

Higher Education for Development
Knowledge, Partnership, Results

Application Title Page

2008-2009 Request for Applications
Africa-U.S. Higher Education Initiative Planning Grants

1. Contracting U.S. higher education institution: Texas A&M University, College of Agriculture and Life Sciences, Department of Agricultural Leadership, Education, and Communications

The U.S. institution must submit the application on behalf of the partnership.

2. Principal African higher education institution: University of Namibia, College of Agriculture and Natural Resources

3. Name of proposed partnership: Namibian Agricultural Education: Increasing Small Businesses and Rural Community Incomes through New Approaches to Agricultural Value Chain Education

4. Proposed problem model focus area (please select only one as your primary focus).

- Agriculture, environment and natural resources
- Health
- Science and technology
- Engineering
- Education and teacher training/preparation
- Business, management and economics

5. Key personnel:

U.S. partnership director's name: Dr. John F. (Jack) Elliot

Title: Professor and Head Dept.: Agricultural Leadership, Education, and Communications

Institution: Texas A&M University

Street address: 2116 TAMU

City: College Station State: TX Zip: 77843-2116

Telephone: 979.862.3003 Fax: 979.845.6296

E-mail address: JElliot@tamu.edu

African partnership director's name: Dr. Martin B. Schneider

Title: Deputy Dean Dept.: Faculty of Ag and Natural Resources

Institution: University of Namibia

Street address: Private Bag 13301

City: Windhoek State: _____ Zip: _____

Country: Namibia

Telephone: 26461 2063620 Fax: 26461.2063013

E-mail address: mbschneider@unam.na

6. List other cooperating African and U.S. institution(s) including higher education, government, non-government, private, etc., if any. (add sheets as necessary):

A. Institution: Michigan State University, Institute of International Agriculture
Name: Michelle Owens-Glenn
Title: Associate Director
E-mail address: owens@msu.edu
Telephone: (517) 353-1888

B. Institution: University of Arizona, Department of Agricultural Education
Name: James Arthur Knight, Jr.
Title: Professor and Faculty Associate
E-mail address: jknight@cals.arizona.edu
Telephone: (520) 621-9144

C. Institution: Louisiana State University
Name: Jonathan Manning Hubchen
Title: Program Coordinator, LSU Ag Center
E-mail address: jhubchen@cox.net
Telephone: (225) 578-7067

7. Funds requested of HED: \$43,650 (not to exceed \$50,000)

8. Cost sharing from the U.S. institutional partner(s): \$ 109,516 (Percentage of Award: 65%)

9. Cost sharing from the African institutional partner(s): \$ 18,058 (Percentage of Award: 11%)

10. Cost sharing from private sector partner(s): \$ 0 (Percentage of Award: 0%)

11. Cost sharing from public sector partner(s): \$ 0 (Percentage of Award: 0%)

12. Total cost sharing from all partner(s): \$ 127,574 Percentage of Award: 75%

13. Total cost of partnership activity: \$ 169,224 (Add lines 8 through 13)

14. One sentence description of partnership: To develop strategic plans for long-term partnerships that strengthen Southern African higher education institution's abilities in agricultural education and teacher training/preparation programs in support of Namibian National Development goals for improved rural livelihoods.

15. Please list any other U.S. federal agencies where you have submitted this particular application or any similar/overlapping application for funding. Also, if this application is a component of a larger project that has been funded or for which funds are being sought, please explain (please use separate sheet).

16. Signatures: An officer from each cooperating institution must authorize this application (add pages as necessary).

Contracting U.S. Institution

John F. (Jack) Elliot _____
Partnership Director Name

John F. (Jack) Elliot _____
Signature Date Jan. 5, 2009

Professor and Head, Dept. ALEC _____
Title

W. Dugas _____
Institution Head/ Authorized Institutional
Representative Name
Director / Vice Dean _____
Title

W. Dugas _____
Signature Date 28/1/08

Principal African Institution

Dr Martin B. Schneider _____
Partnership Director Name
Title:
Deputy Dean, Faculty of Agriculture & Natural Resources

Dr. M. B. Schneider _____
Signature Date 08/12/2008

Prof Dr OD Mwandemele _____
Institution Head/ Authorized Institutional
Representative Name
Title:
Pro-Vice Chancellor: Academic Affairs and Research

Dr. O. D. Mwandemele _____
Signature Date 02/12/2008

Namibian Agricultural Education:
 Increasing Small Businesses and Rural Community Incomes through
 New Approaches to Agricultural Value Chain Education

