

**PROPOSED ACTION PLAN  
FOR ASARECA'S COMPETITIVE  
GRANT SYSTEM COMPONENTS,  
ISSUES, AND OPTIONS**

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Association for Strengthening Agricultural Research in Eastern and Central Africa  
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and

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and

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# 1 INTRODUCTION

## 1.1 Overview of the Paper

Among the objectives of the strategic plan of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) is the establishment of a "consolidated funding mechanism for agricultural research" (ASARECA, 1997-82). One such mechanism that ASARECA is exploring is a competitive grants system. This paper, building on earlier analysis (Ellsworth, 1998), elaborates an action plan for establishing and pilot testing a competitive grants system (CGS) for ASARECA. The effort constitutes part of ASARECA's ongoing collaboration with the Sustainable Financing Initiative (SFI), sponsored jointly by the U.S. Agency for International Development's (USAID) Bureau for Africa, and the World Bank's Special Program for African Agricultural Research (SPAAR).

The author prepared the paper in close consultation with the Executive Secretary of ASARECA and with a staff member of the International Service for National Agricultural Research (ISNAR) in the course of a two-week mission to Entebbe during the period, June 3-18, 1998. At that same time ASARECA hosted back-to-back research network planning meetings, which provided the opportunity for discussion of aspects of the CGS with various network members, donor representatives, and staff of several of the International Agricultural Research Centers (IARCs). The author also conducted interviews with grants managers of the ASARECA/CIP Technology Transfer Project and of USAID/Kampala's Action Program for the Environment and with officials of the East African Development Bank. The draft paper was finalized after review by the ASARECA Secretariat, USAID, and SPAAR.

The paper is divided into four sections. The first introduces the purpose of the report, and sketches ASARECA's plan for, and progress with, SFI. The second section briefly reviews some background on the financing of agricultural research. It examines trends towards performance-based research, summarizes key lessons and best practices in competitive grant-making, and then focuses on the features of a CGS that accommodates ASARECA's needs. The third section is the heart of the paper. Here an action plan for developing a CGS is presented. The plan consists of four components: a) strategic planning, b) establishing the legal framework, c) operationalizing the governance structure, d) designing grants management procedures, and e) pilot-testing. The action plan connects with a proposed project to strengthen the capacity of national agricultural research systems (NARSs) to manage regional networks, which ASARECA is developing with assistance from ISNAR. The fourth section of the paper deals with issues and options. The topics addressed include different funding sources and levels, institutional placement for the CGS, the connection to ASARECA's ongoing research networks, and immediate next steps. Included in an annex is a rough indicative level of effort to implement the plan over a three-year period.

## 1.2 ASARECA and the Sustainable Financing Initiative

The rationale for ASARECA, a regional coordinating entity created in 1994, relates directly to issues of sustainability for agricultural research in Africa. Regional approaches to agricultural research respond to the identified need to complement concentration upon individual NARSs with

attention to regional linkages. In the absence of a regional perspective, NARS-driven approaches can result in duplication of effort and piecemeal programs. In addition, nationally-based approaches are financially unsustainable given available resources, and they fail to capture the synergies that can emerge from a regionally integrated attack on research problems and production constraints. Among the core goals of ASARECA's mandate are to increase the coordination, effectiveness, and sustainability of agricultural research and technology transfer in the region, harmonizing the efforts of the NARSs, the IARCs, and the donors. As a function of these intents, the ASARECA Secretariat has been one of the early partners of SFI. To date SFI's collaboration with ASARECA has focused on two areas: strategic planning and support for the development of a CGS.

Beginning in October 1996, SFI provided assistance to ASARECA to review the Association's mandate, operations, and programmatic responsibilities, discuss with the Executive Secretary issues relating to ASARECA's future plans and sustainability, reach consensus on the scope, orientation, and operational logistics of a strategic planning exercise and an SFI workplan, and prepare terms of reference for technical assistance (TA) to ASARECA for the strategic plan and the SFI. The October visit laid the groundwork for a follow-up mission in November-December 1996 when a two-person team assisted ASARECA to develop a strategic planning operational framework that reflects both a vision for the future and the steps required to attain that vision. The framework included a component to address financial sustainability (see Gilbert and Mooney, 1996). The team facilitated initial discussions of the action plan, drafted terms of reference for additional TA for follow-on analytic work, and made recommendations for its implementation. Based on this, ASARECA began to develop a strategic plan.

SFI supported the process by providing five African senior-level experts as core members of the strategic planning taskforce (referred to as "the Reference Group") and a separate but integrated two-person team to address sustainable financing. This assistance was supplemented by support from the European Union, which financed the participation of several resource persons for the planning exercise. The combined team produced a draft plan by the end of June 1997. The team, along with key ASARECA stakeholders, convened in Nairobi in July for a vetting and discussion of the strategic plan (see ASARECA, 1997). At that meeting, the donors reaffirmed their commitment to supporting ASARECA, and to helping the Association develop a sustainable mode of operations. The financing mechanism that was given the highest immediate priority is a system of competitive grants for agricultural research. A longer-term, secondary priority is an endowment fund. Developing and operating a competitive funding mechanism thus became the next step in ASARECA's SFI workplan.

