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**Evaluation of an International Entrepreneur Exchange Program: Impacts, Lessons Learned, and Implications for Agricultural Development**

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**Abstract**

*This study evaluated a two-way, visitor exchange project for entrepreneurship development between three African countries and the United States. The study's purpose was to determine outcomes, understand lessons learned, and derive implications for international agricultural development. Findings of the study confirm visiting African Entrepreneur Fellows (AEFs) developed entrepreneurial knowledge, gained business skills, and acquired positive attitudes toward U.S. business and culture. The majority of AEFs had applied acquired knowledge and skills to improve their businesses and promoted open economic ideals, business ethics, and human rights in their businesses. As a result, AEFs were able to expand their business into new ventures, improve customer services, establish communication networks, and serve their communities. Visitor exchange, entrepreneurship-building programs are effective strategies in contributing to development efforts in developing countries. Paying due attention to the selection and matching of U.S. mentors with the business interests and learning needs of international fellows is necessary to ensure their learning expectations are met. It is important to assign international participants with suitable mentors for longer periods of time to increase the likelihood of receiving more in-depth learning experiences and develop lasting professional relationships to further collaboration. Realization of the potential of entrepreneurship-focused, visitor exchange programs between nations as a strategy for international agricultural development is the major implication of this study.*

**Keywords:** entrepreneurship development; Sub-Saharan Africa; visitor exchange programs

### **Introduction**

“Entrepreneurship is a dynamic process of vision, change, and creation. It requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions” (Kuratko & Hodgetts, 2004, p. 30). Four characteristics of an entrepreneur include (a) motivation, (b) opportunity identification, (c) willingness to take risks and accept uncertainty, and (d) the ability to network (Rigley & Rönnqvist, 2010). Entrepreneurship education is a necessary strategy to cultivate business development culture for creating jobs, increasing incomes, and achieving economic development in a country (Mkala & Wanjau, 2013). Nations that have promoted entrepreneurship reduced unemployment and achieved economic development (Alakbarov, 2010). Entrepreneurship development can contribute to job creation, innovation, and economic development (Kuratko, 2003).

Due to the development potential associated with entrepreneurship, a trend has emerged to use entrepreneurship training programs as a development strategy (Canziani, Welsh, Hsieh, & Tullar, 2015). More attention has been paid to entrepreneurship than ever before due to the effects of globalization (Şeşen & Pruett, 2016). Swanson (2006) asserted shifting attention from production-focused extension policies toward the entrepreneurship development of small farmers is needed for achieving the agricultural development expectations of developing countries. A study conducted in Nigeria found farmers lacked the entrepreneurship knowledge and skills necessary for selecting appropriate agribusinesses (Esiobu, Onubuogu, & Ibe, 2015). Another study conducted in Zimbabwe with farmers revealed that entrepreneurial agriculture improves farmer

participation in income-generating activities (Mujuru, 2014).

According to Kuratko and Hodgetts (2007), entrepreneurs are both thinkers and doers and their entrepreneurship can be improved through learning experiences. Entrepreneurship education requires a unique pedagogy for balancing both theory and experiential learning to develop “reflexive practitioners” (Greene & Rice, 2007, p. xix). Further, Rae (1997) asserted entrepreneurship education programs should focus on building skills related to effective communication and persuasion, creativity, critical thinking, leadership, negotiation, problem-solving, social networking, and time-management to achieve the desired learning outcomes. To develop these competencies, educators should create learning environments that change the way participants learn and reinforce the development of such competencies (Kirby, 2002).

Lack of international cooperation is considered one of the major challenges to overcome in achieving global agricultural development in the 21st century (Acker, 1999). The U.S. Department of State sponsored a grant proposal competition called the Professional Fellows Program in 2013 to address this challenge: “A two-way, global exchange program designed to promote mutual understanding, enhance leadership skills, and build lasting and sustainable partnerships between mid-level emerging leaders from foreign countries and the United States” (ECA/PE/C-13-01, p. 2). The objective was to enable economic empowerment of young entrepreneurs in selected regions of the world, including Sub-Saharan Africa (SSA). To achieve that aim, a proposal was funded to create professional collaborations and learning experiences between mid-level, emerging entrepreneurs from Kenya, South Africa, and Uganda and U.S. entrepreneurs

as part of a two-way exchange program. Most of the African Entrepreneur Fellows (AEFs) had an agricultural focus or business interests in allied sectors. The project facilitated entrepreneurship development of 23 AEFs in the United States for four weeks and provided international business experience for 11 U.S. participants in SSA during a two-week period.