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**Namibian Agricultural Education: Increasing Small Businesses and Rural Community
Incomes through New Approaches to Agricultural Value Chain Education**
Abstract

The goal of this planning grant is to develop a strategic plan for long-term partnerships among University of Namibia, Texas A&M University, Michigan State University, University of Arizona, and Louisiana State University that will significantly strengthen the University of Namibia's agricultural education and teacher training/preparation programs in support of identified national development goals. Faculty improvement and curriculum enhancement will focus on advancing and building linkages between research, teaching and outreach to provide new entrepreneurial strategies for rural farmers based on sustainable natural product development. Ultimately, a Center of Excellence in Agricultural Value Chain Education is envisioned as a unique resource for educational institutions throughout Southern Africa whereby faculty and students will increase their knowledge of production methods, marketing strategies, and the potential for public-private partnerships, and will work directly with rural farmers to employ these techniques.

Expanded partnerships with government agencies, NGOs, local organizations such as the Namibian Women Summit, the Women's Action for Development, the Agricultural Scientific Society of Namibia (AGRISSON) and the Association for International Agricultural and Extension Education (AIAEE) also will be key to achieving overall project goals. In addition, a co-hosted AIAEE/AGRISSON conference, to be held in Namibia in 2011, is in the planning stages and will be a primary venue for strengthening these partnerships. The implementation of the proposed strategic plan will lead to improved agricultural education academic programs, curricula, and leadership particularly in agricultural value chain methods and, ultimately, to economic gains for rural farmers in Namibia and the Southern Africa region.

1. Objectives of the Planning Grant

Building on over a decade of collaboration among the University of Namibia (UNAM) and key institutions of higher education in the United States, the primary goal of this planning grant is to develop a strategic plan for long-term partnerships that will strengthen UNAM capabilities in agricultural education and teacher training/preparation programs. Concurrently, these programs will directly support identified national development goals for improved rural livelihoods. Thus, there will also be a focus on sustainable use of Namibian natural resources.

Specific objectives are to:

- A. Enhance partnerships among UNAM and U.S.-based higher education institutions through collaborative planning processes, focus group sessions, and organizational linkages with the partners listed in Section 4;
- B. Create a long-term strategic plan to advance The Republic of Namibia's rural economic growth via improved human capital, strengthened curricula, and enhanced undergraduate and graduate education programs in the agricultural and natural resource sciences. This will include a partnership with UNAM's Teaching and Learning Improvement Unit (TLIU) to improve pedagogy and with the Faculty of Agriculture and Natural Resources (FANR) to explore options to build primary and secondary school farms where science will intersect with life skills development for community members and youth alike;
- C. Explore long-term investment in The Republic of Namibia's agricultural industry by strategically empowering community members and educators to engage in value-added opportunities afforded by a rich Namibian natural resources sector;
- D. Initiate plans to expand scientific research, training, and educational capabilities at UNAM in rural value chain agriculture for indigenous plant and animal products through the

creation of a regional Center; thereby empowering disadvantaged populations and reducing gathering pressures on The Republic of Namibia's natural resources;

- E. Investigate approaches for an agricultural communications strategy to disseminate and promote UNAM's scientific achievements with the global community of scholars, and with Namibian policymakers' decisions vis-à-vis science-based evidence in rural value chain agricultural issues; and,
- F. By engaging in the process of developing a full proposal, empower UNAM through increased confidence in fundraising and grants administration, organizational linkages, distance education, and faculty mentoring.

Rural entrepreneurship is the backbone of sustainable economic growth and, as such, this partnership will explore how U.S.-based institutions of higher education can support institutional capacity building at UNAM and its stakeholder-related educational and research institutions to provide knowledge and skills to rural communities that will enhance their abilities to effectively engage in value chain agriculture. For example, the proposed project aims to support the efforts of rural farmers to profit from the Kalahari truffle by facilitating locally produced, processed, packaged and marketed crops, thus retaining profits in local communities. Once this objective is achieved, other natural products can be developed following the same model. Key to this process is to ensure knowledge gained is openly disseminated for use by all interested entrepreneurs. In addition and in accordance with previous projects among partners at Texas A&M University (TAMU), University of Arizona (UofA), Michigan State University (MSU), Louisiana State University (LSU) and UNAM, an underlying long term goal of this project will be to increase engagement among U.S. higher education institutions to help build UNAM's administrative capacities.

