

Case Study: African Union Grant Programme



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Acronyms and abbreviations

AU	African Union
AUC	African Union Council
EDF	European Development Fund
Intra- ACP	Intra African, Caribbean and Pacific
LFA	Logical framework approach
NEPAD	New Partnership for Africa's Development
RBM	Result based management

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Introduction

The overall objective of this study is to describe the policy context, governance, operating conditions and evaluation mechanisms of the African Union Research Grant with the aim of discussing the potential impacts of the funding scheme and the possible launch of an African Framework Programme of Research.

The African Union Research Grant Programme was initiated in 2011 and aims to support the implementation of Africa's Science and Technology Consolidated Plan of Action and its lighthouse projects by promoting Africa's existing scientific excellence. A further objective is to enhance intra-regional scientific research collaboration and cooperation that contributes to Africa's sustainable development (African Union, 2011, 2012).

The African Union Research Grant Programme is an important case study since this initiative is one step towards developing a fully-fledged African Framework Programme for Research and consequently, one of the objectives of this programme is to develop African Union Council capacity for managing research grants.

As a part of the capacity-building process, this report focuses on two interrelated issues:

- The construction of the funding instruments for implementing the *African Union Research Grant Programme*; and
- Identifying key factors that would enable this initiative to generate excellent research for building capacity in prioritised areas.

Policy Context

The African Union (AU) was established on 9 July 2002 and consists of 54 member countries. AU was formed as a successor to the Organisation of African Unity, which was established in May 1963. While the Organisation of African Unity focused to a large extent on policies relating to the eradication of all forms of colonialism and securing Africa's long-term economic and political future, the African Union has taken the political agenda further and seeks to accelerate the political and socio-economic integration of the continent. As a consequence, the African Union has introduced new policy areas, including science and technology policies.

The African Union has charged the African Union Commission to lead the work on science and technology policies, which is administratively located in the Department of Human Resources, Science and Technology. It has the mandate to drive strategic programmes in this area together with the New Partnership for Africa's Development (NEPAD) (African Union, 2005).

In addition, the African Union Commission established the Conference of Ministers in charge of Science and Technology as a platform for developing priorities related to Science and Technology policies. In 2005, the Conference of Ministers in charge of Science and Technology endorsed Africa's Science and Technology Consolidated Plan of Action, which articulates Africa's common objectives related to science and technology capacity-building, knowledge production, management, technology and innovation for development.

In 2007 the African Union Heads of State and Government adopted the theme "Science, Technology and Research for Africa's Socio-Economic Development" and subsequently declared 2007 as the launching year for building constituencies and champions for science, technology and innovation in Africa. In December of the same year the EU-Africa Summit in Lisbon adopted a joint cooperation strategy that has a dedicated partnership on science.

The overall objectives of Africa's Science and Technology Consolidated Plan of Action are twofold:

- To enable Africa to harness and apply science, technology and related innovation to eradicate poverty and achieve sustainable development
- To ensure that Africa contributes to the global pool of scientific knowledge and technological innovations.

The implementation of the plan takes place through regional, continental and international cooperation, which aims to *(i)* improve the quality of science, technology and innovation policies of African countries through promoting and sharing experiences and policy learning, *(ii)* strengthen the capacity of regional economic bodies to mainstream science and technology into their sectoral programmes and *(iii)* establish projects with the view to improve the quality and intensity of regional cooperation (African Union, 2005).

The African Union Commission will contribute to achieving these objectives through some specific support measures that are targeted to stimulate resource sharing of R&D infrastructure, improving the quality of research, increasing the number of scientists, technicians and engineers and lastly contributing to the application of science for achieving some of the Millennium Development Goals.

Key Features of the African Union Research Grant

The African Union Research Grant Programme is a programme lead by the Department of Human Resources, Science and Technology, which aims to ensure that science and technology in Africa contributes to efforts to achieve sustainable development. This programme was formulated as one of the lighthouse projects identified among the early deliverables in Partnership No 8 of the EU-African Joint Strategy and its Action Plan adopted at the EU-Africa Summit in Lisbon in 2007.

The African Union Commission has received funding through the Financial Agreement between the European Commission and African, Caribbean and Pacific States under the 10th European

Development Fund (EDF), intra-African, Caribbean and Pacific (intra-ACP) envelop (African Union, 2011).

As compared to previous EDF programmes, the 10th EDF has increased the importance of regional and intra-ACP cooperation. 8% of the total 10th EDF budget has been earmarked for regional cooperation and 12.3% for intra-ACP and interregional programmes. The total indicative budget for science and research of the intra-ACP programme is €130 million, representing a large increase compared to the 9th EDF intra-ACP programme which allocated €76.35 million for science and research. This can also be contrasted to the total budget of the African Union Commission of €2.7 billion (European Development Fund, 2007).

Strategic Orientation

The strategic orientation of the African Union Research Grant Programme is to enhance intra-regional scientific cooperation by supporting Africa's Science and Technology Consolidated Plan of Action Lighthouse projects which focus on post-harvest and agriculture, sustainable energy and water. The African Union Research Grant funds activities related to data-collection through desk research, stakeholder consultations and field visits, laboratory equipment and minor capacity building if there are foreseen weaknesses.