Following discussions in Washington with the ASARECA Executive Secretary, SPAAR, and USAID in the fall of 1997, SFI assistance was provided to develop a concept paper laying out best practices with competitive grant mechanisms and elaborating the potential application of these practices to ASARECA's research networks. The draft paper was presented for review and discussion at the ASARECA meeting of research network coordinators in February 1998, and subsequently reviewed by the ASARECA Committee of Directors (CD) later that month at the SPAAR Plenary Meetings in Arusha, Tanzania (see ASARECA, 1998b). The CD authorized ASARECA to proceed with further development of a CGS.

In terms of moving along ASARECA's "road to sustainability" (see Ellsworth, 1997) the notion is that success with a CGS will generate several important outcomes. It will a) increase the confidence of funders that resources are well utilized, which will attract more funding, b) build the capacity of grantee NARSs for performance-based research, c) demonstrate the impact of competitively awarded research grants on agricultural productivity and economic growth, and d) lay the groundwork for discussions regarding the capitalization of an endowment fund.

## 2 AGRICULTURAL RESEARCH AND COMPETITIVE GRANTS

### 2.1 Performance-Based Research in Agriculture

Throughout the developing world, and particularly in countries undergoing structural adjustment, the environment for public-sector agricultural research institutions has changed significantly. As the chapters in Tabor (1995) illustrate, adjustment programs have had a major effect on NARSs through policy reforms that modify agricultural production incentives, shift the mix and level of sectoral investment, reduce public sector spending, overhaul the structure and management of public institutions, and introduce new actors into the research and technology transfer enterprise, for example, the private sector, non-governmental organizations (NGOs), and farmers' associations (see also Carney, 1998). These reforms have introduced both top-down pressures from governments and donors to change the way NARSs function, as well as bottom-up pressures from farmers, NGOs, and businesses for more responsiveness to their needs (ISNAR, 1998).

The impacts on African NARSs of the adjustment decades of the 1980s and 90s have been especially acute and, for the most part, detrimental. Although the number and skills of researchers have increased across the continent, spending per researcher has declined, financial resources are spread excessively thin, institutional infrastructure has deteriorated, and salaries have failed to keep pace with inflation. The efficiency and effectiveness of the NARSs have plummeted, while dependence on international donors to fill the funding gaps has increased (Pardey and Roseboom, 1998). As many observers have noted, the current situation is financially unsustainable as well as socio-economically dangerous given the dependence of African nations on their agriculture sectors.

Today, NARSs face an environment where support for research-- whether from national governments, international donors, or the private sector-- is contingent upon producing outputs and contributing to outcomes that are desired by those providing the resources. The trend in research financing is away from open-ended institutional support with no or few "strings attached" toward performance-based support for discrete projects or programs (Janssen, 1998). This shift is driven to a large extent by the pressures for performance that confront the providers of research funds. The private sector has always needed to pay attention to the "bottom line," but national governments and international donors confront increasing demands to be accountable and results-oriented.

NARSs must demonstrate that they are able to use resources effectively to achieve specific research and technology transfer targets, and to contribute to reaching other, related objectives, such as market growth and environmental protection (see Trigo, 1996). This requirement applies even for research that falls into the classic public-goods category-- for example, on subsistence commodities, or on the technical constraints facing rural women farmers. It is no longer sufficient simply to claim doing "good science" as justification for funding. Strategies for resource mobilization and sustainability hinge upon satisfying key stakeholders-- national, regional, and international-- that NARSs can create "value for money" and can perform with efficiency, effectiveness, and accountability (see Brinkerhoff and Goldsmith, 1990, Ellsworth, 1997). This is the reality of the present and the wave of the future, there is no turning back.

## 2.2 Competitive Grants Systems Summary of Best Practice

A variety of funding approaches exist to operationalize performance-based research Commercialization that focuses on demand-driven contract research is one example Another is competitive grant-making This approach is widely used around the world to fund research in a broad range of sectors, not just agriculture A CGS can be financed through endowment funds where grants are made from the interest generated by investing an initial capitalization thus preserving the ability of the system to provide grants (theoretically) in perpetuity An example from the agriculture sector in Latin America is the Regional Fund for Agricultural Technology (FONTAGRO), established by the Inter-American Development Bank (Pineiro and Trigo, 1996 Regional Fund for Agricultural Technology, 1997) Or a CGS can be financed by one-shot or periodically replenished funding allocations, where the grants made draw down on the allocation(s) until the balance is exhausted An example from the region is the ASARECA/CIP Technology Transfer Project, now entering its second phase, which has been financed by USAID (ASARECA/CIP, 1997, Muturi et al , 1998)

The wealth of experience with CGSs, distilled in Ellsworth (1998), has led to the identification of certain basic features of such systems that influence successful functioning (see also Reifschneider and Lele, 1998) The following draws from the discussion in the Ellsworth paper, and begins with a definition a CGS is a grant-making mechanism that formalizes and structures a competitive, merit-based allocation of funds among applicants The grantor announces in advance the purposes for which grants will be awarded the categories of grants, the level and duration of funding per individual grant, eligibility requirements the evaluation criteria and proposal format and the timetable Applicants submit proposals, which are then reviewed by an independent review panel The panel submits its evaluations to the grantor, who makes the selection for grant awards An administrative unit handles the funds disbursements and contracts, oversees compliance with required procedures, provides technical backstopping (in some cases), and conducts monitoring and reporting

For merit-based competition to work effectively, several conditions need to be met First, the pool of applicants and of proposal reviewers needs to be sufficiently large in order to make competition meaningful and fair assessment of proposals possible A rough measure of the degree of meaningful competition is the percentage of proposals awarded grants relative to the total number of proposals received, the lower the percentage, the more competitive the CGS

