doi:10.5191/jiaee.2014.21302

Envisioning the Future of Extension and Advisory Services in the Caribbean

Wayne Ganpat
The University of the West Indies
St. Augustine, Trinidad

Amy Harder
University of Florida,
Gainesville, FL

Austen Moore
University of Illinois
Urbana-Champaign, IL

Abstract

Recent efforts have begun to renew collaborative relationships between actors leading extension systems throughout the Caribbean Community. Successful collaborations are built upon a shared vision. This study was conducted to determine the degree to which a shared future vision for extension and advisory services (EAS) existed within CARICOM countries. A qualitative approach was used to investigate the perceptions of EAS directors from nine CARICOM countries. Similar concerns about the future relevance of EAS were expressed. More diversity existed when considering primary stakeholders and delivery methods. The formal adoption of a shared vision for the region and creation of supportive policies are recommended.

Keywords: Vision, CARICOM, Extension, Caribbean, Relevance

Introduction

The countries washed by the waters of the Caribbean Sea vary widely in size, topography, ethnicity, language, agriculture production systems, primary sources of income, income levels, and styles of governance. Yet these countries are linked through the Caribbean Community (CARICOM), an organization of 15 member nations and five associate members (Caribbean Community Secretariat, 2011). Geographically, CARICOM starts with Jamaica in the northern Caribbean to Trinidad and Tobago in the southern Caribbean, but also includes Belize in Central America and Guyana and Suriname in South America.

In most CARICOM countries, the extension service is administered by the public sector (Global Forum for Rural Advisory Services (GFRAS), 2011), such as the Ministry of Agriculture or a similar Ministry. It is usually national in scope, covers most agricultural commodities, and, in some instances, forestry and fisheries. Jamaica has an alternative national system known as the Rural Agricultural Development Authority (RADA) which is a semi-autonomous statutory authority of the government (GFRAS, 2011). Apart from the Ministries of Agriculture, commodity extension services are also provided in some countries such as for banana in St. Lucia and rice in Guyana. Limited services are provided by the Caribbean Agricultural Research and Development Institute, some larger input suppliers, non-governmental organizations, and farmers' associations.

Extension in the region is based on the British model, a lasting effect from the colonial era. A review of Caribbean extension systems found technology transfer is still the dominant approach (Ganpat & De Freitas, 2010). The elaborate extension system left by the British has weakened overtime. Issues such as "inadequate budgetary support, weak policy framework, low staff morale, high farmer to officer ratio, inadequate research support, inadequate extension education at the tertiary level, competition from other information providers, low perception of extension held by decision-makers and political interference" (GFRAS, 2013, p. ii) have contributed to the erosion of extension service quality.

The continued predominance of budget-constrained extension services administered by the public sector has been a continuing cause of concern. In 1999, Campbell noted increased pressure for public sector extension to demonstrate impacts to justify the level of investment by governments and funding agencies. The pressure was even more intense in countries with pluralistic systems, because "private sector extension was delivering greater benefits to improve both quality and standard of living" (Campbell, 1999, p. 55).

Swanson and Davis (2014) observed similar weaknesses within public sector extension and noted:

> Public extension systems in the Caribbean nations have yet to pursue the range of different extension models as seen elsewhere globally. Institutional reforms are lacking, such as enhanced client orientation and participation; decentralization of service delivery; outsourcing of service delivery; and co-financing of services by direct beneficiaries. There are, nonetheless, hints of reform and development in a few of the Caribbean countries (p. 8).

Since 1962, one influential body in advancing extension in the region has been The University of the West Indies (UWI) through its Faculty of Agriculture at St. Augustine, Trinidad. The UWI Faculty

provided joint leadership with the now-defunct Midwest Universities Consortium for International Activities (MUCIA) in the last serious attempt to modernize extension, the Caribbean Agricultural Extension Project (CAEP) in the mid 1980's (Ganpat, 2013; Seepersad, 1994). The CAEP was funded by the United States Agency for International Development to increase the effectiveness of national public sector and commodity extension systems in bringing about farmer adoption of improved agricultural practices and to improve the long term effectiveness of regional institutions to backstop and support national extension services.

