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## International Journal of Agricultural Extension

ISSN: 2311-6110 (Online), 2311-8547 (Print)  
<http://www.escijournals.net/IJAE>

### FACTORS THAT INFLUENCE EXTENSION PROGRAM SUCCESS: WHAT CAN WE LEARN FROM CAMEROON EXTENSION?

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#### ABSTRACT

The 1914 Smith-Lever US Extension model has logged a century of success. Our research applied case-based reasoning using paired-comparisons of perceptions of the organization and its characteristics by Cameroonian and American stakeholders. The 1914 organizational design was for on-going rural families, not innovation. However, the past is a fundamentally flawed predictor of the future. Transformation strategies include identifying and separating an innovation, experimenting, and measuring learning outcomes against a goal. Recommendations include structural, contextual, and practice-theory-practice interactions. Implications address steps for exploiting public good, making use of continuous improvement, expanding and nurturing collaborative networks, and initiating an aggressive, durable communication campaign.

**Keywords:** Collaboration, Global Programs, Organizational Structures, Public-Private Partnerships, Sustainability.

#### INTRODUCTION

Things change. Frenchman Alphonse Karr (1849, p. 305) advised, "Plus ça change, plus c'est la même chose"—the more things change, the more they stay the same. This research reflects upon Extension principles over time and suggests a path forward toward the global common ground. During the period of 1865-1914, the United States found itself in deep transformation. In response to the second industrial revolution, there were sweeping changes in economic, political, religious, geographic, and social substructures. The United States Congress (1914) instituted the Smith-Lever Act, Burrows (2008, 2012, & 2014) KPMG International (2013) identified persisting issues concerning energy, environment, gender roles, global power-shifts, immigration, industrialization, nationalism, and wars. During this period, Americans depended largely on agriculture for livelihoods. Federal legislation authorized the land-grant university to conduct resident instruction, research, and Extension.

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St-Clair (2001) noted that Hoke Smith and Asbury Francis Lever founded Extension on principles of self-development, self-sufficiency, and self-direction. These grounding principles helped in increasing public education, manage change, and build communities based on proven research and people's needs. "Plus ça change, plus c'est la même chose."

During the period of 1945-2010, Cameroonians depended largely on agriculture for livelihoods. As a newly independent nation in 1960, Cameroon also found itself in deep transformation with changes in the economic, political, religious, and social substructures. Issues included a listing similar to that of the U.S. in the early 1900s: energy, environment, gender roles, global power-shifts, immigration, industrialization, nationalism, and wars. Nyambi (2012) in collaboration with various stakeholders examined the current Cameroonian national extension program and the associated strengths, weaknesses, opportunities, and threats (SWOT) that affected sustainability. Challenges to global Extension success remain as the organic 1914 Smith-Lever legislation approaches the century mark.

**Study Purpose:** This research re-examines longitudinal Extension issues in Cameroon and the United States. The research compares and contrasts global factors that influence program success. This research examined and analyzed Cameroonian stakeholders' perceptions of the undergoing extension program through focus group discussions and one-on-one interviews for organizational fitness using IFPRI extension analysis framework. The analysis compares and contrasts these finding with a review of Extension literature, paying particular attention to the United States, and examines post-hoc how form, function, policy, and mission shape perceptions and performance.

**Conceptual Framework:** Lincoln & Guba (1985) first proposed a constructivist approach to grounded theory to guide investigations from discovery through synthesis. An International Food Policy Research Institute (IFPRI) framework (Birner *et al.*, 2006) analyzed global Extension services. Multiple theories, including grounded theory, theory-in-practice, and IFPRI, advocated the involvement of stakeholders in goal setting and evaluation to improve efficiency and effectiveness of a program.

Indigenous knowledge is a central element to delineate cultural, social, and environmental contexts that assimilate community priorities into reform agendas. Such participatory reform also supports change by creating ownership—"skin in the game." Lincoln and Guba (1985) reminded, "there are always multiple perspectives; that no one perspective can tell the true story" (p. 119).

