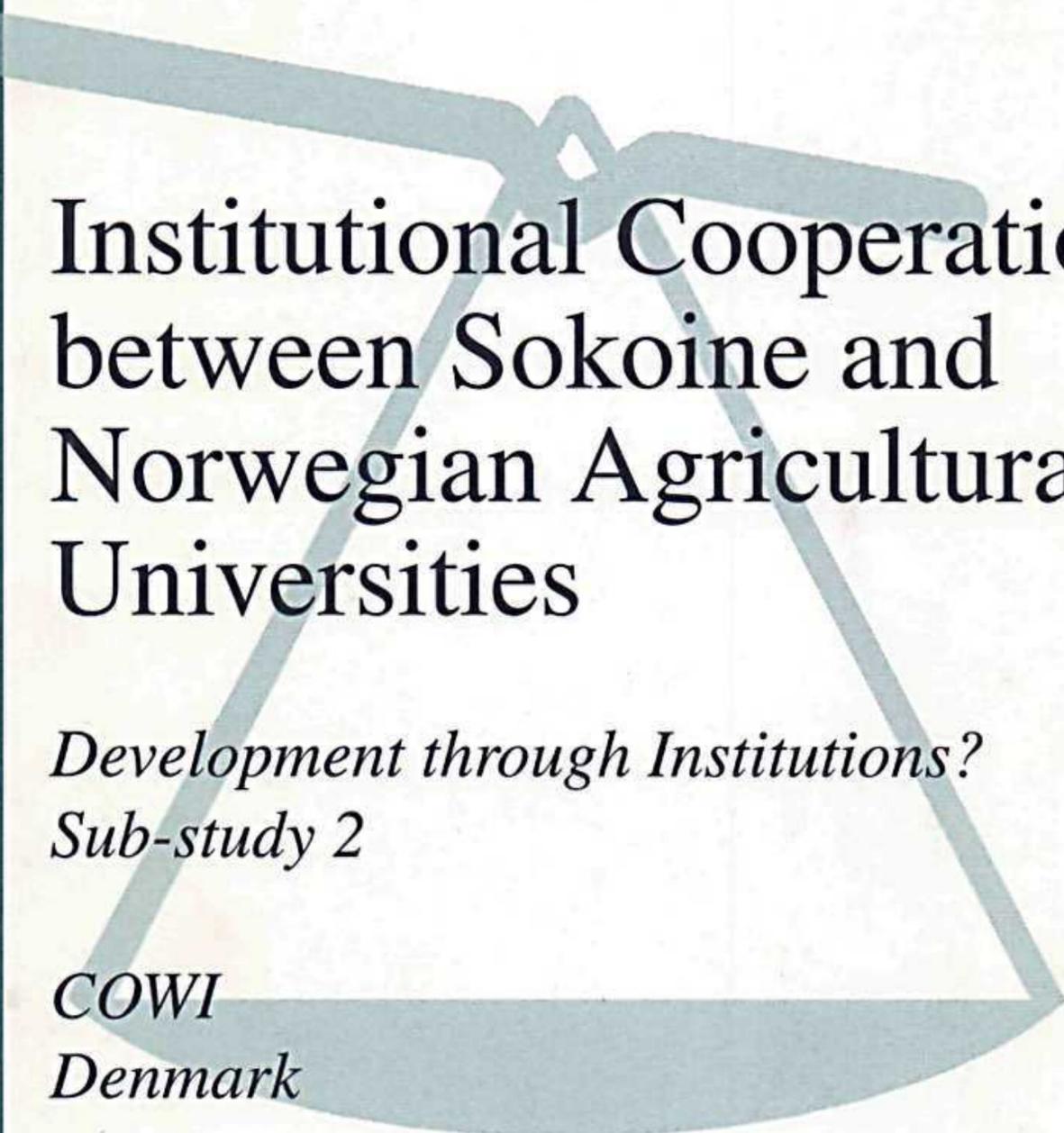


UD

*Evaluation Report 2.98*



**Institutional Cooperation  
between Sokoine and  
Norwegian Agricultural  
Universities**

*Development through Institutions?  
Sub-study 2*

*COWI  
Denmark*

**Information from the  
Royal Ministry of Foreign Affairs**

The Ministry's Information Section provides information with regard to current foreign policy, trade policy and development cooperation policy. Informative material can be ordered from  
fax no. +47 22 24 27 87

Foreign Ministry switchboard,  
Tel. +47 22 24 36 00  
Fax +47 22 24 95 80 or +47 22 24 95 81

Information is available on Internet at  
<http://odin.dep.no/ud>

Office address: 7. juni plassen, Oslo  
Mailing address: P.O. Box 8114 DEP,  
N-0032 OSLO, Norway

**Information to the media:**

The Ministry's Press Spokesman and the Senior Information Officer on development cooperation can be contacted through the Foreign Ministry switchboard

**Foreign journalists:**

The Norway International Press Centre, NIPS, is the Foreign Ministry's service centre for foreign journalists in Norway,  
tel. +47 22 83 83 10

In countries outside of Norway, information on the Ministry of Foreign Affairs may be obtained from Norwegian embassies or consulates



become sustainable. The Government is withholding funds in expectation that donors might step in and compensate for shortcomings, which they actually seem to have done.

#### **Unbalanced support**

In general, donor contributions to SUA have targeted selected institutes/departments, rather than supporting capacity building at the University at large. This unbalanced support structure may have hampered institutional development, as certain institutes or departments have not been able to play their expected role in serving agricultural sector needs, nor has the managerial capability of the University as such been strengthened. For a long time this support was characterised by a focus on plantation forestry and the use of exotic species, rather than, for example, agro-forestry and the use of indigenous species, with limited immediate value for smallholders and their development needs.

For a very long period the activities have been following a supply-driven, rather than demand-driven, approach to capacity building in education and research. The collaboration has focused on single disciplinary issues, both with SUA and AUN, while links to broader socio-economic, policy and institutional issues have been downplayed.

#### **Modes of Operation**

In a first phase before 1986, the collaboration was characterised by person-to-person contacts, gradually being replaced by a combination of personal contacts and institution-to-institution working modalities, while NORAD was the third party in the triangle. In a second phase, from 1986 to 1996, the working modality was characterised by a more formal institute-to-institute collaboration programme, with the SUA partners taking on greater responsibilities and initiatives. With the framework agreement as of 1996, the mode of operation has shifted towards SUA being responsible for programming, planning and implementation, based on a NORAD-to-University agreement. The role of AUN researchers is becoming increasingly marginal. The primary reason is that AUN researchers are too costly, so that budget provisions, now handled directly by SUA, cannot sustain these high costs.

#### **Recommendations**

a) The support to SUA should be continued under the existing framework agreement. The long lasting

nature of the Norwegian supported capacity building programme with SUA, and its high level of funding, which has resulted in Norway having become the by far most important donor, makes it impossible within a foreseeable future to terminate the assistance.

b) The support to SUA should be broadened to encompass the university as a whole, include public administration and management expertise and the capacity building process should be enlarged to include relevant parts of concerned ministries and national institutions in order to meet the broader institutional development objective.

c) The support should be balanced and prioritised in order to make it of greater relevance to Tanzania's agricultural development. Current efforts at SUA to strengthen the relevance of education and research should be supported.

d) A strategy should be developed for the programme, reaching beyond year 2000, and efforts should be made to improve the cost-effectiveness, i.a. by reducing its investment programme, to the benefit of education and research.

e) Immediate steps should be taken to improve monitoring, evaluation practices and learning from experience.

f) The existing programme management system should be strengthened, and the roles of the many players clarified.

g) To rejuvenate the programme, it is recommended that efforts are made to attract younger Norwegian researchers and Ph.D. graduates.

*Evaluation Report 2.98*  
**Institutional Cooperation  
between Sokoine and Norwegian  
Agricultural Universities**  
by COWI-consult, Denmark.  
Sub-study 2 in the series  
**«Development through Institutions?».**  
The series consist of four sub-studies  
and one synthesis report.  
**ISBN 82-7177-506-7,**  
Published May 1998.  
*The Ministry does not accept any  
responsibility for the information  
in this report.*

#### **The Royal Norwegian Ministry of Foreign Affairs - Policy Planning and Evaluation Staff**

Editor: Erik Berg. P.O.Box 8114 Dep., N-0032 OSLO, Norway.

Telephone +47 22 24 36 00, Telefax +47 22 24 95 80

E-mail: eval@ud.dep.telemax.no Internet: www.odin.dep.no

*All reports may be ordered by telephone or e-mail*

# Institutional Cooperation between Sokoine and Norwegian Agricultural Universities

*Development through Institutions?  
Sub-study 2*

*COWI  
Denmark*

*Lars P. Christensen (Team leader)  
Henrik Secher-Marcussen  
Augustine Macha*

---

A report submitted to the Royal Norwegian Ministry of Foreign Affairs

The Ministry does not accept any responsibility for the information  
in this report nor the views expressed, which are solely those of  
the consultant



## Table of Contents

<b>1. Executive Summary</b> .....	5
1.1 Key Findings .....	5
1.2 Conclusions .....	9
1.3 Recommendations .....	11
<b>2. Introduction</b> .....	13
2.1 The Study Framework .....	13
2.2 The Norwegian Approach to Institutional Development .....	14
2.3 Concepts and Definitions .....	15
<b>3. Institutional collaboration between SUA and AUN</b> .....	18
3.1 The origin and nature of the collaboration .....	18
3.2 Sokoine University of Agriculture .....	19
3.3 The Agricultural University of Norway .....	20
<b>4. Strengthening education and research capacities in developing countries</b> .....	21
4.1 Support to capacity building: the traditional approach .....	21
4.2 Lessons learned .....	22
<b>5. Partnership Strategy</b> .....	23
5.1 Changing objectives: From capacity building to institutional development? .....	23
5.2 The three phases of collaboration .....	25
<b>6. Assessment of Programme Inputs</b> .....	26
6.1 The financial support to the programme .....	26
6.2 The funding priorities .....	28
6.3 The Norwegian funding in comparative perspective .....	29
6.4 Recruitment of students and selection of research topics .....	29
6.5 Incentive schemes applied .....	30
6.6 Means of supervision and field visits .....	30
6.7 Issues of sustainability as related to inputs .....	31
<b>7. Assessment of Programme Outputs</b> .....	32
7.1 Quality indicators used in the programme .....	32
7.2 Courses conducted and degrees awarded .....	32
7.3 Gender perspectives .....	32
7.4 Brain Drain .....	34
7.5 Employment record of graduates .....	34
7.6 Research capacities strengthened .....	35
7.7 Publication record .....	36
7.8 International links .....	36
7.9 Managerial capacities strengthened .....	36
7.10 Issues of sustainability as related to output .....	37

<b>8. Relevance</b> .....	38
8.1 Needs assessments .....	38
8.2 Relevance of the Norwegian input .....	38
8.3 The disciplinary orientation of the programme .....	39
8.4 Relevance to agricultural sector needs .....	39
8.5 Societal links .....	40
<b>9. Programme management</b> .....	41
9.1 The role of NORAD .....	41
9.2 The role of NORAGRIC .....	42
9.3 Management under the policy of decentralisation .....	42
9.4 Motivation and interests for institutional collaboration .....	43
9.5 Formulation of aims and objectives .....	43
9.6 From partnership to recipient orientation .....	44
9.7 Issues of donor coordination .....	46
9.8 Evaluation, monitoring and learning from experience .....	46
<b>10. Institutional Issues and Lessons Learned</b> .....	48
10.1 Concepts and intentions .....	48
10.2 Strategies and activities .....	48
10.3 Relevance and outcome .....	48
10.4 Explanations .....	48
10.5 Perspectives .....	48
<b>Table of Appendices</b>	
Annex I Terms of Reference .....	51
Annex II List of Persons Met .....	55
Annex III List of Documents Consulted .....	56

## 1 Executive Summary

The Norwegian government has provided support for capacity building in education and research at Sokoine University of Agricultural (SUA) in Tanzania for nearly 25 years. Around 250 mill. NOK has been granted for this purpose, but the present study is the first systematic assessment of the cooperation, which has been seen as an institutional twinning arrangement between SUA and the Agricultural University of Norway (AUN).

The purpose of this study is to «increase the understanding of what factors contribute to effective institutional collaboration by documenting and analysing the co-operation between Sokoine and Norwegian Agricultural Universities»<sup>1</sup>. The present study is one out of five studies included in the project «Development through Institutions», which is managed by Diakonhjæmmets Internasjonale Senter (DIS) in co-operation with Nordic Consulting Group (NCG) for the Evaluation Unit of the Ministry of Foreign Affairs.

The Key Findings, Conclusions and Recommendations of the study are presented in the following:

### 1.1 Key Findings

#### Objectives of the Programme

1. Over the years the objectives of the agreements of collaboration have been held in rather vague and general terms. Main emphasis was on capacity building through co-operation between institutes in AUN and institutes in SUA. The objectives remained largely unchanged until the signing of the framework agreement in 1996, which defined the collaboration within a broader university co-operation perspective.
2. Although the objectives of the cooperation with the framework agreement take a more systemic view and seek to address the University more broadly as an institution, there is no mention of the concept «institutional development». However, it is mentioned as a kind of conclusion that the Agreement expresses «NORAD's willingness to move from supporting few individual projects to a much broader institutional programme support...». Although SUA recognises the value of this broader

approach, it is not the University which has promoted a new perspective on the collaboration. The initiative has been taken by NORAD. Throughout the SUA University system, perceptions as to what is meant by institutional development remain vague and unclear.

3. The Framework Agreement is more a kind of an umbrella-programme than a well conceived institutional development support programme. The scope of the broader approach to capacity building appears to be fairly limited: «The strategy of the proposed new framework agreement between SUA and NORAD is to strengthen SUA's ability to coordinate, prioritise and administer Norwegian assistance more efficiently».

#### Key Findings Related to Inputs

4. The collaboration between Norway and SUA has been among the longest lasting programmes in international development co-operation in the area of capacity building for education and research.
5. Although it has not been possible to calculate with any degree of certainty total amounts incurred over time, the actual appropriations (1974–2000) for the support comes to around NOK 215m. In addition, the programme in support of SUA has benefited from allocations from various other Norwegian sources, such as the NORAD scholarship programme, NUFU research funds and appropriations for the provision of technical assistance.
6. Neither has it been possible to produce a distribution of expenses on various sub-items, such as education, research, staff development, infrastructure (including construction of buildings), and administrative costs. Neither AUN, NORAD-Dar nor SUA have been able to produce these figures.
7. The main objective of the collaboration has been to support education and staff development, while the main component budget wise has been infrastructure development (equipment and, in particular, construction of buildings). Research collaboration has been only a marginal component, accounting for roughly 12 % of total costs.
8. Administrative costs of handling the programme, which previously was in the hands of NORAGRIC, have apparently been high, although it has not been possible to determine the exact figure. Since SUA in 1995 took over the programme administration, however, no costs have been charged.

<sup>1</sup> From the section on «Purpose and Objectives» of the Terms of Reference, which is included as Annex 1

other institutes are introducing natural resource management practices.

29. These new developments, which all seek to ensure greater relevance, have largely been generated within the University itself and have been locally driven, with only marginal involvement of the researchers at AUN.
30. Relevance to Tanzanian agricultural sector needs may therefore increase in the future. The past priority resource wise given to the Faculty of Forestry has, however, been a limiting factor for responding to agricultural sector needs.
31. The content of activities at the Faculty of Forestry has been, and continues to a certain extent to be, very much centred around forestry plantations and exotic species, rather than agro-forestry and indigenous species, which are limiting factors for greater relevance.
32. Publications from the faculties/departments do not seem to have been overly theoretical, although it should be kept in mind that number of published articles in international refereed journals, rather than applicability of research, continuously is key when promotions are made, in the West as well as in the South.

### Partnership Strategy

33. Way back in 1974 the collaboration was initiated by a few very active and committed Norwegian personalities, who saw the prospects of transferring a capacity building project from Makerere University College to what was to become SUA. During its first phases the activities were individually based and personality driven, rather than demand-oriented.
34. The selection of partnership institutions at SUA has been rather much determined by such persons hand-picking partners, in line with their professional interests and preferences, and in accordance with specialisations at counterpart institutions at AUN.
35. The collaboration has – until the framework agreement – been based on government-to-government and institute-to-institute agreements, rather than university-to-university, or NORAD-to-University agreements. This has clearly hampered capacity building in reaching beyond the single faculties/departments and has limited possibilities for exploiting the Norwegian support in a wider SUA policy, strategy and planning perspective.
36. The principles of recipient orientation, national ownership and local implementation of the collab-

oration has been increasingly at the fore in the gradual evolvement of the collaboration. These principles have in particular been stressed and voiced by NORAD, while the partners at AUN have been less keen on these principles.

37. With greater recipient responsibility, the collaboration has shifted in character, from a twinning arrangement, to a situation where partners at AUN take on a role primarily as consultants and/or service providers, at the direct request of SUA partners.
38. With the framework agreement, and the special agreement between SUA and AUN therein, the role of AUN researchers is becoming increasingly marginal and may soon become rather peripheral. The primary reason is that AUN researchers are too costly, so that budget provisions, now handled directly by SUA, cannot sustain these high costs, which are commensurable with the highest international consultancy fees.
39. While the Norwegian researchers have received a topping up of their normal salaries in the form of a special «field work allowance» of NOK 300,- per day (in addition to per diems and lodging), the SUA partners have not received a similar compensation while being in the field, except for USD 40 per day to cover board and lodging, in accordance with Government regulations and University rules. This has created an obvious lopsided partnership constellation, further adding to an already unequal remuneration structure.
40. Consequently, SUA is increasingly making use of the relatively less costly expertise available in the region.
41. The partnership with AUN colleagues is, however, still by SUA partners perceived as an invaluable contribution, which has resulted not only in competence building at the various institutes, but also created a feeling of trust, partnership and personal contacts and friendship.

### Mode of Operation – Programme Management

42. The collaboration has over the years, in different phases, adopted different working modalities. In a first phase before 1986, the collaboration was characterised by person-to-person contacts, gradually being replaced by a combination of personal contacts and institution-to-institution working modalities, while NORAD was the third party in the triangle. The Norwegian researchers attached to

- AUN had during this period an important initiation-taking role to play, at the request of NORAD.
43. In a second phase, from 1986 to 1996, the working modality was characterised by a more formal institute-to-institute collaboration programme, with the SUA partners taking on greater responsibilities and initiatives.
  44. With the framework agreement as of 1996, the mode of operation has shifted towards SUA being responsible for programming, planning and implementation, based on a NORAD-to-university agreement, signed by the Governments of Norway and Tanzania. The mode of operation reaches beyond the single partner faculty/department in seeking to address the University in broader terms.
  45. With the framework agreement, an Annual Meeting between NORAD and SUA decides on budget allocations for the coming year, based on proposals submitted by SUA Faculties/departments, and as advanced up through the formal University institutional hierarchy. Project Committees are established for funded projects, with collaborating partners seated.
  46. The existing mode of operation has been criticised both by AUN researchers, and by SUA researchers. AUN researchers feel sidelined, as they do not have a say in the Annual Meeting, exclusively conducted between NORAD-Dar and SUA representatives – in line with provisions in the Agreement between these two signing parties. Adding to AUN researchers frustration is that they are less and less in demand, and when demanded, they cannot easily liberate themselves for joint research work, as they have had limited possibilities for planning ahead.
  47. Although they are invited as observers to the Annual Meeting, some SUA researchers feel that the meetings have ended becoming as formalistic decision-making bodies, too far from the needed substantive discussions of each project idea.
  48. The role of NORAGRIC has shifted over the years, but have consistently been very critically appraised by SUA partners. NORAGRIC is seen as a money making machine with its own agenda and separated in spirit and attitude from that of the partnership programme, which NORAGRIC was supposed to serve.
  49. The high costs of involving NORAGRIC, are seen as excessive, and all efforts are done by SUA partners to bypass NORAGRIC.
  50. When administrative, planning and coordination responsibilities were transferred to the Directorate

of Research and Postgraduate Studies at SUA, taking over the major share of previous NORAGRIC responsibilities, NORAGRIC did not assist in the capacity building process paving the way for DRPGS efficiently taking on its new task. NORAGRIC's role in this transitional process is perceived as even undermining local efforts, as NORAGRIC unilaterally took the step of cancelling existing agreements with Faculties/Departments.

51. With the framework agreement, the main NORAD responsibility has been transferred to the Norwegian Embassy in Dar es Salaam. However, while most of the administrative responsibilities between NORAD-Oslo and NORAD-Dar on paper may appear clear, certain unsettled issues remain, such as who has the responsibility of monitoring and supervising the programme. In actual effect, NORAD-Dar seems to be pursuing with vigour its decentralised management role.
52. With the policy of decentralisation, an increasing administrative and supervisory burden has been left with NORAD-Dar, staffed with only one professional assigned this task. This administrative system appears rather fragile. In addition, linking up with, in particular, NORAD-Oslo professional staff, able to assess professionally the various components of the programme, has been weak.

## 1.2 CONCLUSIONS

The long lasting collaboration between the Agricultural University of Norway, and Sokoine University of Agriculture, funded by NORAD, has been an expensive, but rather successful capacity building effort.