As part of the CAEP, the Diploma in Extension was introduced at UWI (Ganpat, 2013). This Diploma program was a one year full-time professional study program developed in response to a concern by regional governments that extension officers lacked formal extension training. Students came from several Caribbean countries, including those not in CAEP. Low participation led to the demise of the program shortly after funding was exhausted.

Nearly thirty years have passed since the collapse of CAEP with little to no regional coordination of extension. However, political attention is again turning to public extension. Policy makers are scrutinizing the extension services and demanding extension in the region be modernized to adequately support regional food security goals. Because of this concern and strident calls by policy makers for a modernized extension service in the region (e.g., Jagdeo initiative), a meeting of regional extension directors was convened in Trinidad in February 2013 by the UWI Faculty of Agriculture with financial support from the Global Forum for Rural Advisory Services. The main purpose of this meeting was to set in place mechanisms for the effective coordination and delivery of extension and advisory services (EAS) across the region for the next decade, as well as to discuss ways to provide mutual support, strengthen linkages, and access training opportunities. This study is an outgrowth of that initial meeting. The study was conducted to facilitate the conversation about the future of Caribbean EAS and will be used to guide renewed collaborative organizational efforts.

Theoretical Framework and Review of Literature

This study used Kouzes and Posner's (2007) Exemplary Leadership model as a theoretical framework. Among the model's principles, organizational leaders are encouraged to focus on creating "a shared vision" (Kouzes & Posner, 2007, p. 99) to prioritize needs and determine future direction and foci. The importance of collaborative organizational vision-setting is nearly ubiquitous among leadership theories (e.g. Kantabutra, 2009; McLean, 2006).

Creating organizational visions requires two commitments of leadership: envisioning the future and enlisting others (Kouzes & Posner, 2007). The future orientation of an organizational vision sets it apart from organizational missions that describe present purposes and operations (Kantabutra, 2009; Thompson, Peteraf, Gamble, & Strickland, 2013). Visions should "communicate what an organization wants to look like in the future" (McLean, 2006, p. 436) and present "the big picture of what you want to achieve" (Hofstrand, 2009, p. 1).

The second major component of modern leadership theories (e.g. Kantabutra, 2009; Kouzes & Posner, 2009; McLean, 2006) is the importance of collaboration that incorporates the perspectives of multiple stakeholders within an organization or discipline. Kouzes and Posner (2009)

asserted “the only visions that take hold are shared ones” (p. 21). Collaborative vision-setting also requires communication and mutual respect (Keeling, 2013). Shared vision-setting processes “foster collaboration and team spirit” (Sidhu, 2009, p. 439) within an organization or system. These factors contribute to improved motivation (Baetz & Bart, 1996; Kouzes & Posner, 2009; McNamara, 2013) and performance (Sidhu, 2003) within organizations.

Agricultural extension systems commonly use collaborative decision-making exercises and vision-setting as a precursor to more detailed strategic planning. In the Cooperative Extension Service of the United States, vision statements are often the foundation of state- or county-level strategic plans (e.g. North Carolina State University, 2013; University of Kentucky, 2013). In Texas, Boleman and Cummings (2005) found collaborative planning that included diverse perspectives increased the applicability of programming and operations and led to future successes in delivering extension services.

Collaborative vision-setting is also a key element of international extension systems and planning, where it is less commonly conducted but equally important. In a study on Ghanaian agricultural education and extension, Zinnah, Steele, Carson, and Annor-Frempong (2005) found visions developed without adequate input from stakeholders were misunderstood by constituents. The result was implementation of programming that did not adhere to the goals of the organization. Conversely, Duvel (2004) found hosting a national workshop in South Africa with representatives from national and state governments, non-governmental organizations, and stakeholders from the agricultural sector to create broader visions and guiding principles resulted in guiding principles that were better suited for a range of diverse local conditions and were more easily incorporated into extension programming. Duvel recommended a similar strategy to regional or national governments forming large-scale extension policies.

