

OAU/STRC-SAFGRAD CONTRIBUTION
TOWARDS STRENGTHENING AGRICULTURAL
RESEARCH OF MEMBER COUNTRIES

September, 1996

Bibliothèque UA/SAFGRAD
01 BP. 1783 Ouagadougou 01
Tél. 30 - 60 - 71/31 - 15 - 98
Burkina Faso

4F

A C R O N Y M S

| | |
|----------------|--|
| AAFRADA | African Agricultural and Food Policy Research Development Agency. |
| ADB | African Development Bank. |
| IARCs | International Agricultural Research Centres. |
| ICRISAT | International Crop Research Institute for Semi-Arid Tropics. |
| IDRC | International Development Research Centre |
| IFAD | International Fund for Agricultural Development. |
| IITA | International Institute of Tropical Agriculture. |
| NARDs | Council of National Agricultural Directors. |
| NARS | National Agricultural Research Systems. |
| OAU | Organization of African Unity. |
| SAFGRAD | Semi-Arid Food Grain Research and Development. |
| SPAAR | Special Programme of African Agricultural Research. |
| SSA | Sub-Saharan Africa. |
| STRC | Scientific, Technical and Research Commission. |
| UN | United Nations. |
| USAID | United States Agency for International Development. |

PART I: Strengthening Agricultural Research Technology Development and Transfer Capacity

I. BACKGROUND

In compliance with the 1976 Resolution (Resolution 505 XXIX) adopted by OAU Council of Ministers in St. Louis, Mauritius, and of the urgent need by Member States to attain food self-reliance and security, African Heads of State and Government created the Semi-Arid Food Grain Research and Development (SAFGRAD) in 1977 within the Scientific, Technical and Research Commission of the Organization of African Unity (OAU/STRC).

SAFGRAD membership include 26 countries from across the continent (Fig. 1).

1.1 Objectives and Goal

The overall goal of the SAFGRAD has been to assist member countries attain food self-reliance and security in sustainable manner. Specific objectives of SAFGRAD are to : i) improve the production and productivity of traditional farming systems with particular emphasis to food grains (i.e. maize, sorghum, millets, cowpea, etc...); ii) foster a dynamic-inter-African research cooperation at regional and sub-regional levels ; iii) facilitate the dissemination and exchange of improved germplasm and technical information through regional trials, workshops, symposia and monitoring tours ; iv) enhance agricultural research and development capabilities of member states through short and long-term training ; v) promote the transfer and adoption of technologies to meet food production challenges in SSA ; vi) strengthen linkages between research and extension agencies at the national level ; and vii) build the resource base for productive agriculture through an integrated farming systems.

1.2. Operational Framework of SAFGRAD.

The OAU initiatives of creating SAFGRAD brought together the efforts of other partners such as donors (USAID, IFAD, IDRC, Ford Foundation, the French Ministry of Cooperation, and later on ADB), member countries as beneficiaries, and the participation of the regional and international agricultural research centres (Annex 1). The SAFGRAD Coordination Office has been an integral part of the project. The organization of African Unity through its STRC provided

Bibliothèque UA/SAFGRAD
01 BP. 1783 Ouagadougou 01
Tél. 30 - 60 - 71/31 - 15 - 98
Burkina Faso

the political, legal and administrative umbrella under which SAFGRAD activities were carried out across national and political boundaries of its member countries.

The management of SAFGRAD involved the partners namely, member states, OAU/STRC through its Coordination Office, the international agricultural research centres, donors. Member countries set-up two management entities (during SAFGRAD Phase One 1978-1986) in order to gage the activities of the SAFGRAD towards their respective research needs. These included, the Consultative Committee, for policy and management guidance ; and the Technical Advisory Committee, for technical review, planning and assessment of research and technology evaluation and transfer activities.

The SAFGRAD Coordination Office not only harmonized the efforts of project partners, but also monitored its implementation by ensuring that the contractual and institutional agreement of the project are met.

Further evaluation and revision of project required participatory management. Thus, the following management entities during SAFGRAD Phase II (1987-1993) were established :

- . The Council of NARS Directors of the 26 member states of SAFGRAD which meets biennially to provide policy guidance on research matters and other relevant problems.
- . The Management (oversight) Committee whose membership of seven comprises research managers, eminent scientists and professors from agricultural faculties of African Universities. This committee met at least once a year to monitor the implementation of SAFGRAD programmes.
- . Steering Committees of 6-7 full-time scientists (for each network) which usually met twice a year to establish research programmes, provided technical guidance and discussed matters of common interest to network members.

1.3. Mandate

The Semi-Arid Africa, the SAFGRAD ecology is characterized with irregular short falls of rain and low soil fertility. Furthermore, both human and livestock population growth in SSA has put

pressure on land use systems, water, etc. The mandate of SAFGRAD include the improvement food grains (i.e. maize, sorghum, millets, legumes), the development of appropriate farming systems and research capacity building (i.e. human resources, infrastructure, development, etc.) of member countries.

II. PERFORMANCE OF SAFGRAD PROGRAMME

Attempt is here made to outline the main thrust of SAFGRAD activities and institutional impacts.

2.1 Research Capacity Building

SAFGRAD has made substantial contribution in developing the research and technology transfer capacity of its member countries. These include (Annexes 2,3,4 and Fig. 2) :

- (i) About 30 scientists from nine countries received training at M Sc and Ph D levels in various fields of agriculture during Phase I and II of the project period. Currently several of them are research leaders, extension specialists, university professors, etc in their respective countries.
- (ii) Nearly 400 participants received short-term training (lasting 3 to 12 months) in various fields of agriculture and farming systems from 22 countries.
- (iii) SAFGRAD has successfully fostered dynamic inter-African scientific cooperation. Scientific monitoring visits and tours (lasting 2 to 4 weeks) enabled researchers and policy makers to know and appreciate each others programmes and research capabilities and weaknesses. These scientific tours involved about 200 participants from 26 member countries.
- (iv) Special seminars, workshops, conferences were organized and have improved research and development skills. About 2500 researchers, technicians and policy makers from member countries were involved. These activities have improved research skills and management outputs.
- (v) About 40 scientists from several countries benefited in specialized courses lasting one to two weeks aimed at improving data treatment, analysis and technology transfer skills.

(vi) Research infrastructures were improved in those countries where SAFGRAD regional research and technology transfer programmes were based (i.e. Burkina Faso, Nigeria, Mali, Kenya, etc).

Based on the impact assessment study carried out by USAID (1993) SAFGRAD input to research and technology transfer capacity for eight countries is summarized in Annex 4.

2.2. The Development and Transfer of Technologies.

Numerous technologies were assessed through the SAFGRAD Farming Systems programme. These include soil-water conservation practices, cropping systems, integrated crops/livestock production systems. These technologies are already adopted by several farmers in member countries.

The early and extra-early food grain cultivars and soil-water retention technology developed through SAFGRAD can bring a significant breakthrough for increasing food production in semi-arid areas of Africa.

SAFGRAD focused on developing crop cultivars and farming systems technologies for semi-arid ecology. Much success have been made to develop suitable cultivars of maize for semi-arid ecology. For example, about 15 early (85 days) and 25 extra-early (80 days) maturing maize cultivars were developed and disseminated among member countries.