Canziani, Welsh, Hsieh, and Tullar (2015) investigated the effectiveness of different pedagogical methods for teaching entrepreneurship and found that experiential learning methods are effective in fostering entrepreneurial motivation. This finding highlights the need for using experiential learning concepts and opportunities when designing training programs for professionals working in agricultural development (George, Edwards, Sitton, Cartmell II, Blackwell, & Robertson, 2014), including entrepreneurs. The AEFs' training program was mainly designed based on experiential learning concepts to achieve its desired outcomes.

### **Description of the International Exchange Program**

Funded by the U.S. Department of State, this project facilitated experiences for learning and collaboration among emerging agricultural and allied sector, mid-level Kenyan, South African, and Ugandan entrepreneurs, i.e., AEFs, and U.S. business leaders as part of a reciprocal exchange. Numerous opportunities for enhanced education and cross-cultural exchanges with U.S. citizens were also provided to the AEFs. The project was guided by six goals ranging from delivery of professional leadership and entrepreneurial training to facilitating three-week internship/job shadowing experiences to building capacity among the AEFs, their U.S. mentors, and other interested parties.

The program supported AEFs from

each of three countries visiting the United States during one of two Fellowship cycles (12 in cycle one; 11 in cycle two) and a total of 11 U.S. citizens visiting Kenya, South Africa, and Uganda over two cycles. In May of 2014, the first group of 12 AEFs trained in Oklahoma for four weeks and a second group of 11 participated during October of 2014. Each of the AEFs' groups received a fifth week of professional development in Washington, DC. While in the U.S. capitol, they interacted with 200-plus Fellows from more than 40 countries and territories and "worked together to address issues of mutual importance, develop[ed] new insights into professional approaches to common issues, and broadened their understanding of foreign working environments, practices and society" (Harrison, Cecchini, Aabye, & Ettinger, 2014, p. 5).

### **AEFs' U.S. Experiences in Regard to Entrepreneurship**

During the five-week U.S.-based fellowships, the AEFs were initially engaged in an intensive five-day training program focused on a variety of topics, including enhancement of their understanding of entrepreneurial venture development; successful business planning, practices, and skills; ethical business leadership principles; applications of new media in various entrepreneurial settings; and propositions of venture financing, among others. In addition, a three-week *internship* or series of *job shadowing* experiences were specifically tailored to the AEFs' entrepreneurial goals, aspirations, and resources. More than 60 internship providers from agricultural enterprises, educational institutions, entrepreneurial ventures, government entities, and non-profit organizations voluntarily participated as mentors for the 23 AEFs.

Team teaching jointly by academicians and successful entrepreneurs

is a recommended practice for entrepreneurship education (McMullan & Gillin, 2001). The project team used this pedagogical strategy in planning the educational program. The focus of this evaluation study was to ascertain the outcomes of a two-way, visitor exchange, entrepreneurship development project and determine ways to improve similar programs in the future.

### **Conceptual Framework**

This international entrepreneur exchange training program was developed based on Kolb's (1984) experiential learning conceptual model. "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38). Experiential learning is a transformative adaptation process involving four phases: (a) concrete experience, (b) reflective observation, (c) abstract conceptualization, and (d) active experimentation (Kolb, 1984). Experience plays a central role in the experiential learning process and leads to successively creating reflective observation, abstract conceptualization, and active experimentation phases through a cyclic process. Concrete experiences will lead to reflective observations on such. Then, reflective observations will augment abstract conceptualizations of what was learned. If the experiential learning is conducive, this phase will foment active experimentation contributing to the learner apprehending and more deeply understanding the meaning of their experiences (Kolb, 1984). The entrepreneur exchange program was designed to facilitate the four phases of Kolb's (1984) experiential learning model by providing hands-on learning internship/job shadowing placements to gain concrete learning experiences, discussions to facilitate reflective observations, lectures to stimulate conceptualizations, and

opportunities to engage in active experimentation of learned concepts.

Evaluation of the outcomes of this entrepreneur exchange program was conceptualized based on Donald Kirkpatrick's evaluation framework emphasizing four levels of training outcomes (Kirkpatrick & Kirkpatrick, 2006): (a) participants' levels of satisfaction with the program; (b) changes in participants' knowledge, attitudes, skills, and aspirations; (c) changes in participants' professional behavior and practices; and (d) institutional impacts of participants' behavior changes. The study focused on these four levels of outcomes. Level one and two outcomes were direct results of the training and expected to manifest immediately after the training. If level one and two outcomes were accomplished then level three outcomes would materialize. Achievement of level three outcomes would contribute to the occurrence of level four outcomes. The level four outcomes included improvements and changes in participants' business institutions and workplaces. The level four outcomes are referred to as institutional impacts in this evaluation study.

### **Purpose and Objectives**

The study's purpose was to evaluate the program implementation process and outcomes of the international exchange program designed to empower young entrepreneurs to increase economic development in SSA. Four objectives guided this study: (a) determine immediate, intermediate, and long-term outcomes of the project; (b) describe factors that contributed to successful implementation of the project; (c) determine lessons learned to improve similar projects in the future; and (d) discuss implications for international agricultural development.