Second, review procedures need to control for self-dealing, conflict of interest, and discrimination Self-dealing refers to a situation where someone is simultaneously a proposal reviewer and an applicant Conflict of interest occurs when a proposal reviewer has some type of relationship with, or link to, an applicant For example, the applicant works for or with the reviewer, or s/he is a student of the reviewer Discrimination is active bias on the part of a reviewer either for or against an applicant All of these are closely related to the first condition in that the smaller the pool of applicants and reviewers, the more likely such problems are to arise In situations where numbers are small, special measures need to be taken to avoid or minimize these problems, for

example, calling upon other proposal reviewers outside the immediate pool of candidates or crafting eligibility requirements so as to broaden the base of potential applicants

Third, the CGS relies upon fluid, effective, and transparent communication among all of the actors in the system between applicants and the grantor, among members of review panels, between reviewers and the grantor, between the grantor and the administrative entity, etc Fulfilling this condition means taking advantage of a variety of communication avenues face-to-face meetings, the mail, the media, and the internet It calls for a) clear statements of funding objectives and evaluation criteria that all actors are aware of and understand, b) in-depth interchange among proposal reviewers, c) discussion with both successful and unsuccessful applicants about the reasons for acceptance and rejection of proposals, and d) sharing of information on progress and results achieved with the grantor, beneficiaries, and the wider research community

Fourth, the CGS must have an appropriate governance structure and sufficient administrative capacity Best practice indicates that the CGS should be a non-profit or semi-autonomous public-sector entity with a distinct and recognized legal status This latter derives from a statute, constitution, or articles of incorporation that delineate the entity's legal identity, purpose, structure, oversight and administrative arrangements, and accountability Most grant-making organizations operate with some sort of board of directors, a review committee structure, and a grants management unit (GMU) The efficiency and effectiveness of the GMU is critical to success, since its operational capacity will largely determine the extent to which the second and third conditions noted above are fulfilled Another issue is the cost of the GMU Studies in the U S found that overhead rates for large public-sector grant-making agencies are on average around three percent of the total grant budget Figures for NGO grant-makers are higher, falling in the 10-30 percent range Experience shows that the number of grants made is a stronger determinant of overhead costs than the dollar value of the grants themselves

### **2.3 ASARECA and Competitive Grants**

ASARECA's strategy reflects an understanding of the evolving performance-based environment for agricultural research, and it has already begun to incorporate that understanding into its operational procedures Many ASARECA research networks have employed some competition-based procedures on an informal, ad hoc basis to allocate resources among projects and research teams The use of such procedures will expand in the future For example, the agricultural policy network, ECAPAPA, intends to establish a grants component that will provide both competitive and commissioned grants for policy studies and training (ECAPAPA, 1998 27-29) The network planning exercises undertaken during the first six months of 1998 have guidelines that explicitly address the need to link activities to outputs, products, and impacts There is an emphasis on setting specific targets such that the five-year plans produced will form the basis for holding networks accountable for concrete results over the life of the plans (see ASARECA, 1998a)

Thus establishing an ASARECA CGS fits within the parameters of a process that is already underway, namely, linking research and technology transfer activities to outcomes through

performance-based planning and management. A regional CGS moves that process more formally and systematically into a merit-driven, competitive mode. Success with the CGS, though, will depend upon NARSs' capacities to manage regional research programs effectively. Hence the explicit linkages and synergies between this CGS action plan and the NARS Strengthening Project (ASARECA, 1998d). ASARECA has identified an initial list of desirable features of a CGS for the region. These include

1. A minimum level of stability in the availability of resources so as to avoid detrimental stop-start implementation problems and wide annual fluctuations in funding levels
2. A transparent grant review and award process that contributes to a perception of fairness and consistency
3. An independent and technically sound review and award panel
4. Procedural measures that make allowance for the relatively smaller NARSs to develop their research capacity
5. Active promotion of new partnerships of researchers and non-researchers in the public, private, and NGO sectors, as well as awards to existing research networks
6. Incorporation of some limited scholarship and training funds
7. A low level of management intensity for the ASARECA Secretariat

Combining these features with the lessons of best practice summarized in capsule form above provides both a starting point and some signposts along a path for the operational development of a CGS for ASARECA. The next section of this paper fleshes out a proposed action plan for developing and pilot-testing the CGS. The objective of the plan is to

Develop, operationalize, and pilot-test a competitive grants system for ASARECA that will allocate funds to priority research activities in an administratively transparent manner that a) reinforces performance-based research and builds NARS capacity, b) demonstrates results and impact in the region, and c) encourages donors--international and national, public sector and private-- to provide a sustainable flow of funding over time

### **3 AN ACTION PLAN FOR ASARECA'S COMPETITIVE GRANTS SYSTEM**

#### **3 1 Component 1 Strategic Planning**

This first component is in essence a cross-cutting one that guides and informs all the others. It can be thought of as the ongoing process of elaborating a vision of intended outcomes, developing strategies to achieve the broad objectives of that vision, and working out the implementation steps that are required (see Boughton et al, 1995). It emphasizes the need to build a base of support and ownership for the idea of a CGS in concert with the development of its operational features. Three task activity areas are included: objective-setting, stakeholder constituency-building, and donor dialogue and funds mobilization. The Secretariat will assemble a small CGS Working Group, headed by the Executive Secretary, to be responsible for strategic planning and overseeing the implementation of this action plan.