#### **METHODOLOGY**

A naturalistic qualitative research method using a comparative case study approach was used for this research. The case study, as described by Yin (2009) and case-based reasoning are appropriate methods given the context and restrictions of the inquiry. A constant-comparative method classified information from various sources for emergent themes, consistency, and trustworthiness (Grove, 1988; Merriam, 2009). The protocol for Cameroonian interviews and focus groups discussions in the Regional Delegations of Agriculture of the North West and South West regions consisted of 16 open-ended and semi-structured questions. The analysis focused on 15-year time changes using a comparative case study design. Four regional focus groups and 28 individual interviews bounded 59 cases from four stakeholder groups of farmer leaders, non-governmental

organizations, extension representatives, and governmental counterparts. The main criterion of selection of participants was that they must have had close links with the national extension program for at least a period of five years. The said participants must have benefited, collaborated, delivered, planned, supervised or coordinated extension services in or within the auspices of the national extension program, that must have allowed him/she to have insightful knowledge on the functioning of the extension program in Cameroon.

Semi-structured, probing questions were framed from the contextual setting to increase clarity and completeness. Further, SWOT analysis of the current Cameroon extension program probed for reasons for differences in program performance, and compared the "fit" of organizational characteristics: governance structures (role of public-private sector in financing and providing extension services, level of decentralization and partnership/linkages), capacity, organization, and management, and advisory methods to the IFPRI frame. Finally, a review of American Extension literature from Journal of Extension (JOE) and others examined equivalent issues guided by the founding principles of self-development, self-sufficiency, and self-direction for comparison with emerging themes from Cameroon issuing results. Comparative case study design has the advantage of using multiple sources of data collection to corroborate obtained information. Observations and documentations complemented data collection to triangulate results for trustworthiness.

As per data analysis, a content analysis for grounded theory through, constant comparative method to compare information from the various sources against each other for emergent themes and consistency was done to ascertain the credibility of the information obtained (Merriam, 2009; Patton, 2002). Trustworthiness was ascertained through member checks, prolonged engagements, reflexive journaling, peer debriefing, triangulation and the establishment of an audit trail (Lincoln & Guba, 1985; Merriam, 2009; Patton, 2002). Coding procedures for emerging themes and codes as specified by Boyatzis (1998) were followed. The credibility of the research and findings was established by having peers verify the codes for rigor, consistency, and congruence with the findings. Refinement of the coding process for the trustworthiness of the codes/themes was done again by

triangulation of data sources (Merriam, 2009; Yin, 2009).

## RESULTS AND DISCUSSION

**Strengths:** Nyambi (2012) identified five strengths from the case study of the Cameroon agricultural extension program—education, collaboration and linkages, productivity, decentralized program structure, and infrastructure.

An analysis of the following Journal of Extension research articles revealed similar strengths for the United States.

Bassano and McConnon (2008) posited that a highly visible educational program could be an effective tool for stimulating and strengthening entrepreneurship and community leadership in a rural region. Further, they concluded that adult education, community development principles, and active participation of planning teams foster success.

Astroth (1991) proposed a programming model based on communication, cooperation, coalition, and collaboration. Astroth concluded, “The more we work together, the more we have the possibility of better understanding complex social problems and acting on them in an atmosphere of trust, cooperation, and mutual respect.”

Boone *et al.* (2007) reported productivity and sustainability were crucial elements in agriculture. They recommended that [university] researchers include Extension agents as potential clientele in their distribution of research findings. Further, agents should engage in professional development activities on sustainable agriculture and transfer the information to their clients.

Braverman *et al.* (2012) found trends of more multidisciplinary and comprehensive programming with more integrated program administration. They predicted, “The emphasis on collaboration and comprehensiveness provide opportunities for more effective Extension programming.”

Schneider *et al.* (2011) advocated “the use of IT [instructional technology] in the communication, development, and assessment of a multi-state, community-based Extension projects that reach a rural audience.” They forecasted an increasing role for IT in both domestic and global Cooperative Extension Services. Further, they advocated IT to “forge connections for technology-enhanced Extension projects by bridging the communication, information, and

feedback needs of geographically dispersed project participants.”

**Weaknesses:** Nyambi (2012) identified eight weaknesses in Cameroon extension: conflict and corruption, capacity building, collaboration and linkages, management, infrastructure, communication and feedback, governance and policy, and program sustainability. Weaknesses emerged more frequently and with more intensity than in other SWOT categories. Nyambi (2012) further observed that agricultural authorities and extension authorities reported poor partnership and weak linkages and collaborations with research sector, but found evidence of good personal relationships. In a Cameroon NGO representative’s words, “The government staffs (extension staffs) are experienced, but again they are not result-oriented.” Further, Nyambi found hindrances to collaboration through “funding, communication, conflict of interest, human relationships, bad policies, competition, a lack of competence, a lack of government support or incentives to private actors, and common interest and goals.” Similar weaknesses emerged from the analysis of American Extension.