Until now, the collaboration has not had a well defined institutional development objective, and the support has been held within a more traditional capacity building approach, of tremendous importance for the institutes concerned, but with limited implications and impact in the broader SUA University perspective.

A major accomplishment of the collaboration has been its staff development programme, through which staff at the main collaborating institutions, the Faculty of Forestry, the Department of Animal Science and the Department of Soil Science, have received teaching and training, at AUN or elsewhere, leading to a situation where practically all academic staff now have Ph.D. degrees. At the same time the collaborating institutes have received a major infrastructural support via the collaboration, through the construction of buildings and

the provision of various equipment and transportation facilities.

Together these elements have very much contributed to the faculties/departments having become self-contained University institutions, capable of carrying out education at various levels, from undergraduate to graduate and Ph.D. education, managing, priority setting and conducting high quality research and creating enabling environments for continued high quality education and research.

The high level of external support provided by the programme, over a very long time horizon, makes it very unlikely that the collaboration programme will ever become sustainable. At least, with the current deep economic and financial crisis, which the Government continuously is facing, and the failings in the past in meeting its obligations, the Government will not be capable of taking over increasing financial burdens, paving – in the foreseeable future – the way for a gradual phasing out of the Norwegian assistance.

The Faculty of Forestry has been supported over the entire programme period with funding at a high level. For a long time this support was characterised by a focus on plantation forestry and the use of exotic species, rather than, for example, agro-forestry and the use of indigenous species, with limited immediate value for smallholders and their development needs. In this, the collaboration has given priority to aspects which are of only marginal importance in relation to agricultural sector needs. While other components of the collaboration have been more directly addressing contextual relevance in their activities, the magnitude of the support indicates that a lot more could have been achieved in order to optimise relevance and benefits in relation to Tanzania's agricultural development, if other priorities had guided programme efforts.

The collaboration has been very costly. As mentioned above, a major achievement has been the staff development programme, and the capacities established with collaborating faculties/departments are impressive. The investment in the construction of buildings, equipment and other infrastructure, however, seems to have taken the lion's share of budget provisions, while the costs of educating the number of Masters and Ph.D. students over the programme have been very high, at least as compared to available figures from other projects for unit costs in producing candidates abroad. With other

programme priorities, both the number of students educated and the amount of research carried out could have been substantially increased.

It has been very difficult in the course of the present study as well as during the Pre-Study which preceded it, to obtain more accurate information on money spent and output produced, indicating serious problems in the monitoring of the programme. Monitoring has not been conducted systematically by anyone, and broader, more encompassing evaluations have not been made. It has, therefore, been difficult for the partners involved to regularly assess outcome and results produced. It appears that management of the programme very much has relied on rather unsubstantiated yearly reports, which have given impressions of repeatedly positive project results.

Project management has been inadequate, with unclear and changing responsibilities. While individuals originating from the AUN research milieu played a particularly influential role during project start up, and in the course of the 1980's, NORAD-Oslo has played a decisive role as well, deciding on budget allocations and responding positively to meeting SUA requirements for a heavy infrastructural build up.

With the implementation of NORAD's decentralisation policy, with management responsibilities transferred to the Norwegian embassy in Dar es Salaam, and implementation, coordination and accounting responsibilities transferred to SUA, management has been reduced to a working modality between NORAD-Dar and SUA management. In this process AUN researchers have been sidelined, and some SUA researchers as well feel that substance has been reduced and bureaucracy taken over.

While the policy of decentralisation has its virtues, it also has a few drawbacks. In the present case, the reduced role of particularly AUN, but also SUA researchers, in management and negotiations over programme substantive issues, has strained some of the comparative advantages in twinning arrangements, which has its rationale in a partnership constellation between researchers/teachers in the North and in the South. At the same time the transfer of management and programme responsibilities to NORAD-Dar has led to a situation, where the professional dialogue, monitoring responsibility and experience sharing between NORAD-Oslo and NORAD-Dar have become too limited.

### 1.3 RECOMMENDATIONS

Based on the Key Findings and the Conclusions of this study, four main Recommendations are provided in the following:

1. **The support to SUA should be continued under the existing framework agreement.**

The long lasting nature of the Norwegian supported capacity building programme with SUA, and its high level of funding, which has resulted in Norway having become the by far most important donor, makes it impossible within a foreseeable future to terminate the assistance. In the implementation of the present framework agreement, particular efforts should be made within three areas of concern:

- The support to SUA should be broadened to encompass the university as a whole, and the capacity building process should be enlarged to include relevant parts of concerned ministries and national institutions in order to meet the broader institutional development objective. A combination of expertise, which include not only agriculture related sciences but also public administration and management expertise is required.
- The support should be balanced and prioritised in order to make it of greater relevance to Tanzania's agricultural development. A more balanced support to institutes and departments at SUA should be based on a reassessment of sector needs. Current efforts at SUA to strengthen the relevance of education and research should be supported. A particular effort should be made to assist SUA in its current process of transition, reviewing curricula and changing the scope and direction of individual institute profiles and thematic coverage, in order to better respond to new labour market demands;
- The programme should improve its cost-effectiveness, i.a. by reducing its investment programme, to the benefit of education and research.

2. **A strategy should be developed for the programme, reaching beyond year 2000**

With the high level support provided by the programme, SUA has become dependent on NORAD. This dependency requires an extraordinary effort on the part of NORAD for managing the programme with a view of

setting priorities, policies and plan targets beyond the year 2000.

To facilitate this process, NORAD should initiate a dialogue with key ministries, SUA and other donors, leading to negotiations on how to prepare for a gradual reduction in the Norwegian contribution. It is of crucial importance that NORAD takes on this responsibility, together with SUA management, in order to prepare for a situation in which the University becomes less dependent on only one donor, while activities are diversified and relevance improved upon.

Such a strategy of phasing out should be formulated, indicating NORAD's contributory role in the short, medium and longer term perspective.

3. **Immediate steps should be taken to improve monitoring, evaluation practices and learning from experience**

As has become evident during the present evaluation, the information available on programme inputs and outputs is far from satisfactory. No sufficiently accurate data exist, and no indicators of success have been developed, indicating that the programme has developed its own «life» with only marginal interference from the outside.

Consequently, a monitoring system should be developed and responsibilities clarified. In addition, the information systematically collected should include the additional funding made available to the activities, financed by other Norwegian sources, such as NUFU and NORAD scholarship funds, in order to facilitate the calculation of real costs of programme outputs. The monitoring of the Norwegian support programme should be based on an improved M+E-system of the University as such.

4. **The existing programme management system should be strengthened**

The technical advisory staff of NORAD-Oslo should be encouraged to play a more proactive, rather than reactive role by establishing a more regular professional dialogue with programme management in Dar es Salaam. In particular, in preparing for the Annual Meetings, professional staff of NORAD-Oslo should play a role in contributing to formulation of benchmarks and success criteria, and related monitoring systems.

In addition, the role of AUN researchers – sidelined in the existing system – should be revised with a view of involving them, along with their SUA partners, in the setting of objectives and professional yardsticks.

To rejuvenate the programme, it is recommended that efforts are made to attract younger Norwegian researchers and Ph.D. graduates, who are already qualified in relation to tropical agriculture, devoted and willing to conduct joint research, including

prolonged periods of field work, together with their Tanzanian colleagues. In this, multidisciplinary approaches should be encouraged.

Within the framework of the Annual Consultations between the two governments on the implementation of the Norwegian Country Strategy for Tanzania, the support for SUA should be addressed in its broader institutional development perspective in order to ensure coherence of Norwegian efforts in Tanzania

## 2 Introduction

### 2.1 THE STUDY FRAMEWORK

The present study of the institutional collaboration between Sokoine University of Agriculture (SUA) and the Agricultural University of Norway (AUN) was conducted by COWI from June to December 1997. The Terms of Reference are included as Annex 1. The study, which serves as an independent evaluation of the long standing Norwegian support to SUA, was conducted by a team, which comprised of:

- **Henrik Secher Marcussen**, who collected information both in Norway and Tanzania, and was responsible for drafting the present report
- **Augustine Macha**, national consultant, who arranged the programme and participated in the collection and analysis of information in Tanzania
- **Lars P. Christensen**, who co-ordinated the study, participated in the collection and analysis of information in Norway and provided quality control.

As it appears from the TOR, the study has a twofold objective: On the one hand, it provides an analysis of the institutional collaboration between SUA and AUN, and present the results in a self-contained report. On the other hand, it feeds into a broader and more comprehensive evaluation of institutional development in Norwegian bilateral assistance. Therefore, the study is presenting results of relevance for the particular programme of collaboration, which has existed for nearly 25 years. At the same time, the study serves as one of five studies, throwing light on different forms of institutional development, where NORAD has utilised different channels of collaboration for achieving and implementing its institutional development policy.

The present study has very much profited from a Pre-Study, which was carried out during December 1996 – February 1997. Based on the preliminary findings of this Pre-Study, and the documentation made available therein, a number of hypotheses were formulated, which guided the questions posed to various partners interviewed. Following from a seminar with team members conducting the other case studies and the overall study-coordinators of DIS, supported by NCG, another set of hypotheses was developed, particularly focusing on institutionally related factors and variables. In the concrete interview situations, the study team has thus utilised two sets of guiding hypotheses, which – although

not using a formal, structured questionnaire – have formed the basis for a rather tight and well structured interviewing schedule. A complete list of people met and interviewed appears in Annex 2, while Annex 3 is a list of documents included in the literature and documentation review.

The persons interviewed include: all team members of the Pre-Study team, staff at SUA and AUN, a few former students and staff of SUA, NORAD staff in Oslo as well as in Dar es Salaam, other donors present in Dar es Salaam, and ministry and departmental representatives. The field visit to SUA, Morogoro also profited from a visit to the site of the Dairy Goat Project, as an example of how the collaboration between SUA and AUN has implied results which are directly applicable to the local situation, and which, seemingly, have greatly contributed to creating additional income generating opportunities for the villagers concerned.

The report is structured in the following way: First, the history and background of the programme is briefly presented, followed by a discussion of the experience from similar projects elsewhere, and «best practices», as developed by the World Bank in this area of assistance. Then a description follows of the partnership strategy adopted in the different phases of the programme. In chapter 6, an assessment of the inputs to the programme is presented, followed by an assessment also of outputs. The relevance of the programme seen in relation to Tanzania's agricultural sector needs is discussed in chapter 8 while chapter 9 discusses the modes of operation used over time in terms of programme management. Finally, chapter 10 discusses the programme's contribution to institutional development.

In November 1997 a draft report was sent to SUA, AUN, the Norwegian Embassy in Dar, and NORAD, who all provided written comments. The draft report was subject for discussions in a seminar held in Oslo the first two days of December 1997 with the participation of NORAD and UD, the co-ordinators of the overall evaluation and the teams undertaking the other case studies. The final report is prepared considering all the comments provided. The study team wishes to thank all the key informants, who have provided very useful information for the study and comments to the draft report.

## 2.2 THE NORWEGIAN APPROACH TO INSTITUTIONAL DEVELOPMENT

Like many other donor organisations, the Norwegian government has emphasised the concept of institutional development in its aid policy for the 90ies. Institutional strengthening or capacity building for sustainable development has become a cornerstone and an important rationale for Norway's involvement in international development cooperation as a part of the strategy to focus on the recipient's responsibility in the development process.<sup>3</sup>

The history of Norwegian institutional cooperation and organisational development goes back to the first development decade. More recent perspectives, as reported in major policy documents however, go back to 1989/90 when NORAD's «Strategies for Development Cooperation» was presented. This strategy was based on the Parliamentary White Papers St.m. nr 36 (1984) and St.m. nr 34 (1986/87), in which the importance of strengthening key public and private institutions in developing countries was emphasised, while admitting the difficulty in separating technical aid and institutional support.

The NORAD strategy emphasised a change from *recipient orientation* to *recipient responsibility* in their aid policy. «Responsibility for own development presupposes robust, stable institutions (...) For the concept of recipient responsibility to be meaningful, Norwegian development contributions must also in the future be used to enhance proficiency and to reinforce public administrative capacity – institutional development – so that these institutions can become independent of aid as far as possible.»

In the same strategy paper it is stated that «NORAD must actively encourage participation of Norwegian organisational and institutional life in development work», which was later presented as the «*Norwegian axis*» in development cooperation. The idea is that the main responsibility for planning, implementation and reporting rests with the cooperating partners, in Norway and in the recipient country, while NORAD acts primarily as a source of funding and coordinating body.

The 1991 NORAD strategy for institutional support<sup>4</sup> follows up the broader 1990 strategy. Support to institutional development should aim at improving: 1) the structure and «construction» of the institution: management, administrative lines, rules for decisionmaking, mechanisms for planning, contextual framework etc.; 2) human resources of the institution: level of education, profile of competence, organisational culture, working conditions, etc. and 3) Material resources: Infrastructure, equipment, maintenance, transport, etc.

In 1991 MFA released the White Paper 51 (1991–92), «Trends in North South Relations and Norwegian Cooperation with Developing Countries». Competence-building, institutional development, and research were cast as partly overlapping and partly complementary activities. Capacity development occurs primarily through education and various types of training activities, research and on-the-job experiences. Institutional development, on the other hand, must take its starting point in institutional circumstances (e.g., administration, leadership, decision-making systems, planning capacity, mandate, etc.).

The White Paper states that support to institutional development can consist of training programmes, institutional support, personnel assistance, institutional cooperation, or any combination of these components. The Government wants to increase the role of institutional *cooperation* in areas where the developing countries express a demand, and where the Norwegian institutions have a relevant technical competence and knowledge of the conditions and needs. White Paper No. 51 confirms the policy change from recipient orientation to recipient responsibility, and argues for a dialogue with the recipient governments about policy issue like democracy, good governance, poverty reduction and gender issues to create an enabling environment for development.

To implement the new policies NORAD in 1992 presented a part two of their strategy focusing on some basic principles for bilateral development cooperation<sup>5</sup>:

«Norwegian development cooperation must contribute towards strengthening institutions in partner countries, so that in the longer term they will be able to carry out their responsibilities independently of foreign assistance. Such institutions may be in the public, semi-public

<sup>3</sup> For an in-depth discussion about the Norwegian policies and strategies for institutional development see the synthesis report.

<sup>4</sup> A NORAD strategy for institutional support: Institutional Development – Possibilities and Restrictions (July 1991)

<sup>5</sup> NORAD, Strategies for Development Cooperation, Basic Principles, Edited 1992

or private sectors, at central, regional and local levels. Important measures will include:

- supporting reforms and organisational development which will increase the efficiency of the public administration at the central, regional and local level;
- supporting educational and research institutions which may improve the supply of expertise and knowledge which is lacking in important public and private institutions;
- supporting the establishment and development of institutions which may improve the functioning of business, industry and the market;
- emphasising the importance of institutional conditions for all development cooperation – if necessary by making financial support conditional upon the development of expertise and organisational changes;
- identifying and evaluating those institutions in partner countries which are suitable for Norwegian assistance. There will be emphasis on framework conditions and the possibilities for development;
- identifying and strengthening Norwegian institutions which are suitable for institutional cooperation in selected sectors;
- giving priority to using local expertise in projects and programmes supported by Norway;
- supporting training programmes, with particular emphasis on organisational development, administration and management training.

The next document which is relevant to analyse is the Public Commission of 1995; *A Norwegian Development Cooperation Policy for a Changing World* (NOU 1995: 5). The commission discusses the aim and contents of a long-term programme for competence-, capacity- and institutional development without defining what it means with institutional development or how it relates to the channels of cooperation. The issue receives relatively less emphasis than in the previously mentioned proposition, but it is clearly noted that institutional development is a priority area. The commission points to the problem-solving capacity as the key word, both at individual and organisational levels, hence the reason to treat these subjects jointly. There are five main points made in the text:

*First*, institutional development can occur both at local and national levels. Not only in public institutions, but also organisations like voluntary associations, private firms, welfare societies, and others. *Second*, the commission emphasises that the cooperation should aim at changing the development framework, and should be connected to the recipient's responsibility. *Third*, the cooperation can be built on mutual advantages; that is, both donor and recipient should gain. *Fourth*, poverty orientation should be the guiding light. *Fifth*, it appears logical to concentrate long-term cooperation to a smaller sample of least developed countries, where there is a NORAD representation.

The Government White Paper St.meld 19 (1995–96),<sup>6</sup> which mainly was based on the Commission's report see capacity building and institutional development as prerequisites for the ability of developing countries to take responsibility for their own development. The development of expertise and administrative capacity is also important in order to prevent aid dependency.

An increased emphasise on capacity building and institutional development was signalled as «past experience of cooperation between Norwegian organisations and institutions and their counterparts in developing countries has been good, and the Government wishes to ensure that this type of cooperation is further developed.

### 2.3 CONCEPTS AND DEFINITIONS

The terminology for institutional development is subject to continuing dispute. We have tried not to invent a new set of definitions for this study, but stay as close as possible to what key and influential actors in development use. We have partly been guided by UNDP<sup>7</sup>, but decided to use institutional development and not capacity development as the broader term. The concepts and their definitions were discussed and agreed to among all teams during the first workshops. We do not claim that they are the only definitions, but they will be applied in this study. The concepts are discussed more indepth in the Synthesis Report.

#### 2.3.1 A multi-dimensional model of institutional development

A point of departure is that institutional development consists of several dimensions and levels and the concept can be decomposed along two variables:

<sup>6</sup> Report No.19 to the Storting (1995–96) «A Changing World. Main elements in the Norwegian policy towards developing countries».

<sup>7</sup> UNDP (1994) «Capacity Development: Lessons of Experience and Guiding Principles».

- level of intervention (from individual and organisational to sectoral and systemic levels),
- type and composition of activities typical at each level (from education and training, organisational development activities to establishing/enforcing rules and regulations for entire sectors and systems).

It appears that institutional development includes a broad range of activities at various levels of society and different sets of interventions at each of them. Distinctions are often blurred, and the broader terms build on and presuppose the more narrow. The terms and levels are as follows:

INSTITUTIONAL DEVELOPMENT		
Process dimension	Level	Focus
1. Human resource development	Individuals and groups	Transfer and use of competence
2. Organisational development	Organisations	Changes in individual organisations
3. System development	(a) network linkages	(a) Patterns of communication/collaboration between organisations.
	(b) sector	(b) Policies, rules, legislative framework.
	(c) overall context	(c) Macro-level policies and conditions. (d) Cultural values, norms and traditions

### (1) Human resource development

is concerned with how people are educated and trained, how knowledge and skills are transferred to individuals and groups, competence build up and people prepared for their current or future careers. This represent the broad areas of educating and training individuals and groups for general or particular purposes, and represents the first and basic building block of institutional development.<sup>8</sup>

### (2) Organisational development

has another entry point and seeks to change and strengthen structures, processes and management systems in specific organisations in order to improve organisational performance.

There are variation between O.D. approaches, but have in their «pure» form the following characteristics:

- focus on individual formal organisations and particularly their internal functioning,
- less attention paid to external contextual influences on performance,
- most concern with internal organisational changes,
- major activities and inputs include education, training, technical advice and equipment,

- organisational change occur as a result of planned internal changes (in management, culture, administration, etc.) with support of external inputs.

### (3) System development

is not a common term in institutional development<sup>9</sup>, but seeks in this study to capture what goes beyond organisational development. It is a broader concept and brings in the organisational environment. In addition to a concern with human resources and internal organisational dynamics, it includes an emphasis on linkages between organisations and the context within which organisations operate.

While organisational development starts inside an organisation, system development looks out from the organisation to its linkages and interactions with the environment, and also how individual and organisational behaviour is regulated and affected by external constraints, pressures and incentives, norms and rules, etc. And contrary to the former organisational perspective an assumption is that organisational innovation requires and builds on changes in the external variables.

**(a) The network and linkages among organisations** which include the network and contact between orga-

<sup>8</sup> Institutional development would most likely include and depend on some training and education components, but it is not necessarily true that training and education have an institutional devel-

opment objective. This is an important distinction in the study since training and institutional development is often made equal at programme level.

nisations that facilitate or constrain the achievements of particular tasks and underlines the interdependence of organisations.

**(b) The sector environment**

referring to the overall policy and institutional environment of the public, private and civil sector that constrains or facilitates organisational activities and affects their performance, including legislative frameworks, formal and informal rules, financial resources etc.

**(c) The overall context**

which encompass the broad action environment for the organisations, beyond the sector – including the political and socio-economic milieu (macro-policies and conditions) and the prevailing cultural norms, values and traditions which facilitate or constrain the functional capacity of organisations.

The following definition of institutional development draws on the preceding discussion and underlines the interaction between micro (internal) and macro (external) factors determining how organisations translate their capacities into actual performance.

Institutional development is a composite process of change that optimises the performance of organisations in relation to their goals, resources and environment.

**2.3.1 Capacity development & Institutional cooperation**

Capacity development is also a term used in connection with institutional development and the terms are almost interchangeable. We prefer to use **capacity** as the ability of both individuals, organisations and systems to perform their functions more efficiently, effectively and sustainably, and **capacity development** includes activities that seek to improve and strengthen such abilities at individual, organisational and systemic levels. It is said that capacity development is a broader concept including also political issues like good governance, transparency and reform, but such issues could as well be included in the institutional development framework described above.