### **Methods**

This was a descriptive evaluation study. A mixed-method approach was used to collect evaluation data. Mixed-methods employ quantitative and qualitative approaches to data collection for complementing the weaknesses of each method with strengths of the other method (Creswell & Clark, 2011). Survey instruments, focus group interviews, reflections, and observations were used to collect evaluation data. Survey instruments included quantitative data collection scales as well as open-ended narrative type questions for gathering qualitative information. Focus group interviews, reflections, and observations were employed to collect qualitative data.

A pre and posttest, quasi-experimental design was used to determine immediate outcomes. Evaluation survey tools were developed with scales for measuring participants' levels of satisfaction, knowledge, attitudes, skills, and aspirations. The satisfaction measure consisted of four items and a four-point Likert-type scale (1, *not satisfied* to 4, *very satisfied*).

AEFs' knowledge improvement was assessed using a retrospective pre and posttest instrument containing nine items and a 5-point Likert scale (1, *very low* to 5, *very high*). If the concepts taught were new to the group, and participants had limited knowledge about such, testing the AEFs at the beginning may not have been valid (Rockwell & Kohn, 1989). This notion rationalized the use of a retrospective pre and posttest design for determining changes in participants' knowledge.

Pre and posttest instruments were used to determine changes in AEFs' attitudes and skills. The skill assessment instrument included six items related to business and a 5-point Likert scale (1, *not confident* to 5, *very confident*). Attitudes toward U.S. culture and businesses were

recorded on a 10-item instrument with a 5-point Likert scale (1, *strongly disagree* to 5, *strongly agree*). Participants' levels of aspirations (readiness to apply what they learned in their work) were recorded using nine potential practices with four possible responses. Participants were asked to indicate whether they intended to implement each of the nine practices as a result of completing the training program using four possible answers: 1) *no*, 2) *maybe*, 3) *yes*, and 4) *already doing*. Validity of the scales was established by a panel of experts. Cronbach alpha reliability estimates for the scales measuring knowledge, attitudes, and skills were .85, .67, and .90, respectively. The pretest was administered to AEFs on the first day of their program in the U.S. and the posttest was given at the program's end.

In addition to survey instruments, focus group interviews were conducted with the AEFs at the conclusion of their respective cohort's program. (The AEFs came to the U.S. in two groups during 2014: 12 and 11, respectively.) A three-month, follow-up survey instrument was developed to assess participants' practice changes and administered online using *Qualtrics*. Continuous communication was maintained with the participants for tracing long-term outcomes.

Quantitative data analysis was done by using IBM SPSS 24®. Descriptive statistics and paired samples *t*-tests were used to analyze the study's quantitative data. Post-hoc analysis of Cronbach alpha reliability estimates was done for the scales measuring knowledge, attitudes, and skills.

Trustworthiness of qualitative data gathering and analysis for this study was established by using the qualities of credibility, transferability, and confirmability procedure specified in the literature (Berg, 2004; Dooley, 2007; Lincoln & Guba, 1985). We used three different methods to establish the credibility

of qualitative data collection and analysis. These methods were (a) prolonged engagement with participants to understand the situation accurately (Lincoln & Guba, 1985), (b) persistent observation to explore the situation realistically (Lincoln & Guba, 1985), and (c) triangulation of the situation through multiple methods of data collection (Berg, 2004).

The researchers engaged with participants extensively for nearly one month and thereafter continued communication through information technology for more than six months, thus, enabling the research team to develop a better understanding of the AEFs and gain their trust which led to sincere and credible feedback. This study achieved triangulation by using three different methods for collecting information: (a) surveys with open-ended questions, (b) semi-structured interviews, and (c) document analysis that allowed the researchers to compare information to triangulate the data and gain a deeper understanding of the findings that emerged during data analysis (Berg, 2004). Qualitative data also underwent content

analysis (Hsieh & Shannon, 2005) and thematic coding to identify major emergent themes (Creswell, 2007).

**Findings**

The findings of outcome evaluation were organized under the four levels specified in Kirkpatrick’s evaluation model (Kirkpatrick & Kirkpatrick, 2006). These levels were participants’ levels of satisfaction with the program; changes in knowledge, attitudes, skills, and aspirations of the participants; changes in participants’ professional practices or behaviors; and the changes participants’ made in their institutions or workplaces, i.e., institutional impacts.

**AEFs’ Levels of Satisfaction with the Overall Exchange Program in the United States**

The AEFs indicated they were either *satisfied* or *very satisfied* with the program for all four items measured. Table 1 summarizes their responses. All of the AEFs indicated the program met their learning expectations.