Conflict, like change, is enduring in social organizations. More than ideological, conflict occurs among groups in which the potential for inequality exists—economic, political, religious, geographic, and social substructures. Bahn (1991) argued conflict is minimized using issues-oriented programming. Bahn (1991) warned, “Altering institutional structure requires reorientation of [organizational] priorities and reallocation of resources.” Hansen (1993) addressed an increasing conflict between “grassroots” input and “research-based” integrity. JOE is replete with examples of and strategies to manage conflict (Arnold & Note, 2013; Hansen, 1993; Zacharakis, 2006). Conversely, there is a dearth of information about corruption, perhaps limited by American’s own definitions. Kuchinke, *et al.* (2008) acknowledged, “Managing employee performance is a critical task in any organization.” The authors reported on an effort to “adopt a participatory and data-based process” and to frame the revision “in the broader context of assessing the performance management system, thus approaching the appraisal process in a systematic and holistic fashion.” Three lessons learned included 1) the usefulness of a thorough planning phase that draws from multiple sources; 2) “the importance of involving a broad range of stakeholders . . .”; and 3) the need to

tailor organizational systems to the specific needs of the institution” [context].

Shuffstall *et al.* (2007) recognized, “Globalization of economies and production has fundamentally altered the rural landscape.” Rural infrastructure issues have evolved from rural electricity, libraries, and farm-to-market roads to information technologies and proprietary genetics. Shuffstall *et al.* (2007) were further of the view, a third generation community network model engaged leaders and organizations in identifying, planning, and implementing information technologies that leverage local resources, reduces dependencies, and increases sustainability.

Organizational stress resulting from weak communication and feedback is abundant in the literature, spanning time, positions, and disciplines. Weigel (1994) reported that Extension staff “wanted more communication about job performance issues, decision-making processes, and future developments in Extension.” However, after two decades the weakness persists. Baker and Chappelle (2012) added language and culture to the swirl of communication and feedback challenges. Robinson (2013) recommended, “Framing scientific information in a manner that is important and relevant to stakeholders.” Leuci (2012) concluded, “Communication is essential to organizational learning.” Shared governance is embedded in Extension’s organic structure. However, Astroth *et al.* (2011) advocated a new set of leadership skills based on Taoism rather than hierarchal power. They argued, “Our global world, the knowledge-based economy, and rapidly changing technological innovations require a different approach to cultivating organizational effectiveness. They concluded, “[servant] leadership must of necessity focus on team work, group accountability, flexibility, and working on the cutting edge.”

**Opportunities:** Seven opportunities emerged from the examination of Cameroon extension: expanding markets, empowering producer organizations, increasing institutional collaboration, enabling environments, exploiting natural resources and human capital, exploiting information and communication technology (ICT), and adding value. Similar opportunities discussed below emerged through a comparative analysis of literature from the Journal of Extension for United States extension.

Burrows (2008), in an effort to cultivate urban audiences, used a local farmer’s market as the venue to

introduce a variety of Extension activities. With a similar challenge to develop and expand consumers, Baker *et al.* (2009) found that identifying unmet demand, coordinating among markets, and developing stronger and strategic plans are benefits that emerge by understanding new audiences and markets. Shaw *et al.* (2012) recognized that stakeholders’ perceptions of Extension programs are crucial. New and existing audiences face adoption decisions that are tenuous and often fade away.

Bull *et al.* (2004) questioned extension’s relevance and optimistically concluded, “Extension is a living, evolving, market-driven organization that responds to society’s changing needs. Lifelong learning is expanding by utilizing existing and new, university-based, knowledge to solve complex problems cooperatively with citizens and their communities.”

Merits accruing from institutional collaboration fill the literature on Extension in the U.S. Gould & Ham (2002) concluded that collaborative efforts were a priority, but often limited by structure and traditions.

Pritchett *et al.* (2012) recognized, “Collaborative partnerships are an important mechanism for meeting client needs in an era of declining resources.” They agreed that shared goals and objectives are crucial, but are not enough to realize full potential without incentives that motivate partners. They advocated “investments in the sweet spot” by aligning incentives with partner values.

Fritz *et al.* (2005) recognized, “As research and Extension shift toward collaborative efforts between different institutions and disciplines, a better understanding of the dynamics of such groups is critical for success.” They concluded, “The complexity and diversity of the problems facing today’s Extension clients have heightened the need for Extension teams representing multiple disciplines, and in some cases, multiple institutions and multiple countries.”