This term, **institutional cooperation**, is at another level than the concepts above. It is a collaborative strategy to strengthen organisations by job-specific skill upgrading, procedural improvements, training and advice, etc. Institutional cooperation represents formalised long term cooperation between two similar or like-minded organisations in the North and South to achieve capacity strengthening in one or both organisations, and is one of the key strategies in Norwegian bilateral aid to enhance institutional development in the public, private and civil sector.<sup>10</sup>

<sup>9</sup> Systems development is often called institutional development, but we have found it useful to distinguish the encompassing term and the systemic elements that go beyond organisational development.

<sup>10</sup> Organisational cooperation includes collaboration in all sectors and not only the public sector twinning arrangements.

### 3 Institutional collaboration between SUA and AUN

#### 3.1 THE ORIGIN AND NATURE OF THE COLLABORATION

Already in the 1960s, the Agricultural University of Norway was involved in aid related activities within agriculture and natural resource management. Agricultural development projects were established in Nigeria in 1961, and support to the forestry sector in Uganda was provided in 1964. In 1969, a Forestry Department at Makerere University, Uganda was established with Norwegian funding, intended to serve the East African nations within the forestry sector. For security reasons, the project was closed down in 1972 and project activities temporarily transferred to Kenya. Most of the then involved Norwegian researchers would have preferred to continue in Kenya, but for the Norwegian aid authorities it was at the time not politically feasible to expand an aid programme in Kenya. So after a brief period of time it was decided to transfer activities to Morogoro in Tanzania which then formed part of the University of Dar es Salaam. The final decision as to establishing, what was to become one of the major and most long-lasting education and research collaboration programmes ever seen, was, however, not least the result of the initiatives and very active personal involvement of some of the Norwegian experts, who had been associated with the forestry programme in Uganda, who still wanted to see a capacity building effort within forestry, serving the East African region.

With funding from NORAD, a Forestry Department, later turned into a Faculty of Forestry, was erected as from 1973 and a Masters degree programme was initiated for the period 1975 – 77. Courses were held at the AUN, while degree work took place at what was to become Sokoine University of Agriculture (SUA). In 1990, the Animal Science Course was transferred to SUA, and the Soil Science course followed in 1992.

Support to the Institute of Animal Science followed in 1977. The Institute suffered from being understaffed and no staff members at the time held Doctor's degrees. It was then decided to support a Masters degree programme, running through 1981. Thereafter the collab-

oration was extended by offering diploma courses also for developing country candidates coming from outside the East African region.

In 1982, an agreement was reached between AUN and SUA, enabling Masters' students within Soil Science to conduct yearly courses at AUN in Norway, while degree work itself remained at SUA. In 1990 the Animal Science course was transferred to SUA and the Soil Science course followed in 1992.

The fourth and most recent addition to the umbrella of support schemes funded by the Norwegian Government was the two-year Masters degree programme in Management of Natural Resources and Sustainable Agriculture which from 1986 was established at NORAGRIC, Norway – the consulting arm of AUN. The programme consists of a one-year diploma course followed by another year of field studies and thesis writing. – In addition, since 1992 support has been given to a course of short duration on Management of Natural Resources and Sustainable Agriculture, held at the Institute of Continuing Education, SUA, Tanzania.

While NORAD and UD has seen the long-standing Norwegian support for SUA primarily as an institutional collaboration programme – a twinning arrangement -between AUN and SUA, funded by NORAD, the perspective of AUN was quite different. The support «has always been regarded by the AUN as a programme for developing SUA, with some participation from various departments at AUN through individual projects»<sup>11</sup>. AUN has seen itself as an institution providing services to SUA and NORAD on their requests. Inadequacies in terms of overall guidance of the programme may partly be explained by this apparent and long-lasting uncertainty about the location of the overall responsibility for the programme<sup>12</sup>. In the opinion of AUN there is «an inherent conflict between the principle of recipient responsibility and the Norwegian aid administration's desire for making Norwegian institutions partners in the programme».<sup>13</sup>

<sup>11</sup> The comments, dated 08.12.97, provided by NLH to the draft report, page 2

<sup>12</sup> Accountability patterns have been further blurred by the fact that key professionals at AUN later in the programme history reappear as key decision makers in NORAD.

<sup>13</sup> The comments, op.cit.

In 1996, a framework agreement of five years duration was signed between the two governments, replacing all previous agreements. Within the framework agreement, a considerable degree of decentralisation has taken place, as the implementing responsibility now rests with SUA, in close collaboration with NORAD-Dar. The framework agreement provides the basis for allocation of funds to those parts of past programmes which are to be continued, as well as the possible inclusion of new areas of collaboration. A separate agreement relates to the specific cooperation between SUA and AUN.

### 3.2 SOKOINE UNIVERSITY OF AGRICULTURE

Sokoine University of Agriculture, which is the only agricultural university in Tanzania, was established in 1984 with its own legal and independent status.<sup>14</sup> The University was created from the former Faculty of Agriculture, Forestry and Veterinary Science of the University of Dar es Salaam. The University has three faculties and two institutes: The Faculties of Agriculture, Forestry and Veterinary Medicine, the Institute of Continuing Education and the Development Studies Institute.

The objective of the University is to provide teaching and conduct basic and applied research within areas such as agriculture, crop production, livestock production, fishery, natural resource management and associated fields and topics, including mechanical and technological issues.

Between 1990 and 1996, a total of 2,346 students have been enrolled with SUA, of which 2,031 were in the Bachelors, 300 in the Masters, and 15 in the Ph.D. programmes. In the same period, a total of 1,293 students have received degrees from SUA, of which 1,122 have been awarded B.Sc. degrees, 156 Masters degrees, and 15 Ph.D. degrees. Of the total of 1,018 enrolled undergraduate students as of July 1997, the majority were enrolled in the Faculty of Agriculture (82 %), with Forestry and Veterinary Medicine sharing the remaining.

As per December 1996, a total of 226 academic staff held teaching positions (of which only 11.5 % female), which leaves the University with a very favourable staff-student ratio of only 1:5.3. It is a specific objective

of SUA to increase cost-effectiveness by increasing student enrolment, so that by the year 2000 the staff-student ratio will be improved to 1:10, with further increases expected towards 2005.

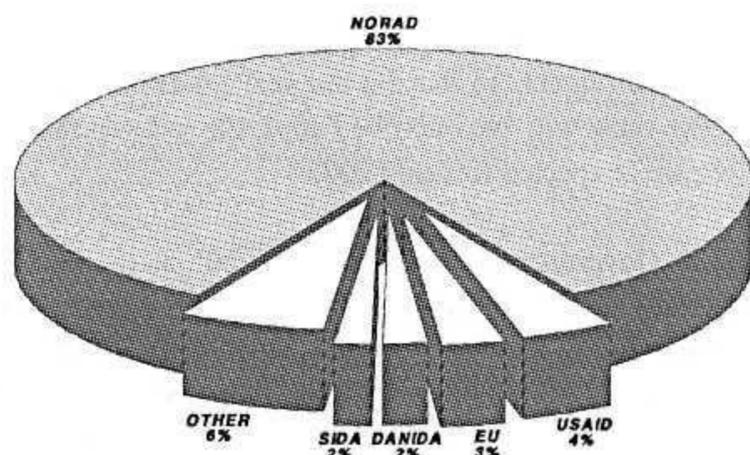
The Government's financial contribution to the University has fluctuated over the years, and increased between the period 1992/93 and 1995/96, from TAS 1.6 billion to TAS 2.8 billion, but has never been near to the (justified) requests for contributions to recurrent and development costs as formulated by the University. For the fiscal year 1996/97, the GOT contribution declined to 2.3 billion, while for 1997/98 the contribution stood at 2.4 billion, in both years slightly lower than total donor contributions. NORAD alone has contributed the major part of external donor contributions, in 1996/97 no less than 83 % of the total, followed by USAID (4 %), the European Union (3 %) and Danida and SIDA with 2 % each. In other words, the contributions from donors represent well over 50 % of the total SUA budget, and NORAD's contribution alone slightly less than the total GOT contribution.

The total external donor contributions to SUA have over a number of years been close to equalling the GOT contribution. Previously, Danida was, together with NORAD, another significant donor to SUA, however terminating its assistance to the Faculty of Veterinary Medicine in 1994. The implication of this has been that NORAD's share in total donor contributions has increased, and SUA is now more than ever dependent on continued assistance from Norway.

**TABLE 3.1:**  
**Donors Financial Support to Sokoine University of Agriculture for 1996/97**

Donor	Amount contributed Tanzania Shilling
NORAD	2,162,068,252
USAID	109,051,953
EU	69,248,941
DANIDA	49,834,187
SIDA	42,637,623
OTHERS	168,615,090
TOTAL	2,601,456,044

<sup>14</sup> See for example the Research Policy Priorities and Guide//lines from 1992, published by the University.



Source: DRPGS, Sokoine University

In June 1997 the University Council approved a new Corporate Strategic Plan to the Year 2005. Compared to previously issued strategies and plans,<sup>14</sup> the new strategy takes a more dynamic, management oriented approach, in which the vision for the University is expressed as becoming the «centre of excellence in agricultural related fields with emphasis in imparting skills, entrepreneurship, research, integration of basic and applied knowledge in an environmentally friendly manner for the benefit of all people». At the same time it is stressed again and again, that the University should become a flexible and dynamic organisation within the Tanzanian society, by contributing to improving «the nation's food supply and safety to enhance the environment and the socio-economic status of the people». This will, i.a. be done by introducing courses which are demand-driven, and encourage demand-driven research for maximum impact, including a much more clear emphasis on multi-disciplinary.

### 3.3 THE AGRICULTURAL UNIVERSITY OF NORWAY

The AUN was established in 1859, at first as a State College. The number of teachers is to-day around 250, of which 80 are full professors. Number of students enrolled are around 1.800, in addition to 250 post-graduate students. – In size, the two universities, SUA and AUN, are thus not too far apart.

As mentioned above, AUN's involvement in development work dates back to the early 1960s, at first by individual staff members being recruited as experts by Norwegian aid authorities for shorter or longer duration. This again led to AUN involvement in Norwegian sponsored agricultural projects, primarily in countries south of the Sahara, as well as staff members acting as consultants/experts for NORAD, voluntary organisations and the UN. Individual scholarshipholders received their education at AUN from the early 1960's, while from the late 1960's the University's involvement in development work gained momentum, in which the collaboration with Makerere University College as from 1969 within the forestry sector was seen as a major contribution.

While AUN's involvement in development issues included a broader range of activities, it was the collaboration between AUN and SUA which developed as the most important and long-lasting twinning arrangement, which paved the way for AUN becoming an agricultural university with an international profile, building competence among staff also within tropical forestry and agriculture. – Also from the late 1960's did the education and training of Norwegian students in agriculturally related areas, focusing on developing countries, gradually take off.

The AUN staff involvement in development issues was thus at the start particularly related to the forestry sector and within that, the possibilities of promoting the industrial use of Tanzania's forestry resources.

Only later became Animal Science and Soil Science more heavily involved. In the AUN-SUA collaboration programme, Animal Science received NORAD support as from 1977, while Soil Science became part of the programme in 1980. Partly inspired by the two-year's Masters education programme in Management of Natural Resources and Sustainable Agriculture held at NORAGRIC for students from the developing world, which started in 1986, in 1992 support was given to the Institute of Continuing Education at SUA in order to conduct short-term courses in the mentioned subjects.

<sup>14</sup> Parliamentary Act No. 6 of 1984 of the United Republic of Tanzania.

## 4 Strengthening education and research capacities in developing countries

### 4.1 SUPPORT TO CAPACITY BUILDING: THE TRADITIONAL APPROACH

The system of higher education is in crisis in most developing countries. Despite the clear importance of investment in higher education for economic growth and social development, government contributions – for which most higher education institutions continuously are dependent – have decreased over the past decades. According to World Bank estimates<sup>16</sup>, government per student expenditures have been steady declining since the late 1970s, in Sub-Saharan Africa, for example, decreasing from an average of USD 6,300 in 1980 to USD 1,500 in 1988. – Following retrenchments in the public sector, government contributions to higher education have declined further since then.

This decline in Government spending on higher education is not least associated with structural adjustment programmes and, in the case of Africa, a widespread economic and financial crisis. The effects of declining contributions to the sector could, in theory, have been modified by more efficient and effective use of available resources. According to the Bank's assessments this has, however, not been the case. On the contrary, in these countries, the quality of research and teaching has deteriorated precipitously and «higher education institutions operate under adverse conditions: overcrowding, deteriorating physical facilities, and lack of resources for non-salary expenditures such as textbooks, educational materials, laboratory consumables, and maintenance»<sup>17</sup>.

Support for capacity building within scientific research and higher education is only receiving a very small share of total aid to developing countries, estimated at only a few percent of the total development assistance. Increasingly this assistance is provided within a twinning cooperation framework, where research partnerships are built between institutions of a similar nature in the North and the South, as this form of collaboration is seen as the most efficient model.

<sup>16</sup> Higher Education. The Lessons of Experience, Development in Practice, the World Bank, Washington, 1994.

<sup>17</sup> Ibid., p. 2.

<sup>18</sup> After Thulstrup, Jagner and Campbell: Natural Science Research in Zimbabwe, SIDA Evaluation 97/14, Department for Research Cooperation, SAREC, 1997, p. 9 ff.

Traditionally, the support provided to higher education and research has been in the form of<sup>18</sup>:

- Training, especially of university staff, including researchers, teachers and technicians;
- provision of buildings for teaching and research activities;
- provision of teaching facilities, including classrooms, teaching equipment and laboratories;
- provision of research equipment, computers and service facilities;
- funds for operation and maintenance;
- provision of textbooks, research journals, access to data bases, etc.;
- on a national level, support for development of professional societies, subject specific research journals, and communication channels between universities and users;
- access for university staff to international communities in relevant fields;
- incentive systems at all levels, ensuring that facilities and working time are used in the most productive fashion; and
- monitoring and evaluation systems, not only in the build-up phase, but more importantly for the productive situation which is supposed to follow the initial investments.

In most twinning arrangements, these traditional forms of support have been used, in part at least, and have provided the very basis for capacity building in the longer-term perspective. Often this support has been directed towards individual research institutes or departments and has given priority to forming the teaching and research basis within these selected institutions, on which to build in a future more expanded collaboration effort.

This first level of capacity building in education and research has been labelled the building of a partial research capacity<sup>19</sup>, in contrast to the creation of a complete research capacity in a given field.

<sup>19</sup> See Erik W. Thulstrup: Strategies for Research Capacity Building through Research Training, in Thulstrup and Thulstrup (eds.): Research Training for Development, Roskilde University Press, Roskilde, 1996, p. 81 ff.

## 4.2 LESSONS LEARNED

While the first intervention type has assisted in providing basic opportunities to perform research at an international standard, and has provided the necessary physical facilities and access to assistance from competent co-operative partners elsewhere, the latter capacity building effort is reaching beyond that. Here, the ambition is to create a situation where researchers independently perform all aspects of research in the field, including procurement and maintenance of physical facilities, training of young researchers, completion and dissemination of research projects, as well as other managerial tasks, at a good, international standard<sup>20</sup>.

However, even this broader approach to capacity building has its limitations. According to best practices developed by the World Bank<sup>21</sup>, as a result of its efforts in synthesising lessons learned, it is necessary to reach beyond the single university institute/department in encompassing the university as such, and it is necessary to reach beyond the university in encompassing also broader national research policy planning and priority setting institutions, if sustainable institutional development within higher education and research should stand a chance of succeeding.

Lack of a national research capacity is, in other words, a constraining factor, which can prevent the exploitation of otherwise well justified and well managed capacity building efforts in individual fields, or with universities at large. National research capacity includes the capability to prioritise research fields and activities, to efficiently provide support for the selected research activities, to monitor and evaluate these activities, to support the training of, attract, and keep good researchers in the country, to create conducive research environments, including incentive systems, and to apply research results to outcomes – both in the form of research results and research training, to the benefit of national development.

In order to reach beyond capacity building in its more traditional sense with individually selected institutes/departments, it is, therefore, in an institutional development framework necessary to:

- support capacity building in all relevant aspects of

university education and research, not only within the single institute/department;

- support capacity building at university administrative and managerial levels, in order to strengthen capabilities in priority setting and policy formulation and planning;
- strengthen university management's capability in coordinating donor efforts at university level;
- strengthen university management's ability to voice and advocate university interests viz. national, political decision-making bodies;
- strengthen university heads of departments and management's ability to disseminate research results and «sell» university products in a form which underlines usability and relevance;
- establish closer links with external user groups and practitioners, in this field in particular extension workers and community groups;
- establish closer links with similar research institutions/universities in the country/in the region;
- strengthen capabilities for monitoring, evaluation and quality assessments throughout; and
- reinforce capacities at national, administrative levels.

In a recent survey of best practices among donors operating in this field of university development cooperation, the Flemish Interuniversity Council concludes very much in line with the above<sup>22</sup>. For most donors involved, the lessons learned from past development efforts have shown that ad hoc projects using «the expert model», by which researchers from Northern institutions transfer their knowledge to researchers at Southern university institutes, and most often colleagues within single institutes or departments, does not work. Instead, a broader approach has been adopted by a number of donors, in particular SAREC and IDRC, in which, on the one hand, greater impact and value added is tried to be achieved at institutional level through support to broader partnership links, building capacities at all levels at universities, but in particular stressing the strengthening of management capabilities. On the other hand, provide support to strengthening the institutional environment in which projects and programmes are carried out, e.g. bolstering the institutional framework handling research and higher education policies at national levels. – Another important lesson learned from these first efforts in broader institutional development is, that while «many Western universities undoubtedly have considerable experience in joint academic operations, they have far less in partnerships directed towards institutional development»<sup>23</sup>.

<sup>20</sup> Ibid., p. 82.

<sup>21</sup> The World Bank, 1994 and Thulstrup et al., 1997 and Thulstrup, 1996, op.cit.

<sup>22</sup> Flemish Interuniversity Council: Strategic Research in University Development Cooperation, University and Polity, May 1997.

<sup>23</sup> Ibid., p. 3.

## 5 Partnership Strategy

### 5.1 CHANGING OBJECTIVES: FROM CAPACITY BUILDING TO INSTITUTIONAL DEVELOPMENT?

The objectives of the agreements of collaboration between SUA and AUN have over the years been held in rather vague and general terms. Until the framework agreement signed in 1996, the objectives have remained largely unchanged, and even with the new Agreement approved, the support is continuously provided within rather traditional approaches to capacity building.

The overall objective is often stated as «developing and improving the teaching and research capacity» of the faculty/departments, while specific objectives are formulated as developing «human resources in the different teaching and research disciplines», and to «develop support facilities for teaching and research».

The discussion as to how to broaden the scope of the programme, reaching beyond the single faculty/department, while simultaneously implementing greater recipient orientation, leaving the main planning, coordination and implementing responsibility with SUA itself, had already been going on for some time in the early 1990's, particularly among NORAD staff. Parallel to this, the implementation of the policy of decentralisation took place, in which NORAD-Dar became responsible for all phases of project administration, including preparations and follow-up. The subject of recipient orientation and adopting the broader approach to institutional development were discussed during Steering Committee meetings in that period, but only materialised with the framework agreement formulated during 1995 and signed in 1996.

In the Country Strategy formulated for Tanzania by the Norwegian Ministry of Foreign Affairs in 1994<sup>24</sup> a few hints as to what institutional development may imply are given. Reviewing the experience from support to Tanzanian universities, it is mentioned that this support «has been largely positive, particularly as related to building of competence, while it has been a weakness in the Norwegian support that this has not formed part of a wider programme in support of the two (University) institutions» (translation ours).

In addition, outlining the strategy of Norwegian assistance for the period 1994 – 1997, it is mentioned that assistance in support of education and research «has to be seen in relation to the objective of strengthening competence building in the public administration at all levels of society» and that, particularly referring to the Norwegian support to the University of Dar es Salaam and SUA, this support ought to be broadened, encompassing «the reform process which these institutions are undergoing professionally and within administration and financial management» (translations ours). To meet an objective of such broader support, it is also judged as important to provide support to «competence building and institutional development within the educational administrative sector as such» (translation ours).

The objectives of the programme as expressed in the framework agreement are, however, continuously vague and do not reflect all the elements, which a broader institutional development programme ought to address, following the listing of best practices in institutional development, referred to above, as well some of the indications given in the Country Strategy paper.

In the framework agreement, the general objective of the programme is expressed as «to establish a system that will ensure optimal use of scarce resources in order to improve and sustain the economy of the country through quality education, training and research». More specifically, the programme's objectives are listed, as follows:

- «to build the capacity of Sokoine University of Agriculture in training programmes, research and staff development in the fields of agriculture and allied sciences», and
- «to strengthen the central functions of the University, primarily through provision of equipment and rehabilitation of dilapidated physical infrastructure and the communication system».

Although the programme objectives with the framework agreement take a more systemic view and seek to address the University more broadly as an institution, there is no mention of the concept «institutional development». However, it is mentioned as a kind of conclusion to the Agreement that it expresses «NORAD's willingness to move from supporting few individual projects to a much broader institutional programme support...»

