# **Poverty Reduction Strategies and Relevant Learning in Higher Agricultural Education**

Case Studies from Ethiopia, Malawi, Tanzania and Uganda<sup>1</sup>.

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#### Abstract

Among the many developing countries that have completed their Poverty Reduction Strategy Papers (PRSP) are four of Norway's main partner countries: Ethiopia (SDPRP), Malawi (MPRSP), Tanzania (TPRSP) and Uganda (PEAP). In all these papers, agriculture is envisaged to be a key factor for economic growth.

To enable agricultural universities (in this context used also for colleges and faculties) to meet this challenge, an analysis of their actions relative to their opportunities and constraints was considered necessary and timely.

This study addressed the following issues:

- How the PRSPs are reflected in official policies, implementation plans and fund allocations to agricultural education in Ethiopia, Malawi, Tanzania and Uganda;
- How their agricultural education is responding to the strategies in terms of teaching, training, research and outreach;
- What is needed for the successful transformation of agricultural universities to meet the society's needs and demands.

The work included desk studies, fieldwork in the four countries and comparative analyses. Emphasis was placed on the demand for skills and knowledge by the private sector including farmers and their organisations. Views were shared on practical improvements that can be undertaken by universities to strengthen entrepreneurship as a stimulus for economic growth and wealth distribution.

In addition to agriculture, education is also considered to be a pillar in economic development. However, agricultural education per se is barely mentioned in the PRSPs. It is however dealt with in other documents related to the PRSPs.

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The newness of the PRSPs made it difficult to attribute recent changes in higher education to the PRSPs alone, so other relevant initiatives, such as the SEMCIT Seminars, were also addressed in the study.

The agricultural universities' identification with their role in the development process is evidenced by the UN Millennium Goals being targeted in their institutional strategies.

Tertiary institutions do not have the resources required to play a significant role in the fight against poverty. Institutional expansion in terms of student enrollments and infrastructure has far outpaced effective staff development and support. Financial arrangements that enable the agricultural universities/colleges to carry out demand-driven research, outreach and training are recommended. Though some institutions offer study-internships in the private sector, students reported too much theory and not enough experiential learning. Tertiary institutions should explore labor market and product market surveys for up-dating curricula and helping students to determine private sector employment opportunities and goals.

In line with the SEMCIT model (Sustainability, Education and the Management of Change in the Tropics), curricula have been revised with the intention of strengthening teaching and learning in entrepreneurship. However, while some institutions have started agribusiness courses, few changes in teaching and training programs were otherwise observed. The change toward more demand-driven research, outreach and teaching programs is going slowly. It is therefore recommended that efforts to prepare agriculture graduates for entering the private sector should be accelerated. Curriculum reviews and modifications, more experiential learning and staff development all need attention. Governments should facilitate the creation of low interest rate start-capital funds for helping graduates to establish commercial farms and other relevant agribusinesses. Since agriculture is key to economic growth, agricultural education should be an explicit part of revised PRSPs. Furthermore, agricultural research and extension should be documented as poverty reduction efforts in the progress reports undertaken by relevant ministries.

The private sector, including farmers' organizations, reported insufficient collaboration with the institutions. The institutions should establish regular contact with private sector stakeholders and government agencies to determine how tertiary-learning institutions can better respond to private sector needs.

The lack of relevant and affordable teaching and training materials in higher agricultural education in Africa mandates a fund for development of such materials. Since issues affecting agricultural education and development often are transnational, support for regional exchanges of information, staff and students should be budgeted in all programs for agricultural research, outreach (extension) and higher education.

## 2 Background and introduction

Most developing countries have now completed their Poverty Reduction Strategy Paper (PRSP), among them four of Norway's main partner countries, Ethiopia (SDPRP), Malawi (MPRSP), Tanzania (TPRSP) and Uganda (PEAP). In all these papers, agriculture is envisaged to play a vital role in the future development process.