##### **3 1 1 Objective-Setting**

ASARECA's CGS needs to specify clearly what its objectives are. The desirable features listed above are a starting point, along with the strategic plan (ASARECA, 1997), the current year's workplan (ASARECA, 1998c), and the network planning guidelines (ASARECA, 1998a). This specification process will inform the categories of grants to be given and the development of award criteria. Some features are already clear, for example, the CGS will focus on operational programs, it will include support to innovative research initiatives, and it will not be used for salary supplements or capital expenditures. The tasks to be completed are:

- 1 Based on review of relevant documents and discussions with ASARECA member NARSs, develop a draft vision statement and associated objectives for the CGS
- 2 Circulate the vision statement/objectives informally among the NARSs and other ASARECA stakeholders for comment
- 3 Finalize the vision statement/objectives
- 4 Disseminate the vision statement and objectives to all stakeholders and partners

##### **3 1 2 Stakeholder Constituency-Building**

For the CGS to function effectively, ASARECA stakeholders must understand and buy into the rationale for competitive grant-making and the procedures through which the CGS will operate. Network members, for example, must accept the realities of the performance-based environment for agricultural research and become comfortable with notions of accountability and competition. Tasks here include:

- 1 Over the duration of this action plan, hold periodic discussions with stakeholders on the CGS to inform them of progress, review issues and concerns and obtain feedback
- 2 Publish regular updates on the CGS in the ASARECA quarterly newsletter, AgriForum

### **3 1 3 Donor Dialogue and Funds Mobilization**

ASARECA has already undertaken a significant amount of dialogue and discussion with its donor partners on issues of funding and on the idea of a CGS. Several donors appear to be ready to make a commitment to provide funds for a CGS, although as of this date no firm agreements have been reached. It may be necessary to prepare slightly different versions of documentation on ASARECA's plans for a CGS to support dialogue and funds mobilization, these may be as simple as a brief memo or one-page prospectus. These will supplement the vision statement (3 1 1 above). The required tasks are:

- 1 Continue ongoing discussions with the various donors that have already expressed interest in the CGS, and keep them informed regarding progress with the operationalization of the CGS concept (see 3 1 2 above)
- 2 Investigate possibilities for support from new potential donors
- 3 As needed prepare documentation on ASARECA's CGS to inform the dialogue process with various donors
- 4 Obtain funding commitments and submit CGS documents to those donors that have expressed interest

## **3 2 Component 2 Establishing the Legal Framework**

The CGS will require the creation of an entity that is separate from, but linked to the ASARECA Secretariat. This second component deals with investigating the possible options for creating this entity, preparing the required legal documentation and related paperwork, and undertaking the necessary steps to formally establish the CGS. This component is to some extent dependent upon the results from Component 1, since the legal framework must be acceptable to the donors that are willing to make funding commitments. Three task activity areas constitute this component: incorporating the fund, creating the governance structure, and negotiating agreements.

### **3 2 1 Incorporation of the Fund**

As noted above, what is required to incorporate the CGS will derive from decisions taken and agreements reached between ASARECA and its donor partners. If it is decided to set the CGS up as a program attached to an existing organization, for example, one of the IARCs, the Rockefeller Foundation, or Canada's International Development Research Centre (IDRC), then incorporation

will be relatively simple. However, if the decision is to create a freestanding, independent ASARECA trust fund at the outset, then the required legal groundwork will be more substantial. Tasks to be undertaken are:

- 1 Depending upon the decisions made, investigate and itemize the legal and related administrative steps necessary to create a competitive grants mechanism for ASARECA, drawing upon relevant experience elsewhere and in other sectors.
- 2 Based on the first task, prepare the legal instruments necessary to establish the CGS, such as, articles of incorporation, enabling charter, constitution, grant-funding agreements or contracts, and/or memoranda of understanding.
- 3 Submit the legal instruments to the appropriate national, regional, and/or international authorities for filing, registration, ratification, etc.

### **3.2.2 Creation of a Governance Structure**

The enabling instruments whatever exact form they take, that establish the CGS as a legal entity will need to include details on a governance structure. This governance configuration and its associated operational procedures (see 3.3 below) will be critical for a two reasons. First, donors will want to be assured that the CGS' governance arrangements will make sufficient provision for management of merit-based competitive funding, financial transparency and accountability, and achievement of CGS objectives. Otherwise, donors will be hesitant to place their funds in the CGS. Second, ASARECA members and their stakeholders will want these same assurances to reinforce their willingness to buy into the idea of a CGS for the region. The tasks involved here are:

- 1 Discuss with ASARECA stakeholders and donors their concerns and expectations regarding the operations of the CGS (link to 3.1.2 and 3.1.3 above).
- 2 Review relevant documents of other research and technology transfer funds, e.g., FONTAGRO (Pineiro and Trigo, 1996, Regional Fund for Agricultural Technology, 1997) and the ASARECA/CIP Technology Transfer Project (ASARECA/CIP, 1997).
- 3 Based on the discussions and review, formulate a detailed governance structure that includes provision for a governing board, the role of the ASARECA Secretariat, a GMU, proposal review arrangements, the role of the funder(s), and provision for financial oversight and auditing (link to 3.3.1-5 below). Depending upon the institutional arrangements selected, this detail may require developing a set of by-laws.

