

## **Sustainability, Education and the Management of Change in the Tropics (SEMCIT) and the Jinja Consensus.**

A multi-year project developed by EARTH University and the Salzburg Seminar with the collaboration of Noragric, Agricultural University of Norway (<http://www.changetropics.org>)

The Salzburg Seminar and EARTH University in collaboration with Noragric initiated a series of international seminars focusing on the importance of education, specifically tertiary agricultural education, to enhance sustainable development in the humid tropics. The tropics are both particularly rich in genetic resources and particularly fragile. They occur in developing countries in Central and South America, Africa and Asia. The first seminar in Austria in August 1999, identified the importance of changing the orientation of existing tertiary education systems in the tropics to meet the challenges of the new Century. The second seminar was held in Costa Rica in August 2000. At this seminar the characteristics of the leaders needed to meet these challenges were articulated and the participants also explored the experience of EARTH University in producing dedicated change agents. The third seminar in Jinja, Uganda was held in May 2002, and produced a broad consensus on the need to encourage the transformation of existing universities and of creating an African institution to implement a radical new approach to tertiary agricultural training and provide support to existing universities. A fourth session will be held in Thailand in October 2002 and the final seminar will be held in Norway in June 2003. NORAD and UNDP Capacity 21 actively support this seminar series.

The dream is:

*“People who will work to achieve a broad, sustainable agricultural system (including all forms of natural resource use) through a new approach to education combining disciplines and including ethics. An education system which provides an environment to broaden the minds of students, encourages them to question and to use their initiative and which promotes social and environmental consciousness.”*

The project mission is to:

*“Foster leadership and change in the tropics through innovative models of higher education in agriculture and natural resources relevant to our common social, economic and environmental needs”*

The main objectives, working groups and conclusions of the first two Seminars are summarised in Table 1. These Sessions highlighted the importance of adapting agricultural education to the realities of the information era, globalisation and modern technology. They emphasised the importance of producing graduates committed to developing rural areas and to the importance of creativity, entrepreneurial skills and experiential learning to the process.

Two preparatory workshops were held in Kampala in May 2001 and in Dakar in October 2001 to enhance the Africa Session held in Uganda in May 2002. The objectives of these workshops were:

To broaden the informal network of people interested in change for tertiary agricultural and environmental education.

- To obtain evidence of what is happening in East and West Africa and in both the anglo and francophone systems.
- To broaden and deepen the understanding of the characteristics necessary for change agents in Africa.
- To consider the most appropriate approaches to develop effective leaders and establish education systems that both enhance sustainable development and meet the challenges of the new information age.

The African regional preparatory workshops confirmed the findings of the earlier seminars. They particularly emphasised the need to transform the existing pedagogical paradigm, to incorporate environmental and social issues in the curricula, to form partnerships with civil society, private sector and government and to encourage a multidisciplinary and more holistic approach to agricultural education. Flexibility and adaptability of new or reformed institutions was emphasised together with the urgent need to address incentives to attract and retain good staff.

The workshops achieved their objectives of expanding the network of Africans interested in the challenges to making tertiary agricultural education more relevant to the information age. There was also a real synergy in the problems facing all the educational institutions and on the profile of the desirable graduates. There was broad agreement on the need for change, the need to be facilitators rather than receptacles of knowledge and the need to provide more entrepreneurial and practical agricultural experience. At both workshops it was agreed that we need graduates who are more critical thinkers and who develop an ethic and value-system which is rooted in their local culture but able to compete on the global stage.

At the Third Seminar Session held in Jinja, Uganda, the participants reinforced the need for change and the importance of producing innovative change agents committed to agricultural and rural development. The meeting moved the process from discussion to proposals for action. The following is extracted from the **Jinja Consensus** document produced at the workshop:

A starting point for the discussions was a broad consensus on the urgent need for change in the tertiary education systems for agriculture and natural resource management in Africa. The vision for such a transformation process is to enhance the role of universities in making agriculture more

economically competitive, socially responsible, and environmentally sustainable in an increasingly globalized world economy and to provide effective contributions to food security and poverty reduction strategies.