Expectations of agricultural growth raise challenges for higher education, research and outreach. Although universities in Africa were declared to be key institutions already at the time of independence, they face a grave crisis today. To enable agricultural universities to play a significant role in the reduction of poverty, a careful analysis of the actions they have taken, and should take in the future, relative to their opportunities and constraints is timely.

A study was proposed to find out how the PRSPs are reflected in policies and action plans for their implementation, e. g. through fund allocations in the ministries of education in Ethiopia, Malawi, Tanzania and Uganda, and how their agricultural universities are responding to the strategies in terms of content of their teaching, training and research and outreach.

# 3 Objectives

The objectives of the study were:

- To investigate how government policy and action plans regarding the PRSP have influenced and supported Awassa College of Agriculture, Bunda College of Agriculture, Makerere University, Mekelle University College and Sokoine University of Agriculture, and to what extent the universities have responded to the national strategies for poverty reduction in terms of changes in their teaching, training and research programs;
- 2. Identify what is needed for the successful transformation of agricultural faculties or universities in accordance with the "change agenda" as recommended by university leaders at the final SEMCIT seminar held in Oslo 2-5 September 2003, and taking into account the decisions taken at the Executive Committee meeting as follow-up to the SEMCIT series of seminars;
- 3. To summarize experiences gained and provide recommendations for future involvement;

### 4 Methodology

The team from the Agricultural University of Norway and the reference group at partner universities gathered information regarding the implementation of the respective PRSPs. The team also liased with the leadership of the universities.

- A desk study reviewed national poverty reduction strategy papers, relevant national educational policies and the UN Millennium Development Goals;
- Interviews were held with university staff and students, ministry officials, private sector representatives and other relevant stakeholders;
- Interviews focused on problem and opportunity analysis emphasizing on the role of universities in stimulating entrepreneurship and 'value creation' in rural communities.

Mutual support functions between universities, private industries, and other institutions were addressed;

• The draft report was discussed with the university management before submission of the final report to NORAD.

## **5** Expected results

- More focus on the relevance of the agricultural universities in the fight against poverty;
- Better information about the universities' fulfilment of education policy goals related to PRSPs;
- Improved awareness within the universities of their role in the development process; poverty reduction strategies taught in the universities;
- Relevant training and entrepreneurial skills taught;
- Resource needs for new initiatives justified;
- Priority areas identified for external support to strengthen the universities' efforts to serve target groups;
- Experiences from the four countries assessed and compared;
- Report to Norwegian Agency for Development Cooperation on lessons learned and recommendations for the future.

## **6 Findings**

## 6.1 The Case of Ethiopia

The education components of Ethiopia's Sustainable Development and Poverty Reduction Program (Ministry of Finance and Economic Development 2002) and its Education Sector Development Program II (Ministry of Education 2002) are similar with respect to goals and actions. The Millennium Development Goals are on target in both cases. ESDP-II is well integrated with the SDPRP. The SDPRP is a derivative of the World Bank's PRSP while the ESDP II represents the government's long-term capacity building strategy. Both programs are pushed from above. Nevertheless, the participation of the leaders of the educational institutions or their representatives cannot be discounted.

The change agenda from the SEMCIT series of seminars has yet not been widely diffused. Preparation was underway in Awassa for a seminar on the lessons of SEMCIT. Such lessons are consistent with the intentions of SDPRP and are bound to leave a mark on Awassa and Mekelle if not on the Ethiopian higher agricultural education system in general.

What can certainly be said at this stage in view of SDPRP or ESDP-II, is that higher education in general has been accorded high priority since 2002, unlike in the 1990s. Awassa and Mekelle are changing. Physical expansion in terms of student enrolments and infrastructure has been extraordinary at both institutions. But the ramifications on educational quality should be addressed and monitored continually by the agencies dealing with quality assurance and strategic thinking. Staff development and staff support for new learning

processes and effective utilization of infrastructure remain outstanding issues. The needs of the institutions in this respect are enormous. They need external assistance to supplement their budgets and other sources of domestic funding. Both universities are skilful in using and capitalizing on external sources. The government should consider incentive mechanisms for enhancing staff enthusiasm and effectiveness as well as to minimize wastage of trained staff and promote efficient use of other resources.