### **3 2 3 Negotiation of Necessary Agreements**

The results of the previous two task areas will form the basis for whatever legal and contractual agreements are required to establish the CGS and to begin operations. The related tasks include

- 1 Prepare the relevant documents in the formats required to enter into agreements, review with appropriate stakeholders, revise (if necessary) and finalize documents
- 2 Negotiate with the relevant parties and sign agreements for the CGS

### **3 3 Component 3 Operationalizing the Governance Structure**

The third activity component deals with the operational details of the governance structure. The legal framework (see 3 2 above) will contain descriptions of the constituent parts of the CGS and possibly by-laws relating to those parts, but it will not reach the level of specification necessary to actually operate and manage the CGS. The set of tasks for each structural element of the CGS are similar, and include

- 1 Review the legal enabling documents of the CGS and the operating structures, procedures, and experience of other grant-making programs and funds
- 2 Based on that review and discussions with ASARECA and other stakeholders, draft a document that elaborates the roles and responsibilities of the structural element, its relationship to the other parts of the governance structure, and the rules and procedures associated with its operational functioning
- 3 Discuss the document with the relevant stakeholders, revise if necessary, and finalize

The following sub-sections address questions and issues related to each element of the CGS' governance structure. As noted, the preceding three tasks apply to each, but are not repeated for reasons of brevity.

#### **3 3 1 The Board of Directors**

The board is the apex unit of the CGS. Rules and procedures governing its membership, composition, responsibilities, terms of office, power and authorities, and accountability will be fundamental to the success of the CGS. Donor confidence and willingness to provide funding will be strongly influenced by the governance details relating to the CGS' board of directors.

#### **3 3 2 The ASARECA Secretariat**

Since the CGS is to be an ASARECA-affiliated mechanism, detailing the role of the

Secretariat is key. As noted above (see 2.3) a concern of the Secretariat is management overload. Therefore, an important consideration here is a level of operational responsibility that does not place excessive demands on the Secretariat's limited staff. However, it is equally important to assure that the Secretariat is a sufficiently integral part of the CGS so that the system is clearly an ASARECA undertaking.

### **3.3.3 The Grants Management Unit**

The GMU is the administrative core of the CGS. The fourth component of this action plan (3.4 below) addresses the details of managing grants. What is important to focus upon here is the place of the GMU within the overall CGS governance structure. Where is the GMU housed? Who does it report to? How broad or narrow are its responsibilities? What degree of autonomy does it possess? What are the staffing requirements? There are models and experience to draw upon that can inform this task set, for example, the ASARECA/CIP Technology Transfer Project, Uganda's Mgahinga and Bwindi Impenetrable Forest Conservation Trust (MBIFCT), and USAID/Kampala's GMU for the Action Program for the Environment.

### **3.3.4 Proposal Review Committees**

The proposal review committees are the technical heart of the CGS. Unless they function effectively the principle of merit-based competition cannot be realized. The rules and procedures governing their operations are essential to confronting the threats to CGS effectiveness discussed above: self-dealing, conflict of interest, and discrimination (see 2.2). Critical considerations to address are committee membership criteria, terms and duration of service, overall committee composition, and reporting relationships. Several of these relate to the objectives of the CGS, it may be desirable, for example, to have subcommittees for particular categories of proposals. Another consideration is cost and the level of effort involved in assuring that the committees function effectively.

### **3.3.5 Financial Oversight and Audit**

Financial oversight and audit arrangements are important for instilling confidence that the CGS is efficient, cost-effective, transparent, and accountable. As with the GMU, the operationalization task overlaps to some extent with the next component (3.4.3 below). Here the focus is more on the structure of the oversight and audit function rather than its administrative content. Relevant questions include, should this function be integrated within the GMU? Should it be contracted out? Should it be divided somehow among the structural elements of the CGS, e.g., financial monitoring within the GMU, but oversight assigned to the board?

## **3.4 Component 4 Designing Grants Management Procedures**

The fourth activity component of the CGS action plan concerns the administrative details of grants management. The operationalization of the governance structure (see 3.3 above) will provide

the foundation for this component's tasks. Particularly relevant subsections of Component 3 are those on the GMU (3.3.3), proposal review committees (3.3.4) and financial oversight and audit (3.3.5). The level of detail here, however, is greater, containing the "nuts and bolts" of awarding and administering grants. The tasks to be undertaken for each of the various subsections in Component 4 are closely related, and as above they are not repeated for each one. The sum of all of these subsection tasks will generate a complete procedures manual for ASARECA's CGS. The task set includes

1. Review the legal enabling documents of the CGS and the operational details of its structures, plus experience of other grant-making programs and GMUs
2. Based on that review and discussion with ASARECA and selected stakeholders, draft a chapter of a procedures manual that details how the element of grants management is to function and be administered
3. Discuss the chapter with the relevant stakeholders, revise if necessary, and finalize

### **3.4.1 The Proposal and Review Process**

The focus in this task area is to develop procedures that will assure the smooth and efficient functioning of the process that stretches from the announcement for grant proposal submissions through to review committee recommendations for grant award. Critical issues to address are the number of award cycles per year, whether or not to include a pre-proposal phase to determine eligibility for the next round, whether proposal development workshops will be held, the mechanics of distributing proposals to reviewers and collecting their assessments, the duration of grants to be awarded, and so on.