<sup>24</sup> Landstrategi. Norsk bistandssamarbeid med Tanzania 1994 – 1997, Utenriksdepartementet, Oktober 1994.

The project document is, however, surprisingly vague as to how such a broader approach to institutional development may be achieved. Consequently, no strategies exist which could direct actions, nor are efforts done in the document to operationalise key institutional development indicators, nor to monitor such elements supposed to strengthen institutional development. Also, directly related to the Immediate Objectives, the Programme Document is not any more explicit when it comes to listing benchmarks for measuring quality in research.

The only mention of a strategy is as follows: «The strategy of the proposed new frame agreement between SUA and NORAD is to strengthen SUA's ability to coordinate, prioritise and administer Norwegian assistance more efficiently» (emphasis ours). Although it is obvious that strengthening SUA's overall administrative capacity will also be of benefit to other donors, not to mention SUA itself in the future, the intentions behind the broader approach to capacity building remain unclear.

The Project Outputs mentioned in the Project Document, as well as the Project Components, are correspondingly held in rather traditional capacity building terms, very much resembling those outputs and components which have formed part of most of the agreements in the past: Outputs are listed as improved capacity in providing quality training and research, rehabilitated buildings, improved communication systems and a laboratory repair workshop, while components include teaching at undergraduate level in forestry and wildlife management, at postgraduate levels in other previously supported areas, a continuous effort in upgrading of staff and infrastructural support through rehabilitation of buildings and roads, etc. – Judged on the basis of the Project Document itself, there is no clear vision for institutional development at SUA, rather the framework agreement is an expression of a more traditional capacity building programme.

While the framework agreement may be perceived by NORAD-Oslo as an institutional development programme, or as a first step in this direction, this is not a view shared by NORAD-Dar, where the framework agreement is seen more as a kind of an «umbrella programme», rather than as a well-conceived institutional development support programme. This is also supported by the fact that mainly those parts of the general university administration and management, which are of

importance for the implementation of the programme, are supported over the programme.

For AUN researchers, the new emphasis on institutional development represents an example of how «fashions» are directing the course of development assistance, and they express little understanding of how to assist in such a new venture. For them, institutional development has been synonymous with capacity and competence building in all matters related to the strengthening of each, individually supported faculty/department.

Although SUA recognises the value of the broader approach, it has not been the University which has demanded a new perspective on the collaboration. The initiative has been taken by NORAD-Oslo, and both at NORAD-Dar and at the University there is widespread confusion as to what the term «institutional development» mean, and what implications the implementation of an «institutional development support programme» might have.

However, in October 1996 a LFA Workshop was held, discussing the programme design of the framework agreement, and as late as in September 1997 a «participatory review workshop» was conducted with all SUA Project Leaders and the Coordinator, the Director of the Directorate of Research and Postgraduate Studies (DRPGS), in order to review programme design. These two meetings seem to have contributed to a better understanding of the potentials of the framework agreement, at least in the sense that «institutional capacity building» is now perceived as a Programme Output, in line with 3 others, which can open the door for assistance outside the more traditional areas of intervention – pending, of course, the decisions taken at the Annual Meetings. The main targeted activities within this institutional capacity building component are continued support to capacity building within DRPGS, training of staff and computerising departmental services in the Finance Department, as well as upgrading of the University Library and support to a University Farm. Also, the Unallocated Budget provisions under the framework agreement allow for more flexibility and the inclusion of new activities, which could pave the way for an «institutional development» eventually to take root. The main problem then seems to be that very few have a clear idea as to where to go if institutional development is to be achieved, and there is little guidance to be found in the Project Document formulated.

It is, therefore, the conclusion that as of date, the support to SUA has been conducted within an approach and a programme design which is a rather traditional capacity building project, and that «institutional development» in the sense described earlier under lessons learned and best practices, is not yet a full-fledged, well conceived and conceptualised part of the support programme.

## **5.2 THE THREE PHASES OF COLLABORATION**

The rather long-lasting capacity building programme has, naturally, over the years evolved, with changing modes of operation. Three quite distinct phases can be identified.

In a first phase until 1986, the programme was characterised by person-to-person contacts, gradually being replaced by a combination of personal contacts and institute-to-institute working modalities, while NORAD was the third party in the triangle, providing the necessary funding. Most of the responsibility for programme management was, however, left to a few influential and forceful individuals, who had shifting professional responsibilities, over time being both researchers and professional administrators with NORAD. The philosophy guiding the collaboration was characterised by a «transfer technology and technical skills philosophy», where the Norwegians were believed to possess not only the resources, but also the skills believed to be in high demand by Tanzanian counterparts. The collaboration was in this phase rather top-heavy and asymmetrical, as it was based on the notion of superior skills offered from the outside.

In a second phase, from 1986 to 1996, the working modality was characterised by a more formal institute-to-institute collaboration programme, with the SUA partners gradually taking on greater responsibilities and initiatives, while NORAD increasingly was stepping in, directing and overseeing programme development.

However, even during the first part of this period a few personalities continued to determine programme content and directions, as a former Norwegian head of the Faculty of Forestry at SUA now had become Head of Office at NORAD, Oslo.

During this period, NORAGRIC, the consulting arm of AUN, also took over greater and greater responsibilities in administering the programme, including procurement, hiring of expatriate staff and being responsible for practical matters related to SUA staff and students' study visits to Norway. To facilitate matters, NORAGRIC even established itself with an office in Dar es Salaam during a three year period, a clear indication of the importance this programme had for AUN and NORAGRIC. Through overheads paid and service fees charged this programme very much contributed to capacity building in Norway as well.

Although this phase may be characterised as the closest the arrangement came in developing a true partnership, as friendships and collegial relations were established between AUN and SUA researchers, still the Norwegians remained in charge, and the spirit of collaboration was one of knowledge and skills transfer from the North to the South.

With the framework agreement signed in 1996, the collaboration has entered its third phase, in which the mode of operation is characterised by SUA being responsible for programming, planning and implementation, based on a NORAD-to-university agreement. With the framework agreement, the principle of recipient orientation has been adopted and realised in the programme, and the main parties negotiating and deciding on programme components and budgetary implications are NORAD-Dar and SUA. As a result, AUN researchers have been sidelined, while a particular collaboration component between SUA and AUN, formulated within the broader framework agreement, is now an only marginal part of the overall programme. In this working modality, AUN researchers are to assist only at the request of SUA, and delivering specifically demanded inputs to the programme. The role of AUN researchers has thus shifted fundamentally in character, from being partners in a formally equal twinning and partnership programme, to acting merely as consultants. At the same time the role of NORAGRIC has been substantially reduced, as SUA feels that services delivered are not always timely, but in particular far too costly.

## 6 Assessment of Programme Inputs

### 6.1 THE FINANCIAL SUPPORT TO THE PROGRAMME

The collaboration between Norway and SUA has been among the most long lasting programmes in the area of capacity building for education and research. It has resulted in an impressive strengthening of collaborating faculties/departments, both with regard to staff development and construction of buildings and provision of other support facilities. It has, however, also been a programme focusing on only a few selected institutes/departments, and through the very high funding level, these selected institutes/departments have been very much favoured institutions, while other institutions at the University have been neglected. The Norwegian support to SUA has, at least until the start of the framework agreement, resulted in an unbalanced University support structure.

It has, however, not been possible to calculate with any degree of certainty total amounts incurred over time, nor to determine how funding has been divided between faculties/departments, nor how budgets have distributed on various sub-items, such as education, research, staff development, infrastructure (including construction of buildings), and administrative costs, etc.

Due to its long lasting nature, a number of administrative shifts and responsibilities have taken place over time. NORAD, who has been responsible for the administration of the programme throughout, has had various charges and responsibilities in relation to the Norwegian Foreign Ministry, from being a relatively autonomous and independent development organisation, to, for a time, being a department for development issues within the Ministry, to becoming, again, a relatively autonomous development institution separated from, also physically, the Ministry, although the Ministry maintains overall administrative and political responsibility. – Partly as a result of these institutional changes, NORAD archives have been moving in and out of the Ministry archival systems, and are now physically divided and stored in different places in Oslo.

With the decentralisation policy and the delegation of most administrative responsibilities from NORAD-Oslo to NORAD-Dar, a further complicating factor has been introduced as to accessing information on spending via the programme.

Furthermore, the administration at AUN has changed accounting and bookkeeping systems twice, and it has not been possible through contacts to here to establish a necessary financial overview. – Similar contacts to faculties/departments at SUA neither have provided this overview.

The estimates available on funding over the programme period are thus the calculations made in the course of the Pre-Study.

According to the Pre-Study, the total amount incurred over the complete programme period, e.g. including estimates as to spending during the first years of the framework agreement, comes to around NOK 235m. In the calculations made, an effort has similarly been made in estimating spending in current prices (present value), using the Norwegian price index. Based on this, the total amount used on the programme exceeds NOK 340m.

Uncertainties prevail, however, on the one hand due to the above factors, which have prevented more precise calculations to be made. On the other hand, due to the fact that actual expenditures on the various programme components in relation to budgets, have not been available.

#### Institutional Cooperation between Sokoine and Norwegian Agricultural Universities

However, using more recent figures provided by AUN during the present study on funding granted over time to the various supported faculties/departments (e.g. not considering unspent amounts, possibly transferred to later periods, or saved with NORAD), the total amount is possibly higher than the one estimated in the Pre-Study, as a few agreements have been omitted from the Pre-Study calculations. Taking all the various agreements over time, and their respective budgets, and adjusting the estimates done in the Pre-Study accordingly, the total granted amount is probably closer to roughly [us2,5]NOK 250m[us] and the present value correspondingly higher.

Responding to an earlier draft of this report the Norwegian Embassy in Dar es Salaam provided the following overview of the actual appropriations for the support to SUA:



**TABLE 6.1:**  
**Norwegian support for SUA**

Appropriations	Million NOK
022 .....	87,680
069 .....	14,394
081 .....	17,983
085 .....	12,913
088 .....	2,543
Subtotal .....	135,513
091 (1996–2000) .....	80,380
<b>TOTAL .....</b>	<b>215,893</b>

Source: Royal Norwegian Embassy, Dar es Salaam: Comments to the COWI-report, dated 4 February 1998

The Embassy reports that «the amount used for institutional cooperation with AUN is not known, but roughly estimated to approximately 10%» of the grand total.

It has to be kept in mind, however, that the estimates and actual appropriations reported above, only try to assess budget provisions as directly granted through the various agreements. In addition, the programme has directly and indirectly received funding from a number of other Norwegian sources, for example through research funds channelled through NUFU from 1992 onwards; scholarship funds for exchange of students for the whole period; and SADC funds for a forestry extension programme. Possibly other sources exist as well, such as funding for the participation in courses on Natural Resource Management and Sustainable Agriculture at Institute of Continuing Education for students coming from the Sudan, Eritrea, Ethiopia and Kenya.

Administrative costs of handling the programme, which previously was in the hands of NORAGRIC on behalf of AUN, have been difficult to determine. NORAGRIC has for the period 1989 – 1996 indicated a total amount of NOK 17m being invoiced, out of which salaries, travel costs, scholarships, equipment and administrative costs in handling students and technicians and their equipment needs should be covered.

The policy of fee charging follows the agreements made with NORAD, which have been negotiated by AUN management. While these fees thus are in accordance with prevailing policies and practices, as reflected in

other similar university twinning arrangements, yet it can be concluded that this cost structure is prohibitive for implementing a partnership programme as the present one. Also, it could be discussed how conducive it is for programme development that NORAGRIC is dependent on a continued income from donor funded twinning arrangements for its existence.

## 6.2 THE FUNDING PRIORITIES

The funding over the programme has targeted only a few, selected faculties/departments, and, within that, particularly favoured the Faculty of Forestry.

Out of total budgeted funds, the Faculty of Forestry has received the lion's share of around NOK 88million, while the Department of Animal Science has received around NOK 29m, and the Department of Soil Science around NOK 19m. In addition has the Institute of Continuing Education quite recently received around NOK 2.7m for conducting the short courses on Natural Resource Management and Sustainable Agriculture. Research collaboration has been a marginal component, according to NORAD-Dar, accounting for roughly 12% of total costs only.

While the programme has contributed significantly to support education and research capacity building within the selected faculties/departments, other faculties/departments (with the exception of the Faculty of Veterinary Medicine, which until 1994 received an equally impressive support from Danida) have suffered from this in the larger perspective unbalanced and unequal support structure, as these institutions have been left with Government financing and more erratic funding from other donors, at comparatively lower levels and with shorter project duration.

Among the institutes who have suffered from this unbalanced support structure is the Department of Crop Science, who until 1992/93 was without donors despite the importance of this subject for agricultural development in Tanzania. Other institutes with much less support from donors than those prioritised by the Norwegian assistance are: The Development Studies Institute, the Department of Agricultural Engineering and Land planning, Department of Agricultural Economics and Agribusiness, and the Department of Agricultural Education and Extension.

Among SUA management staff, it is felt that the Norwegian support, however valuable, has targeted selected

institutes only, but also particularly been interested in supporting single disciplines, or having a particular disciplinary orientation. The departments and institutes of the University dealing with socio-economic issues, or having a broader multidisciplinary outlook, have not been targeted until now, possibly hampering relevance of the programme.

As it appears above, the Faculty of Forestry has throughout the programme period received a major contribution, far exceeding the amounts provided to the Faculty of Agriculture. The priority given to Forestry has not been the result of a well-conceived strategy adopted by NORAD, but rather resulting from individual key persons and their initiatives, strongly influencing programme development and faculty selection, as based on their own personal preferences.

While the programme has had the objective of providing support to capacity building with SUA in education and research, with a view of strengthening agricultural development and, ultimately, improve the situation of the Tanzanian smallholders, the bias in the programme towards the Faculty of Forestry may have been a constraining factor in this regard.

### **6.3 THE NORWEGIAN FUNDING IN COMPARATIVE PERSPECTIVE**

Seen in a comparative donor perspective, the Norwegian funded capacity building programme with SUA is among the most long lasting in international development co-operation and with a funding level, which is surpassed by few.

Although examples can easily be found where World Bank loan programmes in research capacity building have had budgets which by far exceed the Norwegian funded programme, as examples from India and South East Asia, particularly Indonesia, would show, this comparison is perhaps not as relevant as comparisons with other bilateral donors would be.

For instance, over a period of 8 years SAREC has in Zimbabwe provided support to research capacity building in four areas within the natural sciences, at a total cost of SEK 25 million (Thulstrup et al., 1997). Spreading this budget over a 24 year period, as in the case of the Norwegian programme, would still leave the Swedish support far behind in comparative terms.

The Danida funded ENRECA-programme (Enhancement of Research Capacity in Developing Countries), which was created in 1988, has supported in total 39 projects with an annual total budget of USD 7m in 1995. On average, an ENRECA project operates with an annual budget just below DKK 2m.

The Danida support project to the Faculty of Veterinary Medicine at SUA began in 1979, with a finance of DKK 79m provided over two phases, 1979 – 86 and 1986 – 93. Spread out over its total 15 year project period, the annual budget spending can be estimated at a little more than DKK 5m, which is a comparatively high figure.

Seen in a comparative donor perspective, it seems that the Norwegian programme has been not only one of the most long lasting, but also implied a relatively high annual spending of around NOK 10m.

### **6.4 RECRUITMENT OF STUDENTS AND SELECTION OF RESEARCH TOPICS**

In the Pre-Study it was indicated that recruitment of students at SUA in cases had been arbitrary, and that the high fees charged for Masters education has been a preventive factor in the recruitment process.

During interviews with departmental heads at SUA, any arbitrariness regarding the recruitment of postgraduate candidates was vehemently denied. SUA uses an application and assessment procedure, where candidates' qualifications are assessed as well as relevance of the proposed research topic. After this assessment at departmental level, candidates are recommended for enrolment to the appropriate SUA committee.

SUA charges higher costs in admitting students than for example the University of Dar es Salaam, which is associated a number of factors. First and foremost, expenditures at SUA are high (and probably pushed high by high donor contributions), and Government contributions low, resulting in all efforts being done in seeking to recover part of the real costs. In this, SUA is trying to exploit what is termed its good reputation in the country (and in the region) for providing high quality teaching and education.

The relatively high cost charging may, however, in the future be one of the factors which can threaten sustainability, as students may be forced to seek their education in places with lesser costs, unless funded by donor scholar-

ships. – The costing at SUA (tuition fees) is around USD 8–9000 for a Masters student per year, to which has to be added costly field work expenditures.

Identification of research projects and themes was at the start of the programme biased towards AUN researchers who, at that time, had a certain paternalistic «know all» and top down attitude. In the course of the programme evolution, a more symbiotic partnership constellation has emerged, where AUN researchers have adapted, which in the AUN contribution to the Pre-Study has been labelled, «a more emphatic, humble and understanding attitude towards the complexities of development assistance». SUA researchers have in this process gained an increasing say in the identification of research themes, although still based on a partnership notion.

For research themes at SUA, funded outside or within the programme, these are continuously chosen, as elsewhere in academic University settings, on the basis of individual thematic preferences, in which usability and utility are only some parameters guiding the selection process. As career advancement is largely determined by degrees obtained and research results published, a certain inclination towards theoretical and academic subjects can hardly be avoided.

### 6.5 INCENTIVE SCHEMES APPLIED

The incentive schemes applied in the programme have been rather lopsided.

As mentioned earlier, the Norwegian researchers receive while in the field a certain compensation in the amount of NOK 300 per day, on top of normal salaries and all expenses paid. For the SUA researchers no similar incentive scheme applies.

SUA researchers receive while in the field a government regulated and University adopted per diem rate of USD 40, to cover board and lodging. While SUA researchers may save on this, and the per diems thereby serve as incentives, the principle in the collaboration programme (as seen from Norway) has been not to provide formal incentive schemes. The intellectual motivation and the rewards in having research results published (and promotions eventually made at the University) should within this ideology serve as sufficient incentives. – SUA researchers do not necessarily disagree with this but simply point to the fact that Norwegian researchers, already well remunerated, apparently deserve to receive certain incentives.

Other informal systems of remuneration are, however, in force, favouring SUA researchers and acting as incentives. For instance, SUA researchers have been invited to AUN in Norway in order to prepare compendiums, which at SUA replaces more costly textbook material. For this work, which can last several months, SUA researchers are paid NOK 10–12.000 per month (plus free accommodation). – The opportunities for having international travel costs covered by the programme, when participating in conferences or international scientific meetings, are other enabling factors, acting as indirect incentives.

### 6.6 MEANS OF SUPERVISION AND FIELD VISITS

In the Pre-Study carried out prior to the present study, a questionnaire survey was included, where former students were asked to identify major bottlenecks in the programme, as well as major advantages. In the responses, problems of supervision were mentioned.

In discussions with SUA staff, it has been recognised that this is a problem, on the Tanzanian as well as Norwegian side. Although the staff development programme at SUA has resulted in nearly all staff having Ph.D. degrees, eligible for supervising Ph.D. students are still associate or full professors with Ph.D. degrees. Most supervision work related to the granting of Ph.D. degrees has, therefore, until recently at least, been a main input from AUN researchers.

While supervision of Ph.D. students studying at AUN has been less of a problem (except that it has been mentioned that the advice provided by AUN researchers was not always sufficiently relevant for the Tanzanian context) certain difficulties have been identified in supervising students studying at SUA. Despite the incentives paid Norwegian researchers for spending some time in the field, it has generally been difficult to have senior researchers both to supervise students in the field and to conduct field work themselves, with the relatively long time horizon such work requires.

Also for joint research work has the difficulties in having Norwegian senior researchers to spend the needed time in the field be identified as a constraint.

Supervision of Masters students, now being done entirely at SUA by SUA staff, is apparently being conducted according to stipulated regulations, indicating frequency of meetings and reporting requirements. The very fa-

avourable student-teacher ratio at SUA may very much have contributed to a positive assessment of this.

### **6.7 ISSUES OF SUSTAINABILITY AS RELATED TO INPUTS**

While the building of capacities at departments/institutes is expected still to be in place, ensuring that the education of Tanzanian students up to Ph.D. levels can continue at a certain pace even after project termination, it is uncertain the extent to which the activities supported are sustainable in a broader perspective.

The very high level of contributions from Norway over a very long period of time make it very unlikely that the capacity building efforts will ever become sustainable, as the GOT, at least with its current deep financial crisis, seems incapable of sustaining the University at levels provided for by donors. Neither has the GOT in the past been able to live up to its own commitments to SUA, as regulated by law (tuition fees have not been paid in full in accordance with students intake).

Nor has GOT been able to honour the agreement signed with Danida at the termination of this donor's support to the Faculty of Veterinary Medicine, according to which an adopted phasing out strategy was agreed upon. While Danida gradually phased out its support at lower and lower levels, the GOT was expected to (and had agreed to) increase contributions. In this the GOT failed, and the supported Faculty (and the University as such) was

left in a deplorable situation, with rapidly deteriorating buildings and physical infrastructure.

The high external contribution to SUA, with NORAD taking on the major share, has even created a situation where the GOT is withholding funds in expectation that donors might step in and compensate for shortcomings – which they actually seemingly have done. This apparently calculated strategy on the part of the Government is a further threat to sustainability.