Table 1  
*AEFs’ Levels of Satisfaction with the Training Program (N = 23)*

How satisfied are you with:	Percentage of AEFs said			
	<i>Not Satisfied</i>	<i>Somewhat Satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>
The professional interactions with the U.S. participants?	0	0	39	61
The relevance of experience to your business needs?	0	0	26	74
The usefulness of your learning experience in the U.S.?	0	0	26	74
The overall experience you received during this program?	0	0	32	68

*Note.* Scale: 1 = *Not Satisfied*, 2 = *Somewhat Satisfied*, 3 = *Satisfied*, and 4 = *Very Satisfied*

The interviews conducted with the AEFs and their U.S. mentors revealed the

project’s leadership team had paid special attention to address individual interests of

the AEFs when assigning them to respective mentors and internship/job shadowing experiences. For example, a female participant from Uganda interested in the textile and clothing apparel industry was assigned to a faculty member in the Design, Housing, and Merchandising Department of Oklahoma State University. The matching of each AEF with the appropriate U.S. mentor(s) based on the AEFs' entrepreneurial interests contributed to their high-level of satisfaction with the program. However, the AEFs expressed the desire to have additional time with their mentors to gain more in-depth experiences and build lasting professional linkages.

**Changes in Participants' Knowledge, Attitudes, Skills, and Aspirations**

According to the evaluation's framework, the second level of outcome evaluation focused on documenting changes

in knowledge, attitudes, skills, and aspirations of the AEFs.

**Changes in knowledge.** Responses to nine items in the instrument's knowledge recording scale were aggregated to calculate an overall knowledge score. The overall knowledge score could range from 9 = *very low* overall knowledge to 45 = *very high* overall knowledge. The comparison of pre and posttest overall scores for each AEF indicated all were able to improve their entrepreneurial knowledge as a result of the training. The overall entrepreneurial knowledge of the AEFs was slightly above *low level* before the program. After completing the program, their overall knowledge was between *high* and *very high* indicating the program was effective in building the participants' entrepreneurial knowledge (see Table 2). Estimated effect size was 3.99, which, according to Cohen's convention, is a large effect size.

Table 2  
*Comparison of AEFs' Aggregated Knowledge Score Before and After Completing the Training Program (N = 23)*

Variable	Mean		t	p
	Before	After		
Aggregated knowledge score	20.1	36.6	12.5	0.000*

Note. \* $p \leq .05$ ; Aggregated Scale: 9 = *Very Low*, 18 = *Low*, 27 = *Moderate*, 36 = *High*, and 45 = *Very High*. Effect size: Cohen's  $d = 3.99$

**Changes in attitudes.** Table 3 displays a comparison of AEFs' attitudinal mean scores before and after completing the program using paired sample *t*-test. Data indicated the AEFs' overall mean attitude score did not change significantly. Their pre-training view was already somewhat

positive. However, when comparing the overall attitudinal score of each AEF before and after completing the program, it was found that 8 of 23 (35%) of the AEFs developed even more positive attitudes toward U.S. business and culture after completing the program.

Table 3

Comparison of AEFs' Overall Attitudes toward U.S. Business and Culture Before and After Completing the Training Program (N = 23)

Variable	Mean		t	p
	Before	After		
Overall attitudinal score of AEFs	38.9	38.0	0.93	0.36

Note. Attitudinal Scale: 10 = *Very Negative* attitudes toward U.S. Business and Culture, 50 = *Very Positive* attitudes toward U.S. Business and Culture

**Changes in skills.** As described in the methods section, skill development was evaluated by measuring the AEFs' confidence to apply six specific business skills. Responses to the six-item recording scale were aggregated to calculate the overall skill of AEFs before and after completing the program. Table 4 compares the overall mean score of skills before and after completing the program. AEFs' overall business confidence score was between *somewhat confident* and *confident* before the program. Their overall business confidence score was between *confident* and *very*

*confident* after completing the program. The estimated effect size was 0.52, which, according to Cohen's convention, is a medium effect size. The comparison of overall pre and posttests mean scores indicated the AEFs' entrepreneurial skills developed significantly during the training program. When comparing the aggregated skills score of each AEF before and after completing the program, it was found that 12 of 23 (52%) reported developing additional entrepreneurial and business skills as a result of completing the program.

Table 4

Comparison of AEFs' Aggregated Skills Score Before and After Completing the Program (N = 23)

Variable	Mean		t	p
	Before	After		
Aggregated skills score	23.2	25.4	2.07	0.05*

Note. \* $p \leq .05$ ; Aggregated Scale: 6 = *Not Confident*, 12 = *A Little Confident*, 18 = *Somewhat Confident*, 24 = *Confident*, and 30 = *Very Confident*. Effect size: Cohen's  $d = 0.52$

**Entrepreneurial aspirations.** At the end of their program, the AEFs' intentions to apply nine entrepreneurial practices related to the training were evaluated. Data presented in Table 5 confirmed that more than 90% of the AEFs said *Yes* they intended to apply or were *already applying* those entrepreneurial practices. More than 52% of the AEFs indicated they had already strengthened professional linkages with U.S.

partners using social media such as electronic mail, Facebook, and LinkedIn profiles. The remainder of the AEFs (48%) reported they would strengthen professional linkages with U.S. partners using social media. In addition, more than 78% of the AEFs said they would apply entrepreneurial ideas learned in the U.S. after returning to their home countries (see Table 5).