### 6.2 The Case of Malawi

According to Malawi's Poverty Reduction Strategy Paper (Ministry of Finance and Economic Planning 2002a,b), the Government of Malawi "will transform the higher education system to respond to new realities and opportunities within the context of poverty reduction". The aim is to increase access and equity in higher education, and to improve quality and relevance. At the same time they want to reduce the reliance of higher education on Government subventions. This will be achieved by two types of interventions: firstly by reducing the costs of higher education and secondly: by generating alternative sources of resources. It seems to us that the potential for external funding might be somewhat overestimated.

The lack of regular and adequate funding has a negative impact on activities at BCA, by lessening staff initiative and hampering strategic medium- to long-term planning. Still, Bunda College has partially implemented planned activities of MPRSP. Considerable progress has been made in strategic areas such as increasing female student enrolment from less than 10 % to about 30 % within two years. This was accomplished by Bunda staff marketing the college's programs in Malawian secondary schools.

The college has relatively few lecturers and professors below the age of 50. In a long-term perspective, this is unfortunate and strong measures will have to be taken to correct this imbalance. In addition, salary packages and research opportunities must be more attractive in order to recruit the best post-graduate candidates.

There is too little contact between the college and society, especially agro-industry, farmers and their organisations, markets etc. There is a need to bring Bunda College into the mainstream of problem solving through improved research and outreach that targets practical development issues facing the primary industry sector. The public agricultural research is also largely ignored by the government. All this has a negative effect on knowledge creation, competence building and development progress.

BCA is in favour of regional cooperation and has established working relationship with other universities in the region. BCA is also positive to the SEMCIT Model and has initiated courses in agrobusiness and entrepreneurship, but there is a need to upgrade the competence of the staff in these subjects.

Given adequate funding and a suitable policy environment, BCA and other service institutions should not only be able to meet the requirements of the MPRSP but also, in the long term, generate partial income for sustaining themselves.

It may be concluded that whereas the university seems satisfied with its changes in the curriculum towards entrepreneurship, representatives from agro-industry are not impressed by the ability of its graduates to perform. This is probably the main challenge of Bunda College of Agriculture today.

### 6.3 The Case of Tanzania

Tanzania's Poverty Reduction Strategy Paper (United Republic of Tanzania 2000) emphasizes sustained macroeconomic stability, rural sector development and export growth, and private sector development as key measures to reduce income poverty. Within rural sector development and export growth, there are several items related to agriculture, like encouraging farmers to organize themselves in groups or cooperatives, encouraging the private sector to provide agricultural inputs and credit and encouraging communities to develop irrigated farming. Among the areas identified for specific government support are training of primary societies and cooperatives on organizational and financial management, providing demand-driven agricultural research and extension, supporting labor-intensive agroprocessing, putting the Land Act of 1999 into effect, and rationalizing physical controls that constrain crop movements.

Sokoine University of Agriculture (SUA) is committed to contributing to poverty reduction as well as to private sector development through relevant education, research and outreach, including training in entrepreneurial skills. This commitment is expressed in official SUA plans and documents. However, one major weakness is that agricultural education has been not been given a significant role to play in the implementation of Tanzania's Poverty Reduction Strategy. A course in entrepreneurship was offered to SUA students from July 2004, seven years after entrepreneurship became an explicit part of SUA's vision.

It was recommended that agricultural education, research and extension should be recognized and included in the revised TPRSP. Efforts to prepare SUA graduates for employment and self-employment in the private sector should be accelerated. SUA should be empowered to develop business incubation schemes for graduates choosing an entrepreneurial career and the Government should help SUA create a special low interest rate fund to assist graduates in establishing commercial medium-scale farms and other agricultural related businesses. SUA should also establish a forum for contact with private sector stakeholders who can meet regularly to discuss ways that various activities at SUA can be designed and funded to become more relevant for private sector development.