Purpose & Objectives

The ability of the participating extension directors to establish a shared organizational vision is strongly related to the degree to which renewed efforts to collaborate and modernize extension within the Caribbean will be successful (Kouzes & Posner, 1997). The purpose of the study was to understand how CARICOM extension directors envision the future. Specifically, the objectives were to describe future views of Caribbean extension and advisory services (EAS) in 2020 by each respondent, and to compare and contrast the future views among respondents.

Methods

A basic qualitative design (Merriam, 1998) was used to achieve the study objectives. Basic designs are used to “discover and understand a phenomenon, a process, or the perspective and worldviews of the people involved” (Merriam, 1998, p. 11). A basic design was appropriate for the purpose of understanding how CARICOM extension directors envision the future.

According to Lincoln and Guba (1985), “naturalistic inquiry relies upon *purposeful* [*sic*] rather than representative sampling” (p. 102). A combination of maximum variation and convenience sampling (Patton, 1980) was used. The attendees at the Regional Extension Directors’ meeting held in Trinidad during the period February 28 – March 1, 2013 were recruited to participate in the study. The attendees at that meeting agreed to support the study. Although this method of recruitment was convenient, it also fulfilled

the intent of maximum variation sampling, as the attendees represented unique countries whose local conditions may have influenced their visions for the future of EAS.

A researcher-developed survey instrument, adapted from prior visioning research conducted by Harder, Place, and Scheer (2011) with extension professionals in the U.S., was used to elicit responses from participants. Participants received an explanation of the purpose of the study, a brief explanation of the methodological process, and a description of how their responses would be used. Then, the participants were given five open-ended questions that asked them to describe (a) what Caribbean EAS should be doing in 2020, (b) for whom Caribbean EAS should be doing those things, (c) why those things are important, (d) what success will look like if Caribbean EAS is operating with excellence in 2020, and (e) what values will guide the work of Caribbean EAS? The questions were grounded in McLean's (2006) conjecture that a vision should specify what the organization will do or be, for whom it will do those things, and what values will guide the work.

Data collection occurred via e-mail from July to December in 2013. One of the researchers, who had an established relationship with the population, e-mailed the survey instrument to the potential participants. Twelve directors were initially contacted. They had previously committed at the regional meeting to assist with the survey. A two week period was given to respond. This deadline was not kept by most participants and the researcher sent multiple reminders.

Responses were received from directors in ten CARICOM countries (Antigua, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad). While Trinidad and Tobago are one country, the islands have separate extension systems and only Trinidad's system was represented in this study. One additional country was excluded from analysis because the participant based his/her responses on a vision for a regional extension board rather than a vision for locally delivered EAS.

Data were analyzed following the procedures of a template analysis (King, 2012). A template analysis is commonly used for textual data, including interview transcripts, diary entries, and open-ended responses for written questions, as were used in this study. In template analysis, an initial coding template is developed by the researcher to organize themes from the data "in a meaningful and useful manner" (King, 2007, para. 1). Hierarchical coding provides a framework for organization such that broad themes are eventually subdivided into narrower concepts. *A priori* themes may be used on the initial template; in this study, the *a priori* themes aligned with the five stem questions. The initial template was further developed after analyzing four of the participants' responses using line-by-line coding. Per King (2007), the initial coding template was then used to guide the coding of the entire data set with appropriate modifications occurring as new themes emerged that were not captured in the initial template. The themes that emerged from the line-by-line coding of individual responses were used to address the first objective, which was to describe each respondent's future views of Caribbean EAS in 2020 by each respondent. The final template that resulted from analyzing the collective group of responses provided the basis for addressing the second objective, which was to compare and contrast the future views among respondents.

Qualitative research carries with it the potential for researcher bias. Two of the

researchers for this study are faculty members teaching extension education at large universities. They have a combined 40 years of experience working directly for government-led extension in their home countries. The third researcher was a doctoral candidate in extension at the time of the study. One of the researchers is from the Caribbean; the other two researchers are from the United States. All researchers share a common interest in developing the capacity of extension systems.