Table 5  
*AEFs' Readiness to Apply Learned Entrepreneurial Practices (N = 23)*

As a result of this program, do you intend to:	Percentage of AEFs said:			
	<i>No</i>	<i>Maybe</i>	<i>Yes</i>	<i>Already doing this</i>
Apply entrepreneurial ideas you learned in the U.S. when you return to your home country?	0	0	78.3	21.7
Strengthen professional linkages with the U.S. partners using social media such as e-mail, Facebook, and LinkedIn profiles?	0	0	47.8	52.2
Promote open economic ideals in your business?	0	4.3	87.0	8.7
Apply learned business ethics in your business?	0	0	73.9	26.1
Promote human values and rights in your workplace?	0	0	60.9	39.1
Expand your business into new ventures?	0	8.7	82.6	8.7
Share your learning experience with co-workers?	0	0	69.6	30.4
Advocate against all forms of discrimination at your work place?	0	0	60.9	39.1
Develop a business plan to collaborate with U.S. participants?	0	8.7	69.6	21.7

**Overall learning outcomes.** The analysis of qualitative data indicated the AEFs gained new business ideas and knowledge; broadened their vision for business; developed confidence for expanding their businesses; and aspired to expand their businesses. For example, one AEF said: "I gained an insight about how to efficiently run a dairy enterprise." Another African Fellow stated: "I was able to broaden my vision and perspective of the [organic] composting activity."

When AEFs were asked how the overall learning experience and networking impacted them professionally, the most frequent responses were building entrepreneurial capacity by improving their motivation, vision, confidence, knowledge, skills, communication, work ethics, and business ideas. For instance, one AEF said: "With this experience, I feel inspired to achieve more, invest more, and multiply my

efforts." AEFs indicated they were exposed to new knowledge and skills for business expansion. For example, one AEF said: "I was exposed to GAP (Good Agricultural Practices) that have not been applied in my country by the smallholder farmers. I was able to understand business management skills and expansion." The AEFs also learned how to use communication technology for business improvement. To that point, one AEF explained: "I understand business communication and marketing will take you ahead in business."

AEFs also said they were inspired to apply learned business concepts, new ideas, work-related ethics, and technology to improve their businesses, especially in regard to efficiency. In accord, one AEF stated: "I will introduce drip irrigation system to the food garden team members there I work with, I will also teach them how to plant using a tractor." Another AEF

indicated: “I learnt a lot on food labeling. I would like to apply that in my business for better and transparent traceability of products.” Referring to work-related ethics, an AEF said: “I intend to continue to share with co-workers the importance of good business ethics and always being on time.” The AEFs also expressed intentions to expand their businesses with agricultural mechanization ideas learned in the U.S. To that aim, one AEF indicated: “I intend to invest through loans to acquire a small tractor and increase production.”

**Changes in Professional Behaviors and Practices**

Eighteen AEFs responded to the three-month follow-up evaluation survey conducted online. Table 6 summarizes their responses. The three-month follow up evaluation data indicated a majority of the responding AEFs had applied gained knowledge to improve their businesses; promoted open economic ideals, business ethics, and human rights in their businesses; shared their learning experiences with co-workers; and advocated against discrimination at their workplaces. These findings indicate that the visitor exchange program resulted in positive impacts on the entrepreneurial practices of the AEFs as well as their institutions and communities.

Table 6  
*AEFs’ Entrepreneurial Practice Improvements after Three Months*

As a result of the fellowship program, have you made any progress with regard to the following practices?	No		Yes	
	<i>n</i>	%	<i>n</i>	%
Applying entrepreneurial knowledge to improve your business?	0	0	18	100
Sustaining communication linkages with the U.S. partners?	4	22	14	78
Promoting open economic ideals through your business?	0	0	18	100
Promoting business ethics in your business?	0	0	18	100
Promoting human values and rights in your workplace?	0	0	18	100
Expanding your business in new ventures?	1	6	17	94
Sharing your learning experience with co-workers?	0	0	18	100
Advocating against all forms of discrimination at your workplace?	0	0	18	100
Establishing any collaborative partnership with the U.S. participants?	8	47	9	53
Using of social media such as e-mail, Facebook, and LinkedIn profiles for communicating with your business partners?	2	13	14	88

The AEFs acknowledged the application of business concepts, communication skills, and networking skills gained during the training program as important changes in their daily workplace practices.