Argabright *et al.* (2012) drew from the literature and posited, “Aside from ongoing fiscal concerns, researchers point to Extension’s need for a futurist perspective (Patton, 1987) and completely reinventing the organization (King & Boehlje, 2000); staffing for creativity, innovation and vision (Smith, 1988); leadership for the future (Smith, 1990) and accepting varied leadership styles (Astroth *et al.*, 2011; Fehlis, 2005); collaborative work environment (Buchanan, 1993) and increased need for flexibility; change in

moving forward (Blair & King, 2010), and addressing changes in a proactive fashion and a reduction of the 'entitlement' mentality (Extension Committee on Organization and Policy, 2010)." Argabright *et al.* (2012) argued, "One thing is certain, Extension's priorities must transform to meet the needs of the people, the way they need to be met, doing things in ways that have never been done before."

Leuci (2012) concluded, "Extension's engagement with communities, constituents, partners, and the rest of land-grant university requires the collective ability to adapt, challenge previous assumptions, and chart new paths. All of these are necessary to remain proactive and responsive to change, carry out the mission, and create value added outcomes."

**Threats:** Five threats emerged from the Cameroon study: climate change, conflict and corruption, program sustainability, information communication technology, and government policy.

An analysis of literature from the Journal of Extension and others revealed similar threats for the United States. There is a relationship between "climate change" and a "climate for change." Elliott *et al.* (2008) recognized "the scientific reality and socioeconomic threats of climate change. Improving sustainable resilience in the ways we supply food, water, and energy are creating new ways of thinking about these critical resources." The authors called for six steps to creating a national approach to sustainable living. Fraisse *et al.* (2009) in the same light advocated for a co-development and co-learning program between farmers, Extension and Research to adapt to and mitigate climate change challenges. Layman *et al.* (2013) recognized the schism among stakeholders and advocated a participatory decision model to strengthen relationships and proactive training and dialogue. Program sustainability spans concerns of functions, forms, programming, and continuity. Banach & Gregory (2001) proposed a model for sustainable, community-based programs. To apply new energy and skills to local community outreach programs. Wilken *et al.* (2008) deployed an internship model while Apel *et al.* (2013) organized externships. Both highlighted the benefits of recruiting young professionals and sustaining community programs. Lodl & Stevens (2002) suggested that local level self-sustaining coalitions are important for program sustainability.

Just as in Cameroon, information technologies can be perceived as an organizational strength, a weakness, a

potential opportunity, or as a threat to organizations and people. Futurists predict exponential growth in technical information and at the same time, disruptive innovations (Christensen, 2003; Christensen & Raynor, 2003). Astroth (1990) predicted, "The future holds a tremendous potential for Extension." Not everyone in the field perceived the potential as a threat of loss of audience, management challenges, and more required training.

Prokopy *et al.* (2011) purported, "Context is much more important in explaining participation than was earlier thought." Perhaps applying broader implications than in the original research but "It is critically important that Extension personnel be able to understand the local [global] context."

**Discussion:** US extension has evolved over the years from meeting farm family needs to cope with innovation developments and taken steps to address these challenges to strengthen its extension service. Cameroon extension can learn from these trends and experiences to improve on its extension performance to meet its context. Ten attributes described the global factors facing Extension and Development: convergence, social enterprise, smallholders, capacity building, public-private partnerships, inclusive growth, supply chains, sustainability, learning organization approaches, and resilience (Cornwall & Eade, 2010). Both Cameroonian and American Extension audiences recognize these factors in programming, inclusive growth, and organizational development.

In an age of change, successful organizations use the advantages that come with convergence, public-private partnerships, and supply chains linked to information and communication technologies to leverage cross-institutional activities. Such convergence can reduce the cost of extension and, as posited by Seger (2011), when a technology is used well it can lead to greater productiveness and efficiency at a lower cost. Gruidl & Hustedde (2003) earlier warned, "An organization's capacity is defined by its ability to learn, to share that learning throughout the organization, and to modify its behavior to reflect new knowledge and insights." The advice remains relevant today. It is impossible to resolve all of these issues simultaneously, but it is possible to improve Extension using a systematic approach that emulates the behaviors of a resilient learning organization. As a long-time Extension critic and commentator, McDowell (1985; 1991; 2002; 2004)