SAFGRAD focus on the identification of early maturing sorghum cultivars has paid off. The adoption of the sorghum variety, S35, developed by SAFGRD project has been a success story in Northern Cameroon and in Chad. This variety which is high-yielding and non-photosensitive, short cycle duration (90 jours), drought and Striga resistant with good seed quality, is the most widely extended and is cultivated by a substantial number of farmers in the low-rainfall areas. This variety which was released through the support of SAFGRAD, has out-yielded local cultivars by 80 to 150 %. Fig. 3 summarizes technologies evaluated and released through the SAFGRAD systems.

The success in cowpea research includes the generation and diffusion of 10 striga-resistant, 6 drought tolerant and 7 aphid resistant cultivars.

2.3. Facilitated the Exchange and Diffusion of Technical Knowledge on Semi-Arid Agriculture.

About 500 publications on various aspect of agricultural research and development were published and delivered to institutions of research and centres of higher education in member countries. One of the major outputs of SAFGRAD has been to synthesize and publishing available knowledge on semi-arid agriculture. For example, the following books were published and distributed to researchers, policy makers, extension workers and to NARS and University libraries (Fig. 4)

- (i) Food grain production in semi-arid agriculture, published in 1987 (ISBN-978-24-53-12-9) ;
- (ii) Progress in food grain research and production in semi-arid Africa, published in 1994 (ISBN-978-2 453-53-1) ;
- (iii) Processing and industrial utilization of sorghum and related cereals in Africa ; published in 1995 (ISBN-978-2453-37-4) ;
- (iv) Technology options and transfer for sustainable agriculture. In press 1996 ; and
- (v) The SAFGRAD newsletter - published quarterly is distributed in more than 35 countries, regional and international organizations and UN agencies.

2.4 Mobilizing Resources (Funding)

Between 1977 to 1994, OAU/STRC-SAFGRAD has raised the sum of fourty five million two hundered and sixty five dollars (US\$45,261,000) as summarized in Annex 5 Donors contribution has been about 92 per cent, which the major donor USAID contributed about 75 percent of the fund. Other donors included (IFAD, ADB, IDRC, Ford Foundation, Ministry of Cooperation (France). The OAU contribution has been, however about 2 per cent in cash and the in-kind contribution of member countries as beneficiaries of the project has been about 6.8 per cent of the total fund.

These funds have been used to build research and technology capacity building of SAFGRAD member countries.

These grants were made available to SAFGRAD either directly or through agreement signed between OAU/STRC-donors and project partners, such as the Institute of Tropical Agriculture (IITA), for the improvement of maize and cowpea ; and the International Crop Research Institute for Semi-Arid Tropics (ICRISAT), for the improvement of sorghum and millets.

The funds made directly available to the Coordination Office and the networks have been utilized in accordance with OAU financial regulations and are also subject to annual internal and external audits.

SAFGRAD funding is also provided by the government of Burkina Faso, the host country, which has provided the Coordination Office and borne some of the expenses and by the governments of Nigeria, Mali, Senegal, Benin, Togo, Cameroon and Kenya which have made available to the Project land and other facilities required for the successful implementation of its programme since its inception.

2.5 IMPACTS.

The SAFGRAD contribution in research and technology transfer capacity building is summarized in Annex 4, for eight countries where impact assessment was carried out.

To respond to farmers needs in arid and semi-arid zones of sub-Saharan Africa, the extra and early crop cultivars, the soil-water retention and soil fertility and cropping systems technologies constitute a new generation of technology developed through SAFGRAD. These technologies have high potential for making break throughs in food production.

The 1993/94 impact assessment undertaken by USAID/Africa Bureaux established that there has been economic impact from research supported through SAFGRAD Networks. For example, in Ghana alone, the annual social benefits from maize research has been estimated up to 84 million US dollars. High social benefits were also estimated for maintenance research on cowpeas in Mali and Burkina Faso with annual social benefits ranged from dollar 0.8 million to dollars 12.3 million. The diffusion of early maturing sorghum cultivars, such as the cultivar S-35 developed through ICRISAT/SAFGRAD cooperative programme showed, it is well adapted in the Sudano-Sahelian zone, where currently being cultivated by farmers in Northern Cameroon (10.000 ha) and Chad (15.000 ha).

III. INSTITUTIONALIZATION OF SAFGRAD.

3.1 Previous proposals

Realizing that OAU accords high priority to food self-reliance and security by its member states, the Council of Agricultural Research Directors of Member countries, the Oversight Committee donors and other scientific bodies recommended the institutionalization of SAFGRAD as permanent institute of OAU. Furthermore, in compliance with the recommendation of the Fifty First OAU Council of Ministers, the OAU General Secretariat organized an internal meeting on SAFGRAD on 17-19 September, 1991, in Addis Ababa, Ethiopia between ESCAS, STRC, EDECO, Administration and Finance. The following institutional arrangements for SAFGRAD were discussed :

- (a) The Status Quo : SAFGRAD to remain as a Semi-Autonomous project under the OAU umbrella.

Under this institutional arrangement, OAU will continue to provide not only political umbrella and legal framework, but also monitors the implementation of SAFGRAD administrative and financial management systems. OAU subvention will cover SCO operational costs.

- (b) SAFGRAD to be transformed into a Permanent OAU Bureau for Agricultural Research.

Under this arrangement, the SAFGRAD services would be continued since major expenses of its budget would be provided by OAU. Furthermore the OAU Secretariat would be more in touch to member countries agricultural research and development activities as well as in soliciting funding from donors.

- © SAFGRAD to serve as a Semi-Autonomous Agricultural Research Coordination Office of OAU.

Under this arrangement, OAU sustain the Bureau by assuming financial responsibility for administrative and management costs. The Bureau would, however, have broad flexibility and operational autonomy to be innovative and competitive to sustain donor support for its project activities.

After examining the three options, the committee recommended : increased involvement of the OAU in the funding of SAFGRAD was recommended arrangement c. Specifically, it was proposed that in the short term a core administrative staff of the SCO be funded by the OAU General Secretariat as from June 1, 1992. In the medium term, the General Secretariat should additionally take charge of the technical facet of the Office to ensure and reinforce SAFGRAD's self-managing capability in assuming regional coordination. In the long term, and within the context of African Economic Community, the General Secretariat should plan to transform SAFGRAD into an institution which would coordinate and harmonize agriculture and food policy research policy in Africa.

3.2 Setbacks

To reverse the food production and environmental degradation in Africa, there is an urgent need at OAU level to enhance more effective cooperation and harmonization in agriculture, natural resource management and food policy research among sub-regional economic units.

This can lead to an efficient allocation and use of the resources to maximize agricultural production. The need, therefore, arises for an OAU led Agricultural and Food Research Agency which could play the vital rôle of coordinating research not only to facilitate the free exchange of technical information, but also to promote food self-reliance and security in Africa:

New visions and concepts of this nature have yet to be taken seriously by the OAU, since its preoccupation has been in the political emancipation . Although OAU accords high priority to the attainment of food security by its member countries, it is yet to establish the institutional mechanisms for coordinating and promoting science-led agricultural economic development in Africa.