Increasingly, the supported faculties/departments have embarked upon consultancy work and have tried to sell their services at commercial rates. Nearly all institutes have established within their set-up small consulting firms. While consultancy services have been an increasing part of total activity, and may increase even stronger in the future, and have contributed both to improving the financial shape of institutes and individuals (as short term consultancies are generally accepted as individual matters, carried out without interference by the institutes), still the income derived is marginal.

While consultancy work may contribute to cover marginal costs of the institutes, it is not expected basically to change or modify the fundamental sustainability issue. Also, it could be argued that having consultancy work to take over most of the efforts of teachers/researchers would easily run counter to the University's basic mission, that of delivering high quality education and research.

## 7 Assessment of Programme Outputs

### 7.1 QUALITY INDICATORS USED IN THE PROGRAMME

Programme documentation is surprisingly vague as to listing quality indicators to be used for monitoring and subsequent evaluations.

The most elaborate listing of indicators is presented in the Programme Document for the framework agreement, while former bilateral Agreements appear in a very brief standard format, which have no clear quality indicators. As a general observation as related to the overall objective of the framework agreement it is stated that «...over a long period, impact will be seen in form of sustainable management of agricultural and forestry resources, which in turn will result in better lives of children, women and the rural poor». No indicators as to how this may be achieved and measured are, however, given.

The indicators listed as related to the Immediate Objectives are as follows:

- increased research activities;
- increased student enrolment;
- number of trained academic and technical staff;
- increased reading and reference materials in the Library;
- operation of a better system of handling information in the Library;
- the number of new and rehabilitated buildings;
- the number of km of rehabilitated roads; and
- smooth coordination of donor support by DRPGS.

While these indicators are relatively self-evident and straightforward, it is obvious that they belong to the traditional variant of capacity building, where the programme is expected to continue basically along the same lines as before, and with no mention of, nor indicators listed, as related to the broader approach to institutional development. As a tool for monitoring, and as an instrument which could guide subsequent evaluations, the Programme Document for the framework

agreement – which is the most advanced among the documents – is not particularly elaborate, and is, as seen in a broader institutional development perspective, rather deficient.

Should the new approach to broader capacity building, paving the way for institutional development support, have been more clearly targeted, inspiration could easily have been gathered from other similar projects. For instance, Torrez Mairena<sup>25</sup> has listed a number of key variables (and indicators) useful for measuring success in capacity building programmes, which have a broader institutional development perspective. Among these indicators are: the extent to which the programme has resulted in strengthened capacity to identify and design research projects on development problems; has improved planning and implementation of important research; assessment, selection and adjustment of research findings for local application; participation in and profiting from international research; building up and sustaining creative research environments; disseminating research findings so that they will be used; linking education and research to the broader national policy framework; ensuring proper communication channels and exchange of views between research and education and national administration and appropriate line ministries/departments; etc.

### 7.2 COURSES CONDUCTED AND DEGREES AWARDED

The model adapted for graduate degree work included in the start of the programme theoretical course work undertaken at AUN in Norway, with AUN teachers/researchers acting as teachers, while field work and thesis writing took place at SUA. Throughout, SUA has been the degree awarding institution, for Masters as well as Ph.D. candidates involved. – Later on, the entire Masters degree programme was transferred to SUA institutions, who took over educational and supervisory functions, although yet for some time with the occasional help of AUN teachers/researchers. In the later part of the programme period, AUN researchers' role has been reduced to occasionally acting as external examiners.

None of the educational programmes have been created or on offer only to SUA applicants, as staff from other universities in the East African or Southern Africa region have been able to apply for enrolment, however, in

<sup>25</sup> Norvin Torrez Mairena: The SAREC Sandwich Model, in: Thulstrup and Thulstrup (eds.): *Research Training for Development*, Roskilde University Press, Roskilde, 1996, pp. 104–05, inspired by Mats Kihlberg: *Two decades of SAREC, some basic ideas and trends*, Research for Development, SAREC, 1995.

most cases with funding from other NORAD supported educational or scholarship programmes. For this reason, it has been difficult for AUN to report back on exact number of students who have participated in course work, and/or awarded degrees via the programme.

According to the Programme Document formulated for the 1996 framework agreement, a total of 112 Masters students and 21 Ph.D. students have over the entire programme period received their degrees, thanks to the provisions of the Norwegian programme support. In February 1998, responding to earlier drafts of this report, the Norwegian Embassy in Dar-es-Salaam informed that «the actual number of PhD students is likely to be over 30»<sup>26</sup>

Following the calculations presented by AUN as inputs to the Pre-Study report, the number of candidates produced is slightly higher than what is stated in the Programme Document. Here, however, it should be borne in mind that AUN has made its calculations based on addresses listed by applicants, which have provided only a rough guide for determining whether students have been from SUA or from another Tanzanian educational institution.

According to AUN information, a total number of 30 Masters students have been produced under the Faculty of Forestry, 66 in Animal Science and 24 under Department of Soil Science, leaving a total of 120 Masters students educated. In addition to these figures, a total of 11 SUA students have been reported as having taken part in the Masters programme on Natural Resource Management and Sustainable Agriculture, held at NORAGRIC. This would then increase the number of total Masters students educated to 131.

As the total programme support over time, and its distribution on sub-items has not been possible to determine with any degree of certainty, as mentioned earlier (where, for instance, not least the costing of buildings and other infrastructure is believed to have taken up a major part of total costs of the programme), it has been difficult to calculate unit costs of produced graduates over the programme.

However, taking the point of departure in estimates of costs of producing Masters candidates in other pro-

grammes in other parts of the world, a certain indication of the variable cost structure can be obtained. For instance Fernandes is listing the following comparative cost of training a Masters student in Exploration Geology:

**TABLE 7.1:**

**Comparative Cost of Per Student Training, M.Sc. in Exploration Geology**

Institution	Cost in USD	
University of Zimbabwe	Zimbabweans	2,825
	Non-Zimbabweans	10,000
Imperial College, UK		21,880
University of Western Australia		21,175
McGill University Canada		24,700
Rhodes University of South Africa		6,600

Source: T.R.C. Fernandes: Research Training: The Zimbabwean Experience, in: Thulstrup and Thulstrup (eds.): Research Training for Development, op.cit., p. 211

Based on such comparisons and considering the total amount allocated over time to the programme, it can be concluded that unit costs of producing graduates have been quite high, and that provisions to infrastructure, equipment and constructions probably have taken the largest share of total budget allocations.

On the other hand, the educational part of the programme, particularly in staff development, has been one of the major accomplishments of the programme and the strategic importance of this component has been crucial. The staff development programme, which has resulted in nearly all staff members with collaborating SUA faculties/departments now having Ph.D. degrees, has certainly been a main factor in turning these institutes into self-contained education and research institutions, and paved the way for these activities continuously to be carried through after formal project completion.

### 7.3 GENDER PERSPECTIVES

In available information there has so far been no gender disaggregation of data. This is a major drawback considering the critical role of women in Tanzanian agriculture. Consequently, no figures are available on total of females educated.

The gender issue has in the past not received particular attention. Among candidates produced over the pro-

<sup>26</sup> «Comments to the COWI-report, Royal Norwegian Embassy, Dar es Salaam, dated 4th February 1998

gramme, only a fraction seem to have been women. For instance, out of a total of 33 former SUA Masters students interviewed in the course of the Pre-Study about their assessment of the education received during the programme, only 7 were females. In the short course on Management of Natural Resources and Sustainable Agriculture held during the period 1992 to 1996, out of a total number of participants of 89, however, no less than 39 were females (44 %). The much higher proportion of women participating in this course is probably linked to the fact that extension service agents and development practitioners are targeted participants, rather than females seeking graduate education.

In the Department of Soil Science, however, one female Associate Professor is among staff, who have received her Ph.D. degree in the UK, funded by the programme. In addition four female staff members of the Department of Animal Science have earned their Ph.D's with NORAD support.

In the Corporate Strategic Plan to 2005 formulated and adopted by SUA, it is indicated that special efforts will be needed in order to attract female students, who until now only have comprised 11.5 % of the total student body. Other figures, however, indicate that female percentage of SUA student enrolment has increased between 1984 and 1996, from 15.3 % of the total to 24.0 %.

In the Project Document for the framework agreement it is also stressed that the gender issue ought to receive an increasing attention in the programme, not only by seeking to attract female students, but also by giving preference to research topics and project proposals which seek to address «problems of women and children in development, as well as environmental issues».

However, neither the Corporate Strategic Plan nor the Project Document are very specific as to the means to be introduced for meeting this objective. In a recent NORAD funded seminar, a strategy for attracting more females to university education was discussed<sup>27</sup>. In the recommendations following this seminar the relevant ministries are requested to coordinate their efforts in addressing the gender issue in higher education, while

SUA is urged to ensure that degree programmes are more skill oriented and geared towards self-employment. In addition a number of recommendations are presented related to publicising SUA's degree programmes more vigorously, to review curricula and support women projects. – While such recommendations may seem justified, realism is difficult to ascertain. However, the meeting and the University's new Corporate Strategy are indications that the gender issue now is taken more seriously by SUA staff.

#### **7.4 BRAIN DRAIN**

The problem of brain drain seems only to have been of limited importance in the programme.

Many staff members, some of whom now are departmental heads, have been with the programme right from its start. Some staff members even started as Bachelors under the Faculty of Forestry educational programme, advancing through Ph.D. degrees and ending up as either full professors, or heads of faculty/departments.

Only a few full professors have left faculties/departments. In particular this brain drain has affected the Faculty of Forestry, but even here to a limited extent, as only 6–7 senior staff members have been reported as having left their positions. In these cases have staff been turned into heads of boards or ministerial departments, or have left SUA in order to take up positions with international organisations, such as ICFRAF in Nairobi (2 former staff members).

In other cases has South African universities attracted SUA researchers in offering improved salaries and working conditions and the competition from South African universities can be expected to increase in the future.

It seems, however, as if the problem of brain drain has been relatively limited until now, and in cases been turned into a «brain cycling» phenomenon, although of limited importance. On the other hand, the demand for SUA staff, from ministries and international organisations, is a good indication of the quality of staff produced.

#### **7.5 EMPLOYMENT RECORD OF GRADUATES**

Increasingly, the unemployment problem is manifest among SUA graduates, following from retrenchments in traditional employment outlets.

<sup>27</sup> See Proceedings of a Workshop on Sensitisation of Girls Secondary School Teachers at SUA, edited by W.S. Abeli and R.C. Ishengoma, 7 – 10 April 1997, Faculty of Forestry, SUA, Morogoro.

Very few tracer studies have been carried out at SUA and none related to the Norwegian supported faculties/departments. Until the current retrenchment of staff exercise got underway some 3–4 years ago, all university graduates were guaranteed employment within the public sector. Since retrenchment became effective, GOT stopped new recruitment of employees in all ministries except in the fields of education and health. The retrenchment in all other ministries is so strict that staff who resign, retire, or die are not replaced.

In the course of the Pre-Study, a small questionnaire survey was made, in which 31 former Masters students were contacted, mainly former students from the Department of Animal Science. Following from this mini-survey, former students have primarily found employment in the public sector, particularly the Ministry of Agriculture and Cooperatives, or with professionally related public sector research institutes, such as the Tanzania Forestry Research Institute (TAFORI). – Only 4 respondents have reported employment in the private sector.

Both the Department of Soil Science and Department of Animal Science report on increasing problems for candidates in finding employment, particularly within the public sector, following from the effects of structural adjustment programmes and other causes of drastic cuts in Government budgets. Only the Faculty of Forestry has not yet seen serious unemployment problems among its graduates, probably to be explained by the fact that the forestry sector traditionally has been more commercially orientated than many other SUA University departments. The proliferation of environmentally related NGOs, who has an increasing demand for foresters/agro-foresters has also been a positive factor in this respect. However, also here are unemployment problems expected to increase in the future.

As previously mentioned, SUA is presently undergoing an important transition where curricula are revised and other measures are introduced in order to educate candidates, who have a broader, multidisciplinary outlook, and who may more easily find employment in the private sector or as self-employed. This fundamental and important reorientation of the University, as expressed i.a. in the *Corporate Strategic Plan to 2005*, and also reflected in collaborating faculties/departments now changing their names and priorities as turning towards education becoming more socio-economically relevant, is a process which deserves an increasing attention and

support from the programme. So far, the collaboration programme has not greatly assisted in this transitional process.

## **7.6 RESEARCH CAPACITIES STRENGTHENED**

Although the building of research capacities has only been a minor component in the programme, the staff development programme together with a number of joint research projects conducted have enhanced research capacities at SUA. However, also research capacities at AUN have been strengthened.

The main accomplishment of the programme has been in staff development, which has greatly assisted in turning faculties/departments into self-contained institutes. In this process, however, also collaborative research has been an important factor.

The opportunity provided by the programme for having research projects conducted jointly between colleagues from the North and South is one of the major elements fostering trust, partnership and collegeship, even friendships, to evolve.

While the teaching by AUN researchers at SUA, as well as their participation in thesis supervision work, or acting as external examiners, are important, such collaborative work is characterised by being short-term and conducted within well-prescribed phases on an «in-out» basis. Contrary to that is collaboration in joint research projects one of the best means for ensuring viable partnerships, due to the often longer time horizons involved, the conduct of field work together and the resulting joint publications, which all require a commitment and devotion beyond the immediate.

For SUA researchers, the collaboration in research is judged as very positive and an element which should be further strengthened. It has greatly contributed to reinforcing research capacities at involved faculties/departments, by being good demonstration cases of what it takes analytically, methodologically, etc. to conduct research at a good international standard. – The back side of the coin is that, as AUN researchers have reduced their involvement as a result of the costing structure, research at SUA has also been drastically reduced in quantity.

For AUN researchers, the collaborative research activities have also offered opportunities for strengthening

their international outlook and exposure, and have contributed to tropical agriculture and forestry being important parts of staff qualifications. – Also AUN researchers would like to see opportunities for collaboration in research to play a more important role in the programme.

### **7.7 PUBLICATION RECORD**

A certain number of publications have been produced, some of which have been drafted jointly by SUA and AUN researchers and published in internationally refereed journals, indicating high quality of research.

Whether the number of articles and other publications produced have been in satisfactory quantity (and quality), given the resources put into them, has been difficult to determine, as no list of total publications made via support from the programme exists.

Based on interviews with representatives from collaborating faculties/departments, they generally express their satisfaction with the magnitude of written material produced, although in particular the Department of Animal Science admits that more could have been done.

However, based on lists made available to the team during the visit to SUA, it seems that a fairly good amount of publications have resulted from the programme. Most of the publications listed, however, have been printed in occasional paper series or in SUA internally refereed publications series (mimeographed), while fewer have been published internationally. Another striking fact is that the frequency of publications made is greater in the late 1980s and early 1990s, while the number of publications is thinning out towards the end of the 1990s.

This observation corresponds to what AUN researchers have mentioned, namely that with a lesser degree of involvement on the part of the Norwegian researchers, research publications activities tend to slow down. In other words, the research collaboration programme and the involvement of the Norwegian researchers have been catalytic in fostering research results to be published.

### **7.8 INTERNATIONAL LINKS**

The programme has contributed to SUA having a reputation as a high quality University in the region, result-

ing in teachers and researchers being invited to conferences and seminars, and acting as guest lecturers and external examiners at other universities in the region.

In the region, contacts have been established, particularly with Moi University, Kenya and some of the international CGIAR-institutions, such as ILRI and ICRAF. At Moi University many SUA teachers occasionally give lectures, and several are external examiners.

The links to ILRI and ICRAF manifest themselves by researchers from here often visiting SUA, and vice versa. However, no formal collaborative links in research collaboration have been established.

The links to other similar institutions in Tanzania or in the region are mainly established in the case of the three major targeted faculties/departments, while the Institute of Continuing Education seems to be a relatively isolated institution, who in particular could profit from such closer links established with other institutions. Although ICE in its presentation brochure mentions a great number of similar institutions working in Tanzania with extension problems, or trying to address development problems as experienced by practitioners in the field, no exchange of information nor of experience from, for instance, using various participatory techniques take place. As judged from the rather great number of institutions working in Tanzania within this field, there is an obvious risk of duplication of work, if closer links are not established between the Institute of Continuing Education and the other institutions.

Although much has been done, the international links could, no doubt, be substantially strengthened, including more formalised agreements of collaboration and experience sharing.

### **7.9 MANAGERIAL CAPACITIES STRENGTHENED**

The programme has greatly contributed to strengthening capacities at the three targeted faculties/departments, also in respect of strengthening departmental heads' abilities to administer, manage and prioritise research and curricula development. In a broader institutional development perspective, strengthening of managerial capacities with the University at large has been limited to the capacity building effort at the DRPGS (and the computerisation of the finance department), however valuable this effort has been.

While the capacities to identify and design research projects, to plan and implement important research and to assess, select and adjust research findings for local application may have been greatly enhanced by the programme at each individually supported faculty/department, a similar reinforcing efforts has not been done in addressing such issues at University managerial level.

With the framework agreement, the programme has given priority to strengthening the capacities of the DRPGS, which has been a major result achieved within a very short time span. The DRPGS is now capable of, with professionalism and efficiency, taking care of administrative matters related to implementation of the programme, from procurement (although still in a few cases done in collaboration with NORAGRIC) to reporting and accounting. In the longer perspective, this support should also facilitate University management's ability to coordinate donors efforts but this has not been achieved.

While the strengthening of capacities with DRPGS is important, the efforts done seem, however, still motivated more by NORAD wishing to see its programme administered effectively and well, rather than as a means in support of institutional development. In order to reach this broader development objective, a number of additional measures will be needed, including the support of management's ability to voice the University's legitimate claims in relation to the GOT, in order to

sustain good research environments, to disseminate findings and research results in a way which shows usability of research and how research results can meet the demands of different users groups, to facilitate international links and negotiate international agreements on research, etc.

#### **7.10 ISSUES OF SUSTAINABILITY AS RELATED TO OUTPUT**

The provisions made for building capacities in education and research have been heavy, and the question has been raised as to whether a programme of this magnitude could ever become sustainable. Seen in the light of the GOT's continued economic and financial crisis as well as the Government's failure in the past in meeting its own agreed to obligations, it has been argued above that sustainability was not within easy reach.

Therefore, seen in relation to the accomplishment of the programme in supporting staff development, sustainability in the sense of having created a situation, where in particular the education of undergraduates, Masters and Ph.D. students can be expected to continue, is likely. In other words, under present conditions and even without donor contributions, still a certain level of activity in teaching and research can be expected to be maintained, as teachers/researchers with good academic degrees and the necessary qualifications will still be in place.

## 8 Relevance

### 8.1 NEEDS ASSESSMENTS

The programme, its objectives and components, have never been formulated as based on a thorough needs assessment. Instead it has been taken for granted that the support to a capacity building process in education and research naturally, and more or less automatically, would assist in the sustainable management of natural resources, and thereby be of benefit to Tanzania's overall agricultural development.

As discussed above, the programme was at its initiation very much a result of the ambitions and motivations of a few forceful and resourceful Norwegian researchers, who later took up important positions viz. the programme, in either research, for instance as head of departments at SUA, or as aid administrators in NORAD. Whether situated as contracted experts outposted with SUA, or as professionals in NORAD, a few persons have determined what needs the programme ought to address. Based on a rather traditional perspective on capacity building, no major disagreements existed between SUA and Norwegian partners.

Even with the framework agreement no formal needs assessment has been carried out, and no participatory approaches were used in relation to determining overall and immediate objectives. The Programme Document has been formulated based on a pre-programme mission conducted by two SUA staff members together with a Norwegian consultant<sup>28</sup>. Compared to other programme documents, even for programmes of a much less magnitude, the present one is not up to standard.

The general development objective of the programme is listed as contributing to the utilisation and management of natural resources for sustained development, giving «Sustainable management in natural resources» as indicators (which may be hard to measure), but how an increased student output, research output, renovated infrastructure, etc. are expected to contribute to ensuring relevance of the programme, is not being dealt with.

### 8.2 RELEVANCE OF THE NORWEGIAN INPUT

As knowledge about tropical agriculture and forestry at the start of the programme was not widely represented among AUN staff, teaching and input to the educational process by AUN researchers have tended to give priority to general technical matters and/or methodological issues, rather than addressing contextual issues.

Another reason given by AUN researchers<sup>29</sup>, is that «most of the teaching at University level, in Norway and Tanzania alike, is transfer of general knowledge and understanding which is relevant everywhere, irrespective of economic, social and climatic conditions. The aim has not been to provide students with recipes for direct application to specific problems, but rather tools for solving the problems, in Tanzania or elsewhere».

In addition, the AUN input was, at the start at least, essentially supply-driven, and no reference was made to existing Tanzanian Government policy guidelines as to what needs and priorities were. Instead, a rather pragmatic approach was adopted, seeking to do what AUN researchers could do best, as based on judgements particularly made by the few active Norwegians, requesting AUN researchers to join the programme.

