand driven extension services has resulted in an increased number of stakeholders providing extension services including private extension service (Muyanga & Jayne, 2006). The implementation of the new system came with new and unique challenges. One such challenge, was the absence of a forum for communicating and connecting with all the farmers as well as coordination with other extension service providers in the country (National Agricultural Sector Extension Policy, 2012). In the past when the government was the sole provider of extension services the government, through the public extension service system, would have cascaded extension information and materials, funding, and other resources such as vehicles and equipment to all member counties. However, under the new system, communications and feedback is directed to each of the 47 counties through the council of governors. The new process has been identified as time consuming and limited to only the top leadership of the ministry can engage the council (Kenya Law Reform Commission, 2019).

The lack of a central coordinating agency has made it challenging to connect with farmers and extension service providers around the nation thereby contributing to a number of challenges such as low productivity and limited access to markets among the farmers (Boulanger, Dudu, Ferrari, Mainar Causapé, Balié, Battaglia, 2018). Similarly, disseminating technologies and innovations to farmers has also become more of a challenge particularly for those that are in more remote areas (Muyanga & Jayne, 2008). Although the devolved system is intended to make governance more efficient and locally relevant, one of the consequences is that there is not a central authority issuing policies related to local extension programming (Mwololo, Nzuma, Ritho, & Aseta, 2019)

The increased presence of private extension service providers has led to fewer extension agents in other areas. Private extension service providers tend to work and deploy their staff in more productive areas, thereby leaving small-scale subsistence farmers without access to extension services (Muyanga & Jayne, 2006). As such, there can be a disproportionate number of extension agents in certain areas based on the productivity of the area and the type of farmers, and resources, available. Moreover, in other cases, private extension service providers have been reported to promote expensive technologies thereby making it hard for resource poor farmers to adopt such technologies despite being promising in addressing farmers' needs (Ong'ayo, et al., 2016). In response to these and other challenges, the Kenyan Forum for Agricultural Advisory Services (KeFAAS) was established to serve as the coordinating body for provision of agricultural extension and advisory services (AEAS). The implementation of the pluralistic demand driven extension and the decentralization policy in Kenya provides an interesting case to examine the role of extension networks, such as KeFAAS, in similar contexts.

### **Theoretical Framework**

This study was guided by the relational coordination theory. Relational coordination is defined as “a mutually reinforcing process of interaction between communication and relationships carried out for the purpose of task integration” (Gittel, 2002, p. 301). The theory looks at coordination as being comprised of three attributes namely: *shared goals*, *shared knowledge*, and *mutual respect* (Gittel, 2012). Gittel (2011), further described the shared goals as being superior to functional goals of each player, while shared knowledge was described as the ability for the players to look at the relationships that exist between their specific functions and the contribution that constitutes the whole process. Lastly, mutual respect serves as the precursor for overcoming challenges or obstacles that may prevent individuals from appreciating and valuing the contributions of others. As such relational coordination is “measured as a network of communication and relationship ties among workgroups engaged in a common work process” (Gittel, Godfrey, & Thistlethwaite, 2013, p. 211).

Although relatively unexamined within an agricultural service provision, the theory has shown promise in related services contexts such as air travel and medical treatment (Gittel, 2011). For example, in nursing, relational coordination has been shown to be instrumental in mitigating challenges that are created due to differences in geographical proximity and levels of technological advancements (Otte-Trojel, Rundall, de Bont, & van de Klundert, 2017). Extension, as a service delivery enterprise, requires effective integration of interdependent tasks in order to ensure provision of services that are useful and meet the demands of the customer (Gittel, 2002). The presence of multiple service providers with varying levels of extension expertise necessitates the need for frequent and high-quality communication among the service providers and clientele through appropriate coordination structures (Chambers, 1997; Okorley, Gray & Reid, 2010; Pretty, 1995; Rolling, 1991). These needs must be buttressed by shared knowledge and goals as well as mutual respect to effectively address farmers’ needs (Gittel, 2011). Despite the importance of these antecedent conditions, coordination and collaboration in service delivery is a challenge facing many African countries, especially those in decentralized and pluralistic environments (Hanyani-Mlambo, 2002; Shiferaw et al., 2014).

### **Purpose and Research Questions**

The purpose of this study was to examine the role that KeFAAS plays in coordinating agricultural extension service provision in Kenya with a particular focus on the processes and outcomes of the interventions that were implemented by KeFAAS in collaboration with one example organization, the Seed Savers Network (SSN). The study was guided by the following research questions: 1) What is the background of the KeFAAS network? 2) How did KeFAAS facilitate coordination in provision of extension and advisory services in Kenya? 3) What were the impacts of the collaboration efforts?

### **Methods**

This study was part of a larger evaluation project focused on evaluating the impact of agricultural extension service delivery in Africa. Therefore, critical realism lens was used in order to understand the reasons behind successful implementation of KeFAAS efforts as well as provide practical policy recommendations for implementation and establishment of similar extension networks (Fletcher, 2017). Qualitative research methods were employed in order to capture experiences of the individuals who were involved in the establishment and implementation of KeFAAS activities from their point of view (Hammarberg, Kirkman, & de

Lacey, 2016). A single instrument case was used in order to focus on the experiences of the individuals that were involved in the process of establishing and implementing the KeFAAS network. The case-based approach allowed for in-depth observation and analysis (Creswell & Poth, 2013).