2. The Problem Model

The 1996 Namibia National Development Plan (NNDP)ⁱ identified a critical shortage of trained personnel for positions in private sector, government and non-governmental organizations capable of providing research, teaching, and advisory services in agriculture and related fields and also for managing the country's natural resources. This shortage was noted as a serious drawback for achieving significant advances in the agricultural sector. To address this need, the FANR at UNAM was solicited to engage in training a new generation of agriculturalists whose aim is to improve management of natural resources and help to meet the country's food security needs.

A. Education and Teacher Training/Preparation

Specifically, the FANR has collaborated with the US-based partners participating in this proposal to revise curriculum and support teacher training to address the needs of the rural and disadvantaged populations of The Republic of Namibia. The FANR is composed of six departments (Agricultural Economics & Extension, Animal Science, Crop Science, Food Science & Technology, Integrated Environmental Science, and Fisheries & Aquatic Sciences). While initial progress has been made in focusing educational programs on local development needs, the FANR is limited by low numbers of Ph.D. level faculty, inadequate modern research facilities, low status graduate-level programs, minimal community outreach and training, and the lack of a problem-based curriculum. These gaps cannot be filled in one step or by one person, but require long-term support and involvement from experienced professionals.

B. Pedagogy

The TLIU at UNAM was established in 1998 to ensure that all staff are able to meet growing teaching challenges through improved pedagogy and employment of a variety of course

delivery modes. However, until the middle of 2006, TLIU was embedded within a larger department under a single director with multiple responsibilities, resulting in minimal progress in achieving the Unit's goals. At that time, an Institutional Audit recommended TLIU be re-established as a separate entity with its own director. That director, Dr Erika Maass, is now actively engaged in developing this partnership. Although the TLIU has begun to make progress toward improving the quality of teaching and learning at UNAM, the Unit needs to be substantially expanded if it is to more effectively impact and reach more staff members.

C. The Foundation for Economic Improvements and Partner Capacity

Significant changes in The Republic of Namibia's economic position are dependent upon a highly educated population. Steps taken to move toward the achievement of this goal, the crux of this proposal, will establish the foundation for improvements in agriculture, health, science and technology, engineering, business, management and economics. Proposed capacity-building priorities include faculty development, curriculum improvements, community outreach and engagement, institutional leadership and management, marketing, advocacy, alumni engagement, research and problem solving capacity development, and improvements to facilities and equipment. The educational expertise and institutional capacity among the partners to make advances in these areas is impressive, but more important is the passion among the team for the Namibian people. The résumés in Section 4 of this proposal will verify not only competence, but passion for the success of UNAM demonstrated by the long-term commitment and involvement of this team over the past decade and by what the partnership proposes to accomplish in the next decade.

3. Needs Assessment and Strategic Planning Process

Current research from the Namibian Central Bureau of Statistics indicates that nearly one-third of The Republic of Namibia's two million people lives on US\$1 or less/day and documents a sharp rise in households classified as "severely poor" or living on less than N\$185 (US\$19) per monthⁱⁱ. The NNDP substantiates these reports, indicating that the increase in "severely poor" is a reflection of monetary deprivation, high numbers of children in poor households, and low levels of education of the household heads. PI Schneider indicated, "...people in rural communities often lack the knowledge that would allow them to capitalize on the opportunities and potential wealth available to them."

The national goal, as identified in the NNDP, is to improve levels of food security at both household and national levels and to create employment opportunities. Thus, increased agricultural production is key to ensuring food security for a significant proportion of the Namibian population as well as expanded employment opportunities. However, domestic food production does not currently meet local demand, thereby requiring significant food imports. Constraints noted to broadening opportunities in the agriculture and natural resources sub-sector include a small domestic market, barriers to export trade development, production credit availability, and farmers' lack of skills and risk aversionⁱⁱⁱ.

Systemic change to improve these conditions is the ultimate long-term goal of this proposed project, and it begins by significantly and foundationally improving education, teacher training/preparation, and information sharing. The following outline and work plan indicate how this partnership intends to demonstrate its current capacities to address the problem model and build a process to develop institutional and innovative changes that will be defined in a strategic plan.

A. Problem Model Findings and Current Capacity

a) Education and Teacher Training/Preparation

i. Team leaders (PIs and Project Coordinator Glenn) will formally activate the team and assemble findings from the focus groups conducted the past two summers by partners Elliot, Schneider, and Glenn.

ii. Documentation of institutional (UNAM, ministries, NGOs and other stakeholders) capacity will be gathered by all participants.

iii. A summary of the findings will be published by Glenn and used as the basis for initiating additional needs assessment activities.