A number of institutions including the National Agricultural Research Directors of 26 member countries of SAFGRAD, sub-regional research and development agencies and donors have recommended the transformation of SAFGRAD to fill this gap for coordination and harmonization agricultural and food policy research. For example, USAID, the major donor for SAFGRAD for several years has drawn the attention of OAU through its STRC to institutionalize SCO as permanent agency of OAU, while other donors and USAID may continue to support project activities of the OAU/STRC. Because of the lack of interest on part of OAU institutions most of the

donors have doubted the serious political and financial commitment of OAU to play central rôle in the coordination and harmonization research and development efforts in agriculture, food policy and natural resource management to spur economic growth in Africa.

IV. CURRENT ACTIVITIES (1995-1997)

4.1 Promotion of industrial utilization of food grains (OAU/STRC-Nestle Agreement)

4.2 Liaison activities with crop commodity networks.

4.3 Food Grain Production Technology Verification Project (financed by the African Development Bank).

4.4 Workshop and symposium organized.

- i) Technology Options and Transfer Systems (organized on April 1995).
- ii) Farming Systems-Research-Extension-Training (organized in 1996).

4.5 Joint OAU/ECA/ADB Programme on the Management of Agriculture and the Environment at Village level (pilot projects preparation stage).

4.6 Striga Control Project Collaborative Programme with South Korea.

4.7 Other projects under preparation.

- i) Technology Transfer to Enhance Food Production with Agri-Visual, England.
- ii) Grain Legume Improvement and Utilization to be submit for Swiss Foundation.



Fig.1. SAFGRAD Member States

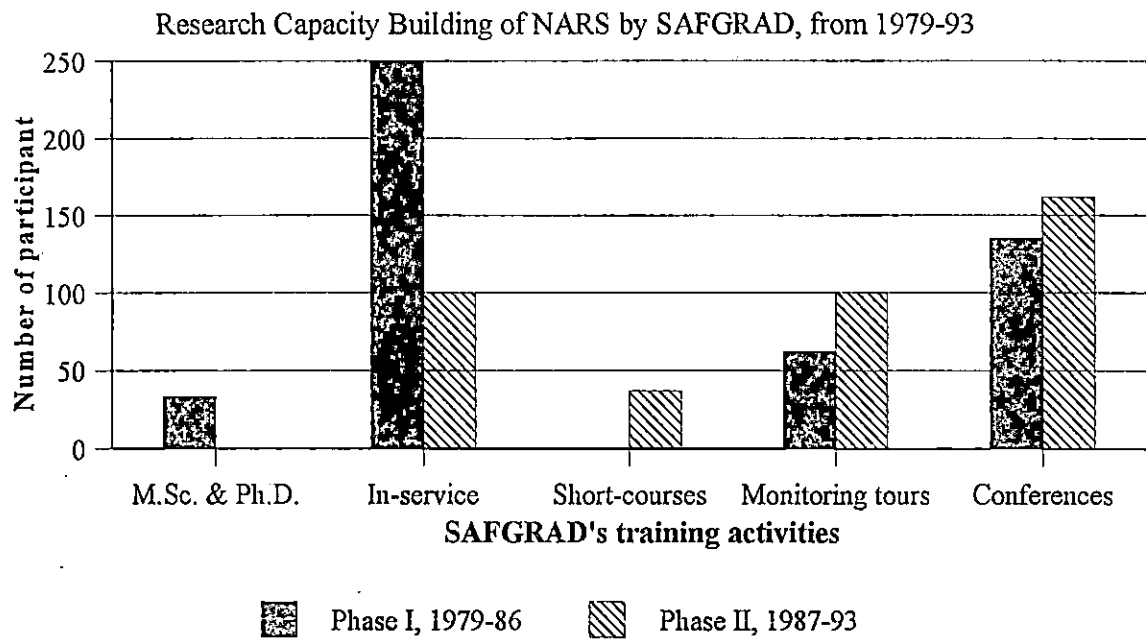


Fig. 2. Improvement of research skills of national scientists through SAFGRAD's training activities in Phase I, 1979-86; and Phase II, 1987-93

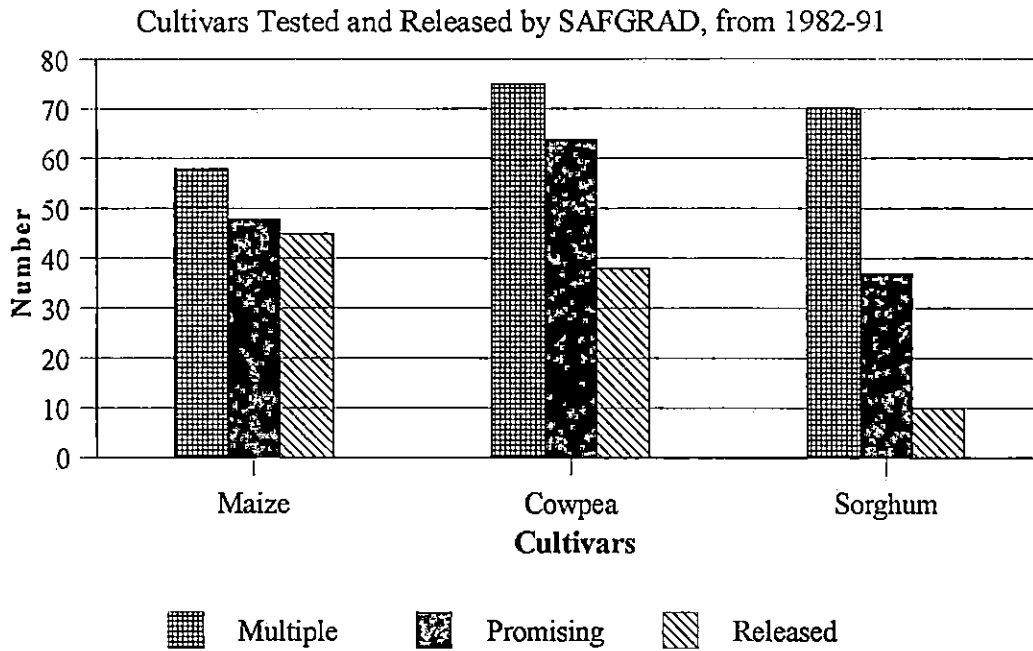
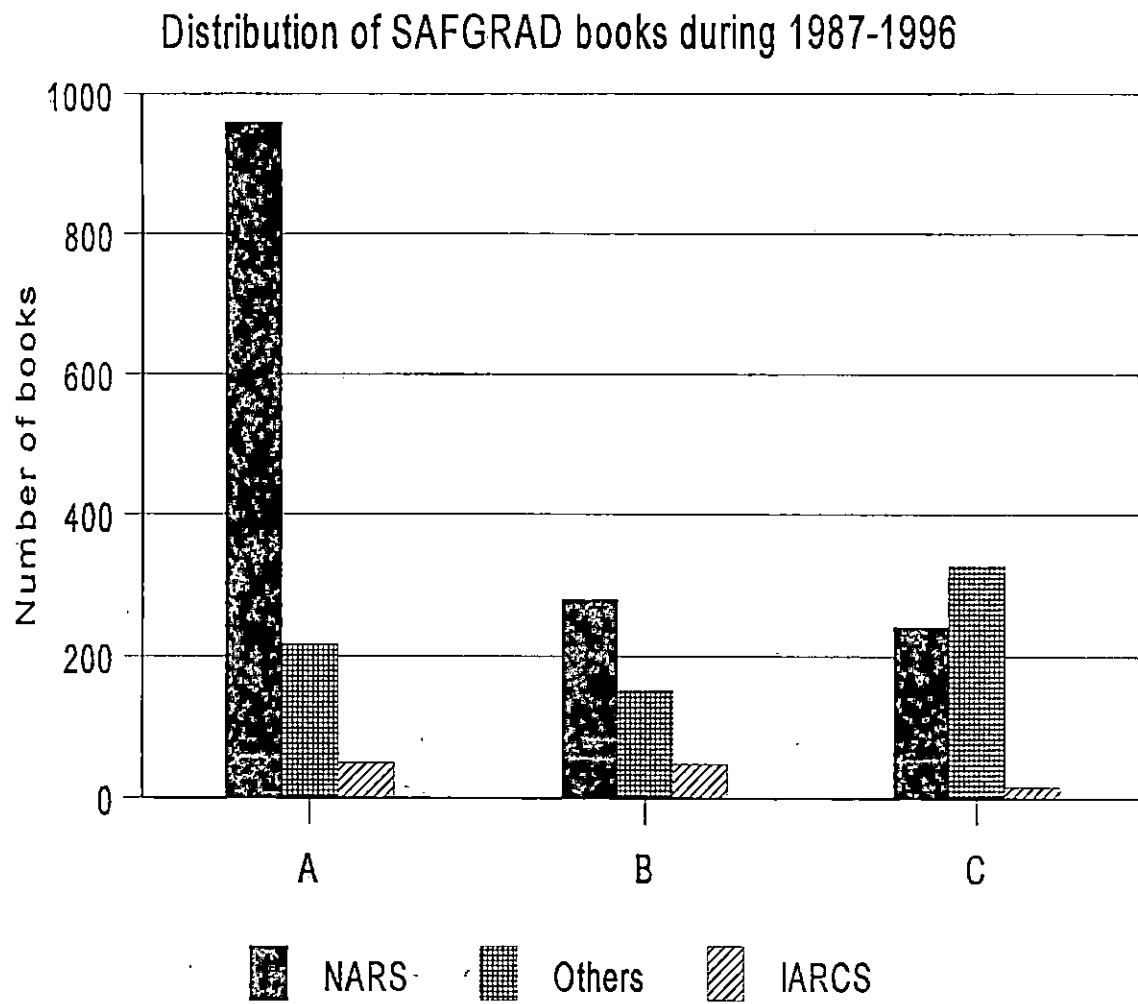