**Institutional Impacts**

For the purpose this study, institutional impacts were the changes or improvements AEFs made in their business organizations or workplaces as a result of the program’s learning experiences.

Institutional impacts were documented by analyzing the three-month follow-up evaluation information and electronic mail communications received from the AEFs. The most noticeable institutional impact was the AEFs’ business expansions as a result of putting their learning experiences into practice. For example, one AEF mentioned: “I have utilized a lot of skills acquired in the U.S. in my work. We have initiated four agribusiness projects.” Another AEF said: “I engaged with small businesses value

addition programs and created employment opportunities for two youths along the value chain.”

An additional institutional impact was expanded business networks of the AEFs due to improved communication. For instance, an AEF said: “I am more fluent and efficient in communication, and my people relations have improved.” Planning to develop business collaborations between Africa and the U.S. was another important institutional impact. To that aim, an AEF shared: “I shadowed my U.S. mentor. I am working on hosting him in two years in Uganda, for him to experience agri-business in this part of the world, and give him an appropriate stage to share.” This statement reflects the strengthening of business linkages between the AEFs and their U.S. collaborators as a result of the exchange program.

A strong professional network had been developed among the AEFs and with the project’s U.S. participants. This professional network represents an expansion of social capital for the AEFs and their U.S. counterparts which supports an ongoing exchange of ideas on business, research, and development work. In addition to the AEFs’-U.S. participants’ network, the AEFs alumni members have developed a professional network called Partnership for African Youth in Agriculture (PAYA) to support youth development in their countries. One AEF said: “We constantly consult regarding our work, and encourage each other to grow our collaborations with our U.S. counterparts, as well as the other Fellows from Africa.”

Improved customer service in AEFs’ businesses was another institutional impact. To this point, an AEF described his view: “The fellowship experience has increased my capacity to understand the dynamics in my business that I little knew. A case in point was the application of customer care

techniques to community members I serve.” Another notable impact was enhanced service to their communities. For example, an AEF said: “I have opened my project to my community as a learning center for women to acquire design skills with the intent that they will become entrepreneurs.” These findings highlight that the exchange program contributed to expanding the AEFs’ businesses; improving their business communications, including ongoing networking with other AEFs; improving their customer service; enhancing service to their communities; and establishing business linkages with their U.S. contacts.

## **Conclusions**

### **Outcome Evaluation**

Conclusions related to outcomes were organized under four headings, including (a) levels of satisfaction; (b) changes in knowledge, attitudes, skills, and aspirations; (c) practice and behavior improvements; and (d) institutional impacts, as specified in the study’s outcomes evaluation conceptual framework.

**Levels of satisfaction.** The overall program was well-received by AEFs acknowledging it was effective in facilitating their achievement of learning needs and expectations.

**Learning.** Comparison of pre and post evaluation data confirmed the AEFs developed entrepreneurial knowledge, gained business skills, and acquired positive attitudes toward U.S. business and culture. The AEFs acquired new business ideas and learned about aspects of U.S. work ethics, such as being punctual and a service orientation when dealing with customers, and broadened their entrepreneurial capacity and vision, which helped them develop the confidence needed for expanding their businesses. Learning assessment data further

confirmed the program was effective in inspiring AEFs to apply learned business concepts, new ideas, work ethics, and technology to improve the efficiency of their businesses.

### **Practice and behavior**

**improvements.** The review of three-month follow-up evaluation data leads to conclude a majority of AEFs had applied gained knowledge and skills to improve their businesses and customer service; promoted open economic ideals, business ethics, and human rights in their businesses; shared their learning experience with co-workers; and advocated against discrimination at their workplaces. Qualitative data further confirmed that the AEFs became more customer-focused, transparent, humble, and community service-oriented. Some of the AEFs reported plans to build business collaborations with their U.S. contacts. The findings confirmed the program had positive impacts on the AEFs' entrepreneurial behaviors and practices.

**Institutional impacts.** According to the Kirkpatrick (2006) evaluation framework, the fourth level of program outcome was focused on determining the institutional impacts of the training. Analysis of the AEFs' responses to a follow-up evaluation and other feedback received after returning home confirmed their application of learning acquired during the training program. The most notable institutional impacts were AEFs' expanding their current businesses, starting new ventures, improving customer services, establishing communication networks, and serving their communities. George et al. (2014) reported similar impacts related to communication and community outreach from an exchange program involving food security fellows representing Kenya and Uganda. The communication network

established by the AEFs represents their attempt to leverage significant social capital to augment the exchange of ideas between them and U.S. contacts regarding additional business, research, and development opportunities. The AEFs, as fellowship alumni members, creation of the Partnership for African Youth in Agriculture (PAYA) organization to support youth development in and for the agriculture sectors of their respective countries was another significant social impact resulting from the exchange program. (The organization's name was later modified to Glo [, i.e., Global]–PAYA.)