Several methodological decisions were made to limit the potential for bias. First, the researcher who collected the data, and is well acquainted professionally with the participants, did not participate in the initial analysis of the data. Although this researcher's prolonged engagement with extension in the Caribbean helped establish the credibility of the study in that respondents were more likely to trust him (Lincoln & Guba, 1985), there existed a danger of introducing the bias associated with going native in the analysis of data. Therefore, the second researcher independently analyzed the participant responses, which were stripped of any identifying information.

Some researchers (e.g., Mays & Pope, 1995) hold the view that inter-rater reliability is an important technique for qualitative research. However, other qualitative methodologists argue inter-rater reliability "does not serve our understanding of being credible in naturalist research" (Anzul, Ely, Freidman, Garner, & McCormack-Steinmetz, 2003, p. 164). In 1997, the former editor of *Qualitative Health Research*, Morse, argued:

> [A] comprehensive understanding of data bits cannot be acquired in a few objective definitions of each category. Moreover, it cannot be conveyed quickly and in a few definitions to a new member of the research team who has been elected for the purpose of determining a percentage agreement score. This new coder does not have the same knowledge base as the researcher … and therefore does not have the same potential for insight or depth of knowledge required to code meaningfully (p. 446).

Barbour (2001) contended "The greatest potential of multiple coding lies in its capacity to furnish alternative interpretations and thereby to act as the 'devil's advocate'" (Multiple coding, para. 3). Such a process does not require multiple coders or the calculation of inter-rater reliability. Anzul et al. (2003) instead "endorse the idea of checking and honing our findings with a support group" (p. 164). Consistent with Anzul et al., an internal debriefing was conducted with the research team following the initial analysis to discuss the findings and develop the final interpretation of the data.

The researchers sought to establish trustworthiness using techniques recommended by Lincoln and Guba (1985). An audit trail consisting of the raw data, data analysis templates, memos, and drafts of the findings was kept. Regular communication regarding the study took place between the researchers, including a face-to-face meeting to discuss the initial data analysis. The team approach to this study was itself a technique to help establish trustworthiness as the use of multiple investigators is a form of triangulation (Lincoln & Guba, 1985). Additionally, two professionals, who were uninvolved in the research, were included in the process as peer debriefers. Finally, a member check was conducted via e-mail to allow respondents to verify the accuracy and interpretation of the findings.

Findings

The Future of Caribbean EAS, According to Respondent

The findings for the first objective are presented by respondent to capture the uniqueness of each respondent's perspective on the future of EAS in the Caribbean. Further, the findings have been written to represent the synthesized results of the line-by-line coding of each respondent's answers to the five open-ended questions, with illustrative quotes interwoven. Respondents provided different levels of depth to the prompts provided on the survey instrument; accordingly, there is considerable variance in summary depths for their responses.

Respondent 1 (R1).

A changing agricultural context in the Caribbean has created the need for farmers/producers to view themselves as small business owners as a pathway to financial security and improved quality of life. R1 stated "Farmers or rural producers are operating in a different environment from when the extension function was first concretised [*sic*]." Environmental changes included "greater and wider ranging competition;" increasingly complex production, marketing, and promotion systems; and longer and wider value chains with "more actors and types of actors." EAS must be prepared to provide "services within the framework of farming as an entrepreneurial activity, income stream and livelihood option" so that clientele "can in fact graduate from being a primary extension beneficiary or target."

Additionally, R1 observed "The entry age and the educational background of farmers/producer [*sic*] has changed significantly" with younger, more educated individuals entering farming in comparison to historical trends. The new generation of farmers/producers is prepared to access technology to find answers to their questions so "the role of extension as the provider of *fertiliser or dewormer information* [*sic*] is not as critical as previously." Instead, EAS will provide value-added services – beyond the farm gate – such as assistance with social media usage and debating the merits of using loans for business expansion. Such services will require EAS officers to blend traditional roles with contemporary ones so they are able to "be technological change agents, non-formal educators, motivators, animators, and empowers (*sic*)."

EAS' future relevance and productivity is dependent upon its officers being "able to respond to the changing environment of the farmer/producer and facilitate their decisions" in all aspects of farming, not only production. Although technology transfer will remain a priority, the technologies will be entrepreneurial in nature, "i.e., production tech, promotion tech, marketing tech, networking tech, delivery tech, credit tech, savings tech, etc." This will require an EAS workforce capable of acting as small business advisors.