Data were collected using focus groups, observations, and key informant interviews. A semi-structured interview guide was used for collecting data during key informant interviews and focus groups. The interview guide was based on structure and framework provided in the Framework for African Agricultural Productivity (FAAP) principles, framed within the larger Comprehensive African Agriculture Development Programme (CAADP) issued by the African Union's New Partnership for African Development (NEPAD, 2015). The participants for the study included members of the Seed Savers Network (SSN) and members of KeFAAS including the network executive director, support staff, and advisory council members. SSN is an extension service organization that was identified by KeFAAS as an exemplar of coordination between KeFAAS and other extension organizations.

The SSN is a non-profit grassroots farmers' organization that promotes seed access. The vision for the network is to be a lead agent in promoting diverse seed access to farming communities in Kenya. Their mission is to conserve agro-biodiversity by strengthening communities' seed systems for improved seed access and enhanced food sovereignty by reaching out to all the farmers in Kenya, although they are geographically located in a small area within the Rift Valley. Three members of SSN were recruited for the study and participated in a focus group. A field visit was conducted at the SSN facility. The field visit included a tour of the facility provided by the SSN director, as well as discussions with two additional SSN members. The tour included the SSN seed storage facility, a review of the SSN literature that has been produced, the trial gardens where different variety of plants are grown for demonstration purposes, as well as novel planting demonstrations including a vertical garden model, composting structures, and seedling growing conditions. The focus group was conducted after the facility tour. The focus group lasted approximately one hour and allowed participants to respond to questions, as well as elaborate on themes between participants.

In addition to the SSN focus group, a total of three additional key informant interviews were conducted. The interviews were conducted with the KeFAAS director, the KeFAAS communications officer, the KeFAAS board chairperson. The interviews lasted between 30 minutes and one-hour. Additionally, a second focus group was also conducted with the KeFAAS director, board chairperson, and two other board members. The second focus group lasted approximately one-hour and was based on the same moderator's guide. However, participants were allowed to expand upon themes and interact directly with each other as well.

All the key informant interviews and focus groups were conducted in English. All the data from focus groups and interviews were transcribed. The data from the field notes, focus groups and key informant interviews were analyzed in order to generate themes and sub themes that informed the results of the study. The themes and subthemes were generated following the elements of relational theory. Therefore, three major themes focusing on how KeFAAS identified stakeholders who had shared goals were identified. Moreover, themes that emphasized KeFAAS' efforts in establishing and identifying opportunities for enhancing shared knowledge and respect were generated. Member checking of the transcribed data was conducted to ensure that the data was representative of the interviews and focus groups.

#### Subjectivity statement

As qualitative researchers, the authors wish to recognize the bias that may exist from the

primary researcher's previous experience working in similar settings, and its contribution towards the data analysis and interpretation process. The authors wish to acknowledge that the primary researcher was conducting an evaluation of the continental African Forum for Agricultural Advisory Services (AFAAS) network as part of a larger study during the time that this data was collected. Furthermore, the primary researcher has previous experience working with extension networks in over 50 countries from all six permanently inhabited continents.

## **Results**

### **Background of KeFAAS**

During the interviews and focus groups, one major theme that emerged was regarding identification of stakeholders with shared goals. From the interviews and focus groups it was reported the KeFAAS network was established in 2016 to address the need for a central coordinating structure due to the implementation of the pluralistic demand driven extension services provision in Kenya. In particular it was reported that KeFAAS focuses on providing coordination and consultative support and frameworks to improve the provision of extension services in Kenya. An emergent theme from the process was the consistent agreement amongst study participants the primary goal of KeFAAS is to address coordination issues in extension provision. However, it was also reported that having a shared goal was not enough as KeFAAS had to overcome a number of challenges in order to become a formally recognized entity in the country. The challenges included: gaining policy maker recognition, coordinating with the appropriate stakeholders, and securing funding. As a registered entity, KeFAAS initiated several activities to increase awareness of the organization, including articulating the need for the network as well as recruiting new members. An elaboration on the emergent thematic actions are provided in greater detail.

### **Communication and Marketing Materials**

In order to ensure that that the public and other stakeholders were aware of KeFAAS in terms of its objective, mission, vision and structure, the network developed and disseminated various communication and marketing materials. These materials contained information about the value and purpose of KeFAAS. Additionally, these materials included information regarding mode of conduct, expectations of members, and the role of the network. Information was provided to ensure that potential members fully understood their role as well as the role of KeFAAS and its expectations. These disclosures were provided to address some challenges that the network was already facing. For example, many potential members were already paying members of similar groups that provided little to no value, these potential members were not sure about the role and value of KeFAAS.