Fig. 3. Elite cultivars tested, and those developed and released under SAFGRAD's efforts from 1982-91



Legend:

A: Food Grain Production in Semi-Arid Africa

B: Progress in Food Grain Research and Production in Semi-Arid Africa

C: Processing and Industrial Utilisation of Sorghum and Related Cereals in Africa.

Fig. 4. Distribution of SAFGRAD Books to Institution and Scientists Worldwide.

Annex I. Institutional Partnership for Implementing the SAFGRAD Programme.

| Institutions | SAFGRAD Phase-I 1978-1986 Management Entities | SAFGRAD Phase-II 1987-1993 Management Entities | Rôle and Responsibilities of Management Entities |
|--|---|---|--|
| 1) OAU/STRC | The SAFGRAD Coordination Office (SCO) | The SAFGRAD Coordination Office (SCO) | <ul style="list-style-type: none"> i) Provided, legal, administrative and logistic frame work for project implementation : ii) Facilitated inter-African research cooperation : iii) Coordinated food grains and farming systems project activities among member countries : iv) Facilitated the organization and management of networks : v) Harmonized project implementation : vi) Facilitated scientific leadership and professionalism among member countries : and promoted adaptation and transfer of technologies. |
| 2) Member countries National Agricultural Research Systems | <ul style="list-style-type: none"> i) The Consultative Committee Policy making and management body comprised of 10 member from NARS, donors, IARCS. Review management performance. ii) The Technical Advisory Committee (Review annual research and technology transfer programmes) comprised of 12 members from NARS, donors, IARCS. | <ul style="list-style-type: none"> i) Conference of National Agricultural Research Directors (26 member countries). ii) Oversight Committee comprised of 8 members from NARS only. iii) Steering Committee of networks comprised 6 to 8 members from NARS researchers. | <ul style="list-style-type: none"> ▣ policy making body and follow-up ▣ Implementation of the SAFGRAD project. ▣ Management of SAFGRAD and networks ▣ Served as Management-Board of SAFGRAD. ▣ Technical management of networks |
| 3) The international Agricultural Research Centres | i) IITA/SAFGRAD programme based in Burkina Faso. | <ul style="list-style-type: none"> i) Network Coordinators for cowpea and maize. ii) Sorghum and millet network coordinators in West and Eastern Africa. | <ul style="list-style-type: none"> Implementation of Network programmes Implementation of Network programmes |

| | | | |
|-----------|---|--|-----------------------------------|
| | ii) ICRISAT/SAFGRAD programme based in Kenya, Nigeria, Mali for the improvement of sorghum and millets. | | |
| 3) Donors | USAID, IFAD, IDRC, OAU, France Ministry of Cooperation, and Member Countries. | USAID, IFAD, ADB, OAU, IDRC, Ford Foundation, France Ministry of Cooperation and Member Countries. | Funding and technical assistance. |



Annex 2. SAFGRAD Long-Term Training Support as of December 1986.

| Country | Level of Training | | Total |
|-----------------------|-------------------|----------|-----------|
| | M.Sc. | Ph.D. | |
| Botswana | 1 | - | 1 |
| Burkina Faso | 3 | 6 | 9 |
| Cameroon | 2 | - | 2 |
| Chad | 1 | - | 1 |
| Guinea, Conakry | 4 | 2 | 6 |
| Mali | 6 | - | 6 |
| Senegal | 2 | - | 2 |
| Somalia | 1 | - | 1 |
| Togo (French Support) | 2 | - | 2 |
| TOTAL | 22 | 8 | 30 |

Source : SAFGRAD I Synthesis Report, 1977-1986.

Annex 3. Training, seminars, workshops, etc for improving research skills and exchange of technical information.

| Type of Training | Number of Participants | | | | Number of Countries |
|------------------------|------------------------|-----------------------|--------------|-------------|---------------------|
| | SAFGRAD I 1978-86 | SAFGRAD II 1987-93 | SCO 94-96 | Total | |
| i) Short-term training | 250 | 140 | 25 | 390 | 22 |
| ii) Long-term training | 30 | - | - | 30 | 9 |
| iii) Scientific tours | 65 | 100 | - | 165 | 26 |
| iv) Workshops/Seminars | 764 | 900 | 170 | 184 | 26 |
| v) General Conferences | 130 | 165 | 85 | 380 | 23 |
| TOTAL | 1239 | 1305 | 260 | 2779 | |

Source : Except for 94/96 - SAFGRAD Impact Assessment Report (1994).