B. Needs Assessment Findings

a) PI Schneider will implement a needs assessment process in The Republic of Namibia with assistance from Dr. Erika Maass, Director of the TLIU, and Associate Professor Dr. Luke Kanyomeka, Deputy Dean FANR-Ogongo.

i) Verify priorities of UNAM personnel, stakeholders, partners, and potential partners.

ii) Arrange for July focus group sessions led by Glenn and Elliot.

iii) Verify the Agricultural Scientific Society of Namibia (AGRISSON) conference itinerary (July 1-2) with conference chair Kanyomeka. The itinerary includes:

(1) Unveiling the Team's strategic planning process and solicit input.

(2) Announcing the AIAEE/AGRISSON 2011 joint conference.

(3) Offering a session on how to submit and publish research results.

iv) Finalize May travel arrangements for Schneider and Mwandemele to participate in a strategic planning event (see C.b.) in conjunction with the 2009 AIAEE conference.

- b) PI Elliot will initiate the need assessment process in the U.S.
 - i) Working with Schneider and Glenn, U.S. partners will assess and compile Namibian input (using various communication channels) and make preparations for the May strategic planning event.
 - ii) Information and documents will be shared with Bill Lindley (Strategic Planning Facilitator) who will lead the May strategic planning event.

C. Strategic Planning Development

- a) Lindley, the PIs and Glenn will focus on utilizing all needs assessment findings to generate a first iteration of the strategic planning document. This document will be reviewed and edited by the partners throughout the spring and summer.
- b) Strategic Planning Event in conjunction with the 2009 AIAEE conference – May 24-29
 - i) Strategic plan editing sessions, facilitated by Lindley, will occur during and after the AIAEE conference.
 - ii) The writing team, including Schneider and Mwandemele will convene at TAMU for additional editing and to meet institutional collaborators, including Team Borlaug.
 - iii) The AGRISSON conference (July 1-2), chaired by Professor Kanyomeka will be the inaugural unveiling of the strategic planning process for many of the Namibian scientists and the venue for inviting them to become involved in this project.
 - iv) The team will prepare final iterations of the strategic plan following the AGRISSON conference as they continue to meet with stakeholders in The Republic of Namibia, including private sector partners.
 - v) Initial work on a detailed executive summary will begin during the early July Namibian development trip by the PIs and Glenn.

- vi) The team will provide input on the executive summary and strategic plan prior to Schneider and Elliot's attendance at the Africa HED Partners Meeting in August.
- vii) Throughout September the team will be briefed, input solicited, and a final iteration of the detailed executive summary prepared and submitted.
- viii) Glenn will lead the team as it addresses HED comments and creates and submits the final strategic plan in October.

4. Proposed Partnership Description

A. Relevant Experience of Key Personnel

The proposed partnership is based on a relationship that began in 1998 when the proposed Project Coordinator, Dr. Michelle Glenn (in her role as Agricultural Extension, Education and Communications Officer in the FAO Africa Office) and the proposed Strategic Plan Facilitator, Dr. William Lindley (in his role as FAO Senior Officer for Agricultural Education), implemented an FAO project in The Republic of Namibia to support development of the FANR. Dr. Jack Elliot, the U.S.-based Principal Investigator, currently from TAMU, provided technical expertise in 1999 and developed a Memorandum of Agreement between UofA and UNAM. Funding was acquired that allowed for two UNAM faculty to attend the UofA and receive advanced degrees. In 2000, Elliot led a Namibian national curriculum review that restructured UNAM's programs from a quarter to a semester system and, in 2002, conducted a week-long faculty development workshop on instructional advances for UNAM faculty. Dr. Jim Knight, UofA, assisted Elliot in the UNAM faculty development workshop. The current UNAM Pro- Vice Chancellor, Osmund Mwandemele, was the Dean of the FANR during the FAO project, and his constructive relationship with these members of the project team has grown and strengthened over the subsequent years.

Martin Schneider, Deputy Dean FANR, and Vice Chancellor Lazarus Hangula also became involved in this professional relationship during Elliot and Glenn's visits to The Republic of Namibia. Dr. Schneider coordinated the UNAM faculty focus groups facilitated by Elliot and Glenn in 2006 and 2008. Moreover, in 2010, Knight will be taking sabbatical leave to work with UNAM/FANR and stands ready to assist with implementing the proposed strategic plan.