Respondent 2 (R2).

EAS' role will be to work with multiple actors within the agricultural value chain. These actors include "producers, processors, traders, credit institutions, agricultural service providers, consumers" and more, within an agricultural realm. Such work will occur systematically through the development of innovative, "high impact programs" using "multidisciplinary teams" to provide "individuals with problem solving information which will result in the ultimate development of the user of the service." Such capacity development will occur through "technology transfer, advisory work and human resource development."

Outcomes of high impact EAS programs will result in increased production and human capacity, improved quality of

life, "increased incomes for farmers and all other stakeholders," improved country and regional economic self-sufficiency through increased consumption of domestic commodities, and increased export. Conversely, successful EAS work will lead to "reduced imports of selected agricultural commodities to the region." Ultimately, if EAS is operating with excellence in 2020, there will be "achievement of food security in the Caribbean."

Respondent 3 (R3).

To be a valued and relevant organization in a changing environment, EAS' role should be to promote improved livelihoods and increased food security. Historically, "Good extension organizations in the Caribbean have contributed immensely to the development of rural communities." Moving forward, EAS must concentrate on contemporary challenges to achieve success.

EAS will work "to improve livelihoods in rural communities" while acknowledging "the importance of the human being, particularly those who are disadvantaged." This pro-poor philosophy will be realized by "training, coaching and educating" rural people/communities to lead to improvements in knowledge, skills, and attitudes. More specifically, sustainable agriculture will be promoted "to ensure a level of food and nutrition security within rural communities." Supportive policies will reflect and support this role for EAS.

Respondent 4 (R4).

Present methods of EAS are inadequate: "The contact farmer method of training farmers is not producing the desired results." Although still strongly committed to efficiently serving farmers, future work must move away from a historical top-down, contact farmer approach to "a more participatory approach" for training farmers, who are the primary clientele for EAS. Done successfully, EAS will create "improvement in the overall livelihoods of farmers."

Respondent 5 (R5).

EAS' role will be to enhance food security in the Caribbean region; these services "are critical to the development of the Caribbean." Linkages between multiple actors in the agricultural value chain, including researchers, farmers' groups, and credit lenders will be facilitated by EAS. EAS will continue to provide advisory services and training to farmers to increase productivity. Together, EAS' efforts will contribute to a "Productive Caribbean Agricultural sector."

Respondent 6 (R6).

EAS will be a knowledge broker in a complex, interrelated public sector that includes "allied service providers (e.g. planning, water & the environment, funding agencies, finance, research, education, social services, regulation, trade/commerce)." It will serve the Caribbean by promoting innovative, sustainable agricultural solutions to better position farmers within the value chain, thereby enhancing their livelihoods. According to R6, "A value chain approach is necessary for optimal returns from the sector" while a focus on sustainable agriculture is necessary due the sector's "significant negative impact on the environment and therefore its vital natural resources."

EAS will be committed to making measurable progress towards attaining food security for the Caribbean, cooperating with "individual governments and related stakeholder entities," and reducing praedial larceny. To accomplish these outcomes, EAS will facilitate "timely access to requisite information on the appropriate technologies, practices, inputs and associated impact therefrom." Success will

be dependent upon “adequate inputs from other sectors.”

Respondent 7 (R7).

Technology has changed the environment in which EAS operates. The “developments in communication methodologies dictate that there be improvements in the way service providers interact with clientele.” Embracing technology will be part of EAS’ evolution into “knowledge brokers for clientele.” Clientele include schools, producer cooperatives, interest groups (e.g. diabetic and hypertensive groups), marketing entities, and input suppliers. EAS will seek to increase “productivity of clientele and their agri businesses” by providing timely access to needed information, and in so doing, will increase demand for its services and will “have won the confidence of clientele for being reliable and relevant.” Collaborations inside and external to the region and a commitment to “becoming ‘learning organizations’” will drive EAS as it strives to determine “best practices in terms of service delivery and technical advisories.”