A review of this evaluation study's findings lead to conclude the "Empowering Aspiring Entrepreneurs for Economic Success in Sub-Saharan Africa: A Professional Fellows Program for Kenya, South Africa, and Uganda" project was successfully implemented and achieved all of its major goals and objectives. Accomplishment of these objectives confirms the visitor exchange program was effective in contributing to development efforts in SSA by further developing young entrepreneurs in the context of agriculture and its allied sectors.

### **Recommendations and Implications**

An entrepreneurship-focused, visitor exchange program was an effective strategy for contributing to agribusiness development in developing countries such as Kenya, South Africa, and Uganda. Such programs can be used to develop knowledge, skills, and attitudes supporting the expansion of agricultural businesses and serving rural communities in developing countries. Literature (Mujuru, 2014; Swanson, 2006) emphasizes the pressing need to enhance the entrepreneurial knowledge and skills of smallholder farmers and allied agribusiness operators if the agriculture development goals of lesser-developed countries are to be achieved. Experiential learning methods are

effective in fostering entrepreneurship development (Canziani, Welsh, Hsieh, & Tullar, 2015). Therefore, it is important to use experiential learning methods, such as job shadowing and internship placements, in designing entrepreneurship development programs likely to achieve the desired learning outcomes.

The AEFs' suggestions can be used to make important recommendations for improving similar exchange programs in the future. First, it is important to pay due attention to the selection and matching of U.S. mentors with the business interests and learning needs of international participants to ensure their learning expectations are met. Second, the participants, based on their entrepreneurial interests, should be assigned mentors for longer periods of time to increase the likelihood of receiving more in-depth learning experiences and develop lasting professional relationships. Third, it is worth doing additional follow-up with the program's participants to determine whether they achieve their expected, long-term results from participating in an exchange program on entrepreneurship in the United States.

Entrepreneurship education is a tested development strategy effective in creating jobs, alleviating poverty, improving living standards, and achieving economic development (Alakbarov, 2010; Mkala & Wanjau, 2013; Smith & Paton, 2011). This study's findings highlight the potential of two-way, entrepreneurship-themed exchange programs between developing countries and the U.S. as a comprehensive strategy for building entrepreneurial capacity and linkages to address agricultural development challenges. Therefore, it is important to use entrepreneurship-focused exchange programs between lesser-developed countries and developed nations as a comprehensive strategy to overcome the agricultural and rural development

challenges facing Kenya, South Africa, Uganda and alike.

### References

- Acker, D. G. (1999). Improving the quality of higher education in agriculture globally in the 21st century: Constraints and opportunities. *Proceedings of the 15th Annual Conference of the International Association for Agricultural and Extension Education*, 47-53. Port of Spain, Trinidad-Tobago.
- Alakbarov, I. (2010, June). Azerbaijan's success story on sustainable entrepreneurship development through adoption of policies, financing and innovative strategies. *Paper presented at the International Conference on Policies to Address Financing and Entrepreneurial Challenges in High-growth Innovative Firms*, Helsinki, Finland. Retrieved from [http://www.unece.org/fileadmin/DAM/ceci/ppt\\_presentations/2010/ic/Helsinki/alakbarov.pdf](http://www.unece.org/fileadmin/DAM/ceci/ppt_presentations/2010/ic/Helsinki/alakbarov.pdf)
- Berg, B. L. (2004). *Qualitative research methods* (5th ed.). Boston, MA: Pearson Education, Inc.
- Canziani, B., Welsh, D. H. B., Hsieh, Y., & Tullar, W. (2015). What pedagogical methods impact students' entrepreneurial propensity. *Journal of Small Business Strategy*, 25(2), 97-113. Retrieved from <http://libjournals.mtsu.edu/index.php/jsbs/article/download/563/525>
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.).