Another important task is to identify and develop criteria for grant awards that reflect the desirable system features listed above (2.3) and that respond to the objectives of the CGS (3.1.1) and of ASARECA. In addition, it will be critical to devise criteria that can provide incentives for ASARECA research networks not simply to compete with each other for grants, but to use competitive, merit-based procedures for the internal distribution of resources among network partners once a grant has been awarded. Such criteria are essential if the CGS is to instill a real performance-based orientation and motivation for agricultural research, the guidelines for network planning provide a starting point (ASARECA, 1998a). Another source is Ellsworth (1998), who provides much useful discussion and some suggested proposal guidelines. Other potentially relevant examples and guidance can be found in ISNAR's Ecoregional Fund guidelines (1997) and Muturi et al (1998).

### **3.4.2 Grant Award and Funds Disbursement**

Relevant procedures here deal with the mechanics of deciding upon grant awards, communicating with successful and unsuccessful applicants, contract preparation, and transferring

funds to awardees. One salient consideration is the identification of milestones that will trigger the disbursement of the next tranche of funds to grantees. This relates both to financial and results monitoring and reporting (3.4.3 and 3.4.4).

### **3.4.3 Financial Monitoring and Reporting**

Many of the important parameters influencing procedures related to financial issues will be defined as a function of decisions taken regarding sources of donor funding (3.1.3) and the CGS governance structure (3.3.5). The set of tasks here concentrates upon fleshing out policies, rules, and procedures that will assure an appropriate level of oversight and reporting that satisfies legal and accountability requirements without creating an unduly heavy burden on either grantees or the GMU. This task set and the next one (3.4.4) link to the NARS Strengthening Project in that NARSs will need the capacity to fulfill the various reporting requirements that the CGS will impose if the system is to operate effectively.

### **3.4.4 Results/Impact Monitoring and Reporting**

There are direct links among developing procedures for results/ impact monitoring and reporting, the objectives of the CGS, ASARECA's objectives as laid out in its strategic plan, and the goals of the research networks. If the CGS is to demonstrate ASARECA's ability to produce results and impact, and to increase its financial sustainability, then it must create monitoring and reporting policies and procedures that allow for the collection of the appropriate information and that present that information cogently and effectively. This task set will be undertaken in consultation with various of ASARECA's networks (see 4.3 below) and with key donors. It will be informed by ASARECA's ongoing efforts to develop concrete performance and impact targets (see Oehmke, 1998).

## **3.5 Component 5 Pilot-Testing the Competitive Grants System**

The fifth and final step in the action plan moves from system development to initial operations and pilot-testing. This step will begin following completion of the other four components, approximately halfway through the three-year period estimated for implementing the action plan, in other words, about 18 months after starting implementation. It will prepare the way for a transition to funding the ASARECA networks, which by the end of the pilot-testing period will have the input from the NARS Strengthening Project on addressing the accounting and financial management systems necessary for NARSs to be grant recipients (see ASARECA, 1998d). It should be noted that this pilot-testing will not be possible unless some donor or donors have made commitments to put funds into the CGS. One potential scenario is that initial allocations permit the operation of a small grants program to individual scientists, perhaps for training and scholarships and/or for innovative commodity research approaches. (The next section develops a range of CGS funding level scenarios, see subsection 4.1.2 below).

This pilot-testing component will permit ASARECA to put the necessary CGS staff in place and to proceed through at least one full proposal and funding cycle to build operational experience and learn by doing. Two task activity areas are involved: staffing the CGS structure, and conducting a proposal and funding cycle that leads to grant awards.

### **3.5.1 Staffing the CGS Structure**

The results of Component 3 (see 3.3 above) will provide terms of reference and staffing requirements for the board of directors, proposal review committees and subcommittees (as needed), the GMU, and the financial management and audit function. This activity area includes the following tasks:

1. Recruit membership on the board of directors and technical review committees, via a transparent nomination and selection process.
2. Recruit, hire, and install a GMU coordinator (and other staff if necessary).

Decisions made on the institutional home for the CGS (see 4.2 below) will influence the second task. It may be that the institution that houses the CGS will already have staff that can support the GMU coordinator. It is also possible that this activity area could start earlier as part of the final elements of Component 3.

### **3.5.2 Conducting a Grant Proposal and Award Cycle**

The tasks to be undertaken here will flow directly from the outputs of Component 4 (see 3.4 above). The activity will lead the CGS staff through a trial run of announcing a grant offering, soliciting proposals, managing the proposal review and scoring process, making awards, and disbursing funds. Depending upon need, this activity could include conducting one or more proposal workshops for potential applicants. In all likelihood, these small grants would be of relatively short duration, thus the staff would also conduct monitoring and reporting on the grants given. At the same time, in collaboration with the CGS Working Group and the coordinator of the NARS Strengthening Project, the staff would prepare the groundwork for a transition to larger grants for the ASARECA research networks.

## 4 ISSUES AND OPTIONS

### 4.1 Funding Sources and Levels

Discussions of the ASARECA CGS have raised a number of issues regarding a grant fund. The first deals with funding sources, and the second with the overall level of funding for the CGS.

#### 4.1.1 Commingled Funds versus Separate Accounts

A central issue is donor concern about commingling of funds. Donors, as noted above (see 2.1), face pressures to demonstrate the accomplishments and impacts of the resources they provide. Besides that, many donors have accounting regulations specifying how funds are to be handled that make it difficult to merge funds with other sources. If the ASARECA grant fund is a single account, then some kind of modus operandi will need to be worked out to allow several different donors to make contributions to the CGS. Another option would be to build in the possibility of sub-accounts: a separate one for each contributing donor. The administrative overhead implications of managing multiple accounts would need to be investigated.