In addition, Glenn, Knight, Mwandemele, Wingenbach, Hutchinson, and Elliot are long time AIAEE members. All have been active in AIAEE leadership, with Dr. Wingenbach serving as the current President. They are assisting UNAM with co-hosting the 2011 AIAEE Annual Conference in Windhoek, in conjunction with the AGRISSON Biennial Conference. These events will provide opportunities for supporting this proposed project through professional development, networking, collaborative research, and peer-reviewed publication, particularly for young faculty members. In addition, Glenn and Elliot, as previously noted, will participate in this summer's AGRISSON Conference at UNAM's Ogongo campus.

B. Institutional Commitment

TAMU's President, Elsa Murano, encourages international activities among faculty, students, and institutions as illustrated by her recent appointment of Eric Bost as Vice President for Global Initiatives, a position created in January 2009. The TAMU Norman Borlaug Institute for International Agriculture also supported Linda Cleboski's travel to The Republic of Namibia in December 2008 to assist in finalizing this proposal. In addition, the TAMU Department of Agricultural Leadership, Education, and Communications (ALEC) has a long history of international involvement including offering a Master's in Agricultural Development and

encourages an international focus in its Ph.D. programs. Recently, a new faculty position was approved in International Agriculture and a nation-wide search will soon be underway.

UNAM's Pro-Vice Chancellor, Osmund Mwandemele, was the original author on the first MOA between the UofA and UNAM. Upon hearing that PI Elliot was moving to Texas A&M, Professor Mwandemele indicated that he wanted to continue the relationship and build a new MOA with TAMU. The Borlaug Institute is facilitating that process. UNAM administrators are also supportive of Knight's sabbatical and looks forward to working with him to help achieve the pedagogical goals of this proposed project.

Other partnering institutions also demonstrate considerable commitment to stated project goals. The UofA is in the process of transferring the MOA to Knight and is also supporting his 2010 sabbatical at UNAM. Similarly, MSU's International Extension Programs office financed Glenn's Namibian activities for the past two summers. In addition, MSU coordinated and provided resources for numerous conference calls for this proposal preparation. At the same time, LSU partner, Jonathon Hubchen, Program Coordinator for International Programs, has worked with UNAM for several years on food science initiatives and plans to apply that experience toward the goals of this project.

C. National Government Commitment to the Development of Higher Education

Experts from the following Namibian ministries participate in FANR's curriculum review cycles and are equally represented on the FANR Faculty Board. Their participation in the proposed strategic planning process is expected.

A significant UNAM/FANR partner within the Government of the Republic of Namibia is the **Ministry of Agriculture, Water and Forestry (MAW+F)**. FANR faculty, together with colleagues from various directorates within the Ministry, are involved in research and extension

activities throughout The Republic of Namibia. UNAM's Experimental Farms, supported by the Ministry are being utilized as centers for formal and informal training of rural farmers, farm workers, and communities in various agricultural skills and farming practices.

The **Ministry of Fisheries and Marine Resources (MFMR)** and the FANR's Department of Fisheries and Marine Sciences support each other through staff exchanges and student attachments (internships) on marine research vessels off the Namibian coast. Marine biologists and fisheries experts also assist in teaching certain modules of the FANR undergraduate degree program.

Through a collaborative agreement between UNAM and the **Ministry of Environment and Tourism (MET)** Department of Natural Resources, students are being trained in forestry management, game ranching, and environmental protection.

The **Ministry of Education (MoE)**, amongst others, administers study loans and bursaries for FANR students. MoE and FANR personnel are engaged in teacher training courses with the aim of introducing agricultural subjects such as horticulture, animal husbandry, and basic food science into the country's school curricula.

D. HED Partners – Collaborative Efforts and Involvement

➤ **Texas A&M University: Department of Agricultural Leadership, Education and Communications**, the submitting department at the applicant institution, with over 50 faculty and staff and 1000 students, is the largest department of its type in the world. Currently, it has three Namibian research and development projects, a designated international tenure-track faculty position, is home to the AIAEE president and the AIAEE journal editors, and has international expertise in strategic planning, agricultural teacher training, curriculum development, program management, agricultural communications and marketing, among others.

Elliot and Wingenbach have successfully managed national and international projects involving more than \$9 million dollars in extramural funding in the past decade.