- Thousand Oaks, CA: SAGE Publications, Inc.
- Dooley, K. E. (2007). Viewing agricultural education research through a qualitative lens. *Journal of Agricultural Education*, 48(4), 32-42. doi:10.5032/jae.2007.04032
- ECA/PE/C-13-01 grant program. (2013). *Bureau of Educational and Cultural Affairs (ECA) request for grant proposals for professional fellows program*. Washington, DC: United States Department of State.
- Esiobu, N. S., Onubuogu, G. C., & Ibe, G. O. (2015). Analysis of entrepreneurship development in agriculture among arable crop farmers in Imo State, Nigeria. *International Journal of African and Asian Studies*, 7, 92-99. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1019.2625&rep=rep1&type=pdf>
- George, D., Edwards, M. C., Sitton, S., Cartmell II, D. D., Blackwell, C., & Robertson, J. T. (2014). African food security fellows' perceptions of their experiences in the United States: Reflective journaling as a way to interpret and understand an international experience. *Journal of International Agricultural and Extension Education*, 21(1), 33-45. doi:10.5191/jiaee.2014.20103
- Greene, P. G., & Rice, M. P. (2007). Entrepreneurship education: Moving from 'whether' to 'what', 'how' and 'why'. In P. G. Greene & M. P. Rice (Eds.), *Entrepreneurship education* (pp. xiii-xxviii). Cheltenham, UK: An Elgar Reference Collection.
- Harrison, P., Cecchini, E., Aabye, M., & Ettinger, L. (2014). *2014 fall professional fellows congress program book*. Retrieved from [http://issuu.com/worldlearning/docs/Professional\\_fellows\\_congress\\_program/0](http://issuu.com/worldlearning/docs/Professional_fellows_congress_program/0)
- Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. doi:10.1177/1049732305276687
- Kirby, D. A. (2002, June). Entrepreneurship education: Can business schools meet the challenge? *Paper presented at the International Council for Small Business 47th World Conference*, San Juan, Puerto Rico. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.496.9023&rep=rep1&type=pdf>
- Kirkpatrick, D., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (3rd ed.). San Francisco, CA: Better-Koehler Publishers, Inc.
- Kolb, D. A. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Kuratko, D. F. (2003). *Entrepreneurship education: Emerging trends and challenges for the 21st century*. Retrieved from [http://www.unm.edu/~asalazar/Kauffman/Entrep\\_research/e\\_ed.pdf](http://www.unm.edu/~asalazar/Kauffman/Entrep_research/e_ed.pdf)
- Kuratko, D. F., & Hodgetts, R. M. (2004). *Entrepreneurship: Theory, process, and practice* (6th ed.). Mason, OH: South-Western Publishers.
- Kuratko, D. F., & Hodgetts, R. M. (2007). *Entrepreneurship: Theory, process, and practice* (7th ed.). Mason, OH: South-Western Publishers.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications, Inc.
- McMullan, W. E., & Gillin, L. M. (2001). Entrepreneurship education in the nineties: Revisited. In R.H. Brockhaus, G. E. Hills, H. Klandt, &

- H.P. Welsch (Eds.), *Entrepreneurship education: A global view* (pp. 57-77). Aldershot, UK: Ashgate Publishing Limited.
- Mkala, D. M., & Wanjau, K. (2013). Transforming implementation of entrepreneurship education programme in technical training institutions in Kenya. *European Journal of Business and Innovation Research*, 1(3), 18-27. Retrieved from <http://www.eajournals.org/wp-content/uploads/TRANSFORMING-IMPLEMENTATION-OF-ENTREPRENEURSHIP-EDUCATION-PROGRAMME-IN-TECHNICAL-TRAINING-INSTITUTIONS-IN-KENYA.pdf>
- Mujuru, J. T. R. (2014). Entrepreneurial agriculture for human development: A case study of Dotito irrigation scheme, Mt. Darwin. *International Journal of Humanities and Social Science*, 4(4), 121-131. Retrieved from [http://www.ijhssnet.com/journals/Vol\\_1\\_4\\_No\\_4\\_Special\\_Issue\\_February\\_2014/14.pdf](http://www.ijhssnet.com/journals/Vol_1_4_No_4_Special_Issue_February_2014/14.pdf)
- Rae, D. M. (1997). Teaching entrepreneurship in Asia: Impact of a pedagogical innovation. *Entrepreneurship, Innovation and Change*, (6)3, 193-227.
- Rigley, B., & Rönnqvist, R. (2010). *Entrepreneurship education and its outcomes*. Retrieved from <http://umu.diva-portal.org/smash/get/diva2:356975/FULLTEXT01.pdf>
- Rockwell, S. K., & Kohn, H. (1989). Post-then-pre evaluation. *Journal of Extension*, 27(2), Retrieved from <http://www.joe.org/joe/1989summer/a5.php>
- Şeşen, H., & Pruett, M. (2016). The impact of education, economy, and culture on entrepreneurial motives, barriers, and intentions: A comparative study of the United States and Turkey. *The Journal of Entrepreneurship*, 23(2), 231-261. doi:10.1177/0971355714535309
- Smith, A. M., & Paton, R. A. (2011). Delivering enterprise: A collaborative international approach to the development, implementation and assessment of entrepreneurship. *International Journal of Entrepreneurial Behaviour and Research*, 17 (1), 104-118. doi:10.1108/13552551111107534
- Swanson, B. (2006). The changing role of agricultural extension in a global economy. *Journal of International Agricultural and Extension Education*, 13(3), 5-17. Retrieved from [https://www.aiaee.org/attachments/160\\_Swanson-Vol-13.3.pdf](https://www.aiaee.org/attachments/160_Swanson-Vol-13.3.pdf)