Respondent 8 (R8).

EAS will continue its long tradition of “advising” and “demonstrating” new techniques to its clientele, farmers. A value of “honesty” will guide its work. Looking forward, EAS will “continue to improve the livelihood of farmers.”

Respondent 9 (R9).

EAS’ role will combine the best of its historical roots with innovative new approaches to empower clientele to improve their livelihoods. EAS will continue as “an information resource provider” but will also serve as “Networking facilitator to clients, promoting functional value chains among farmer cooperatives and companies.” Advice will continue to focus on agricultural development while expanding an emphasis on marketing opportunities. “Personal interaction with all stakeholders” will continue to be emphasized. Stakeholders will include “all persons along the value chain” as well as “youth to harness their potential to contribute to the [agricultural] sector.”

The Internet will be an important tool for communicating with all actors in the value chain, enabling EAS to reach additional clients “and not only in the country in which extension operates.” Expanding linkages with clientele as well as with other non-governmental extension service providers will strengthen EAS’ ability to “be at the forefront of information providers and collaborators” in an open market. Although “much more than excellent extension is required” to achieve a “well functioning agricultural sector,” successful EAS will be characterized by “clients who are empowered to have successful operations.”

Similarities and Differences among Future Views of Caribbean EAS

Respondents’ responses reflected three broad themes as they considered the future of Caribbean EAS in 2020: delivery models, stakeholders, and relevance. Within each primary theme are contained secondary and tertiary themes, all derived from the participants’ responses and the analysis of their responses.

Delivery models.

Respondents described different models of EAS delivery that will be used in 2020. Some respondents favored a more traditional approach to EAS, focused on the continuation of the technology transfer model (R1, R2, R7, R8) and its top-down (R5) approach. The traditional models discussed align with a belief that the role of

EAS should be to train (R3, R4, R5) clientele. However, respondents also suggested more innovative models of EAS that align with a desire to empower (R1, R2, R3) clientele. EAS will serve as a facilitator (R1, R5, R6, R9) or knowledge broker (R7, R9), follow a participatory (R4) model, and/or actively influence policy (R3). A blend of approaches was advocated to achieve the common goals of improving livelihoods (R1, R2, R4, R6, R8, R9) and increasing food security (R2, R3, R5, R6).

Stakeholders.

Respondents explicitly identified farmers (R4, R5, R6, R8) as a primary audience for EAS; sometimes they identified farmers as the only audience (R4, R8). Similarly, producers (R2, R7, R9) were explicitly identified as target audiences. Only one respondent (R1) named both producers and farmers. A philosophical divide was observed between the respondent who advocated a pro-poor (R3) orientation to selecting target audiences, while another specifically stated EAS should work with all income levels (R1). Value chain actors (R1, R2, R6, R7, R9), agricultural organizations (R5, R7), and youth/schools (R7, R9) were also mentioned by respondents as target audiences in 2020. A few respondents indicated less traditional audiences, such as allied service providers (planning commissions, funding agencies, finance, social services, regulation, trade/commerce) (R6), Ministries of Agriculture (R5), consumers (R2), and banks/credit institutions (R1, R2), would become clientele for EAS moving forward. Respondents who suggested these types of clientele were more likely than their peers to envision EAS playing an important role in developing capacity within the agricultural value chain.

Relevance.

The concept of relevance was discussed by many respondents as they sought to frame their thoughts on the future of EAS; statements about relevance often served as qualifiers for descriptions of what future success would look like. Concerns about declining relevance (R1) and uncertainty about future relevance (R1, R3, R7) contrasted with expressions of an overt desire for increased relevance (R3). Influences on relevance were perceived to be a changing environment (R1, R3) in terms of socio-economics (R3) and technology (R1, R7). Inadequate delivery methods (R1) were noted and the increased use of technology (R7, R9) was mentioned as a solution for improving relevance. Evidence of relevance in 2020 was thought to include clear demand for services (R7) and a willingness of clientele to pay fees for service (R7).