Annex 4.: Contribution of SAFGRAD to research and technology transfer capacity building in selected countries from 1982 to 1992

| Country | SAFGRAD Input | | |
|--------------|--|---|---|
| | Sorghum Research | Maize Research | Cowpea Research |
| Burkina Faso | <p>Supported training of a sorghum breeder and a soil scientist at Ph.D. level during SAFGRAD1</p> <p>Strengthen plant pathology research in identification of sources of resistance to leaf anthracnose</p> <p>supported training of three economists. 1 at Ph.D. and 2 at M.Sc. Levels</p> <p>On-the-job training for several technicians by the ICRISAT/SAFGRAD program</p> | <p>Facilitated release of varieties, such as SAFITA-2, EV8322-SR, Pool-16DR.</p> <p>Supported research in the development of early and extra- early maize cultivars, 1986-92</p> <p>Trained technicians in field-plot techniques, variety maintenance, seed multiplication, etc.</p> <p>Made available several maize germplasm, 1990-91</p> <p>Supported on-farm research and adoption of maize cultivars through the Accelerated Crop Production Program</p> | <p>Trained several technicians and some researchers to enhance cowpea improvement.</p> <p>Assisted in supervising thesis research for the degree of «Ingenieur Agronome» from the University of Ouagadougou.</p> <p>Facilitated long-term training at M.Sc. And Ph.D. levels.</p> <p>Strengthened INERA capabilities to generate technology by integrating regional and national cowpea research efforts.</p> |
| Cameroon | <p>Extension agronomist was assigned to North and Far-North Provinces through the ACPD program (1982-87)</p> <p>An extension agronomist was trained at M.Sc. Level</p> <p>Provided some financial support for screening sorghum genotypes resistant to striga</p> | <p>Trained technicians.</p> <p>Supported on-farm trials for the adoption of early and extra-early maize cultivars in the North and (1990-92) Far-North Provinces of Cameroon (1987-91).</p> <p>Provided technical assistance through three-man FSR team in North Cameroon, 1986-89.</p> <p>Promoted on-farm research and technology transfer through the accelerated crop Production Program, (880-85)</p> | <p>Trained some technicians and one extension agronomist at M.Sc. Level who currently conducts on-farm research on all cereals and cowpea.</p> <p>Facilitated visit to other national cowpea programs.</p> <p>Contributed to cowpea germplasm.</p> |
| Ethiopia | <p>Provided some research support to improve research capabilities in the identification of resistant cultivars to striga and anthracnose</p> <p>carried out seed production and entomology short training courses</p> | | |
| Ghana | <p>Some technicians benefited from short-term training in striga control and on-farm agronomic research provided limited funds for research support</p> <p>Provided germplasm from regional trials; consequently released varieties such as framida</p> | <p>Trained technicians</p> <p>Supported the development of facilities to undertake screening of maize cultivars resistant to streak virus.</p> <p>Provided early-maturing maize varieties of which SAFITA-2 is adopted in Northern Ghana.</p> <p>In Northern Ghana, supported on-farm verification trials for the adaptation of maize cultivars in association with other foodgrains.</p> | <p>Facilitated the exchange of information through seminars and monitoring tours.</p> <p>Contributed germplasm relevant to Northern and Coastal regions of the country.</p> |
| Kenya | <p>15 trainees benefited from short-course training in seed production, insect, and disease control, received financial support to screen sorghum genotypes for resistance to long smut, covered smut, and drought</p> <p>Benefited from the exchange of germplasm, consequently released varieties for farmers' use. New variety KAT 369 released and seed being increased for use in composite flour for bread</p> | | |

Table ... (cont'd.)

| | | | |
|---------|---|--|---|
| Mali | <p>2 agronomists and 2 sorghum breeders were trained at M.Sc. Level through the Accelerated Crop Production Program (ACPO)</p> <p>An expatriate agronomist was based in Mali (1979-85) through the SAFGRAD project to strengthen the technology-transfer efforts and to improve linkages between research and extension</p> <p>10 technicians were trained to assist in sorghum on-farm research.</p> <p>Financial support provided to screen cultivars resistant to headbug.</p> | <p>Supported training of one agronomist at the M.Sc. Level.</p> <p>Trained several technicians to carry out on-farm research.</p> <p>Provided agronomist, 1979-1984.</p> <p>Supported on-farm research for adoption of food grain technologies through the accelerated crop Production Program of SAFGRAD, (1979-87)</p> <p>Provided funds for an agronomic evaluation on the adaptability of early and extra early maize cultivars. Some varieties were released (SAFITA-2, DMIR-ESRY).</p> | <p>Trained some technicians in cowpea breeding and agronomy.</p> <p>Trained one extension agronomist at M.Sc. Level who managed on-farm research.</p> <p>Supported expatriate staff (1979-89) to promote transfer and adoption of technology.</p> |
| Niger | <p>Facilitated pathology research for screening sorghum cultivars for resistance to long smut disease</p> <p>Three trainees participated in monitoring tours and two other trainees benefited from short-term training</p> | | <p>Some researchers participated in analysis and review of cowpea research and appropriate technology development.</p> <p>Some researchers participated in scientific-monitoring tours which facilitated joint monitoring and evaluation of the performance of elite germplasm included in the regional trials.</p> |
| Nigeria | <p>The network provided financial support to broaden the use of sorghum for industrial purposes</p> <p>Financial support was provided for on-station and on-farm verification trials to screen sorghum cultivars suitable for different cropping systems</p> | | |

Source : Impact Assessment of SAFGRAD Commodity Networks (1994).

Annex 5. Funding and institutional support for the implementation of OAU/STRC-SAFGRAD programme

| Donors | Period | Amount in US Dollars | Collaborating Institutions |
|---|-----------|----------------------|--|
| 1) United States Agency for international Development (USAID) | 1977-1993 | 33,764,000 | 1) More than 30 National Agricultural Systems (NARS) participated in the activities of SAFGRAD programme. |
| 2) International Fund for Agricultural Development (IFAD) | 1983-1989 | 3,822,631 | 2) IITA in the improvement of maize and cowpea and technical support to Networks of these crop commodities. |
| 3) Ministry of Cooperation (France) | 1978-1994 | 1,041,057 | 3) ICRISAT in the improvement of sorghum, millet and soil-water management research and technical support to networks of these crop commodities. |
| 4) International Development Research Centre (IDRC) | 1987-1994 | 1,115,562 | 4) Through the OAU/STRC-SAFGRAD, NARS managed collaborative networks and served as 'Lead Centres' for stress oriented regional research. |
| 5) African Development Bank (ADB) | 1989-1994 | 803,023 | 5) Universities (e.g. Ahmadu Bello and Purdue Universities) participated in Farming Systems Research and development. |
| 6) Organization of African Unity (OAU) | 1984-1994 | 842,000 | 6) ICRAF provide technical support and fund for the development of Agroforestry network in Semi-Arid lowlands of West Africa. |
| 7) International Centre for Research in Agroforestry (ICRAF) | 1991-1994 | 333,362 | 7) SAFGRAD also improved capabilities of some countries in farming systems research, and verification of technologies. |
| 8) Ford Foundation | 1989-1991 | 248,000 | |
| 9) Member States in-kind contribution | 1986-1991 | 3,070,900 | |
| 10) Others donors (IFS, ACCT, CTA). | 1989-1994 | 220,610 | |
| TOTAL | | 45,261,145 | |

