1. PROJECT TITLE

Sustainable use of rural woodlands in Zimbabwe

2. PROJECT DESCRIPTION

I am developing a collaborative project to work with a university located in rural Zimbabwe, Midlands State University (MSU), to foster the sustainable use of rural woodlands in the region around Gweru, where MSU is located. This project will address a real need in rural Africa—the need to make rural socioeconomic development relevant to the education experienced by most Zimbabweans. This project will be developed in partnership with several educators at Midlands State University through hosting them for short periods (up to one month) at UNH for project development, engaging with the UNH community, and proposal writing. I intend to host the first educator in Fall 2009 (Mr. Samson Gumbo), and to host the second in Spring 2010 (Dr. Charles Pfukwa). In the project, we will work with a women’s empowerment organization in Zimbabwe (Jekeza Pfungwa) and several rural communities to 1) examine the use of indigenous knowledge in food production for rural communities develop, and 2) develop a community-based curriculum for secondary schools for disseminating the rational and scientific basis for indigenous knowledge in food production.

3. BACKGROUND INFORMATION/STATEMENT OF THE ISSUES/PROBLEM

Rural socio-economic development in Zimbabwe, and presumably in much of sub-Saharan Africa, is poorly integrated with formal education. The primary through tertiary school curriculum is by nature and structure academic and in some cases abstract. It is accordingly removed from local ecosystems and the indigenous knowledge systems of rural communities. The net result is that formal education becomes a process of urbanization in which graduates of the system do not see themselves as having any responsibility towards the socio-economic development of the communities in which they were raised. In other words, the concepts, knowledge, attitudes and skills developed do not translate to practical application for the benefit of the community.

The concept of work-related learning is an attempt to link education with the real world of work. This approach has been successfully adapted at MSU by students interested in commerce and industry where they are deployed in year-long internships. Students have often improved operations at workplaces by

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applying concepts learned in formal instruction at MSU. However, this has not been the case in the rural areas. For example, success stories are lacking in land reclamation or in improving community health through the use of local resources by students in various relevant disciplines at MSU.

Entrepreneurship through work-related learning has yielded successful results when projects are urban-based and address needs of the urban community. The challenge is to develop curricula that consider among other issues how science, technology and indigenous knowledge systems can be applied for socioeconomic development. Teaching approaches and projects must address the challenges of rural communities.

4. PROJECT DETAILS

Goals and Objectives

- To establish a research project on rural development in Zimbabwe. This will ultimately require the securing of funding from appropriate sources in the USA.
- To increase the research knowledge capital at a young university in Zimbabwe, Midlands State University (founded 2001). This will be accomplished through a) bringing researchers to UNH for approximately one-month exchanges; and b) working with faculty, staff, and students at MSU on research projects in rural Zimbabwe during similar stays of UNH professors at MSU.
- To form partnerships with several rural communities, university staff in Zimbabwe and at UNH, and NGOs in Zimbabwe.

Target Population/Audience

This project targets a diverse audience, including researchers and faculty at UNH, staff at Midlands State University, and residents of rural Zimbabwe. We intend to start small and increase the scope of the project as new groups become interested.

Methods

Evidence of External Collaboration and Partnership:

I have contacted and identified several faculty at UNH who have ongoing research in Africa, and the recent initiation of a partnership with two Ghanaian universities has indicated the great level of interest on campus in African issues. I have discussed with the Office of International Students and Scholars how to bring scholars to UNH, and discussed with the director of the International Research Opportunities Program how to provide UNH students with research opportunities in Zimbabwe.

At Midlands State University, my colleague Mr. Samson Gumbo is currently the director of the Work-Related Learning program for undergraduates,

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Outreach Scholars Academy – Project Format
and sees a great need for making rural development as important in secondary school education as the Western-oriented and abstract curriculum held up as the standard model. We have drafted an initial research plan that will be modified and expanded as other staff at UNH or Midlands State University join. In addition, a local (Zimbabwean) women’s empowerment organization (Jekeza Pfungwa, director Ms. Bertha Jambaya) has agreed to provide training or assessments in rural communities as required. An initial visit in Fall 2009 to UNH by Mr. Gumbo will be used for fleshing out the planned research in greater detail, meeting with interested colleagues at UNH, and writing a grant proposal for the project.

We have selected nine rural communities in Midlands Province in two climatic zones (low veldt—less rainfall and high veldt—more rainfall). The initial study will be exploratory and will investigate the use of indigenous knowledge systems in crop and vegetable cultivation. The focus will be on the production, gathering, processing, and preservation of food and the extent to which the indigenous food systems of selected communities contribute to household food security, poverty and health of those communities.

In a second part of the study, we will develop a community-based integrated curriculum for Foods and Nutrition for secondary school systems. This curriculum will focus on opportunities to use and apply indigenous knowledge systems to raise awareness of the role of nutrition in the fight against HIV and AIDS.

Benefits and impacts of this collaborative study:
1) For UNH, the study will expand my interests from beyond the “basic” science of forest ecology to include the interactions of rural communities with woodlands. The study will allow me to explore a developing interest in our lab, the use of stable isotopes as dietary markers. I expect that the project could serve as a nurturing ground for many other researchers and students at who seek to work in the tropics at the intersection of natural systems and human communities.
2) For Midland State University, the study will focus attention at the school on the rural communities immediately surrounding it, and according to one professor at Midlands State, will introduce many faculty at the school to western modes of doing research.
3) For the rural communities themselves, the benefits will include instruction on how diet and food choices can help in increasing resistance to diseases including HIV, and formal instruction in secondary schools on indigenous knowledge systems, thereby strengthening the transmittal of those systems from one generation to the next.

Scholarly Connection:
The planned work will allow me to combine a long-standing personal interest in development in Zimbabwe with my scholarly career. In particular, it will facilitate a transition to a more integrated research agenda that combines human impacts, the development of human capital, and woodland ecosystems. This will be my first research in tropical environments, and will expose me to a much wider range of academic disciplines than I am currently engaged in.
5. EVALUATION PLAN

The scholarship of the project will be assessed through documentation of outputs such as published papers, faculty or students trained and participating (e.g., through the UNH International Research Opportunities Program), and, assuming the project is funded, through required annual reports by the funding agency. The Midlands State University project coordinator, Mr. Sam Gumbo, has experience in evaluating outcomes of projects at his university and will handle assessments at MSU. Evaluations and benefits assessment in the targeted rural communities will either be handled by MSU or by the partnering NGO (Jekeza Pfungwa, based in Harare, Zimbabwe), which also has experience in assessing outcomes from the range of training and educational projects they have carried out during their history.