In the course of programme development, contextual relevance has increased, although the support to the Faculty of Forestry over a prolonged period of time has favoured issues of greater relevance to private sector needs or the commercial exploitation of plantation forestry resources rather than, for instance, smallholder needs and issues of sustainable management of natural resources. The focus on plantation forestry and exotic species, in particular Eucalyptus produced for poles and fuelwood, have characterised the Norwegian assistance over a long period of time. One of the foresters involved in the programme wrote in 1988: «In the first years of the project both teaching and the little research that was made, concentrated on industrial plantations and the industrial use of timber. Since those topics were the focus of forestry development thinking at the time, and the knowledge of indigenous forests and their traditional use was very limited among the foreign staff, this bias

<sup>28</sup> See Draft Project Proposal on Continued Norwegian Support to Sokoine University of Agriculture, SUA, Morogoro, May 1993, drafted by L.D.B. Kinabo, O. Mapunda and T. Refsdal.

<sup>29</sup> As expressed in the Pre-Study report, p. 13.

could not surprise anyone. Later, topics like agroforestry have received much more attention, both because general forestry development theory has emphasised such techniques, and because Tanzanian staff came to play a more important role. However, it still seems to be a considerable discrepancy between the knowledge needed both by peasant farmers and pastoralists and by planners and extension officers, and the type of knowledge assembled and taught at the faculty (of forestry)».<sup>30</sup>

The joint, collaborative research projects have contributed to improving contextual relevance of AUN inputs, and the Dairy Goat Project is in this connection a success story. Through this project, the in-breeding of Norwegian goats with local breed, has established a new income generating source for smallholders in the highland areas surrounding Morogoro, as the new breed is far more economical than for instance pig breeding, and easily producing a surplus of both meat and milk for sale. As a result, the number of households joining the programme has spread fast, now including more than 50 families. – However successful this project may be, the project came into being more as an improvised component, rather than as an outcome of a well conceived strategy of, for example, addressing the poverty issue in the region.

Other examples are efforts by the Department of Soil Science, having established trial soil and conservation schemes in the hilly areas surrounding the University. Although useful, these experiments are still on a small scale, and much more could be done, particularly if the expertise of the two institutions, the Department of Soil Science and Faculty of Forestry, combined their efforts. However, collaboration across institutes/departments have not been widespread during the programme and could, if given priority, have increased relevance significantly.

### **8.3 THE DISCIPLINARY ORIENTATION OF THE PROGRAMME**

The programme has twinned two institutions, SUA and AUN, who both have a deep disciplinary orientation and tradition. The interests in advancing basic disciplinary knowledge and expertise, present at both ends, have hampered the development of multi-disciplinary approaches and restricted broader relevance of the programme.

With the traditional roles played by Agricultural Universities, as institutions of higher learning, where areas of specialisation rather than breadth and cross-disciplinary collaboration have been in focus, it is no great surprise that emphasis has been on various disciplines. Such an orientation has been seen as a rather straightforward and largely unquestioned structural and educational orientation of these Universities.

This is, however, changing, in the North as in the South, as requirements as to serving broader societal and development needs are being raised. The greater concern for the environment and improved management of natural resources is another important factor fostering greater practical relevance in education and research.

Recently, partly in response to the changing labour market prospects for its graduates, SUA has adopted its new Corporate Strategic Plan to the Year 2005, which to a great extent seeks to address issues of relevance and usability. In this major policy shift, SUA will occasionally review curricula with a view of assessing relevance, it will instigate greater efforts in demand-driven research and strengthen the dissemination of research results to actual and potential user groups. But in particular the disciplinary orientation of the University will be reviewed, where a stronger multi-disciplinary orientation and a more holistic approach will be introduced, without losing the strength of each discipline's basic foundation.

The role of the programme in assisting in this major policy shift towards greater relevance has been limited. In particular AUN researchers have played a marginal role, if any at all, which may be ascribed both to the reduced role of AUN in later years of the programme period, and to AUN still being rather disciplinary in its own orientation.

The policy shift at SUA has thus been mainly driven by internal SUA forces and initiatives, with only limited assistance from the programme, although such an assistance, and a more heavy involvement of AUN, would be of clear benefit to all.

### **8.4 RELEVANCE TO AGRICULTURAL SECTOR NEEDS**

In Tanzania the agricultural sector is dominated by smallholders. The Norwegian supported programme has only to a limited extent been of direct relevance to

<sup>30</sup> Background Paper, 1988, by Ole Hofstad

smallholder needs or to priorities set in nationally formulated plans viz. the situation of the smallholders.

However, determining what constitutes Tanzania's agricultural sector needs is not easy. First of all, although the line ministry in question, the Ministry of Agriculture and Co-operatives, in September 1996 drafted its The Agricultural Policy of Tanzania 1996 (which has still not passed through Parliament), and in this addresses agricultural research needs, these are still formulated in broad and general terms, under which most research activities would fit nicely in.

Secondly, other nationally formulated strategy documents, such as White Papers concerned with agricultural and forest policies, are equally vague and general, not offering much of a direction as to higher education and research.

Yet, a number of areas exists, where there are crucial knowledge gaps, and where the programme could have contributed more, if seeking to improve on relevance in relation to agricultural sector needs. These include:

- policy level analysis, e.g. consequences of policy decisions, where existing institutions, including the Ministry of Agriculture and Co-operatives, are particularly weak on agricultural policy analysis. Many policy issues have been decided by the GOT, with far-reaching consequences for the smallholders, e.g. nationalisation of large-scale farms; villagisation policy; price controls of agricultural inputs and outputs, etc.
- producer level analysis, e.g. coping strategies and decision-making considerations viz. the State, market, prices, etc.
- institutional factors, e.g. the importance of tenure issues, community based strategies and role of formal and informal institutions.
- planning level analysis, e.g. remedying existing data shortcomings on markets and costs of production,
- for more efficient targeting and priority setting.

Now that SUA has become a mature and viable institution, its relevant departments ought to fill in on some of these issues, to the extent possible. In this, AUN as well as other Norwegian research institutions could play an important role.

### 8.5 SOCIETAL LINKS

A number of field stations have been established through the programme, where research results are tried out in practice. A few examples of research becoming directly relevant for the villagers concerned have been mentioned, notably the Dairy Goat Project. Focus on extensionists and extension work seems to play an increasing role, as also illustrated by course activities at the Institute of Continuing Education. And the dissemination of research results in the form of publications does also form part of faculties/department's work. Yet, it is the impression that much more could be done, and that the collaboration programme here could act in a much more catalytic and facilitating way.

In order for the University to play a more forceful role in serving development needs of the country, it would require that the University seek to establish itself as a nation-wide research and higher education institution, with close links to extensionists and practitioners and linking up more closely with farming systems research and activities within the NARS framework. While doing some in this regard, faculties/departments could easily strengthen external links.

The publications produced as a result of the twinning arrangement have been addressing both very theoretical and also practical issues. To demand a greater practical content and impact of publications may be difficult, as SUA researchers are part of a normal University system, according to which promotions and salary increases are based on degrees awarded and research results published. Naturally, to the extent research results are published in internationally referred journals, a certain priority given to more abstract and theoretical issues can be expected. Similarly, it should be borne in mind that the mission of a University is to develop into a centre of excellence in learning and research and as such, a certain mixture of basic and applied knowledge and research is needed.

However, a strengthened effort could definitely be made as to disseminating research results more widely in making research results available to development practitioners. Also the managerial and professional capabilities of University management ought to be strengthened, in order for the University to be heard and have a say in policy decisions affecting agriculture and smallholder needs.

## 9 Programme management

### 9.1 THE ROLE OF NORAD

The role of NORAD in relation to programme management has changed in the course of the programme period. Before 1992, the decision making competence rested with NORAD-Oslo, but from the start of 1993, this was delegated to the Norwegian embassy. Prior to that, during 1983 to 1989, in NORAD-Oslo the country offices were responsible for handling the programme. This again was replaced by the research office within NORAD acting as the unit deciding on the research projects which should be promoted. This responsibility lasted until the formal delegation of responsibilities to the field.

Throughout the programme period has NORAD played an influential role, at times reinforced by former Norwegian researchers turned into NORAD senior programme officers, particularly in relation to decisions on budget spending and monitoring. While AUN researchers had the professional responsibility for programme implementation, this only could be pursued within the budget constraints imposed by NORAD. Decisions on infrastructural support and provisions for the construction of buildings at SUA were also in the hands of NORAD. The relatively high level of spending on these items is, according to AUN researchers, entirely the responsibility of NORAD, as the Norwegian researchers seldomly were consulted on this, and often openly expressed their reservations towards what they perceived as an excessive build up of the physical infrastructure.

Previously, budgets for the different collaboration agreements have been set annually by Steering Committees established for each supported SUA faculty/department, with representatives from all collaborating parties involved. With the framework agreement, an Annual Meeting between NORAD and SUA decides on budget allocations for the coming year, based on proposals submitted by SUA faculties/departments, and as advanced up through the formal University institutional hierarchy. Project Committees, where all collaborating partners have a seat, are established for projects funded, including joint research projects.

This mode of operation has been criticised by both AUN and SUA researchers. AUN researchers, who have been used to the role as trend-setters and «directors» of the programme, are now suddenly finding themselves side-

lined and without formal influence on the programme. The role as consultants, where their assistance is based on a clearly formulated demand, and where their services cost wise are compared to that of other consultants, has apparently not been easy to accept. Complaints have been voiced, particularly in relation to the way in which the Annual Meetings are held, exclusively conducted between NORAD-Dar and SUA representatives (the Vice-Chancellor and Deputy Vice-Chancellor) – in line with the provisions in the Agreement between these two signing parties to the Agreement. Here AUN researchers feel some frustration, not only because they are less and less in demand, but also because when demanded they cannot easily liberate themselves for joint research work, as they have often not had the opportunity to plan ahead.

Although they are invited as observers to the Annual Meeting, also some SUA researchers feel that the meetings have ended up as formalistic decision-making bodies, managed by bureaucrats too far from the needed substantive discussions of each project component or idea and too distant from those supposed to implement programme components. Also it has been claimed that advancing project ideas up through the formal University hierarchy can be a rather heavy-handed procedure, much more complicated than the previous ones based on easy person-to-person contacts.

The Minutes from the first Annual Meeting held in connection with the framework agreement (February 1996) seems to confirm SUA researchers' viewpoint, as these are nearly void of any substantive discussion. The Minutes reflect a rather formal discussion (or nearly a NORAD monologue), where, in particular, NORAD-Dar takes the opportunity to address administrative issues, such as stressing the importance of proper accounting principles, to report on over- or underspending, to stress the need for being cost-conscious by only buying cars of the most basic types, etc.

From the Agreed Minutes it also appears that links to the national administration are weak. For instance, for both the Soil Science Project, and the similar agreement for support to the Institute of Continuing Education, the Ministry of Science, Technology and Higher Education is a formal partner, countersigning the agreements. However, the Ministry representatives did not take part

in this first Annual Meeting, and in the Minutes from the meeting it is stressed that in the future the Ministry ought to receive annual progress reports, accounts and other information about the two projects. Although a formal partner to these two Agreements, the Ministry has obviously not been properly informed, indicating that the involvement of the national administration is regarded merely as a formality.

Recalling lessons learned and best practices developed by the World Bank and others in this field of twinning between Northern and Southern academic institutions, the neglect in involving the Ministry, which is not only the administrative and political referral for SUA but also directly involved as a formal partner in two projects, may be a major constraining factor in pursuing a strategy of institutional development in the programme.

### **9.2 THE ROLE OF NORAGRIC**

The role of NORAGRIC has shifted over the years, but have by SUA partners consistently been very critically appraised. NORAGRIC is seen as a money making machine with its own agenda and separated in spirit and attitude from that of the partnership programme, which this institution was supposed to serve. Also some of the AUN researchers as well as NORAD representatives have voiced their concern for the way in which NORAGRIC has acted, particularly as being a too costly arrangement, where aid money has been used for funding the rapid growth of an institution within the University.

The high costs of involving NORAGRIC, who charges service fees on any service rendered, whether in purchasing a flight ticket, providing lodging to SUA fellows studying at AUN or simply purchasing necessary equipment, are seen as excessive, and, consequently, all efforts are done by SUA partners to avoid using NORAGRIC.

At times services of NORAGRIC have been reported timely delivered, efficiently and fast, in other situations they have been reported as unacceptably delayed, and personnel have been, in cases, claimed as being outright negligent.

When administrative, planning and coordination responsibilities were transferred to DRPGS, taking over the major share of previous NORAGRIC responsibilities, NORAGRIC did not assist in the capacity build-

ing process paving the way for DRPGS efficiently and with competence handling these new tasks. By SUA partners, NORAGRIC is even perceived as having been playing a negative role in this difficult transitional process, where DRPGS within a relatively limited period of time was supposed to build capacities in order to be fully in charge. This is, for instance, reflected in NORAGRIC not assisting directly in this capacity building effort, as anticipated, but also by NORAGRIC being claimed of unilaterally and too abruptly having cancelled bilateral agreements with SUA faculties/departments on service provisions, when the new working modalities came into force.

### **9.3 MANAGEMENT UNDER THE POLICY OF DECENTRALISATION**

After 1993, when the policy of decentralisation was gradually set in motion, the main NORAD responsibility has been transferred to the Norwegian Embassy in Dar es Salaam. However, while most of the administrative responsibilities between NORAD-Oslo and NORAD-Dar on paper may appear clear, certain unsettled issues remain.

While NORAD-Dar seems to be pursuing with vigour its decentralised management role, the programme administrative responsibility is left with only one professional, making it a relatively fragile set-up. However qualified and committed the person is, administering and handling the framework agreement seems to be a rather complex and huge task. Of particular concern is the monitoring, supervision and quality checking, where a more regular, intense and systematic professional dialogue with technical advisers at NORAD-Oslo could have been beneficial. Although advisers formally are asked to review Project Documents, and to assist by offering advice in preparations of the Annual Meetings, still this dialogue has been restrained, leaving, maybe, too heavy an administrative and professional burden on the Dar office.

The important task of learning from experience and synthesising lessons learned is largely left undone, possibly caused by unclear divisions of labour between NORAD-Dar and NORAD-Oslo. Even under the decentralisation policy, it could have been expected that NORAD-Oslo would play a more proactive role in this, for the benefit of future similar programmes.

In general, the role of NORAD-Oslo viz. NORAD-Dar seems to be in need of clarification. The implementation

of the policy of decentralisation has seemingly led to a situation where NORAD-Oslo has defined its role as too uncommitted, too reserved and with too little involvement, particularly in professionally related matters. The rather vague Project Document formulated, with no strategy for institutional development and only few quality measures and indicators, as well as the general lack of direction as to where institutional development in theory as well as in practice could take the project, are indicators of this lack of dialogue and experience sharing within NORAD. For instance, it has been mentioned how the preparations of a kind of Manual for handling institutional development issues – which is yet to be formulated by NORAD-Oslo – could greatly have enhanced NORAD-Dar's capabilities in its efforts towards implementing institutional development objectives of the framework agreement.

#### **9.4 MOTIVATION AND INTERESTS FOR INSTITUTIONAL COLLABORATION**

The interest in entering into the collaboration programme has primarily been individually motivated, and the aim has been to strengthen capacities with individual faculties/departments, with similar and matching disciplinary interests, rather than embarking upon a broader institutional development project.

When researchers attached to AUN at the start of the programme were asked to assist, they only reluctantly accepted, as both scepticism and uncertainties prevailed, particularly in relation to the researchers suddenly being forced into a situation where they had to communicate and teach in English. Adding to this reluctance was also the fact that only few then had a more intimate knowledge about Africa, or, specifically, Tanzania.

For researchers attached to AUN, motivations have naturally been many and varied. For some, a solidarity with the Third World was a factor, for others the driving force was to assist in capacity building with similar institutions in the South, through transfer of skills and knowledge, particularly within general technical matters or methodological issues. Researchers at AUN were thus motivated both by a feeling that their technical skills would be in high demand by faculties/departments at SUA and also very much needed in order to ensure quality in teaching and research. Supporting a programme addressing these issues was expected somehow in the end to contribute to improved living conditions for the people of Tanzania.

In addition, it has been claimed that instituting attitudes and norms with SUA colleagues, conducive for high quality research and education, including the need for having a practical approach to issues and problems, were other important motivational factors, more so than organisational development as such.

With the programme evolving over time, AUN researchers have increasingly realised that the programme also has offered them opportunities for broadening their own professional qualifications, by adding tropical forestry and agriculture to their skills package. In general, the programme has contributed to AUN having a wider professional outlook, with improved international contacts and a greater awareness of Third World issues.

The number of international consultancies, which AUN staff have been involved in, testifies to this greater international exposure, which the programme has definitely contributed to.

For researchers attached to SUA, the programme has offered opportunities for upgrading their skills and awarding the degrees needed in order to become self-contained faculties/departments, able to conduct full fledged teaching and research at all levels, without the assistance and employment of expatriate staff. Also, through the award of Ph.D. degrees to most academic staff, the programme has been a career-motivating factor, as promotions and salary increases are closely associated with degrees obtained and research results published.

However, for both partners, the programme has been perceived as a capacity building effort. The understanding of the need of reaching beyond individual institutes, or even establishing closer ties between individual faculty/departments, have been rather limited.

#### **9.5 FORMULATION OF AIMS AND OBJECTIVES**

Aims and objectives of the programme have been formulated by the Norwegian partners, particularly by a few strong personalities involved at the start of the programme, and by NORAD, not least when some of these personalities transferred to NORAD employment. As mentioned earlier, these aims and objectives have been held in rather vague terms.

Following the rather traditional approach to capacity building in education and research, the formulation of

aims and objectives has not been a much debated issue. Although the Norwegian partners have been the most active in the formulation process, the SUA partners have not had much reason to challenge this, as aims and objectives, at least until the framework agreement, have been a relatively straightforward issue and in conformity with more conventional thinking as to how this should be pursued.

The issues addressed have been to build capacities at SUA in teaching, research and staff development, in addition to developing support facilities for this teaching and research.

However, with the framework agreement a broader approach has been adopted, leaving much greater initiative and responsibility to SUA partners. Even in this case has the formulation of aims and objectives been donor-driven, as the SUA partners may have been consulted in the process, but the Programme Document essentially has been formulated by NORAD.

Surprisingly, no participatory approach to project formulation has been in use, and no assessments of needs have been undertaken. It has been more or less taken for granted that problems to be addressed continued to be the same as before, although, perhaps, now in a wider sense and with a broader perspective. Only in October 1996 did SUA partners participate in a Programme Design Workshop, using the Logical Framework Approach to discuss Development Objectives as well as Immediate Objectives with associated Programme Outputs, but at that time the Project Document had already been drafted.

In other words, only with the principle of recipient orientation, mainly instigated by NORAD-Oslo, as well as the implementation of the decentralisation policy, delegating most administrative responsibility to NORAD-Dar, have the opportunity been created for SUA to be in the driver's seat as to determining how programme objectives were to be implemented. And only then have otherwise normally used approaches to project formulation, such as LFA and the full involvement of target beneficiaries in the formulation process, gradually become elements of the programme modality. – However, the AUN partners seem not to have been very active in furthering these elements and processes centred around the use of LFA or participatory approaches.

## 9.6 FROM PARTNERSHIP TO RECIPIENT ORIENTATION

In the course of the full programme period, the partnership modalities have shifted tremendously, from a situation of top-down and asymmetrical relations with the Norwegian partners as the dominant ones, to a situation gradually providing more room of manoeuvre for SUA partners and greater equality and partnership, although not without its asymmetries, to the present recipient oriented partnership strategy, where programme components increasingly may be included as based on a demand-driven modality.

Way back in 1974, the programme was initiated by a few very active and committed Norwegian personalities, who saw the prospects of transferring a capacity building project from Makerere University College to what was to become SUA. Had it not been for these few very active personalities, who convinced the Norwegian aid authorities, later NORAD, of providing the necessary funding, the programme probably would never have gone off the ground the way it did. For a very long time the programme targeted the forestry sector, through support to the Faculty of Forestry at SUA, and within this perspective in particular gave priority to forestry plantations using exotic species, in contrast to agroforestry measures, based on indigenous species. This bias in the programme was closely associated with a few key personalities, who directed the course of the programme according to their professional preferences and likings. In other words, during a relatively long period of time the programme was individually based and personality driven, rather than demand-oriented, although there is not much doubt that SUA colleagues at that time to a great extent shared the views and priorities, offered by the Norwegian foresters in the programme.

The selection of partnership institutions at SUA has thus been rather much determined by such persons hand-picking partners, in line with their professional interests and preferences, but also in accordance with specialisations represented at counterpart institutions at AUN.

The partnership strategy continued in the period 1986 to 1996 to be based on government-to-government and institute-to-institute agreements, although not as personality-driven as before. Still, the smooth running of the partnership arrangements was ensured by the easy and collegial institute-to-institute relationships, where problems were identified and solved in a direct and uncomplicated manner – as far as existing communication links would allow.

The partnership strategy adopted in this period has, however, clearly hampered capacity building in reaching beyond the single faculties/departments and has limited possibilities for exploiting the Norwegian support in a wider SUA policy, strategy and planning perspective.

With the framework agreement signed in 1996 and the principle of recipient orientation contained therein, the collaboration has shifted in character, from a twinning arrangement between so-called equal partners, to a situation where partners at AUN take on a role primarily as consultants and/or service providers, at the direct request of SUA partners. According to AUN researchers, this shift has implied a less collegial «we» feeling in the programme, being substituted for the more formal «we – them» dichotomy.