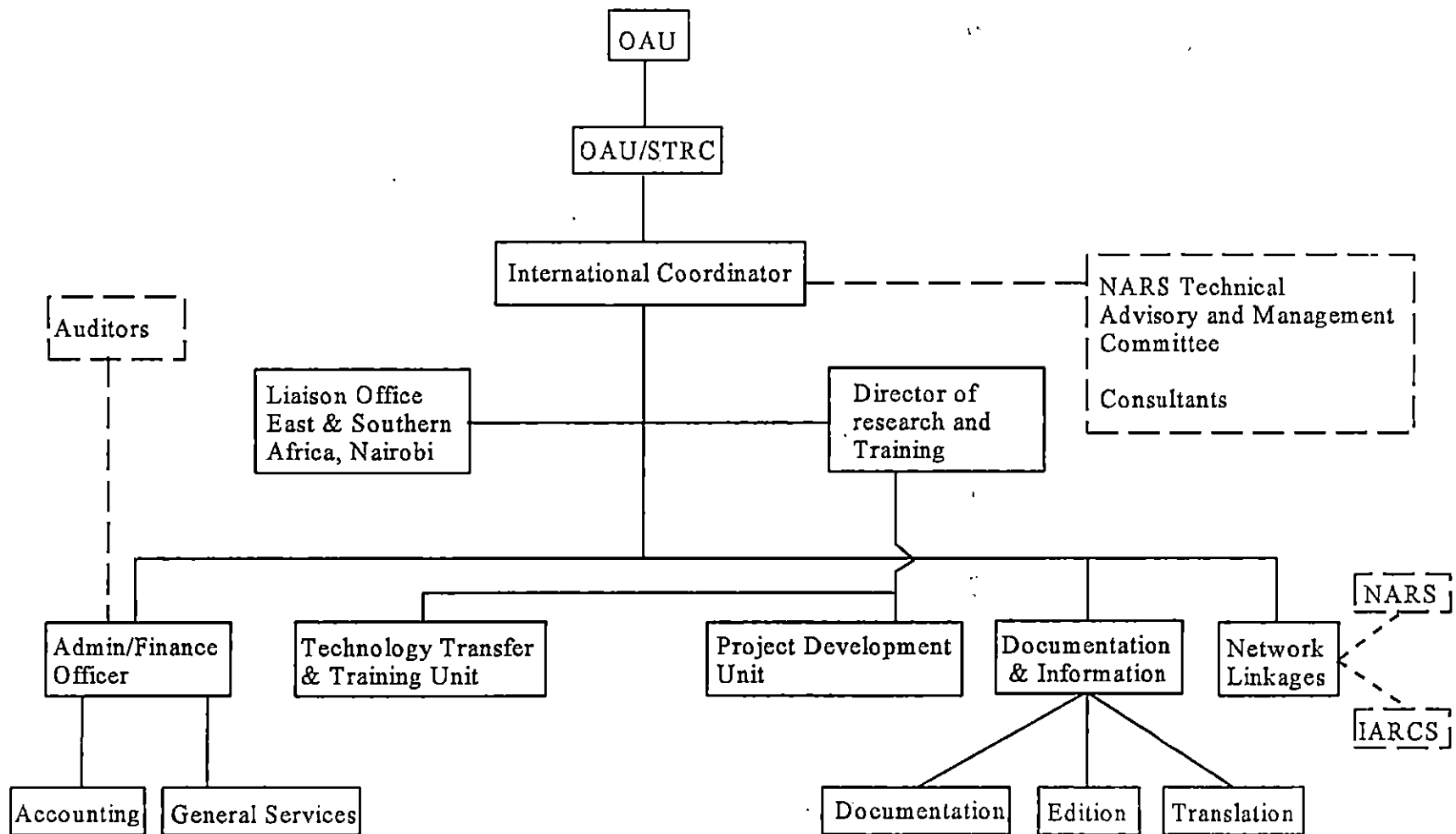


Fig. 5. Organization Chart for the SAFGRAD Coordination Office

PART II

Part II.

New OAU/STRC Framework for Coordinating Agricultural and Food Policy Research in Africa (a proposal)

Realizing the determination of the OAU to establish a vibrant African Economic Community, OAU/STRC through its newly restructured and revitalized institutions should be more actively involved in the coordination of agricultural, natural resource and food policy research at regional and continental levels. The new institution expected to evolve from SAFGRAD, can forcefully liaise and interact with existing regional and international research organizations. Considering the institutional changes that are taking place in Africa, there is need for OAU to anchor and respond to changing priorities of agricultural development, natural resource management and food security issues. Since the last five years, the Special Programme for African Agricultural Research (SPAAR) of the World Bank and those International Agricultural Research Centres (IARCs) operating in Africa have been the key players to bring about institutional changes of research and development at regional and national levels.

In the past 16 years, although donors have appreciated OAU's partnership (through SAFGRAD) in strengthening agricultural research, they expected OAU to institutionalize SAFGRAD as its permanent agency for the coordinating agricultural and food policy research in sub-Saharan Africa (SSA).

Feedback from national systems also indicates that the rôle of OAU/STRC as a continental scientific organization vis-à-vis SPAAR, IARCs is not well articulated. There is a consensus, however, that OAU/STRC through restructuring SAFGRAD should serve as the focal institution to facilitate and harmonize the activities of IARCs, SPAAR of the World Bank and other agencies involved in the development of agricultural research systems in Africa.

Article 46, of the Treaty establishing the African Economic Community calls for Member States at sub-regional and continental levels, to « cooperate in the development of agriculture, forestry, livestock and fisheries to ensure food security ». It also calls for the « harmonization of agricultural development strategies and policies at regional and community levels, in particular, in so far as they relate to production, trade and marketing of major agricultural

✓

products and inputs ». New or revitalized institutions of OAU should be put in place to attain the objective of article 46.

Under the OAU umbrella, existing sub-regional research coordination agencies should be able to address issues of regional and continental significance in the field of agriculture, natural resource management and food policy.

The institutions of the five sub-regional economic and political groupings are listed in Annex 1. These institutions coordinate research in agriculture, food policy and resource management. While interaction of these institutions and research scientists between North and South (External to Africa) has been sustained, institutional collaboration and technical exchange between the sub-regions (in Africa) has been very weak. In the last five years or so, the Special Programme for African Agricultural Research (SPAAR) of the World Bank has filled this void.

Niche of SAFGRAD

One of the original objectives of SAFGRAD was to assist in strengthening the capabilities of National Agricultural Research Systems (NARS) of its member countries. During the past 16 years, many of the NARS have made great strides in human resource development and enhancement of institution building, to which SAFGRAD has made its modest contribution.

OAU/STRC-SAFGRAD is well recognized for its services in agricultural research, farming systems (i.e. natural resource management) development and promotion of food grain production in semi-arid Africa. In addition, SAFGRAD has over 16 years experience collaborating with IARCs operating in Africa.