➤ **The University of Namibia (UNAM)** has five campuses and eight regional centers. UNAM's vision is to engage society in the creation and dissemination of knowledge through teaching, research, and advisory services, and a commitment to lifelong learning; thereby becoming a treasure house of knowledge at the service of national development and available in multiple educational and outreach formats forms directly relevant to improving people's quality of life. FANR stakeholder groups that will provide strategic planning input include: (1) the Namibian Women Summit (a group that brings together women leaders, business women and women entrepreneurs to network); and (2) the Women's Action for Development (a self-help organization that aims to uplift the socio-economic and socio-political situation of primarily Namibian rural women).

➤ **Texas A&M University: Norman Borlaug Institute of International Agriculture** provides agricultural technical assistance in 30 countries, conducts problem-solving research to support economic development in poor countries, advises on agricultural policy and regulation, and supports the federal government in its conduct of U.S. foreign assistance. Linda Cleboski, the Institute liaison for this project, has worked closely with PI Schneider on this planning grant proposal.

➤ **Michigan State University** is well known for its international expertise and particularly in empowering rural communities to engage in economical value chain processes. Proposed Project Coordinator Glenn, once a regional FAO Officer and currently Director of MSU International Extension Programs, has assembled interested content experts in product center & training, value chain work, mushroom research, and veterinary medicine to assist with the

strategic planning process. Glenn is the catalyst who began these U.S. and Namibian higher education relationships over a decade ago.

➤ **University of Arizona** has an active MOA with UNAM. MOA leadership is being transferred from Elliot to Knight who has been approved for a six-month sabbatical at UNAM beginning January, 2010. Knight's priority will be to help implement the proposed strategic plan and MOA activities in the areas of faculty development, learning styles, curriculum development, and teacher training. During his six month stay, he will coordinate grantsmanship and fundraising training courses to be offered by Dr. Barbara Hutchinson.

➤ **Louisiana State University Agricultural Center (LSU AgCenter)** is a statewide campus of the LSU System responsible for agricultural research, extension and international programs. The LSU AgCenter provides off-campus educational programs that disseminate technical, economic, and management information to agribusinesses and communities and conducts statewide health, food safety, youth, and leadership programs. In the past few years, it introduced Hazard Analysis and Critical Control Points (HACCP) in The Republic of Namibia with local industry and government agencies. AgCenter team members, including Jonathan Hubchen, conducted in-country HACCP training.

➤ **Association of International Agricultural and Extension Education (AIAEE)** serves as a worldwide catalyst in bringing the collective expertise of several hundred agricultural and extension educators to bear on the problems of human resource and agricultural development. AIAEE officials selected Windhoek, Namibia as the site for its 2011 conference.

➤ **Agricultural Scientific Society of Namibia (AGRISSON)** is a nonprofit society that strives to promote the application of agricultural scientific principles in The Republic of Namibia by means of active interaction of people and/or institutions affiliated with the agricultural sector.

Their biennial meeting, chaired by Professor Kanyomeka, will be held at the UNAM's northern campus on July 1-2, 2009 and will serve as a venue to continue working with UNAM colleagues on the strategic plan.

➤ The following entities also agreed to work with the partnership team to develop the strategic plan: (1) **Centre for Research Information Action in Africa - Southern Africa Development and Consulting (CRIAA SA-DC)**, (2) **Gobabeb Desert Training and Research**, and (3) the Namibian office of the **Food and Agricultural Organization (FAO)**.

E. Potential Impact

➤ **Students:** A relevant curriculum with inclusion of community members and private sector affiliates is the proposed future. School Farms at Primary and Secondary Schools with youth programs for life skills development, business clubs, as well as leadership/agribusiness training for rural youth is another focal priority.

➤ **Faculty:** UNAM support for faculty research and publications is evolving. With many departments lacking a long-term culture of research, and some departments yet to initiate post-graduate programs, such academics are often left in a vacuum. Even faculty members with fairly active research programs experience publishing problems in reputable journals. In many cases, this can be ascribed to a lack of confidence and understanding of the process of scholarly writing. However, despite the lack of recognized scholarship vis-à-vis scientific journal publications, UNAM's promotion criteria are very strict concerning research output (in addition to requirements for teaching effectiveness and community service), creating tension and feelings of inadequacy for many, especially young Namibian faculty. The 2011 AIAEE/AGRISSON Conference will be used as a catalyst to encourage collaborative research activities and scholarly submissions for these faculty members.

➤ Higher Education Institutions: In the future, UNAM, through its country-wide campuses, is poised to educate and train people who will go out and work with farmers to give them the skills to enhance their livelihoods through improved practices and knowledge of agribusiness processes. One of UNAM's major goals is to connect its university researchers and educators with the Namibian Communal Conservancies^{iv} and with private sector partners in addressing real-world challenges through engaged research, scholarship, and transformative learning experiences.

