

Poverty Reduction Strategies and Relevant Participatory Learning Processes in Agricultural Higher Education

Case studies from Ethiopia, Malawi, Tanzania and Uganda

Edited by
Frik Sundstøl

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Noragric, Centre for International Environment and Development Studies
Agricultural University of Norway (NLH)
P.O. Box 5003
N-1432 Ås
Norway
Tel.: +47 64 94 99 50
Fax: +47 64 94 07 60
Internet: <http://www.nlh.no/noragric>

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List of contributors

Sundstøl, Frik, Noragric (main editor)

Abeli, Willbard S., Sokoine University of Agriculture, Tanzania

Angstreich, Michael G., NARI

Boddens-Hosang, Joanna A. A., Noragric/NLH

Johnsen, Fred H., Noragric

Kaboggoza, John R. S., Makerere University, Uganda

Kaunda, Emmanuel, Bunda College of Agriculture, University of Malawi

Moe, Stein R., Noragric

Larsen, Thor S., Noragric

Waktola, Aregay, Noragric

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LIST OF ACRONYMS

ADLI	Agricultural-Development-Led-Industrialisation
AIMs	Malawi Agricultural Input Markets Development Project
ASDS	Agricultural Sector Development Strategy
BCA	Bunda College of Agriculture
CGIAR	Consultative Group for International Agricultural Research
COPE	Community Oriented Practical Education
CSP	Corporate Strategic Plan
DAE	Department of Agricultural Extension
DARS	Department of Agricultural Research Services
EARTH	Earth University Costa Rica
ESDP	Education Sector Development Program
ESIP	Education Sector Investment Plan (Uganda)
FFNC	Faculty of Forestry and Nature Conservation
FOCAL	Future Opportunities and Challenges in Agricultural Learning
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Countries
IFAD	International Fund for Agricultural Development
IFDC	An International Centre for Soil Fertility and Agricultural Development
IMF	International Monetary Fund
JSA	Joint Staff Assessment
MAFS	Ministry of Agriculture and Food Security
MAIFS	Ministry of Agriculture, Irrigation and Food Security (Malawi)
MAPS	Marketing and Agro-processing Strategy
MAROP	Malawi Agricultural Research and Outreach Program
MASIP	Malawi Agriculture Sector Investment Plan
MDG	The Millennium Development Goals (United Nations)
MFA	Ministry of Foreign Affairs
MK	Malawian Kwacha
MNREA	Ministry of Natural Resources and Environmental Affairs (Malawi)
MOE	Ministry of Education
MPRSP	Malawi's Poverty Reduction Strategy Paper
MVIWATA	Tanzania's Network of Farmers' Groups
NAADS	National Agricultural Advisory Services
NAADS	National Agricultural Advisory Services Programme
NAES	National Agricultural Education Strategy 2004-2015.
NARO	National Agricultural Research Organisation
NARP	National Agricultural Research Policy
NARS	National Agricultural Research System
NASFAM	National Smallholder Farmers' Association of Malawi
NGO	Non-Governmental Organisations
NLH	Agricultural University of Norway
NOK	Norwegian crowns
NORAD	Norwegian Agency for Development Cooperation
Noragric	Centre for International Environment and Development Studies (Norway)
OVOP	One-Village-One-Product
PAP	Practical Attachment Program
PEAP	Poverty Eradication Action Plan
PEAP	Poverty Eradication Action Plan (2001-2003)

PIF	Policy and Investment Framework
PMA	Plan for Modernisation of Agriculture
PPE	Pro-Poor Expenditures
PRSP	Poverty Reduction Strategy Paper
PSIP	Public Sector Investment Program
SDPRP	Sustainable Development and Poverty Reduction Program
SEMCIT	Sustainability, Education and the Management of Change in the Tropics
SOER	State of the Environment Report 2002.
SUA	Sokoine University of Agriculture
TARPII-SUA	Household Income and Food Security for Smallholder Farmers in Tanzania: Applied Research with Emphasis on Women
TBL	Tanzania Breweries Limited
TCCIA	Tanzania Chamber of Commerce, Industry and Agriculture
TEVET	Technical Education, Vocational and Entrepreneurial Training
TPRSP	Tanzania's Poverty Reduction Strategy Paper
UFNP	The Uganda Food and Nutrition Policy
UFNP	Uganda Food and Nutrition Policy
UNFF	Uganda National Farmers Federation
UPE	Universal Primary Education
UPPAP 2002	Uganda Participatory Poverty Assessment Process
UPSR 2003	Uganda Poverty Status Report, 2003
URT	United Republic of Tanzania
WB	World Bank Group
WEHAB	Water, Energy, Health, Agriculture and Biodiversity

1. 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. Although universities in Africa were declared 'engines of development' 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 action 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/faculties are responding to the strategies in terms of content of their teaching, training and research.

The study was carried out partly as a desk analysis and partly through fieldwork in the four countries. Emphasis was placed on the demand for skills and knowledge by the private sector including the farmers and their organisations. The study outline shared views on practical improvements that can be undertaken by universities to strengthen entrepreneurship as means towards economic growth and a fair distribution of wealth.

The second main objective of the study was to support the partner universities in identifying what is needed for the successful transformation of their agricultural faculties and departments in order to better meet society's needs, and to make agriculture more economically competitive, socially responsible, and environmentally sustainable in an increasingly globalised world economy, and provide effective contributions to food security and poverty reduction strategies in accordance with the "change agenda" as recommended by university leaders at the final international seminar on Sustainability, Education and the Management of Change in the Tropics (SEMCIT), held in Oslo 2-5 September 2003.