This demand-driven approach to using AUN partners and expertise has suddenly changed the partnership context, as the role of AUN researchers has become increasingly marginal. The main reason is that AUN researchers simply are too costly. While this fact has been hidden in budget provisions for AUN collaboration, directly managed by NORAGRIC on behalf of AUN, the recipient orientation adapted with SUA partners being responsible for total budget provisions and budget allocations have made everything more transparent. Now the full costs of hiring Norwegian expertise appear from budget spending considerations, and in this AUN staff seem not to be competitive.

While AUN researchers on field work in Tanzania receive their normal salaries, per diems, lodging and travel costs, in addition they receive a topping up of their salaries in the amount of NOK 300 per day, while NORAGRIC charges overheads/service fees, using a factor 2.7 on AUN researchers brut wage. A visit by a AUN researcher of 4–5 weeks duration may easily run into NOK 120–140.000 – a level commensurable with the highest international consultancy fees.

While the Norwegian researchers receive a topping up of their normal salaries in the form of the special «field work allowance» of NOK 300 a day, the SUA partners do not receive a similar compensation while in the field, except for USD 40 per day to cover board and lodging, in accordance with Government regulations and University rules. While the USD 40 per day spent in the field may still be regarded as an incentive by SUA researchers in allowing for certain savings to be made,

the perception of the partnership arrangement still is one of an obvious lopsided partnership constellation, which is further adding to an already in the outset very unequal remuneration structure between the two partners.

In consequence, SUA is increasingly making use of the relatively less costly expertise available in the region, and unless the AUN researchers (including NORAGRIC) change their costing principles, AUN researchers role in the programme may become increasingly marginal.

This would, however, be regrettable, as the partnership with AUN colleagues by SUA partners still is perceived as an invaluable contribution, which has resulted not only in competence building at the various faculties/departments, but also created a feeling of trust, partnership and personal contacts and friendship.

In order to rejuvenate the programme, make it more balanced and reinvigorate the partnership feeling, two suggestions have been voiced by SUA researchers:

On the one hand, SUA researchers have expressed a strong willingness to act as teachers at courses held at AUN for Norwegian and other students. This has never materialised, as AUN researchers have referred to the language problem as a main barrier – an argument, which has not been accepted by SUA researchers, referring to the increasingly international orientation of AUN. -Although it cannot be denied that such an arrangement would imply a substantial incentive for SUA researchers, as salaries paid would by far exceed Tanzanian remuneration structures for similar work, the proposal is still relevant and could possibly contribute to making courses at AUN more Third World relevant and it could provide more equal opportunities in the programme to AUN and SUA researchers alike, eroding the still prevalent superiority feeling which AUN researchers are ascribed.

On the other hand, SUA researchers have strongly expressed their wish as to embarking upon a new type of partnership programme with AUN, in which the programme would seek to attract younger Norwegian researchers and recent Ph.D. graduates, who have the devotion, the interest in Third World issues from the outset and who are keen to go to the field for doing collaborative research work with their SUA partners. While it – with a few exceptions -has been rather difficult in the past to have senior AUN researchers to in-

volve themselves in field work over longer periods of time and under strenuous conditions, it is felt that the younger Norwegians would be not only very qualified partners, but also committed and enduring.

### **9.7 ISSUES OF DONOR COORDINATION**

The programme of capacity building within education and research has not as yet resulted in the University being better able to coordinate donors contributions.

At the initiative of SUA, a donors meeting was called in the late 1980s in an effort to better plan University development in accordance with donor pledges. However, the meeting was disappointing, as only a very few donors, among which NORAD, committed themselves to continued support to SUA at levels comparable to past funding.

Previously, this aspect of coordination was not one which was given priority in the Agreements, as the support was concentrated at capacity building at the individual faculty/departments. But even with the framework agreement, where University management has been strengthened, both by building planning and coordination capacities with DRPGS and strengthening the finance department, University management continuously finds itself in a position, where it has proven extremely difficult to coordinate donors contributions. A major reason for this is, of course, the very difficult financial situation of the GOT.

For instance, the French government recently donated a sum to the University, being a surplus from a trading arrangement with Tanzania, which by insistence by the French was used for erecting a building, eventually to be turned into a laboratory. However, the French were not able to keep their intentions by providing additional funding for completing the construction and as a result, the University is now left with an empty shell, which the University has no means itself for completing.

Recently, the World Bank has offered to assist in a nation-wide agricultural research programme, which would also imply funding of certain activities at SUA, and the Bank is obviously trying to act as a kind of coordinator of such a major effort. A package deal has been constructed where most major donors, according to the Bank, have agreed to chip in funding – except for Danida and NORAD, so far the major contributors to SUA. The reasons for the reservations expressed by Danida and NORAD are not clear, but the case illus-

trates the need for strengthening the donor coordination efforts with the University, and maintain it there, rather than embarking upon yet another donor-driven effort.

But according to University management, the University simply does not have the bargaining power to request donors to contribute in specified priority areas, as the SUA cannot afford to calculate with the risk of the offer being withdrawn. The University management very much feel victims of the situation, in particular the weak financial and political support from the GOT, and does not regard itself in a position where demands to donors can be expressed with any force.

While the support under the framework agreement directly has aimed at strengthening the coordination capacity of the University, the two examples illustrate that if the institutional environment, including the support of the Government, is not in place, then even the best intentioned capacity building programme may not be successful. In other words, capacity building even in a broader University perspective has its limitations, requiring additional efforts, possibly through institutional strengthening beyond the University level, reaching into the national administrative and political institutional set-up. Such a conclusion is also in accordance with World Bank recommendations on how to provide institutional development support for higher education and research.

### **9.8 EVALUATION, MONITORING AND LEARNING FROM EXPERIENCE**

Project achievements and shortcomings have throughout been discussed in regular progress reports, and been the basis for discussions at Project Committee meetings. No systematic monitoring seems, however, to have taken place, and to date no evaluations nor more systematic reviews of the programme as such have been effectuated.

The previous agreements between the partners have not been very explicit as to how monitoring and evaluation should be conducted, except that this was, in the end, the responsibility of NORAD-Oslo. One evaluation report on Forest Education and Research in Tanzania was conducted in 1977, and a review of the support to the Faculty of Forestry in 1990. These are the main evaluations/reviews carried out during the entire programme period.

In addition, a number of more specific and limited studies have been conducted. These include: a review of

Personnel Development in Animal Science from 1984; a Follow-up Study on Animal Science from 1985; a review of Personnel Development in Animal Science from 1992; and a report to NORAD, dated 1993, on Management of Natural Resources and Sustainable Agriculture.

Seen in the light of the magnitude of this programme and its long lasting nature it is a matter of serious concern, that no more systematic evaluation efforts have been done, of all the single agreements with faculties/ departments as well as the programme in a wider perspective.

With the framework agreement, the Project Document is outlining directions as to how monitoring, evaluation and feedback from experiences are supposed to take place.

Each of the sub-projects are expected to prepare annual progress reports, reflecting achievements in relation to stated objectives. These progress reports will then be discussed in the Annual Meetings, between SUA University administration and NORAD-Dar, using DRPGS as facilitator of this discussion. NORAD reserves the right to monitor the project at any time of the year, while it is loosely stated, that «Knowledge obtained from the monitoring exercise will be useful in further planning and smooth execution of the Project».

In the Project Document, it is also outlined that at the end of its second year, the project will be reviewed, and

a thorough evaluation conducted at the end of the fourth year. – This will, however, according to available documentation, then be the first time where this capacity building project will be subject to a systematic evaluation effort initiated by NORAD. In the past, a number of project completion reports have been written at the end of each funding phase, by SUA and AUN staff, containing useful information and reflections over what has been accomplished and what not. And the collaboration agreement between SUA and AUN has also been the subject of a couple of studies, wishing to see this collaboration project as one among other examples of Norwegian twinning arrangements. But, so far, no external, independent evaluation has taken place of a programme which has been running close to 25 years, and with a funding between NOK 250 and 300 million!

However, in the Project Document no guiding principles for the evaluation scheduled are listed and no measuring yardsticks indicated. Generally, the Project Document is surprisingly vague in this context.

While the monitoring responsibility previously rested with NORAD-Oslo, this task is now ascribed to NORAD-Dar under the policy of decentralisation. A closer dialogue between NORAD-Oslo and NORAD-Dar, even with the implementation of the decentralisation policy, might here be conducive for project quality, and a more systematic effort in learning from past experience and ensuring adequate feedback mechanism, to the benefit of other similar projects, and to the benefit of any strategy of institutional development.

## 10 Institutional Issues and Lessons Learned

### 10.1 CONCEPTS AND INTENTIONS

With the framework agreement, NORAD has opened up for a broader capacity building effort, although the objective of institutional development is only implicitly addressed in project documentation. The concept of institutional development is not well defined, and hardly mentioned in the Project Document. The various actors have different interpretations of the concept, if at all accepting it as anything more than usual fashion in current development jargon.

In particular, it seems that the concept has been developed by NORAD-Oslo, with clear intentions as to reaching beyond single projects and isolated interventions, which have often only limited multiplier effects or limited sustainability. However, there does not seem to be shared opinions among the partners as to what the term «institutional development» means and its implications for the programme:

- At AUN, researchers have had a view on institutional development as being synonymous with [us2,5]institute[us] development, e.g. seeking to address most problems and issues which the single faculty/department is facing in becoming high quality teaching and research institutions.
- For SUA researchers, the new approach contained in the framework agreement is being welcomed, but the broader objectives and intentions behind are not clear.
- For NORAD-Dar, the framework agreement still represents an «umbrella programme» and the intentions are not (yet) to embark upon a full-fledged institutional development support programme.

In other words, the perceptions as to what institutional development may imply, are not uniform. They vary greatly among partners. There is a great need for communicating the new approach, promoting a common set of concepts and definitions and for providing administrators with a few tools, quality indicators and benchmarks.

### 10.2 STRATEGIES AND ACTIVITIES

The existing project documentation is void of any strategy pertaining to institutional development. However, a number of activities have been introduced, which even-

tually could pave the way for a broad based institutional development support.

While the Project Document has introduced a much more broad approach to strengthening education and research capacities, reaching beyond the single faculty/department, the strategy for implementing this is still vague, even a bit confusing. In the Project Document it is, for example, mentioned that strengthening capacities more broadly with SUA is expected to make the administration of the NORAD supported programme more efficient, which should then be a major justification. While this ambition may be entirely legitimate, it tends to confuse the ambitions and the thinking behind.

While the capacity built in particular with DRPGS seems impressive, it is yet too early to assess outcome, but the feeling registered with management at various levels of having become responsible, and willingness expressed as to taking on that responsibility, is promising.

The support not only to education and research, but also addressing managerial capabilities, making the University in principle better geared towards managing, planning, coordinating and priority-setting its development goals, is a major advancement compared to the more traditional approaches to capacity building.

However, to be effective instruments of institutional development, strengthening education and research capability in one sector at one University may be a first step, but will also ultimately require the strengthening of the national research policy and policy formulation capability. The programme is still far from addressing these broader institutional concerns.

### 10.3 RELEVANCE AND OUTCOME

After a rather long period of collaboration within the framework of a more traditional capacity building project, it is high time to address the University at large within a perspective of a broader institutional development project. The new approach as contained in the framework agreement is, therefore, both timely and relevant, although not yet given its proper conceptual framework, implementation or targeting.

The structure and mission of the two Agricultural Universities involved, with a traditionally clear disciplinary orientation, have been constraining factors for achieving broader institutional development objectives.

The researchers attached to AUN have a certain experience from gradually involving multidisciplinary issues in natural resource management, in teaching and research, although this is not part of their comparative advantage. But they have limited experience and knowledge about how to address some of the broader issues, which an institutional development programme would involve, such as strengthening SUA University managerial capability, relating to agricultural policy matters, voicing University interests viz. ministries, politicians and practitioners, etc. To achieve these broader objectives, the collaboration programme would be in need of new (Norwegian) partners, such as researchers and teachers attached to Public Administration, Business or Management oriented High Schools or Universities.

#### 10.4 EXPLANATIONS

With the framework agreement, new doors have been opened for a broader capacity building effort with SUA, although not yet as a proper institutional development project in the sense as used by other donors, nor «best practices» developed by the World Bank. The programme is still mainly directed towards capacity building, although with a wider number of University institutes involved, and addressing management, administration and coordination problems with mainly one unit, the DRPGS.

Among the reasons for the programme not yet having evolved as a full-fledged institutional development activity, the following can be mentioned:

First of all, the long lasting character of the programme, with a continuously high spending, has created a situation, where sustainability is threatened and where, with the current economic and financial crisis of the GOT, it is not possible in the foreseeable future for Norwegian authorities to step down, or even gradually phasing out.

Secondly, the concept of institutional development, however valuable and justified, has been formulated and advocated mainly from NORAD-Oslo, and has yet to be transmitted to the field as an organically integral part of existing programme portfolios. In this, NORAD-Oslo

has a major task ahead, in communicating its policies and providing analytical tools and yardsticks.

Thirdly, not only have the partners involved not yet understood the full meaning and content of the concept of institutional development. They are probably also the wrong partners. At least, AUN researchers may continuously be an important party to the programme in relation to agriculturally related teaching and research, but to implement a broader institutional development objective, new partners are needed.

Fourthly, institutional development requires a much more concerted effort at national level, in which NORAD actively should seek to address, in annual negotiations with the GOT and elsewhere, a coordinated and well directed effort, which could target this new type of objective. A particular concern is here to have the GOT to meet its financial obligations to SUA, and prepare for the situation in the maybe distant future, where the GOT will be forced to take over. It is, for instance, also needed that NORAD in its Country Strategy seeks to address directly the institutional development issue, by looking into the total NORAD efforts in Tanzania in a holistic perspective, in trying to avoid the patch work character of interventions.

#### 10.5 PERSPECTIVES

Our assessment of the institutional collaboration between SUA and AUN using the multi-dimensional model of institutional development, which was introduced in chapter 2 of this report, concludes that the focus of the collaboration has been on the lower levels of concern, while there has been little attempt to address system-wide concerns.

It is fair to say that the collaboration has been successful, but costly, in terms of human resources development. In terms of organisational development the results are confined to a few selected institutes at SUA, while the impact on the institution as a whole so far has been limited. In fact the unbalanced support for a few institutes has created animosity between institutes with negative effects for overall performance of the University.

The impact at the system-wide level has not been systematically traced, neither by this study, nor by NORAD in previous years. It raises the general questions about the kind of development needs in Tanzania, which the

programme is expected to address: Who are the end-users of the knowledge, which is produced at SUA – and how can their needs be met in the most cost-effective way? What role can SUA play in the development of the agricultural sector in Tanzania? These kinds of concerns have not been dominant in the shaping and further development of the institutional collaboration between SUA and AUN. Most of the SUA-candidates have found employment in various Government departments related to agriculture and forestry. It goes without saying that it is important to have qualified staff in those departments both at central and regional levels. A large number of well qualified candidates in the public administration may not in itself, however, lead to institutional development, because other factors such as policies, regulatory frameworks, recurrent budgets, rules and procedures, may be equally or even more important. All of these factors are often addressed jointly in broader sector support programmes. To ensure more sustainable results of the investments made by Norway, it appears to be important for a donor like NORAD to provide more of its support for institutions of higher education and research within such broader frameworks of sector support programmes.

The three-level model of assessing institutional development used here could provide a suitable basic framework for the monitoring and the evaluation system, which the present study has recommended to be developed for the Norwegian support to Sokoine University of Agriculture.

Three important lessons relevant to development-oriented collaboration between public institutions in the

South and in the North can be learned from the present study.

- The first points to the need for rooting the collaboration in a systems-wide perspective, which would imply a much better formulation of objectives of the support to be provided. A stakeholder analysis and a planning process following the logical framework approach would be helpful to maintain this focus.
- Secondly, stakeholders, including NORAD, are required to pay more attention to costs and cost-effectiveness of institutional collaboration arrangements. They are often supply-driven, as we have seen in this case study, ill defined and costly because there is little competition on the input-side. Opportunity-costs and cost-effectiveness of several alternative arrangements are often not considered in the process of planning and appraising collaboration programmes
- The third lesson relates to the need to clarify the roles and responsibilities of the different collaborating partners, including NORAD, for programme management, monitoring and evaluation. Irrespective of the execution and implementation arrangements designed for specific programmes of collaboration, NORAD remains responsible, and should be held accountable to the Norwegian public, for ensuring that the collaboration, including the allocation of resources, in an optimal way matches the aims and objectives of Norwegian foreign aid policy.

## Annex I Terms of Reference

### 1. BACKGROUND TO THE STUDY

In recent years Norwegian development assistance has focused increasingly on a policy of «recipient orientation». In practice this means transferring greater responsibility for implementation from the donor organisation to the recipient of development assistance. However, many of the organisations and institutions responsible for implementation are not sufficiently equipped with human, technical and financial resources.

To improve this situation Norwegian development assistance has introduced new strategies and programmes with a view to strengthening national capacities and capabilities in partner countries. NORAD is currently channelling support through three sectors in Norwegian society (the public, private and civil sector) which are collaborating with institutions and organisations in selected countries:

- Norwegian public institutions and their «twinning arrangements» with similar institutions in the South.
- The private for-profit sector which has two sub-sectors as follows:
  - a) Norwegian companies involved in providing goods and services to the public and private sector in developing countries, and
  - b) Norwegian consulting firms managing specific programmes for NORAD.
- Norwegian NGOs and their southern counterparts.

The Ministry of Foreign Affairs (MFA) has decided to undertake a comprehensive Evaluation of Institutional Development in Norwegian Bilateral Assistance in the course of 1997. The evaluation will be undertaken in the form of five inter-related sub-studies. The principal findings will be synthesised in a composite final report. The five sub-studies are as follows:

1. A Study of Institutional Cooperation («twinning»)

2. A Case Study of the Cooperation between Sokoine (SUA) and Norwegian Agricultural Universities (AUN).
3. A Study of Private Companies
4. A Study of Private Consulting Firms
5. A Study of the NGO Channel

Each sub-study will be undertaken by independent teams, but MFA has requested Diakonhjems Internationales Senter (DiS) in cooperation with Nordic Consulting Group (NCG) to prepare a common framework for all the studies and coordinate the implementation in order to identify a core set of cross-cutting issues and concerns which should be traced in all channels and provide a basis for comparative analysis.

### 2. INTRODUCTION

A Prestudy of the cooperation between SUA and AUN (Study 2) was carried out in 1996 by the Centre for International Cooperation and Development (CICD), Agder Research Foundation, Kristiansand with the following objectives:

- a) review available information and documentation, and
- b) consider possible changes in the Terms of Reference for the main study on the basis of the Prestudy.

The Prestudy included the forwarding of a questionnaire to the two institutions, meetings and interviews with resource persons at the two universities, and personnel graduated from SUA in Tanzania.<sup>1</sup>

This study of the cooperation between AUN and SUA should be considered as a case to illustrate the broader issues of institutional cooperation outlined in Study 1. Findings from this case should feed into the overall study, but on the other hand also result in an independent, self-contained report.

The cooperation between the agricultural universities in Norway (AUN) and Tanzania (SUA) has been ongoing for nearly twenty-five years (1972–1997), but has been through many different stages. It started by NORAD assistance to the establishment of Department of Forestry in Morogoro, then under the Faculty of Forestry at the University of Dar es Salaam. The cooperation was gradually expanded to include also the Department of

<sup>1</sup> «Evaluation of the institutional collaboration between Agricultural University of Norway and Sokoine Agricultural University». A Prestudy. Report to the Norwegian Ministry of Foreign Affairs. February 1997.

Animal Science and Production (1976), Department of Soil Science (1981) and Institute of Continuing Education (1986).

Up till 1986 the collaboration was part of the general NORAD support to Sokoine University, and as such administered by NORAD. Between 1986 and 1996 collaboration was formalised through separate agreements (Memorandums of Understanding) including these four institutions at SUA and similar at AUN. NORAGRIC – a Research and Consultancy Centre attached to AUN – has administered the different agreements.

From June 1996, a new frame agreement between SUA and AUN was set up, covering a wide spectre of disciplines and tasks. The new link is established within the Frame agreement between SUA and NORAD. The budget frame for the NORAD agreement is 78.5 mill. NOK for the period 1996–2000. The institutional collaboration will primarily be based on funding within this NORAD frame. For this study it is useful to distinguish between three different phases in the collaboration: before 1986, between 1986 and 1996, and from 1996 onwards. This study should cover the entire period, but focus on the last two phases.

### 3. PURPOSE AND OBJECTIVES

The purpose of this case study is to increase the understanding of what factors contribute to effective institutional collaboration by documenting and analysing the cooperation between the Sokoine and Norwegian Agricultural Universities.

The objectives for the study are:

- (a) to document changing objectives, programmes and modes of cooperation between AUN and SUA, (with a focus on the period from 1986),
- (b) to assess and discuss relevance, efficiency and results of programmes,
- (c) to describe and analyse processes of collaboration in order to identify factors affecting outcomes,
- (d) to contribute towards improved policies and practices in the area of institutional collaboration and institution building.