### **National Agricultural Trade Fair Participation**

Throughout Kenya fairs provide an opportunity for farmers, private industry, and other associated organisations to connect and network. Therefore, KeFAAS took advantage of these fairs to connect with farmers and other stakeholders. Having a physical presence at fairs gave KeFAAS an opportunity to meet face-to-face with potential members. For example, through participation at the national agricultural show in Nakuru county the KeFAAS leadership team connected with members from the SSN.

**Training and Capacity Building Activities for Members**

In addition to their communication and outreach efforts KeFAAS conducted a number of training and capacity building for its members. For example, KeFAAS delivered seven trainings for members, and potential members, on AFAAS extension focused curriculum. The trainings served a dual opportunity for KeFAAS to strengthen capacity of the agricultural industry in Kenya, but also to increase awareness for the network through shared knowledge.

**Impacts of KeFAAS Actions**

Several impacts were reported as a result of KeFAAS efforts in reaching out and coordinating with various stakeholders in the agricultural sector. The combination of communication and marketing materials and presence of KeFAAS at the National Agricultural Fair resulted in creating positive connection which made it easy for KeFAAS to identify organizations with shared knowledge. Additionally, efforts directed at providing communication materials to everyone ensured anyone interested was able to gain knowledge about the organization, whether there was shared knowledge or not. One such connection was with the SSN which resulted in the SSN registering for membership with KeFAAS. Through awareness building and validation meetings the SSN was able to visualize the benefits of joining KeFAAS as well as the overlap in shared goals between the organizations. The SSN recognized the national reach of KeFAAS and how their network would enable them to extend the impact of their information and resources much more efficiently and effectively. Additionally, SSN viewed KeFAAS as a knowledge facilitator within Kenya with legitimacy and respect that might benefit their efforts.

In terms of mutual respect, this was evidenced through SSN's connections with KeFAAS, specifically, the SSN was able to secure funding, initiate, and implement a project to catalogue local seed varieties. Recognizing the reciprocal, and mutually respectful and beneficial relationship with SSN, KeFAAS implemented a project to document indigenous crops that were grown in a limited number of counties and to then work with one university (both an SSN and KeFAAS member), to analyse the nutritional content of the crops, to then better educate farmers on those suitable for different agro-ecological zones and have high nutritional content. KeFAAS, provided technical guidance and financial assistance for completion of the project which led to completion of about 1000 questionnaires and collection of seed samples in two counties. As one representative for SSN said, "we would not have completed this project were it not for KeFAAS." Through this collaboration, several stakeholders involved with the SSN project subsequently opted to become members of KeFAAS themselves.

**Conclusions, Implications, and Recommendations**

KeFAAS efforts in connecting with other stakeholders to coordinate delivery of AESA in Kenya appear to be succeeding. A primary theme that emerged from the analysis is that part of the success may be attributed to KeFAAS' emphasis on ensuring potential members had adequate information about the role of KeFAAS as well as its value. KeFAAS was very intentional in ensuring that information provided through their communication and marketing materials focused on shared knowledge, goals, and mutual respect for membership (Gittell, 2011). To ensure that the members had shared knowledge, the network was willing to work with SSN on a project that the organization was implementing. Instead of KeFAAS dictating how to complete the project KeFAAS provided supplementary support, bringing their connections,

resources, and expertise to bear. In a mutually beneficial manner, both KeFAAS and SSN had shared goals as both were looking for ways to reach more stakeholders country.

A recommendation is for extension networks to ensure that knowledge is shared broadly and consistently amongst members and affiliated organizations. Serving as a knowledge facilitator and promoting awareness of projects and programs should help improve message consistency and mitigate the potential for conflicting information to farmers (Chowa, Garforth, & Cardey, 2013). These recommendations are consistent with those posited by the Theory of Diffusion of Innovations (Rogers, 2003). Furthermore, there is need to come up with advisory councils that include representatives of scientists, farmers and extension service providers. A committee comprised of individuals representing diverse areas of expertise will help to ensure shared knowledge is appropriately vetted. Based on recommendations within the literature a further recommendation would be to codify and make information and knowledge available in platforms that are appropriate for their stakeholders, “To improve knowledge management effectiveness RAS [extension] networks should establish a dedicated platform that is appropriate for their membership and context” (Lamm, Lamm, Davis, & Swaroop, 2017, p. 103). A noteworthy limitation for the study is the focus on one case for examination. Although not intended to be generalizable, the results should be considered within context of the breadth of the analysis. Nevertheless, it is worth noting that several scholars have emphasized the need for creation of coordinating structures in order to strengthen coordination in extension service delivery (Chambers, 1997; Okorley, Gray, & Reid, 2010; Pretty, 2003; Rolling, 1991). However, the literature remains sparse related to the practical aspects of how this coordination can be achieved. Therefore, this study provides insights as to how coordination in extension delivery was achieved by the KeFAAS network. An associated recommendation is for more research to occur within extension networks to replicate the observations of the present study. In particular, a deeper and more rigorous analysis of shared goals, shared knowledge and mutual respect should be examined further to determine their impact in enhancing extension coordination.

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