1.1. OBJECTIVES

The objectives of the proposed study are:

1. 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;

1.2. METHODOLOGY

Noragric's team and the reference group at partner universities gathered information regarding the implementation of the respective PRSPs. The team also liaised 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.

1.3. EXPECTED RESULTS

- More focus on the relevance of the 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;
- Resources 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. Norwegian support assessed for the implementation of SEMCIT-like processes identified by our partner universities and articulated by SEMCIT Executive Committee;
- Report to NORAD on lessons learned and recommendations for the future.

2. THE CASE OF ETHIOPIA

Conclusions and recommendations

The education components of Ethiopia's Sustainable Development and Poverty Reduction Program (SDPRP) and its ESDP-II are similar with respect to goals and actions. The Millennium Goals are on target in both cases. ESDP-II is well integrated with the SDRP. 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 colleges are skilful in using and capitalizing on external sources. The NORAD-supported partnership with NLH/Noragric is a case in point. 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.

3. THE CASE OF MALAWI

Conclusions and recommendations

Bunda College has done well in partially implementing the goals and planned activities of Malawi's Poverty Reduction Strategy Paper (MPRSP) despite financial and other constraints. 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 a well-qualified and motivated staff, but the age distribution is somewhat skewed, with relatively few lecturers and professors below the age of 50. In a medium to 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. The lack of regular and adequate funding has a negative impact on activities at BCA, lessens staff initiative and hampers strategic medium to long-term planning. At the same time, the potential for external funding from local commerce and industry seems to be overestimated.

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 official agricultural research/outreach services are also largely ignored by the government. All this has a negative effect on knowledge creation, competence building and development progress. The proposed MAROP program, currently under review by NORAD, is designed to address these challenges.

BCA is positive to regional cooperation and has established working relationship with other universities in the region and with NLH through NORAD support. 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 have little respect for the ability of graduates to perform. Why this difference in perception? Even if the intentions of the college are good, the lack of contact with the rural community may lead to an "ivory tower" environment at Bunda, which is not sufficiently open to the world outside the campus and the academic circles. In recent years it has become more common to have external members of the universities' governing bodies. Cross-societal representation could be one way of strengthening the BCA's links with the nation.

4. THE CASE OF TANZANIA

Conclusions and recommendations

Tanzania's Poverty Reduction Strategy Paper (TPRSP) 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 agro-processing, putting the Land Act of 1999 into effect, and rationalizing physical controls that constrain crop movements (URT 2000).

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 neither SUA nor agricultural education has been given a significant role in the implementation of Tanzania's Poverty Reduction Strategy Paper (TPRSP). A drawback at SUA itself is that its course in entrepreneurship is yet to be offered to all SUA students seven years after entrepreneurship became an explicit part of SUA's vision.

It is recommended that:

- Agricultural education at all levels should become an explicit part of the TPRSP when it is revised later this year;
- Agricultural research and extension done at SUA should be recognized and reported as poverty reduction efforts in the TPRSP progress reports together with those activities undertaken in the Ministry of Agriculture and Food Security, Ministry of Water and Livestock Development and Ministry of Cooperatives and Marketing;
- Efforts to prepare SUA graduates for employment and self-employment in the private sector should be accelerated;
- The Government should help SUA create a special low interest rate fund to be administered by a credit institution so that SUA to assist graduates in establishing commercial medium-scale farms and other agricultural related businesses;
- SUA should be empowered to develop business incubation schemes for graduates choosing an entrepreneurial career either within or outside the University. This may involve enterprises/franchises operated under the auspices of SUA so that it can save money and/or generate income by privatizing certain service functions e.g. bookstore, cafeteria, consulting etc.;
- SUA should 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.

5. THE CASE OF UGANDA

Conclusions and recommendations

Tertiary education is not mentioned in Uganda's Poverty Eradication Action Plan (PEAP) (2001). However, using the PEAP as a platform, the Plan for Modernisation of Agriculture (PMA) and particularly the National Agricultural Education Strategy (NAES) link poverty issues with tertiary education. These links will probably be further strengthened in the Second Education Sector Investment Plan (ESIP II), expected in mid 2004. 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 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.

We recommend that:

- The focus on internships with NGOs, farmers and relevant Government organisations be strengthened;
- The internships should be used to strengthen the relationship between Makerere and other stakeholders in agriculture;
- Students should be more involved in course evaluation and quality control. This will not only raise the general quality of their education, but also increase the focus on challenges related to poverty;
- Curricula should be continuously assessed 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. Credit should be made available for students with good business proposals;
- Agricultural research funds should be more closely linked with the education program.

6. 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.

7. OVERALL 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 demand-driven research, outreach and training is necessary for poverty reduction;
- Makerere's accomplishments in income generation should be shared with the other tertiary institutions in the study;
- 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, labor 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;

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- 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 NORAD.

8. SUMMARY

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 play a vital role in the development process.

To enable agricultural universities to meet this challenge, an analysis of their actions relative to their opportunities and constraints was considered necessary and timely.

This study addressed:

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

The study included desk analyses and fieldwork in the four countries. 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.

The newness of the PRSPs made it difficult to attribute recent changes in higher education to the PRSPs alone, so other relevant initiatives were also addressed by the study. Education in general is a pillar of the PRSPs whereas agricultural education *per se* is barely mentioned. However, it is dealt with in detail in other documents related to the PRSPs.

The agricultural universities' identification with their role in the development process is evidenced by the UN Millennium Goals being targeted in their institutional strategies. In line with the SEMCIT model, 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 relevant commercial farms and other 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.

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.

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 similar transnational, support for regional exchanges of information and staff should be budgeted in NORAD's programs for higher agricultural education.