Conclusion, Recommendations, and Implications

The findings of this study showed that while extension directors have been working with limited interactions with each other, they have some commonalities in their vision, desires, and expectations for effective EAS in the region.

The three major themes distilled from the responses by directors need special attention if EAS is to be strengthened in the region. The issue of relevance has to be addressed as top priority. GFRAS (2013) noted low perceptions of extension held by governments; the repeated emphasis by the directors for EAS to be viewed as relevant suggests they are aware of this issue. Their concern is justified, given Campbell's (1999) observations of the increasing pressure for public sector extension to prove its worth.

A perceived lack of organizational relevance can lead to undesirable carryover effects on personnel. Staff who feel

irrelevant to national agricultural development may become de-motivated, further weakening what level of service is being provided. Regional and national plans need to clearly define the role and value of EAS in agricultural development. Revisions to government policies may also contribute to the development of a shared EAS vision across CARICOM by addressing the appropriate/preferred scope of programs, use of varied extension approaches (e.g. technology transfer vs. participatory), and identification of target clientele.

In some of the countries surveyed, the vision of the modern clientele base has expanded beyond traditional farmers and producers to include other actors in the value chain like marketers and processors. Moreover, some directors noted the need to work with allied service providers. These findings support Swanson and Davis' (2014) observation that some Caribbean EAS systems are more progressive than others. Agricultural development may by stymied if all the actors in the value chain are not given the required attention; however such a pursuit will require financial and human resources that may exceed the projected capacity of a single country system. Continuing to work independently is likely to limit the potential of Caribbean EAS systems to be impactful.

In this regard, the Caribbean Agricultural Extension Providers Network (CAEPNet), a newly formed grouping of extension directors and professionals, has a role to play to champion the placement of EAS on the policy-making agenda of governments across the region. The annual meeting of Agriculture Ministers presents an opportunity for EAS advocates to make an argument for its relevance. Extension directors and their officers need formal assurance that they have the support of government and recognition that their work contributes meaningfully to meeting food security and economic livelihood goals.

With regard to delivery methods to be pursued, some indication of the preferred method could be suggested in a regional policy statement. Consistent with Ganpat and De Freitas (2010), the findings indicated some directors prefer the traditional top-down, technology-transfer approach. Others directors are willing to embrace more participatory approaches focused on farmer empowerment and learning. This situation highlights the opportunity for extension research in this area to determine which approach or mix of approaches may be most appropriate.

Research is needed to identify best practices suitable for countries or groups of countries in the region. Collaboration with extension departments in other universities which have strong extension research capabilities, and are familiar with Caribbean systems, will add to the capacity of Caribbean academic institutions such as the UWI to conduct the needed research. Action areas for extension research should be identified for the region and external funding pursued to address the resource limitations of most regional governments.

This study provides a foundation for the development of a shared vision (Kouzes & Posner, 2007) for EAS in the Caribbean. Effective leadership requires partnership with other extension stakeholders and the inclusion of multiple perspectives to generate shared objectives and direction for the Caribbean region (Kouzes & Posner, 2007). Working together, a renewed Caribbean coalition such as the CAEPNet can generate the motivation and support needed to ensure EAS achieves its shared vision of future success.

References

Anzul, M., Ely, M., Freidman, T., Garner, D., & McCormack-Steinmetz, A.

(2003). *Doing qualitative research: Circles within circles*. London: Routledge.

Baetz, M. C., & Bart, C. K. (1996). Developing mission statements which work. *Long Range Planning, 29*(4), 525-533.

Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: A case of the tail wagging the dog? *British Medical Journal, 322*(7294), 1115-1117.

Boleman, C. T., & Cummings, S. R. (2005). Listening to the people: A strategic planning model for Cooperative Extension. *Journal of Extension* [Online], *43*(3). Retrieved from http://www.joe.org/joe/2005june/tt3.php

Campbell, D. A. C. (1999). Managing public sector extension organizations: Some critical issues. *Journal of International Agricultural and Extension Education, 6*(2), 55-59. doi: 10.5191/jiaee.1999.06207

Caribbean Community Secretariat. (2011). *CARICOM member states*. Retrieved from http://caricom.org/jsp/community/member_states.jsp?menu=community

Duvel, G. H. (2004). Towards an appropriate extension approach for South Africa: From model to principles. *Proceedings from 2004 Conference of the Association for International Agricultural and Extension Education, Dublin, Ireland,* 580-587.