SAFGRAD, therefore, should evolve into another niche where it can still continue to contribute effectively to African agricultural research and development. It was this consideration that convinced OAU to organize special meetings in Addis Ababa (September 1991) and Abidjan March 1994, and in Nairobi, October, 1995 to discuss the restructuring of SAFGRAD. Participants in these meeting included representatives from STRC and OAU Headquarters as well as eminent African NARS scientists.

Creation of the African Agricultural and Food Policy Research Development Agency (AAFRADA) is proposed.

While the Addis Ababa meeting recommended the institutionalization of SAFGRAD (which has always been a project), the Abidjan (1994) and Nairobi Task Force (1995) Meetings on SAFGRAD proposed its transformation into the African Agricultural and Food Research Development Agency (AAFRADA).

2.1 Mandate

AAFRADA will coordinate agriculture and food policy research including natural resource management in all agro-ecological zones of Africa. Its commodity mandate include major crops of Africa and related agricultural production activities which enhance the development of sustainable agriculture and the environment. AAFRADA will harmonize and facilitate inter-African research cooperation and also liaise with the activities of international agricultural research institutes in order to influence their research agenda towards the needs of African farmers.

2.2 Functions

The functions of AAFRADA include :

- a) To enable OAU harmonize agricultural research and development efforts of regional/sub-regional organizations (AMU, CEEAC, CILSS, ECOWAS, IGADD and SADC) in order to attain food self-reliance and security by Member States ;
- b) To harmonize donor support in collaboration with the World Bank (SPAAR), European Union, etc towards the promotion and revitalization of agricultural research and development in Africa ;
- c) To facilitate the development of projects of continental interest, but to be implemented by sub regional economic groupings ;

- d) To facilitate the flow of technical information for the maintenance of a database on human resources in Africa with regard to research in agriculture, food policy and natural resources ;
- e) To monitor the implementation of joint and collaborative projects in agriculture, food policy and environmental research ;
- f) To occasionally organize technical seminars, meetings, symposia, training, conferences on themes of inter-regional importance ;
- g) To promote the publication of scientific journals, books and newsletters to enhance the diffusion of technical information.

It should be emphasized that AAFRADA is not a new structure, but a broadened version of the present SAFGRAD, unlike SAFGRAD (restricted to the semi-arid zone), its mandate will extend into other ecologies.

2.3 Staff and Budget Requirements

The professional staff and budget requirements for AAFRADA is summarized in ANNEX 2. The minimum professional staff proposed included : Agency Director/Coordinator, Agricultural Economist, in-charge of the coordination and harmonization of food policy research ; Agriculturalist, to follow-up the implementation of projects and in-charge of coordination and harmonization of agricultural research ; Natural Resource Management Specialist, in-charge of coordination of farming systems and environmental programmes and Administrative and Financial Officer, in-charge of financial management and administration.

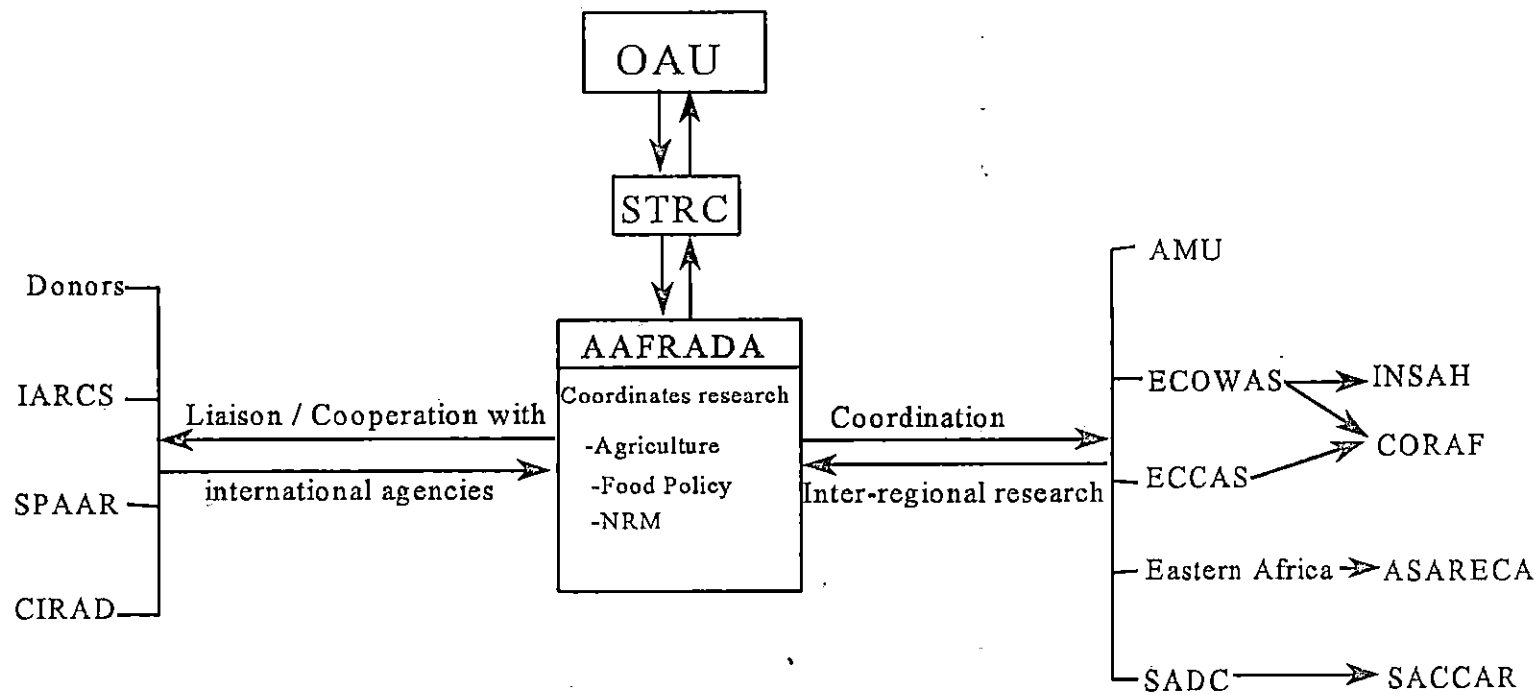


Fig 1. Schematic Outline for Inter-Regional Research Cooperation in Agriculture Food Policy and Natural Resource Management

| | | | |
|----------|--|----------|---|
| AAFRADA: | African Agricultural and Food Policy Research And Development Agency | INSAH: | Institut du Sahel |
| ECOWAS: | Economic Community of West African States | CORAF: | Conference des Responsables de la Recherche Agronomique Africains |
| AMU: | Arab Mahgreb Union | ASARECA: | Association for Strengthening Agricultural Research in Eastern and Central Africa |
| ECCAS: | The Economic Community of Central African States | SACCAR: | Southern African Conference of Agricultural Research |
| SADC: | Southern African Development Coordination Conference | | |