As mentioned earlier, another objective of this programme is to build capacity in the African Union Commission for establishing a sustainable system for managing competitive research grants at the Pan-African level with the view to developing a fully-fledged African Framework Programme for Research. The African Union Research Grant Programme is the first step towards this objective.

To address this issue a Task Force has been established by the Department of Human Resources, Science and Technology to assess the feasibility of the establishment of an African Research Council. In the Report of the Task Force it states that the African Research Council should be established to support and deploy basic, applied and frontier research to respond to the policy needs associated with Africa's Science and Technology Consolidated Plan of Action. (African Union, date unknown). It is further emphasised that to ensure scientific excellence and integrity without losing close association with the African Union system, attention needs to be paid to the crafting of the structure, procedures, processes and governance of the African Research Council. Thus it is suggested that the African Research Council be established from the outset as an autonomous and accountable institution. The governance structure should include a Governing Council, located at the African Union headquarters, a Scientific and Advisory Committee with various sub-committees and a senior Management Team. In terms of financing, it is suggested that the bulk of the funding would come from public resources including the AU annual budget allocation and Member States. However, the Task Force also recognises that these resources are not enough and therefore it is expected that the African Research Council will source support from bilateral and multilateral partners outside the continent. In addition, they suggest that an African Council Trust Fund would be established, to which AU member states, bilateral and multilateral donors, private foundations and philanthropic organisations could contribute resources.

This report is now in the hands of the Department of Human Resources, Science and Technology, which will decide how to proceed.

Institutional Supporting and Operating Conditions

Funding and evaluation mechanisms

In the Open Call for proposal issued by African Union in 2011 and 2012, it is stated that the total budget allocation for the African Union Research Grant Programme was €7 million in 2011 and €14.7 million in 2012. The budget for evaluation of the project proposals was €700 000 in 2012. The funding is split between three priority areas including post-harvest and agriculture, sustainable energy, water and sanitation. In 2011 nine projects were awarded. An amount between €500 000 and €750 000 is allocated to research proposals, with grants covering 50-80% of the total costs. The proposals are submitted in a single stage, including a Concept Note and a full proposal through Open Calls.

It is stated that the scientists should construct consortia of at least three organisations from at least two different African Countries (South Africa excluded), while established research networks and regional bodies recognised by the African Union Council such as Regional Economic Communities, are considered to be partnerships in themselves and do not need to form alliances with other organisations.

The evaluation criteria of the Concept Note covers the relevance and experimental design of the proposal and the full application is assessed on the basis of the applicants' financial and operational capacity, including factors such as the availability of sufficient financial resources to maintain the activity throughout the period, the applicants' management capacity including professional competencies and qualifications required to successfully complete the proposed action. In addition there are a number of criteria covering aspects such as the relevance of the proposal, its consistency with the objectives of the Call for Proposals, expected impact, sustainability and cost-effectiveness. Scientific quality is not stated as an evaluation criterion in the guidelines for application and evaluation.

The proposals are evaluated by rotating independent scientific experts. The initial ranking of the proposals is done by the African Union Council and Department of Human Resources, Science and Technology who together with experts prepare a draft shortlist of proposals. Then, the Advisory Management Committee (permanent body) composed of scientific and research experts of the five African regions examine and discuss the results of the shortlist. A final selection is then made by the Bureau of the African Conference of Ministers in charge of Science and Technology. The results of the evaluations and funding decisions for the proposals are coordinated by the Director of the Department of Human Resources, Science and Technology. The full procedure is estimated to take approximately six months from start to completion. However, it appears to have taken longer in 2012, since an official list of grant rewards was still not publically available in June 2013

The reporting mechanisms of the programme include annual interim reports and final reports. The reports include a narrative and a financial section. The narrative report follows the established model for monitoring and evaluation in development assistance, called result based management (RBM) or Logical Framework Approach. The reporting framework includes four levels of achievement e.g. the overall objective, specific objective, expected results and activities. All levels should have qualitative or quantitative indicators that measure progress on each level. In addition, assumptions that were made while formulating the four levels should be stated (Open Call for Proposals, 2011 and 2012).

Governance organisation

The research carried out under the African Union Research Grant Programme should be conducted by research networks either through the creation of inter-institutional cooperation or partnerships for regional and sub-regional cooperation.

Only one applicant is allowed to be the grant holding institution but partner institutions are allowed and the role of each partner has to be clearly defined.

Expected impact of the African Union Research Grant

The expected impact of this African Union Research Grant Programme focuses solely on socio-economic impacts, including:

- Enhanced food security and food safety
- Better adopted renewable and sustainable energy technologies
- Improved integrated water resources and waste management

Preliminary Observations

The African Union Research Grant Programme is financed by the 10th EDF intra-ACP budget and follows the general application framework procedures developed in the EDF at large.¹ While this seems to be logical from the perspective of development, there are some areas of concern that are worth mentioning in this regard, especially since AUC has decided that the African Union Research Grant Programme should strengthen AUC capacity for managing research grants.