## 4. OUTLINE OF ISSUES AND QUESTIONS

### 4.1. General

The formal objectives of institutional cooperation has changed, but in the current agreement the aim is « to

strengthen professional and technical capacity in teaching and research for the benefit of both parties. Most previous memorandums are only slightly more specific, including aims like « facilitate exchange of staff and students, and do joint publishing/authorship of academic material ». The aim of building competence of local relevance was particularly expressed in the 1991 memorandum covering animal science and production.

The case study should examine the stated academic and organisational objectives, but also discuss to what extent joint programmes are relevant and contribute to the strengthening of the agricultural sector in Tanzania.

### 4.2. Questions and issues

The case study shall cover and discuss the following general areas of concern:

- (1) Document briefly how the cooperation between SUA and AUN has evolved (with a focus on the period from 1986), identify changing objectives and strategies in different phases, and features which have characterised the collaborative arrangements.
- (2) Record and analyse what programmes and activities are pursued to reach the stated objectives, and discuss relevance to agricultural sector needs.
- (3) Identify and discuss factors which have been supporting/impeding processes of collaboration.
- (4) Document results and discuss efficiency and effectiveness at academic, organisational and agricultural sector level.

In order to answer the broad questions, the case study should cover the following issues:

#### Comparative perspective

1. Review briefly experiences and « state of the art » knowledge from studies of similar collaborative programmes.

#### Role of NORAD

1. NORAD's role in coordination, monitoring and evaluation of the institutional cooperation.

#### Organisational assessment (for both SUA and AUN)

1. Background and evolution of institutional collaboration.
2. Motivation and interests for institutional collaboration.

3. Formulation of aims and objectives.
4. Strategies and programmes followed in the different phases.
5. Levels of competence and capacity to handle all aspects of institutional cooperation (technical, cultural, managerial, administrative, etc.) and efforts to strengthen the same).

#### **Process of mutual adaptation**

1. Factors supporting/impeding processes of effective collaboration and implementation of programmes.
2. Extent to which principles like recipient responsibility, national ownership and participation are now guiding the collaboration.
3. How SUA and AUN perceive the relevance and value of collaboration.
4. Scope of convergence between SUA and AUN perspectives and experiences.

#### **Contextual issues**

1. To what extent linkages are established with similar institutions in Tanzania.
2. Role and influence of other donors and donor coordination.
3. Effects of political and socio-economic changes on the collaborative programmes.

#### **Outcomes and impact**

1. Availability of monitoring and evaluation mechanisms, indicators and data to assess outputs and outcomes of programmes.
2. Document achievement of objectives at different levels:
  - a) academic programme level (M.A. and Ph.d. level and research initiatives)
  - b) organisational level (strengthening of technical and managerial capacity),
  - c) benefits for other relevant teaching institutions and the agricultural sector in Tanzania.
3. Explore and discuss issues of effectiveness and efficiency for programmes.
4. Potential for sustaining programmes at SUA without external assistance.

## **5. STUDY PLAN**

### **5.1. Components**

The case study will have the following key components:

#### **A. Desk study phase**

1. Review products from Prestudy phase and available documentation.
2. Review and summarise findings from similar studies in other countries.

#### **B. Case study phase**

1. Interview staff at AUN, validate data and findings from Prestudy phase and collect additional material.
2. Collect further information in Tanzania and verify existing data for the report.<sup>2</sup>

#### **C. Synthesis phase**

1. Identify lessons learnt and recommendations for improvement of future policy and practice.
2. Generate common issues and concerns for the synthesis report.

### **5.2. Methods**

The team will decide on appropriate methods for the case studies, but should include:

- Literature and document review.
- Interviews with SUA and AUN staff and former student, NORAD and relevant informant in Tanzania.

### **5.3. Organisation and coordination**

DiS is coordinating the study on behalf of MFA and the team will communicate and report regularly to the appointed Team Leader. The team shall participate in joint workshops to prepare methods and instruments for field visits, to discuss draft reports and contribute to the synthesis process. The team is professionally responsible for their products according to agreed mandate. DiS/NCG in consultation with the Advisory Group is responsible for the review and quality control of reports.

### **5.4. Time frame**

The study will commence when teams and consultants are approved by MFA, and not later than end of June 1997. Major events and deadlines will be in accordance to the time-schedule presented in the Plan of Implementation (Part I). Deadline for a draft report is 15 November and final report 15 December 1997.

<sup>2</sup> The Prestudy team suggests a two week visit to Tanzania spending one third of the time in discussions with Government staff and former SUA candidates, one third with discussions at SUA, and the remaining time with the Norwegian Embassy, other donors, follow up meetings, etc.

## **6. STUDY TEAM AND QUALIFICATIONS**

If possible this case study and the study of Institutional Cooperation should be combined and carried out by the same team. The team for the case study shall consist of an international and national consultant. The national consultant should collect relevant data and information in Tanzania, and in particular focus on the assessment of SUA.

The international consultant(s) should have relevant theoretical knowledge and preferably practical experience

from similar collaborative university programmes, and be familiar with Norwegian development policy and strategies.

## **7. REPORTS**

The results should be presented in an independent report. The team is responsible for the validity of the data, analysis and quality of the report. Details will be regulated in accordance with specifications in the contract.

## Annex II List of Persons Met

### **IN NORWAY:**

Ministry of Foreign Affairs: Erik Berg, Head of Evaluation

Rolf Ree, Head of Office

Elisabeth Jacobsen, Head of Office

### **NORAD:**

Lornst Finanger, Institutional Development Specialist, Technical Department

Tor Erik Gjerde, Senior Training Adviser, Technical Department

Sidsel Volan, Human Resource Development

Bente Nilsson, Human Resource Development

Lars Ekman, Agriculture

### **Members of the Pre-Study Team:**

Halvdan Jacobsen, Agder Research Foundation, Kristiansand

Steinar Skjeveland, Agder Research Foundation, Oslo  
Knut Samset, Scanteam, Oslo

### **Agricultural University of Norway:**

Colin Murphy, Coordinator, Research

Dag Guttormsen, Head of Office

Frik Sundsstøl, Professor, Animal Science

Alf Bakke, Professor emeritus

Bal Ram Singh, Professor, Soil Science

Ole Hofstad, Professor, Forestry

Kåre Venn, Research Director

Asmund Ekern, Professor, Animal Science

Johan Kielland-Lund, Professor

Niels Standal, Professor, Animal Science

Lars Olav Eik, Researcher, Animal Science

### **NORAGRIC:**

Ragnar Øygaard, Senior Lecturer

Elisabeth Molteberg, Ph.D. student

### **In Tanzania:**

#### **Meetings with donors:**

Karl H. Solberg, Programme Officer, Natural Resources Management, Environment, SUA and Agriculture, Norwegian Embassy

Mrs. Hilda Ansi Gondwe, Assistant Programme Officer, Water and Environment, Danish Embassy

Donald Sungusia, Agriculture Services Specialist, the World Bank

#### **Ministries and Directorates:**

P.N. Ndemu, Director of Research and Planning, Ministry of Science, Technology and Higher Education

T.N. Kitway, Assistant Commissioner, Farming Systems Research, Directorate of Research Training, Ministry of Agriculture and Co-operatives

Professor Said Iddi, Director of Forestry and Beekeeping, Ministry of Natural Resources and Tourism

#### **Former AUN-SUA students:**

Nelson K. Mchau, M.Sc. (SUA), Ph.D. (Genetics), SUA  
Mrs. Mary Kabatange, M.Sc. (SUA)

#### **Sokoine University of Agriculture, Morogoro:**

Professor Anselm B. Lwoga, vice-chancellor

J.P. Mrema, Ph.D., Head of Department of Soil Science

Professor R.C. Ishengoma, Dean, Faculty of Forestry

Dr. Salim M. Maliondo, Head, Department of Forest Biology

Dr. D.T. Shemwetta, Acting Head, Department of Forest Engineering

Dr. Raphael M. Wambura, Director, Institute of Continuing Education

Professor Resto D. Mosha, Dean, Faculty of Veterinary Medicine

Professor Ndelilio A. Urrio, Head of Department of Animal Science and Production

Professor Louis A. Mtenga, Small Ruminant Specialist

Professor Ludovick D.B. Kinabo, Director, Directorate of Research and Postgraduate Studies

## Annex III List of Documents Consulted

Abele, W.S. and R.C. Ishengoma (eds.), 1997: Proceedings of a Workshop on Sensitisation of Girls at SUA (7 – 10 April), Faculty of Forestry, Morogoro.

Agder Research Foundation, Centre for International Cooperation and Development (CICD), 1997: Evaluation of the institutional cooperation between Agricultural University of Norway (AUN) and Sokoine Agricultural University (SUA), Tanzania. A Prestudy. Agder Research Foundation, Kristiansand.

Addendum No. 1 to Agreement between the Government of the Kingdom of Norway and the Government of the United Republic of Tanzania regarding Personnel Development Programme in Animal Science and Production, Sokoine University of Agriculture, Tanzania, 1989 (TAN 085).

Agreement between the Government of the Kingdom of Norway and the Government of the United Republic of Tanzania regarding financial support to a M.Sc. Program on Soil Science and Soil Management at the Sokoine University of Agriculture, Tanzania, 1992 (TAN 081).

Agreement between the Government of the Kingdom of Norway and the Government of the United Republic of Tanzania regarding financial support to a Short Course on Management of Natural Resources and Sustainable Agriculture at the Sokoine University of Agriculture, Tanzania, 1992 (TAN 088).

Agreement between Sokoine University of Agriculture and The Agricultural University of Norway on The Cooperation between SUA and NLH in the Field of Agricultural and Allied Sciences, 1996.

Agreement between the Government of the Kingdom of Norway and the Government of the United Republic of Tanzania on the provision of continued Norwegian support to Sokoine University of Agriculture, 1996 (TAN 091).

Chamshama, S.A.O. and S. Iddi (eds.), 1996: Management of Forest Plantations in Tanzania. Special Issue. Record No. 63, Faculty of Forestry, Morogoro.

Danida, 1992: Support to the Faculty of Veterinary Medicine. Sokoine University of Agriculture, Tanzania. Evaluation Report, 1992/8.

Danida: The Bilateral Programme for Enhancement of Research Capacity in Developing Countries, Evaluation Report, 1992/10.

Danida, 1995: Review Report. Danida's Programme for Enhancement of Research Capacity in Tanzania, March.

Frame Agreement on Continued Norwegian Support to Sokoine University of Agriculture (TAN 091), 1996: Training Workshop on Programme Planning, Management and Review, Workshop Report, October.

Kinabo, L.D.B., 1997: Experiences From the Co-operation Between Sokoine University of Agriculture and the Agricultural University of Norway, paper presented to African – Norwegian Universities Conference, Dar es Salaam, 27 to 29 October.

Klem, Gustav G., revised by S. Iddi, 1996: Wood Science. Faculty of Forestry, Morogoro, August.

Kristiansen, Stein, 1996: Communication of Competence. A Study of Competence Building through Institutional Collaboration: The Case of Academic Institutions in Tanzania and Norway. Centre for International Development and Cooperation/Agder College, June.

Memorandum of Agreement between Sokoine University of Agriculture and Ministry of Agriculture for Collaborative Link in Agricultural Research and Training, 1992, August.

Ministry of Science, Technology and Higher Education, 1996: Higher Education Policy, The United Republic of Tanzania, Dar es Salaam, January.

Ministry of Science, Technology and Higher Education, 1997: Higher and Technical Education Statistics in Tanzania 1992/93 – 1996/97, The United Republic of Tanzania, Dar es Salaam, August.

Muhikambe, V.R.M., Mtenga, Kifaro and Lock, 1995: Farmer to Farmer Extension Approach: The Mgeta Ex-

perience, in: Lugeye and Ishuza (eds.): Proceedings of a National Conference on the Future of Agricultural Education and Extension in Tanzania, Tanzania Society of Agricultural Education and Extension and Canadian Society of Extension.

NLH, 1996: Report from a Mission to the Faculty of Veterinary Medicine at the Sokoine University of Agriculture, Morogoro, Tanzania (Arve Lund and Eivind Liven), September.

NLH, 1997: Inspill fra NLH til evalueringen av det institusjonelle samarbeidet mellom Sokoine University of Agriculture og Norges Landbrukshøgskole, Ås, 8. oktober.

NORAD, 1990: Strategi for NORADs Arbeid med institusjonsutvikling i utviklingsland, Oslo.

Ole-Meiludie, R.E.L. et al., 1997: Timber Harvesting in Cupressus Lusitanica: A Case of Meru Forest Project, Tanzania, Record No. 66, Faculty of Forestry, Morogoro.

The Royal Norwegian Ministry of Development Cooperation, 1988: Evaluation of the Soil Science Course, Evaluation Report 7.88, Oslo.

SIDA, 1995: Agricultural Research in Tanzania, September.

Sokoine University of Agriculture, 1992: Research Policy Priorities and Guidelines, September.

Sokoine University of Agriculture, 1992: M.Sc. (Soil Science and Land Management) Programme, Morogoro, May.

Sokoine University of Agriculture, 1993: Draft Project Proposal on Continued Norwegian Support to Sokoine University of Agriculture (Prepared by Kinabo, Mapunda and Refsdal), May.

Sokoine University of Agriculture, 1995: Prospectus. The Official Guide 1995/96/97, Mzumbe Book Project.

Sokoine University of Agriculture, Faculty Forestry and the Government of the Kingdom of Norway, 1996: Support to the Faculty of Forestry, Sokoine University of Agriculture, TAN 022, 1973 – 1996, Terminal Report, August.

Sokoine University of Agriculture, Institute of Continuing Education, 1996: Terminal Report on the Management of Natural Resources and Sustainable Agriculture (MNRSA) Short Course (1992 – 1996), September.

Sokoine University of Agriculture, no date: Frame Agreement to Continued Support to Sokoine University of Agriculture.

Sokoine University of Agriculture, Faculty of Agriculture, 1996: Final Report on Personnel Development in Animal Science: NORAD Support Project TAN 069 (1990 – 1991) and TAN 085 (1992 – 1996), September.

Sokoine University of Agriculture, 1997: Corporate Strategic Plan to the Year 2005. Objectives and Strategies. Abridged version approved by University Council, June.

Sokoine University of Agriculture, 1997: Research Projects Catalogue, Vol. 2, Morogoro, July.

Sokoine University of Agriculture, 1997: Research News, Vol. 7, No. 1, DRPGS, Morogoro.

Sokoine University of Agriculture, Faculty of Forestry, no date: FORCONSULT. Forestry Consultancy Prospectus, Morogoro.

Sokoine University of Agriculture, no date: Institute of Continuing Education. ICE Publication No. 1.

Sokoine University of Agriculture and NORAD, 1997: Frame Agreement on Continued Norwegian Support to Sokoine University of Agriculture (SUA), Annual Review Report For Financial Year 1996/97, September.

Solberg, Karl H. og Osvald Haugbotn, 1994: Appraisal of Project Proposal on Continued Norwegian Support to Sokoine University of Agriculture (SUA), Dar es Salaam.

Sundstøl, Frik, 1997: Appraisal of TARP II. Travel Report, Tanzania 24 August – 11 September.

Syrstad, Ola, 1997: The joint SUA/AUN Master of Science Programme in Animal Production. A brief historical account. Aas.

Thulstrup, Erik W.: Strategies for Research Capacity Building through Research Training, in: Thulstrup and

Thulstrup (eds.): *Research Training for Development*. Roskilde University Press, Roskilde, 1996.

Thulstrup, Erik W. and Thulstrup, Hans D. (eds.): *Research Training for Development*, Roskilde University Press, Roskilde, 1996.

Thulstrup, Erik W.: *Scientific Research for Development*, Human Resources Development and Operations Policy, Working Papers, the World Bank, Washington, March 1994.

Thulstrup, Erik W.: *Improving the Quality of Research in Developing Country Universities*, Education and Employment Division, Population and Human Resources Department, The World Bank, Washington, March 1992.

Thulstrup, Erik W.; Jagner, Daniel; and Campbell, Peter N.: *Natural Science Research in Zimbabwe, An Evaluation of SAREC Support for Research Capacity Building*, SIDA Evaluation 97/14.

United Republic of Tanzania, Ministry of Agriculture and Co-operatives, 1996: *The Agricultural Policy of Tanzania 1996*, Dar es Salaam, September.

The World Bank: *Higher Education, The Lessons of Experience, Development in Practice*, the World Bank, Washington, 1994.

## EVALUATION REPORTS

- 1.87 The Water Supply Programme in Western Province, Zambia
- 2.87 Sosio-kulturelle forhold i bistanden
- 3.87 Summary Findings of 23 Evaluation Reports
- 4.87 NORAD's Provisions for Investment Support
- 5.87 Multilateral bistand gjennom FN-systemet
- 6.87 Promoting Imports from Developing Countries
- 1.88 UNIFEM - United Nations Development Fund for Women
- 2.88 The Norwegian Multi-Bilateral Programme under UNFPA
- 3.88 Rural Roads Maintenance, Mbeya and Tanga Regions, Tanzania
- 4.88 Import Support, Tanzania
- 5.88 Nordic Technical Assistance Personnel to Eastern Africa
- 6.88 Good Aid for Women?
- 7.88 Soil Science Fellowship Course in Norway
- 1.89 Parallel Financing and Mixed Credits
- 2.89 The Women's Grant. Desk Study Review
- 3.89 The Norwegian Volunteer Service
- 4.89 Fisheries Research Vessel - "Dr. Fridtjof Nansen"
- 5.89 Institute of Development Management, Tanzania
- 6.89 DUHs forskningsprogrammer
- 7.89 Rural Water Supply, Zimbabwe
- 8.89 Commodity Import Programme, Zimbabwe
- 9.89 Dairy Sector Support, Zimbabwe
- 1.90 Mini-Hydropower Plants, Lesotho
- 2.90 Operation and Maintenance in Development Assistance
- 3.90 Telecommunications in SADCC Countries
- 4.90 Energy support in SADCC Countries
- 5.90 International Research and Training Institute for Advancement of Women (INSTRAW)
- 6.90 Socio-cultural Conditions in Development Assistance
- 7.90 Non-Project Financial Assistance to Mozambique
- 1.91 Hjelp til selvhjelp og levedyktig utvikling
- 2.91 Diploma Courses at the Norwegian Institute of Technology
- 3.91 The Women's Grant in Bilateral Assistance
- 4.91 Hambantota Integrated Rural Development Programme, Sri Lanka
- 5.91 The Special Grant for Environment and Development
- 1.92 NGOs as partners in health care, Zambia
- 2.92 The Sahel-Sudan-Ethiopia Programme
- 3.92 De private organisasjonene som kanal for norsk bistand, Fase I
- 1.93 Internal learning from evaluation and reviews
- 2.93 Macroeconomic impacts of import support to Tanzania
- 3.93 Garantiordning for investeringer i og eksport til utviklingsland
- 4.93 Capacity-Building in Development Cooperation Towards integration and recipient responsibility
- 1.94 Evaluation of World Food Programme
- 2.94 Evaluation of the Norwegian Junior Expert Programme with UN Organisations
- 1.95 Technical Cooperation in Transition
- 2.95 Evaluering av FN-sambandet i Norge
- 3.95 NGOs as a channel in development aid
- 3A.95 Rapport fra presentasjonsmøte av "Evalueringen av de frivillige organisasjoner"
- 4.95 Rural Development and Local Government in Tanzania
- 5.95 Integration of Environmental Concerns into Norwegian Bilateral Development Assistance: Policies and Performance
- 1.96 NORAD's Support of the Remote Area Development Programme (RADP) in Botswana
- 2.96 Norwegian Development Aid Experiences. A Review of Evaluation Studies 1986-92
- 3.96 The Norwegian People's Aid Mine Clearance Project in Cambodia
- 4.96 Democratic Global Civil Governance Report of the 1995 Benchmark Survey of NGOs
- 5.96 Evaluation of the Yearbook Human Rights in Developing Countries
- 1.97 Evaluation of Norwegian Assistance to Prevent and Control HIV/AIDS
- 2.97 «Kultursjokk og korrektiv» – Evaluering av UD/NORADs studiereiser for lærere
- 3.97 Evaluation of decentralisation and development
- 4.97 Evaluation of Norwegian Assistance to Peace, Reconciliation and Rehabilitation in Mozambique
- 5.97 Aid to Basic Education in Africa – Opportunities and Constraints
- 6.97 Norwegian Church Aid's Humanitarian and Peace-making Work in Mali
- 7.97 Aid as a tool for promotion of human rights and democracy: What can Norway do?
- 8.97 Evaluation of the Nordic Africa Institute, Uppsala
- 9.97 Evaluation of Norwegian Assistance to Worldview International Foundation
- 10.97 Review of Norwegian Assistance to IPS
- 11.97 Evaluation of Norwegian Humanitarian Assistance to the Sudan
- 12.97 Cooperation for Health Development WHO's support to programmes at country level
- 1.98 «Twinning for Development» Institutional Cooperation between Public Institutions in Norway and the South
- 2.98 Institutional Cooperation between Sokoine and Norwegian Agricultural Universities
- 3.98 Development through Institutions? Institutional Development promoted by Norwegian Private Companies and Consulting Firm
- 4.98 Development through Institutions? Institutional Development promoted by Norwegian Non-Governmental Organisations
- 5.98 Development through Institutions? Institutional Development in Norwegian Bilateral Assistance. Synthesis Report