# 6.4 The Case of Uganda

Tertiary education is not mentioned in Uganda's Poverty Eradication Action Plan (Ministry of Finance, Planning and Economic Development 2000). However, using the PEAP as a platform, the Plan for Modernisation of Agriculture (Ministry of Agriculture, Animal Industry and Fisheries/Ministry of Finance, Planning and Economic Development 2000) and particularly the National Agricultural Education Strategy (Ministry of Education and Sports 2003) link poverty issues with tertiary education. These links will probably be further strengthened in the Second Education Sector Investment Plan (Ministry of Education and Sports 2003). While the first ESIP successfully dealt with primary education, the second ESIP is expected to adopt a more holistic view and include education from pre-primary through the university level (NAES 2003).

PEAP issues have recently been incorporated into the newly revised strategy at Makerere (Makerere Universty 2004). It is also evident that poverty issues are increasingly emerging at

the faculty and department levels, and the programs and course curricula are gradually focusing more on poverty challenges.

Difficulties with experiential learning, teaching materials and facilities are at least partly resource related. Increased focus on work-internships and more involvement of students in quality control should be emphasised.

As policy for agricultural research and education currently rests with two ministries, optimal conditions neither exist for the integration of the PEAP and higher education, nor for the best use of research funds in the agricultural sector.

It was recommended that the focus on internships with NGOs, farmers and relevant Government organisations be strengthened and that internships should be used to strengthen the relationship between Makerere and other stakeholders in agriculture. Students should be more involved in continuous curricula revision, course evaluation and quality control to ensure adequate experiential learning and inclusion of poverty challenges. The focus on entrepreneurship should be strengthened by launching the cross cutting program in entrepreneurship emphasised in the revised Makerere strategy and extra credit should be made available for students with good business proposals. Agricultural research funds should be more closely linked with the education program.

### 7 Overall conclusions

- Education is an important pillar in the various poverty reduction strategies;
- Although agriculture is the most important sector for reducing poverty in Ethiopia, Malawi, Tanzania and Uganda, agricultural education is barely mentioned in the respective poverty reduction strategies;
- The general opinion in the private sector is that there is too little collaboration between the agricultural universities/colleges and the private sector including farmers' organisations;
- Graduates of the agricultural universities/colleges lack practical and managerial skills in entrepreneurship;
- The institutions are aware of their roles in the development process and of the Millennium Development Goals. There is a clear intention in the universities to strengthen teaching and learning in entrepreneurship in line with the ideas behind the SEMCIT model. The change, however, towards a more demand driven research and teaching program is going too slowly;
- The agricultural universities/colleges are not receiving the resources required for them to play a meaningful role in the fight against poverty. Physical expansion in terms of student enrolments and infrastructure has far outpaced staff development and staff support;
- Students report too much emphasis on theory and too little on experiential learning in their study programs;
- There is a great need for relevant and affordable teaching and training materials.

#### 8 General recommendations

• Agricultural education at all levels should be an explicit part of the poverty reduction strategies when they are revised;

- Agricultural research and extension should be recognized and reported as poverty reduction efforts in official progress reports;
- Financial support to enable the agricultural universities/colleges to carry out demanddriven research, outreach and training is necessary for poverty reduction;
- Makerere's accomplishments in income generation should be shared with the other tertiary institutions;
- Universities/colleges should establish contact fora with private sector stakeholders to discuss ways that various activities at the university/college can be designed and funded to become more relevant for private sector development;
- External, cross-societal membership in the governing bodies of the universities/colleges should be considered;
- Efforts to prepare agricultural graduates for employment and self-employment in the private sector should be accelerated, e.g. through relevant curricula, staff development, labour and product market surveys etc;
- The governments need to create and enforce policies that facilitate the establishment of agriculture-based companies and industries;
- The governments should help universities/colleges to create special low interest loan funds so that graduates can start commercial medium-scale farms and other agricultural related businesses;
- A fund should be established for development of relevant and affordable teaching and training material within higher agricultural education in tropical Africa;
- A fund for intra-regional exchanges of academic information and staff should be budgeted by donors funding projects within tertiary education.

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