Administrative overhead is not the only factor to take into account in considering the option of a single omnibus fund that would merge monies from several sources versus a fund with multiple accounts from multiple sources. There would be potential impacts on: a) grant criteria, b) monitoring and reporting, c) the number and size of grants, and d) the viability of competition. The most difficult scenario for ASARECA to manage would be one where numerous donors, each requiring their own account, contributed small amounts of funding for discrete but varying purposes. This situation would make it difficult to operate a merit-based competitive funding mechanism successfully.

#### 4.1.2 Low versus High Funding Scenarios

The second issue deals with overall funding levels for the CGS. Obviously, this will have important implications for: a) grant-making objectives, b) the number and size of grants, c) administrative costs, d) the degree to which a performance-based orientation is reinforced, and e) the results that can be achieved. These implications can be illustrated by considering four alternative funding scenarios, simplified for ease of presentation, and summarized in a matrix in Table 1.

**Scenario 1: Low funding/large number of small grants.** Under this scenario, because of the limited amount of total funds-- say, for example, \$500 thousand over five years-- a relatively narrow range of objectives could be effectively pursued. Overhead would probably be around ten percent (roughly that of CIP for the ASARECA/CIP Technology Transfer Project), a low dollar amount but a higher percentage than the norm for larger grants funds (see Ellsworth, 1998). The degree of reinforcement of a performance orientation would likely be moderate to low, given that if individual grants were limited to a maximum of about \$25 thousand (in line with the Technology Transfer Project), the CGS could award only 18 grants, taking overhead into account. The depth and

breadth of results would most likely be limited, important for the grantees and their immediate beneficiaries but with limited scaling-up potential. This is a point made by the Technology Transfer Project evaluation of Phase I (Muturi et al., 1998)

**Scenario 2 High funding/large number of small grants** This scenario increases the total amount of funds available, for example, to \$5 million over five years but maintains a focus on smaller grants in larger numbers. This would allow the CGS to pursue broad range of objectives or to concentrate effort on a few areas. There could potentially be some administrative economies of scale. However, as noted above (see 2.2), administrative costs vary more by number of grants, and less by size, thus the overhead rate would probably increase above the ten percent level of the smaller fund. Assuming that the size of grant were to be double that of the first scenario-- that is, \$50 thousand-- which would still fall in what most would consider a small-grant category this CGS could conceivably award about 90-95 grants. This increase would provide for a higher level of impact on performance-based orientation, since larger numbers of researchers or technology transfer staff would receive grants via a competitive process. The breadth of results would be relatively wide, but probably not too deep, given that the grants would still be small thus the level of effort supported would be somewhat modest.

**Scenario 3 Low funding/small number of large grants** Under this third scenario, the funds available for grant-making would remain low, for simplicity's sake assume the same \$500 thousand for five years. If the ceiling amount per grant were raised to \$100 thousand-- not a huge grant by international standards, but substantial for the ECA region-- the CGS would be able to award just under five grants, slightly less than one per year, given that overhead, albeit likely reduced in comparison to the first and second scenarios, would consume some of the funds. Such a fund would be able to pursue only a very narrowly targeted set of objectives. It would be likely to have relatively little impact on instilling a performance orientation in the NARSs, and could only provide partial support to a few ASARECA networks. Its results could be significant for those receiving funding, but they would certainly not be widely felt. Unless there were prospects for increased levels of funding in the future, it would be difficult to make a cost-effective argument for implementing this CGS scenario.

**Scenario 4 High funding/small number of large grants** The fourth scenario takes the \$5 million figure for five years from Scenario 2 and increases the size of individual grants to \$300 thousand. This is the size that the ASARECA Executive Secretary envisions as appropriate for network support. These assumptions yield a picture of a CGS that would be able to provide about 15 grants over the five-year period-- about three grants per year-- with enough left over to operate a small program of training and scholarship grants, after subtracting out overhead expenses. Such a CGS could target a restrained yet relatively ambitious set of objectives. Overhead would ultimately be lower than for Scenario 2, although it might take time for administrative efficiencies to be achieved. The impact on performance orientation and institutionalization of merit-based competition could potentially be important, particularly if NARSs perceived that the CGS was not simply a five-year aberration in practice. Similarly the potential would be present for both wide and deep research and technology transfer results.

**Table 1 ASARECA CGS Funding Scenarios**

		Funding Level	
		Low	High
Number & Size of Grants	Large No & Small Size	<b>Scenario 1</b> * narrow objectives * med-low overhead * med-low performance reinforcement * limited impact	<b>Scenario 2</b> * broad objectives * med-high overhead * medium performance reinforcement * wide, not deep impact
	Small No & Large Size	<b>Scenario 3</b> * very narrow objectives * low overhead * low performance reinforcement * limited impact	<b>Scenario 4</b> * broad/targeted objectives * medium overhead * med-high performance reinforcement * wide & deep impact

**4.2 Alternative Institutional “Homes”**

As discussed earlier (see 3.3 above), the CGS needs an institutional placement that instills donor confidence that funds will be efficiently and transparently managed, does not impose excessively high overhead costs, and has a track record of experience working with NARSs in the region. Several possibilities exist that ASARECA can explore during the process of implementing this action plan. These include Canada’s IDRC, which has a regional office in Nairobi, one of the IARCs that does not have direct interests in regional research programs, Sweden’s International Foundation for Science (IFS), the Rockefeller Foundation, or another of the major philanthropic foundations with African science programs, or the East African Development Bank, headquartered in Kampala. Initial exploratory discussions with several of these institutions have already taken place and will be pursued further.