made a case for change that included organizational re-development and expansion of target audiences—while expecting the same or fewer resources for the task. Little has changed. "Plus ça change, plus c'est la même chose." One can conclude there is a natural desire for security of the known—Charlie Brown's blanket—yet there is a keen awareness of rapid change in our "smartphone" society. Like many organizations, Extension was designed for ongoing, evolutionary operations, not for disruptive innovation. The challenge is not in our knowing that innovation and change are crucial—we understand that. The challenge however, is in its execution. In another context but relevant to the issue, Erlanger (2013) quoted Giuseppe Tomasi di Lampedusa from his novel *The Leopard*: "everything needs to change, so everything can stay the same" [para. 9]. Govindarajan and Trimble (2010; 2013) prescribed an approach that separates the potential innovation from the "herd" and treats it as a "new enterprise." Further, Govindarajan and Trimble (2010) encouraged organizing the innovation as a separate "experiment" focused more on learning and less on short-term results. They recommended decisions based on dialogue, hypotheses, and more dialogue. In concert, Gates (2013) advised, "... What's missing is often good measurement and a commitment to follow the data." Gates noted, "You can achieve incredible progress if you set a clear goal and find a measure that will drive progress toward that goal—in a feedback loop..."

Extension is beginning its second century in the United States. It has endured as a robust organization because of its grounded principles that moved discovery to synthesis and practice. However, as Taleb (2010; 2012) argued, "the past is a fundamentally flawed predictor of the future." Taleb advised organizations to seek structures that benefit from chaos and have a concave downside and a convex upside. Further, it is smart for organizations to listen carefully to inform and refine theory using the voice of indigenous opinion leaders of community practice. Certainly, this is a bi-directional path that requires courage and confidence.

#### **CONCLUSION AND RECOMMENDATIONS**

Given past success of extension in the US and Cameroon, programming principles of self-development, self-sufficiency, self-direction and shared governance are crucial functions. Consequently, shared ownership and transparency contribute to public education, managed change, and community development. An unanticipated

consequence is propagated from a rigid theory that fails to recognize changes in practice. Taleb (2012) warned that theories do not create practice. Rather we create theories out of practice. Strengths, weakness, opportunities and threats to Cameroon's extension were identified. Government investment, training, market incentives, and management were identified as key areas to be addressed for sustainability, effectiveness, and efficiency of the Cameroon extension program Using the American extension services experience from researched literature as a guide to improve program performance, functionality and sustainability of Cameroon extension, global extension programs, and Cameroon extension are recommended to:

- Communicate their purpose, identify experiences, and advance public good; Communication through information and communications technology (ICT) and feedback from actors is paramount for program success in Cameroon. In addition, program priorities must be transformed to meet the needs of the people and current innovations.
- Institute a vigorous program of education and self-improvement for everyone (Drucker *et al.*, 2008); Capacity building of farmers and extension agents in Cameroon should focus to meet the changing trends especially because more youths are involved in agriculture in Cameroon (2<sup>nd</sup> generation agriculture actors). Extension agents need to be re-educated to meet the changing needs/trends in agriculture and current trends should reflect changing audience. Extension actors/professional should engage in professional development activities on sustainable agriculture and climate adaptation and mitigation strategies,
- Apply continuous assessments while experimenting with many types of innovation (Christensen, 2003; Christensen & Raynor, 2003; Drucker *et al.* 2008; Gates, 2013; Govindarajan & Trimble, 2010; 2013); Continuously assessing the extension program in Cameroon for its merits and performance is important as well as taking comparative advantage of experimenting with already existing innovations,
- Build linkages, infrastructure, and collaborative networks with public-private partners; Increased government investment, more local council, and private sector involvement and engagement with extension functioning through good government

policy are needed in Cameroon. Better collaboration would foster new ideas, empowerment, greater accountability and resources allocation thereby improving the effectiveness and efficiency of the extension program. Rural infrastructure developments; farm roads, markets, communication infrastructure would enhance the extension service activities ,

- Adopt a confident, assertive communication campaign that recognizes and assigns positive net benefit and gets credit for it (McDowell, 2004); and
- Initiate market incentives for small farmers; Markets incentives through a price standardization system, to protect farmers would make the extension program sustainable. It is about time to initiate demand driven extension to ensure program sustainability.

Gates (2013) concluded, “And I am optimistic that we will do even better in the next 15 years. The process I have described—setting clear goals, choosing an approach, measuring results, and then using those measurements to continually refine our approach—helps us to deliver tools and services to everybody who will benefit, be they students in the U.S. or mothers in Africa’ (para. 32). This research further reaffirms the need for a learning organization adapting to the needs of globally networked communities striving for self-development, self-sufficiency, and self-direction to meet its context.

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