The seminar took note of several recent initiatives to improve agricultural education and learning systems, including the Third Millennium Declaration of the Association of African Universities at their Nairobi meeting in February 2001, and also the strategic emphasis given to both agriculture and education in the overarching regional strategy of NEPAD (The New Partnership for African Development).

The key principles in the Jinja Consensus include the following:

- \* A focus on developing students with high ethical values with a vocational interest and commitment to rural activities and in producing graduates who are capable of independently accessing and using knowledge.
- \* Agricultural programs must provide students with a market orientation. A key curriculum objective is for students to develop leadership, entrepreneurial and management skills which also embrace social and environmental responsibility. Graduates should be able to generate activities which can become important sources of income growth and employment in rural areas.
- \* Such changes will require stronger emphasis on new or revised student selection criteria and admission policies to ensure that agricultural faculties and universities prioritize students interested in careers related to African agriculture and rural development. Special emphasis needs to be given to lower income rural applicants, particularly women.
- \* A student-centered approach to learning and discovery will include flexible and practical approaches to problem-solving, effective communication skills and strong linkages to rural communities and the developmental needs of key stakeholders such as women farmers. Through experiential learning methods, educational institutions should focus on facilitating student development rather than transferring knowledge. New student evaluation systems will be necessary to reflect these goals.
- \* Networking with other institutions is important to create synergies and in particular in developing an integrated, cross-disciplinary approach to

curriculum development.

\* Such profound institutional changes will benefit from periodic internal and external institutional evaluations, as proposed in the Nairobi Declaration of the African Universities.

The seminar participants noted many examples of innovative changes already taking place in tertiary agricultural education systems in Africa and consider it important that these must be accelerated and reinforced.

In this spirit the Jinja Consensus concluded that a three-pronged approach is needed for Africa:

- first, there is an urgent need to transform existing institutions and to strengthen the development-focused processes of change taking place.
- second, to strengthen this an Africa-wide network which reinforces the paradigm changes highlighted above is needed.
- third, to reinforce and accelerate this process a new regional institution would provide impetus to developing new innovative learning methods in student-centered learning and effective cross-institutional sharing of lessons. It should be established as a privately endowed, non-profit Pan-African agricultural university which can combine student and faculty education emphasizing close linkages to other African universities, including faculty visitations and exchanges.

The participants at the Jinja Seminar agreed that action along these lines is urgently needed and will make significant contributions to Africa's sustainable development goals.

### **The EARTH University Experience**

The explicit purpose of the University is to "prepare tomorrow's leaders today" by providing an environment where the intellectual, physical, emotional and spiritual dimensions are all developed. The ideal "exit profile" of graduates is that they possess:

Positive values and ethical principles.

Leadership abilities.

Commitment to improving community welfare.

Respect and tolerance of ideas of others and ability for teamwork.

Management and entrepreneurial capacity.

Ability to communicate effectively (written and verbal).

Capacity to develop and implement practices that promote sustainable agriculture and natural resource use.

Capacity to develop, synthesise and present solutions to problems.

An open mind with the capacity and interest to be a life-long learner.

This is achieved by providing a self-directed and experiential learning process where even when the transfer of knowledge is involved, active participation by the learner is encouraged. Practical experience in hands-on farmwork, community service, entrepreneurial projects and both smallholder and corporate attachments are an integral part of the degree.

The initiators and financiers of EARTH made the deliberate decision to concentrate on developing a few exceptional graduates to return to their communities. These agents of change would provide the stimulus for encouraging innovative and sustainable development by promoting increased incomes and conservation through the effective use of agricultural and natural resources. The University has an endowment fund and also a committee dedicated to raising funds annually, in particular to provide scholarships. Half the students are on full scholarship and 30% on partial scholarship and even the 20% paying full fees are not meeting the full share of the cost of running the institution. EARTH University has international financial backing and the success of its graduates has meant that it is increasingly possible to mobilise resources for the institution.