Ganpat, W. (2013). *History of agricultural extension in Trinidad & Tobago*. Kingston, Jamaica: Ian Randle Publishers.

Ganpat, W. & De Freitas, C. (2010). ICTs for extension in the English speaking Caribbean. In R. Saravanan (Ed), *ICTs Worldwide Experiences* (pp. 45-89). New Delhi, India: New India Publishing Agency.

Global Forum for Rural Advisory Services (GFRAS). (2011). *Worldwide extension study*. Retrieved from http://www.g-fras.org/en/world-wide-extension-study

Global Forum for Rural Advisory Services (GFRAS). (2013). *Regional extension meeting on "Networking for Change."* Retrieved from http://www.g-fras.org/images/members/caribbean/Caribbean-Regional-Extension-Meeting-proceedings-GFRAS-web.pdf

Harder, A., Scheer, S., & Place, N. (2011). Improving the future of U.S. Cooperative Extension: A Delphi study. *Journal of Extension Systems, 27*(2), 1-10.

Hofstrand, D. (2009). *Creating a mission statement, developing strategies, and setting goals*. C5-09. Ames, IA: Iowa State University Extension. Retrieved from http://www.extension.iastate.edu/agdm/wholefarm/html/c5-09.html

Kantabutra, S. (2009). Towards a behavioral theory of vision in organizational settings. *Leadership and Organization Development Journal, 30*(4), 319-337.

Keeling, M. (2013). Mission statements: Rhetoric, reality, or road map. *Knowledge Quest, 42*(1), 30-36.

Kouzes, J. M., & Posner, B. Z. (2007). *The leadership challenge* (4th ed.). San Francisco, CA: Jossey-Bass.

Kouzes, J. M. & Posner, B. Z. (2009). To lead, create a shared vision. *Harvard Business Review, 27*(1), 20-21.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Mays, N., & Pope, C. (1995). Rigours and qualitative research. *British Medical Journal, 311,* 109-112.

McLean, G. (2006). *Organizational development: Principles, processes, performances*. San Francisco, CA: Berrett-Koehler Publishers.

McNamara, C. (2013). *Basics in developing mission, vision, and values statements* [Online]. Retrieved from http://managementhelp.org/strategicplanning/mission-vision-values.htm

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.

Morse, J. M. (1997). "Perfectly healthy, but dead": The myth of inter-rater reliability. *Qualitative Health Research, 7,* 445-447.

North Carolina Cooperative Extension. (2013). *Strategic framework*. Retrieved from http://www.ces.ncsu.edu/files/library/0/Strategic_Framework_FINAL.pdf

Seepersad, J. (1994). Improving agricultural extension through a systems approach: Lessons from the Caribbean Agricultural Extension Project (CAEP). *Journal of International Agricultural and Extension Education, 1*(2), 22-27. doi: 10.5191/jiaee.1994.01205

Sidhu, J. (2003). Mission statements: Is it time to shelve them? *European Management Journal, 21*(4), 439-446. doi:10.1016/S0263-2373(03)00072-0

Swanson, B. E., & Davis, K. (2014). *Status of agricultural extension and rural advisory services worldwide: Summary report.* Lindau, Switzerland: Global Forum for Rural Advisory Services.

Thompson, A., Peteraf, M., Gamble, J., & Strickland, A. (2013). *Crafting and executive strategy: The quest for competitive advantage*. New York, NY: McGraw-Hill.

University of Kentucky. (2013). *Vision and mission*. College of Agriculture, Food, and Environment. Retrieved from http://ces.ca.uky.edu/extensionmanual/node/7

Zinnah, M., Steele, R., Carson, A., & Annor-Frempong, F. (2005). Assessment of tertiary agricultural education in Ghana. *Proceedings from 2005 Conference of the Association for International Agricultural and Extension Education, Baton Rouge, LA*, 1-9.