**ANNEX 1 - Sub-regional economic and political groupings and
their agricultural research coordinating agencies**

| Regional Economic political grouping | Number of countries | Research Agency | Year established |
|--|------------------------|--------------------|---------------------|
| I. SADC | 9 | SACCAR | 1984 |
| II. AMU | 6 | - | - |
| III. CILSS | 9 | INSAH | 1976 |
| IV. ECOWAS | 16 | Evolving | 1975 |
| V. ECCAS | 10 | Evolving | 1983 |
| VI. Eastern, Central Africa Oceanic Countries | 11 | ASARECA | 1994 |
| VII. OAU | 26 | STRC-SAFGRAD | 1977 |
| VIII. West and Central Africa (CORAF) | 24 | Evolving | 1987 |

| | |
|---------|--|
| ASARECA | Association for Strengthening Agricultural Research in Eastern and Central Africa. |
| INSAH | Institut du Sahel. |
| CORAF | Conférence des Responsables de Recherche Agronomique Africains. |
| AMU | Arab Mahgreb Union. |
| COMESA | Common Market of Eastern and Southern Africa. |
| CILSS | Comité Permanent Inter-Etats de Lutte contre la Sècheresse dans le Sahel/Permanent Inter-State Committee for Drought Control in the Sahel. |
| ECCAS | The Economic Community of Central African States. |
| SADC | Southern African Development Community. |
| SACCAR | Southern African Centre for Cooperation in Agricultural and Natural Resources Research and Training. |
| STRC | Scientific, Technical and Research Commission of the OAU. |
| SAFGRAD | Semi-Arid Food Grain Research and Development Agency. |

AAFRADA STAFF REQUIREMENT

| TITLE OF POST | ESTABLISHED POSITIONS | PRESENT STRENGTH | NEW POSITIONS | N° BUDGETED FOR |
|---|--------------------------|---------------------|------------------|--------------------|
| 1. International Coordinator/Director | P4 - 12 | 1 | | 1 |
| 2. Agriculturist | P 3 - 6 | | 1 | 1 |
| 3. Food Policy Specialist. (Ag. Economist.) | P 3 - 6 | | 1 | 1 |
| 4. Natural Resource Management Specialist. | P 3 - 6 | | 1 | 1 |
| 5. Administrative & Finance Officer | P2 - 11 | 1 | | 1 |
| 6. Documentation Officer | P 1 - 3 | | 1 | 1 |
| 7. Secretary | GSA 3 - 9 | 1 | | 1 |
| 8. Secretary | GSA 3 - 5 | 1 | | 1 |
| 9. Accounts clerk | GSA 3 - 6 | 1 | | 1 |
| 10. Driver | GSB 5 - 9 | 1 | | 1 |
| 11. Driver | GSB 5 - 6 | 1 | | 1 |
| 12. Messenger | GSB 5 - 5 | 1 | | 1 |
| 13. Watchman | GSB 4 - 6 | 1 | | 1 |
| 14. Watchman | GSB 4 - 3 | 1 | | 1 |
| 15. Cleaner/Photocopy & Tel. Operator | GSB 4 - 6 | 1 | | 1 |
| | | 11 | 4 | 15 |

AAFRADA BUDGET PROPOSAL

FOR TWO YEARS

| | YEAR I | YEAR II | TOTAL |
|-----------------------------------|---------|---------|-----------|
| | US \$ | US \$ | US \$ |
| A. SALARIES AND ALLOWANCES | 573,915 | 514,375 | 1,088,291 |
| 100 Basic Salaries | 165,267 | 168,825 | 334,092 |
| 213 Post Adjustment Allowance | 59,182 | 59,983 | 119,085 |
| 101 Consultants | 3,000 | 3,000 | 6,000 |
| 102 Temporary Assistance | 3,000 | 3,000 | 6,000 |
| 103 Overtime | 2,500 | 2,500 | 5,000 |
| 200 Travel on Initial Recruitment | 38,800 | | 38,800 |
| 201 Travel on Home leave | | 37,650 | 37,650 |
| 203 Installation Allowance | 63,420 | | 63,420 |
| 204 Dependency Allowance | 10,800 | 10,800 | 21,600 |
| 205 Housing Allowance | 77,760 | 77,760 | 155,520 |
| 206 Pension | 23,136 | 23,836 | 46,772 |
| 207 Insurance | 4,130 | 4,222 | 8,352 |
| 208 Medical Scheme | 15,000 | 15,000 | 30,000 |
| 212 Education Allowance | 108,000 | 108,000 | 216,000 |
| B. MISCELLANEOUS | | | |
| 300 Travel of Staff | 30,134 | 31,641 | 61,775 |

C. OPERATIONS

| | | | | | |
|-----|----|---|---------|---------|-----------|
| | 1. | MAINTENANCE OF EQUIPMENT & PREMISES | 20,900 | 22,900 | 43,800 |
| 401 | | Maintenance of Vehicle | 3,000 | 3,300 | 6,300 |
| 402 | | Maintenance of Equipment | 4,400 | 4,800 | 9,200 |
| 403 | | Maintenance of Office & Premises | 2,000 | 2,200 | 4,200 |
| 404 | | Utilities | 7,000 | 7,700 | 14,700 |
| 406 | | Insurance of Vehicles | 2,000 | 2,200 | 4,200 |
| 408 | | Fuel | 2,500 | 2,700 | 5,200 |
| | 2 | COMMUNICATIONS | 10,000 | 11,100 | 21,100 |
| 500 | | Telex | 1,000 | 1,100 | 2,100 |
| 501 | | Telephone & Fax | 4,500 | 5,000 | 9,500 |
| 502 | | Postage | 500 | 600 | 1,100 |
| 503 | | Courrier (DHL / EMS) | 4,000 | 4,400 | 8,400 |
| | 3 | OFFICE SUPPLIES & MISCELLANEOUS SERVICES | 14,500 | 15,850 | 30,350 |
| 600 | | Office Supplies | 2,000 | 2,200 | 4,200 |
| 601 | | Bank Charges & Commissions | 2,000 | 2,200 | 4,200 |
| 603 | | Hospitality Allowance | 500 | 500 | 1,000 |
| 606 | | Subscription to Newspapers & Periodicals | 500 | 500 | 1,000 |
| 607 | | Other Supplies & Services | 2,500 | 2,750 | 5,250 |
| 608 | | Printing & Publications | 7,000 | 7,700 | 14,700 |
| | | D. TECHNICAL ACTIVITIES | 51,500 | 81,500 | 133,000 |
| 610 | | Training | 25,000 | 20,000 | 45,000 |
| 614 | | Technical Advisory & Management Committee | 26,500 | 26,500 | 53,000 |
| 622 | | Inter-regional Directors Meeting | | 35,000 | 35,000 |
| | | TOTAL BUDGET A+B+C+D | 700,949 | 677,367 | 1,378,316 |

AFRICAN UNION UNION AFRICAINE

African Union Common Repository

<http://archives.au.int>

Department of Rural Economy and Agriculture (DREA)

African Union Specialized Technical Office on Research and Development

1996-09

OAU/STRC-SAFGRAD CONTRIBUTION TOWARDS STRENGTHENING AGRICULTURAL RESEARCH OF MEMBER COUNTRIES

AU-SAFGRAD

AU-SAFGRAD

<http://archives.au.int/handle/123456789/5009>

Downloaded from African Union Common Repository