There is an additional alternative to an ASARECA CGS affiliation with an existing institution, which is to create a new free-standing entity. This possible choice should be examined as a longer-term option for the future. It may make sense particularly if success with the CGS leads in the direction of an endowment fund.

### **4 3 The Competitive Grants System and ASARECA Networks**

A key issue in implementing this action plan is the relationship between the CGS and ASARECA's research networks. The transition from current network funding procedures to the CGS calls for careful attention. As noted (2 3 above), elements of performance-based programming and competition are already integral to network plans for the coming five years. Thus, in a sense this transition has already begun. In line with the recommendations in Ellsworth (1998) the ASARECA Secretariat's current thinking is to divide network funding into two components: a core amount awarded to each network based on its five-year plan that would support basic operations inter- and intra-network coordination and cooperation, and so on, and program funding that would over time, become subject to the procedures and rules of the CGS. This notion reflects the features of Scenario 4, outlined in the earlier sub-section (4 1 2).

In determining this mix between core and program funding, ASARECA will need to address the differences among NARSs along a couple of dimensions: a) between the relatively stronger versus weaker NARSs that are managing networks, and b) between those networks whose focus is on "orphan" commodities versus those researching highly marketable crops and products.

There are a couple of other relevant considerations here. First is the issue already noted (see 3 4 1 above) of competition among networks versus competition within networks. While most of the focus in discussions of the CGS has been upon the former, the latter is equally important, if not more so in the minds of some. Unless the distribution of resources within a network—once it wins a grant, is accomplished according to the principles of competition based on technical merit, the attitudinal and behavioral changes in the direction of motivation towards performance and results are unlikely to occur. Grant award criteria and monitoring need to take this into account in order to build in incentives for performance.

The second issue relates to bringing other partners into the CGS besides the existing set of networks. This can be addressed in a number of ways. For example, it could be handled by establishing a separate grant window within the CGS with its own objectives, award criteria, review process, and monitoring. Or it could be integrated, as is currently the case with network planning, into ASARECA's networks, via grant criteria that encourage new partnering arrangements. This issue will need to be considered in the course of establishing the CGS.

### **4 4 Getting from Here to There**

The next steps for the CGS action plan will begin the process of moving from discussion of the concept and planning to implementation. This plan, having been vetted by USAID and SPAAR, will be among those plans reviewed and discussed by the various donor appraisal teams scheduled to visit ASARECA in July and August. ASARECA will also disseminate the action plan to member NARSs and other stakeholders in the region. Subsequently, at the ASARECA meetings scheduled for October and November, decisions will be made regarding the shape of, and support to the CGS. If at that point it appears that insufficient commitment exists on the part of donors to allocate

resources to the grant fund, then the CGS effort should be terminated. However, on the assumption that funding commitments will be made, by the fall of 1998 the pace of future implementation can be plotted out with more degree of accuracy, and the CGS can move closer to becoming a reality. As of this writing, a preliminary estimate for carrying out Components 1-4 of the action plan is one-and-a-half years, with Component 5 estimated to take another one-and-a-half. It will be important to treat CGS design, start-up, and pilot-testing, planned for a total period of three years, as an explicit learning process, where what works and what makes sense will emerge from trying out the system and modifying it in light of experience.

As noted above (3.5.2), this action plan is complemented by the NARS Strengthening Project (ASARECA, 1998d), which will address NARSs' financial management and accounting capability as part of increasing their capacity to coordinate regional research networks. This will be important for the success of the ASARECA CGS if it is to make grant awards to networks, among other grantees.

It is difficult at this juncture to make a meaningful budget estimate of the cost of implementing the CGS action plan. An annex to this paper provides a rough estimate in terms of level of effort by component.

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### ANNEX Estimated Level of Effort Budget

Action Plan Activity Area	Level of Effort	Assumptions
Component 1 Strategic Planning	Internat'l TA 5 p/w Regional TA 5 p/w ASARECA 21 p/w	1) TA 2 p/w each for start-up, intermittent backstopping 3 p/w total for 3 yrs 2) ASARECA CGS Wking Grp 1 day/mo X 3 yrs X 3
Component 2 Establishing the Legal Framework	Internat'l TA 4 p/w Regional TA 4 p/w	1) TA Regional person has legal expertise 2) One mission for ea expert
Component 3 Operationalizing the Governance Structure	Internat'l TA 6 p/w Regional TA 4 p/w	1) Internat'l TA 1 person, 3 trips, 4 p/w X 1, 1 p/w X 2 2) Regional TA 1 mission 3) TA functions initial design and follow-up
Component 4 Designing Grants Management Procedures	Internat'l TA 9 p/w Regional TA 4 p/w	1) Internat'l TA 2 persons X 1 trip, 4 p/w, 1 person X 1 trip, 1 p/w 2) Regional TA 1 person X 1 mission 3) TA functions initial design and follow-up
Component 5 Pilot-Testing the CGS	Internat'l TA 6 p/w Regional TA 6 p/w GMU 18 p/mo	1) TA functions periodic backstopping, training, review of lessons learned Supplemental TA from NARS Strengthening Project 2) GMU full-time coordinator for 1 5 yrs, assumes contract renewal in future to manage CGS GMU

#### Notes

- 1 This budget does not include level of effort for project management, coordination of technical assistance, or documentation of lessons learned for SFI
- 2 Travel, per diem, communications, overheads, and so on would need to be calculated separately