

IFS-AAS Briefing Document 5/2016

Supporting Collaborative Research in Africa

June 2016

Summary

What is this about?

Supporting scientists in Africa and other places to engage in collaborative research is an initiative where IFS and AAS aim to be helpful. Given the urgency of the challenges facing today's African scientists, we will continue to support them as they contribute to securing affordable food, water and energy for an increasing population, and where their scope for action is constrained by the urgent challenges of environmental sustainability. The strategies of both IFS and AAS aim to contribute to a global research community that is reducing poverty and supporting sustainable development.

Read this if ...

You are in a position to make or influence policy on supporting or funding collaborative research at continental, regional, national and institutional levels.

It involves:

- The outcomes of a pan-African Conference on Collaborative Research, held from 17-19 April 2016 at the African Academy of Sciences in Nairobi, Kenya.
- Messages about the benefits and challenges of, and recommendations for, carrying out and supporting collaborative research.

Consider supporting and funding teams of African researchers to collaborate on discovering multidisciplinary answers to the continent's pressing issues. Be aware of the benefits and challenges of doing so, and also of recommendations to improve experiences of collaborative research in Africa.

Background

With support from the Carnegie Corporation, the Belgian Science Policy Office (Belspo), and the Carolina MacGillavry Fund, the International Foundation for Science (IFS) has developed a process to encourage collaborative research in Africa. It consists of a facilitated social networking platform, a web-based application review system, and ongoing support for 19 research teams in two pilot iterations on the themes of *Neglected and Underutilised Species* and *Biodiversity*. IFS and the African Academy of Sciences (AAS) collaborated to host a Conference on Collaborative Research in February 2016 because the two organisations believe in collaboratively addressing the challenges that scientists in Africa face in doing research. In particular, IFS is of the view that greater collaboration among African institutions of higher education and advanced science is the way forward to address the problems that the continent is facing. For its part, AAS is working hard to boost intra-African collaboration in science while maintaining strong collaborations outside Africa.

Messages to Makers and Influencers of Science Policy in Africa

IFS and AAS hope to collaborate with continental, regional, national and institutional partners, and working within the processes of relevant science, technology and innovation policy frameworks, to encourage science policy-makers and -influencers to consider the following issues of importance in terms of the benefits and challenges of, and recommendations for, carrying out collaborative research.

Benefits

- Researchers are inspired to apply for and win funding; share proposal writing experiences and skills, research data, equipment and materials; and become more effective at working in teams.
- Scientists can travel and network across Africa; learn across disciplines, regions and languages; and gain deeper and broader views of the continent's potentials and challenges.
- Colleagues build expertise at managing projects as national representatives, in planning, logistics, field and laboratory activities, team coordination, and recruitment and training of field staff.
- More scientific results and publications can be achieved with less effort, fewer resources and wider geographical reach.

Challenges

- It can take time and patience to decide on a research focus or topic among several researchers proposing a variety of interesting ideas.
- Making a clear and compelling case for the relevance and economic benefit of the research can be difficult.
- When communication is poor, decision-making can be slow and research progress and outcomes are affected.
- Unless team members' expectations of each other are made clear, there can also be problems with roles, responsibilities and workloads, both at a distance and when colleagues come together.
- Social media and web-based workspaces require reliable internet connections, as well as consideration of time differences across team members' locations.
- Allocation of and access to funds may also prove problematic at team members' institutions, and there are issues of currency exchange fluctuations.
- There can be intra-team issues concerning the sharing of research equipment, materials, infrastructure and funds.

Recommendations

- There should be strong mentorship or advisorship embedded in the process of bringing together and supporting teams of collaborative researchers.
- Guidelines should be developed for both virtual and face-to-face meetings, which should include inception, review and closing meetings to be sure of the progress and performance of the team.
- There should be a web-based platform for sharing data and monitoring progress.
- It would be good to have indicators of how the collaborative research team is working and growing together, and how effective they are at producing relevant results.
- Consideration should be given to unexpected events, with the possibility to revise research plans and reallocate funds.
- Attention needs to be paid to overcoming visa problems that arise between countries.
- Team membership should be widened to include non-research organizations as collaborators, for ease of dissemination and up-take.

Links or references to other documents, information sources and details on this topic:

International Foundation for Science and Stockholm School of Entrepreneurship 2013 *When Scientists and Poets Were Friends: A workshop on interdisciplinarity and creative problem solving methods*. Stockholm: International Foundation for Science and Stockholm School of Entrepreneurship.

International Foundation for Science 2014 *IFS Collaborative Research Workshop: Getting started*. Stockholm: International Foundation for Science.

Haylor G, Porter B, Ghezze N and Savage W 2015 *Investigating Costs and Benefits of Collaborative Research: The results of surveys of IFS collaborative research aspirants and grantees regarding IFS efforts to promote the benefits and reduce the costs of research collaboration assessed after one year*. Stockholm: International Foundation for Science.

International Foundation for Science 2016 *Update on the Collaborative Research Approach*. Stockholm: International Foundation for Science.

This document is part of a series of Briefing Documents prepared by the IFS Secretariat:
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