➤ Republic of Namibia: The intended outcome is to expand economic opportunities for rural communities by providing training and learning opportunities based on current science, technologies, partnerships, and business approaches that will ultimately develop and enhance The Republic of Namibia's competitive advantage in the indigenous agricultural products industry. By building partnerships among UNAM/FANR faculty and students, farmers' organizations, local NGOs, communal conservancies, and government agencies, rural communities in The Republic of Namibia will become empowered not only in the production of indigenous agricultural commodities, but also in the improvement of their processing, packaging and marketing. This approach provides unique opportunities to strengthen communication linkages between researchers, extensionists, and their communities that will lead to increases in agricultural profits and economic development in rural Namibian communities.

➤ Southern Africa: A Regional Center for Rural Value Chain Agricultural Research, Production, Processing, and Marketing is proposed to offer courses, grant undergraduate and graduate degree programs, and provide teacher training in all components of the agricultural value chain. Such a Center was identified as a top priority in previous focus groups, and has the potential to transform the entire region. For example, Southern Africa has a rich heritage in its

natural plants, yet people in rural communities often lack the knowledge that allows them to capitalize on this wealth. Although many indigenous plants are cultivated or gathered from the natural environment, farmers are not skilled in commercial production, processing, packaging, and marketing of these indigenous commodities. To help rural entrepreneurs capitalize on their knowledge of local plants, the Center would provide a venue to conduct research, improve scholarship, disseminate new knowledge, and develop training programs focused on successful natural products' agri-business development. Mainstream farming practices often present barriers for small-scale farmers due to a lack of communication channels. The Center would also help fill this gap and foster new entrepreneurial enterprises for rural farmers. .

5. Innovation and Change

Innovation and change will be realized through a multiplier effect from the confluence of AGRISSON and AIAEE organizational interaction. The unique combination of agricultural and extension education professionals from these two organizations brings literally thousands of years of expertise to bear on the rural economic challenges facing Namibian agriculturists. Most AIAEE members have significant connections and interactions with agricultural development organizations including the UN-FAO, World Bank, CGIAR, African Development Bank, Association of Africa Universities (AAU), and the African Union. Joining the intellectual forces of AIAEE and AGRISSON will promulgate innovative solutions toward meeting The Republic of Namibia's agricultural challenges, while simultaneously encouraging new relationships with agricultural development organizations beyond the scope of this project. Such new relationships may discover long-term solutions that foster practical, sustainable changes for Namibian agriculture, but also may reveal new philosophical approaches for those working in international agricultural development projects. For example, agricultural development personnel may find

new methods to foster localized agricultural entrepreneurship through micro- rather than macro-economic philosophies that are better suited for The Republic of Namibia's indigenous plant products such as the Kalahari truffle.

Purchasing products such as the Kalahari Truffles marketed by Namibian farming cooperatives throughout the region will be one long term measure of this projects success. Providing new sustainable approaches, partnerships, production methods, marketing strategies and opportunities for rural communities to benefit from a proper use of Namibian natural resources is the proposed long term target. However, to realize this ambitious goal, investment and support for research and education as well as communication of new knowledge to rural entrepreneurs is needed. Guiding principles to accomplish this task are based on the Agricultural Open Educational Resources^v and on the premise that knowledge and innovation are local and widely applicable to the Southern Africa region. Thus, by strengthening academic programs and curricula that augment the development goals of The Republic of Namibia and the Southern Africa region, this partnership will also contribute to overall economic development.

Specific to this planning grant, innovative and fundamental educational changes are expected to continue and expand at UNAM because of the strong and supportive relationships among the partnering institutions. PIs Elliot and Schneider and project coordinator Glenn will participate in the 2009 AGRISSEON meeting for the purpose of elevating UNAM faculty scholarship through collaborative activities that will lead to publishing and presenting research results at the joint 2011 AIAEE/AGRISSEON Conference. While such a purpose may appear routine, this will be the first time an international research conference has committed to improving Namibian research capabilities. At the same time, AIAEE members and member institutions will have a unique opportunity to become involved in collaborative research and publication with UNAM faculty.

Thus, this partnership will also potentially provide new opportunities for U.S. higher education faculty members to become engaged with education and research at UNAM.