The African Union Research Grant Programme focuses essentially on socio-economic impacts, which are supposed to be achieved through central priority setting and by promoting resource concentration at the regional and intra-regional level through cooperation. If we compare the evaluation criteria developed in the African Union Research Grant Programme with other funders of research, such as the EU, we can see that there are a number of differences that the African Union Council might consider.

¹ See for example similarities to the ACP-EU Support Programme to ACP Cultural Sectors (ACPCultures II + ACPFilms II) Guidelines for applicants

The African Union Research Grant Programme assessment procedure differs from the standard assessment procedure adopted by many public and private research funders in that it gives priority to relevance, effectiveness, feasibility and sustainability of the action. This focus, in combination with the relative weight that is given to socio-economic impacts, makes it unclear how and to what extent criteria such as scientific quality are assessed in relation to the relevance of the proposal, even if the proposals are peer-reviewed by scientists. In addition, the guidelines for the applicants in the African Union Research Grant Programme define the type of scientific and research methods that the scientists are expected to apply. This may reduce the attractiveness of the instruments for researchers who prefer to have a higher degree of freedom to design their research.

While the absence of an explicit reference to S&T quality as an indicator for determining proposal quality is not a problem in itself, it does create the risk that scientists may get the impression that relevance is more important than the scientific quality of the proposal. It may be useful to try to maintain the link between relevance and S&T quality as much as possible to reduce the risk that the funding is seen as creating two track research capacity; relevance and excellence. It might also be worthwhile reviewing practices that have been applied in the European Framework Programme together with those in development assistance to see what options exist for making scientific excellence conditional and the prime criterion for evaluation.

The African Union Research Grant Programme should be seen as the first step towards constructing an African Research Council, thus it is important to carefully consider the possible implications of turning to the development assistance community for support. This is because there are very few funders that consider that scientific achievements and capacity-building of research institutions and infrastructures are justifiable results in themselves. Thus, these funders would like to ensure that the scientific results have impact beyond the academy, requiring national and institutional commitments.

The OECD/IHERD report on *Centre of Excellence for Capacity Building* (Hellström ed. 20013) shows that some key dimensions are important for scientific excellence:

- the long term viability of the institutions, which includes a sound governance structure ensuring autonomy and self-direction and a broadly accepted commitment to academic values;
- the ability to attract academic “stars” and high levels of recruitment selectivity; and
- collegial consultants for resource allocation.

Furthermore, there are a number of other criteria that seem to nurture excellence namely:

- compatibility of aims between the instrument and the institutional context;
- effectiveness and mutual reinforcement objectives of the instrument and institution; and
- acceptance of the programme by its most important constituencies.

Even if the emphasis in the current African Union Research Grant Programme is on organisational and management aspects, it is unclear to what extent the projects are evaluated using qualitative defining markers of scientific excellence.

Furthermore, the best available evidence suggests that co-location of basic and applied research is another important marker for nurturing excellence because excellent basic research capacity is dependent on a variety of stimuli and problems. If applied research is not in close contact with basic research it quickly runs into quality problems. Thus, facilitating contact between basic and applied science, commissioned corporate research and publicly funded basic research is necessary to maintain excellence (Nedeva 2010). It is unclear how these dimensions are addressed in the African Union Research Grant Programme.

It appears that the African Union Research Grant Programme and parts of Africa's Science and Technology Consolidated Plan of Action build on the assumption that once the projects address socio-economic objectives, there will be uptake in the rest of society. It does not pay attention to the fact that science does not provide ready for market solutions. The last thirty years of innovation policy in developed countries shows that the road from the laboratory to the market or the intended beneficiary is one that has to be peopled with several support points to ensure that the result arrives at the intended destination. Furthermore, moving results from the laboratory to the market is best done at the national rather than regional level. The African Union Council therefore has to rely on the ability of the research institutions and national actors to invest resources in the same research projects for mutual reinforcement so that the results have the intended outcome. To ensure these linkages there is a need for the African Union Council member country and the applicant institution to agree that all parties allocate resources to the same project. Otherwise, there is a risk that the African Union Council instrument becomes isolated, negatively influencing the probability of achieving the intended results.

Possible options for future actions

Providing that the African Union members have a firm political commitment to further develop the African Union Research Grant Programme, it appears to be strategic for the African Union Council to invest in building up a knowledge base so that they can adopt a strategic approach to public R&D funding. It is important that they identify best practices to sustain policy.

This is important, not least because the larger the share of the public R&D funding allocated through competitive means, the higher the governance costs. Detailed knowledge of the pros and cons of types of modalities vis-à-vis each other becomes indispensable knowledge at this point. This is particularly important in the early stages of the construction of an African Research Framework Programme.

Another suggestion for the African Union Council is to review the framework conditions and modalities used in the European Framework Programme, creating the opportunity to draw lessons

from their experiences and contextualise them to avoid policy imitation. This is particularly important if the members of the African Union decide to develop a fully-fledged African Union Research Framework Programme.

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