Similarly, by building capacity at educational centers (agricultural research centers, higher educational institutions, secondary school farms, and/or other educational institutions), the entrepreneurial process in local and national communities will be strengthened to provide opportunities to network with private enterprise and public organizations. These educational hubs will offer open access to educational resources by local, national, and regional education and research institutions/organizations and to cutting edge content from educational programs developed at UNAM.

Previous focus group activities by Elliot and Glenn have already forged collaborative partnerships with others who desire innovative change for the Republic of Namibia. For instance, last summer the Gobabeb Desert Training and Research and the CRIAA SA-DC personnel contributed their expertise and assistance to the initial assessment process.

6. Management Plan

The proposed project team will begin verifying educational and training needs by building on the results of previous UNAM and Namibian stakeholder's focus group sessions (see Work Plan). In addition, the consensus building process used to develop this proposal will be expanded to all potential partners. This will be realized, in part, through an invited professional development workshop, lead by Osmund Mwandemele (UNAM Pro Vice Chancellor) and Martin Schneider (Deputy Dean FANR), at the 25th AIAEE Annual Conference in San Juan Puerto Rico (May 24-29, 2009). Mwandemele and Schneider will lead an interactive workshop on "Increasing Small Businesses and Rural Community Incomes through Agricultural Value Chain Education Linkages in Africa" for an anticipated 125 AIAEE professionals. The AIAEE

conference venue affords UNAM officials explicit opportunities to network with agricultural and extension education professionals, NGOs, and private sector representatives. Opportunities to further develop the project's strategic plan will be achieved through intensive editing sessions led by Strategic Planning Facilitator Lindley in coordination with AIAEE members, Elliot, Glenn, Wingenbach, Knight, and Hutchinson, who plan to attend the AIAEE conference in San Juan. Planning grant partners will use the AIAEE conference to promote collaborative activities that will result in full attendance at the 2011 AIAEE Conference, co-hosted in conjunction with the AGRISSON Biennial Conference in Ogongo, Namibia.

Following the AIAEE conference, Schneider and Mwandemele will travel to TAMU where they will help develop the full strategic plan. Then Elliot and Glenn will attend the July 1-2 AGRISSON meeting with PI Schneider where they will continue to work with UNAM partners on the strategic plan and executive summary. PIs Schneider and Elliot will attend the HED partners August 24-25 meeting in Accra, Ghana and unveil the Namibian strategic plan. The detailed executive summary will be refined during the summer and will be ready for submission in September. Following these meetings, project coordinator Glenn will solicit editorial input electronically and through conference calls. The final strategic plan, as the culmination of ideas from all partners, will be submitted in final form in November, 2009.

7. Budget

The work plan, budget, and management plan document strong Namibian leadership, participation, and equitable expenditures. For example, 41% of the actual award supports travel for Schneider and Mwandemele to attend the strategic planning event. The three key activities (strategic planning event, the AGRISSON Conference, and the Ghana partner's meeting) account for the entire award budget. This budget directly builds on the decade-long relationships among

the key partners and demonstrates considerable buy-in and support from all partner institutions and project members. Most particularly, PI Schneider, along with UNAM colleagues Mwandemele, Maass, Kanyomeke, and Itenge have been closely involved in developing this proposal since the summer of 2008 and are organizing the Namibian portion of the work plan. The UNAM cost share, \$18,058, accounts for 11% of the entire partnership cost. The combined U.S. partner cost share, \$109,516, is 65% of the total. TAMU reduced its indirect rate from 46.5% to 10%. These percentages illustrate the commitment the team members have toward this effort. Because the proposed strategic planning process begins to incur costs prior to June, it is expected that these expenses will be negotiated during the sub agreement approval process.

ⁱ Republic of Namibia (2004): *Namibia Vision 2030, Policy Framework for Long-term National Development*, Office of the President, 248 p., Windhoek, 2004. ISBN: 99916-56-03-0

ⁱⁱ Republic of Namibia (2008): *Preliminary National Accounts 2007*, National Planning Commission/Central Bureau of Statistics, 14 p., Windhoek, 2008

ⁱⁱⁱ Republic of Namibia (2007): *National Accounts 1996-2006*, National Planning Commission/Central Bureau of Statistics, 46 p., Windhoek, 2007.

^{iv} *Namibia's Communal Conservancies: A review of progress and challenges (2004)* Published by NACSO (Namibian Association of CBNRM Support Organizations) PO Box 98353, Windhoek with funding from LIFE (Living in a Finite Environment) and USAID

^v Weber, Steven (2004): *The Success of Open Source*, Harvard University Press, Cambridge, MA and London, UK