

**KNAW-NASAC COLLABORATION WORK PLAN TO STRENGTHEN
SCIENCE ACADEMIES IN AFRICA
SUBMITTED BY THE NASAC SECRETARIAT, NAIROBI, KENYA
TIMELINE: 1 JUNE 2010 – 31 MAY 2013**

1. INTRODUCTION

1.1 Network of African Science Academies

The Network of African Science Academies (NASAC) is an autonomous organization whose mission is to “*provide authoritative science advice for policy formulation towards economic, social and cultural development in Africa*”. In order to fulfil this mission, NASAC aims to (i) *Make the voice of science heard by decision-makers in Africa and worldwide, through its members; and (ii) Strengthen science, technology and innovation capacity of its members, and facilitate the creation of science academies in countries where none exist.* NASAC’s secretariat is hosted by the African Academy of Sciences (AAS) in Nairobi, Kenya and has a membership of sixteen¹ science Academies to date.

1.2 Science academies in Africa

Science academies should play a significant role in providing independent, credible advice to governments and society at large. With enhanced physical and intellectual infrastructure, academies can further contribute to key policy decisions and developmental goals more effectively. In Africa however, most science academies (including NASAC members) are under-resourced and lack institutional capacity to confidently provide this much needed service. NASAC therefore provides an avenue and forum through which collective initiatives can be undertaken to promote appreciation of science and science-advice by policy makers in Africa. Unfortunately, the need for independent science advice surpasses the effort made through networking so far. The public and even scholars are often unfamiliar with the role and potential of academies. By organising international conferences and conducting stakeholder forums and focussed in-country workshops, academies in Africa shall become more visible. Regional and international networking will also provide critical opportunities for interaction between scientists and policy makers.

1.3 Overall aim of the KNAW-NASAC collaboration

The overall aim of the KNAW-NASAC collaboration will be to strengthen the capacity of and role of science academies in Africa. Scientifically, the focus for the 3-year cooperation will be on one broad overall theme: ‘*Climate Change*’. The involvement of young excellent scientists in the planned activities is considered important. With regard to institutional capacity building, the training of academy staff will be central, concentrating specifically on improving their communication skills.

The main impact sought is to increase the profile of science academies through direct interaction with policy and decision makers Africa as well as with Dutch scientists involved in Climate

¹ NASAC members include fifteen national science academies from Cameroon, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique, Nigeria, Senegal, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe and one regional academy, the African Academy of Sciences.

Change and related issues. It is envisioned that the main instruments to be used shall be scientific conferences and the electronic medium.

1.4 Strengthening academies' secretariats

Institutional capacity building in basic skills (such as resource mobilisation, organisational development and communication and public relations) is a precondition for being able to develop a strong track record of policy-advisory activities. KNAW can support African academies through sharing practical collaboration skills on mutual secretariat processes and issues such as, and not limited to working with committees, engaging with decision makers, tracking personnel performance, or even monitoring expected outcomes of activities, just to name a few. Additionally, KNAW may also provide pertinent information on capacity enhancement opportunities (e.g. through circulating calls for proposals like the Carolina MacGillavry PhD fellowship, other opportunities for grants or training applications) for secretariat staff members and the academy's membership to participate in.

The collaboration between NASAC and KNAW will therefore carry great weight since the proposed activities are well focussed and aim to meet the needs of academies in Africa. It is further expected that the selected academies will endeavour to share experiences and best practises beyond the current project timeframe as well as beyond the initial four academies in the cooperation.

2. THEMATIC PRIORITY: CLIMATE CHANGE & RENEWABLE ENERGY

NASAC proposes the choice of a central theme as a focus for collaboration and for organising capacity enhancement interventions around it. A thematic priority would therefore serve as an "umbrella" for existing (and future) research in and about Africa. A key criterion in the search for a common theme was "mutual benefit": collaboration between the KNAW and African academies should be relevant from a scientific perspective for both parties and interesting for the natural and the social sciences. Moreover, relevance from a societal point of view was a criterion as well, for example having a connection with the MDGs.

Of paramount international importance globally is climate change. To date, it has received little coordinated attention in Africa, especially in respect to adaptation. Therefore, under this theme, NASAC proposes to focus on ***the impact of, and adaption to climate change on multiple sectors*** (e.g. agriculture, health, water) in Africa. With regard to the responses to climate change, almost inevitably the issue of energy consumption and energy production arises and "renewable energy" shall therefore be included. The importance of this theme was confirmed in a joint statement by NASAC to the G8 in June 2007. Within this broader theme, individual academies will be invited to find their own niche and define specific topics on which they wish to concentrate (e.g. agriculture, food security, health, water, biodiversity). The NASAC Executive Committee will however play a significant role in identifying the focus of the theme for the conferences.

3. STRENGTHENING EXISTING AND NEW ACADEMIES

3.1 Choice of partners

This cooperation shall be considered as a window of opportunity for future collaboration, and therefore, it is only for practical reasons that the focus this time round shall be on the four proposed academies. Hence, the proposed implementation formula is to intensively partner with four existing academies in different stages of development: (i) two moderately-established academies i.e. the African Academy of Sciences (AAS) and Kenya National Academy of Sciences (KNAS); and (ii) two newly-established academies i.e. the Academy of Sciences of Mozambique (ASM) and the Mauritius Academy of Science and Technology (MAST). These specific partners have been selected for the unique dimensions that they provide to the collaboration as follows:

- AAS: Host academy for the NASAC secretariat and the only member with a regional scope in mandate and membership. As at December 2009, had a membership of 189 scientists from 32 African countries. [AAS contact: Dr. Eng. Shem Arungu-Olende, Secretary General – arunguolende@aasciences.org, and staff member - Ms. Patriciah Jeconiah – p.jeconiah@aasciences.org].
- KNAS: Established through an Act of Parliament and receives basic government support. KNAS brings on board its experience, both opportunities and challenges, for direct involvement with government. [KNAS contact: Prof. Joseph Otieno Malo, President – jomalo@uonbi.ac.ke, and staff member Mrs. Noel Abuodha – secretariat@knascience.org].
- ASM and MAST: The youngest members of NASAC and hence previous initiatives did not include them. The two academies have also been in existence for less than 3 years with ASM established in 2009, while MAST in 2007. [ASM contact: Prof. Orlando Quilambo, President - quilambo@zebra.uem.mz with staff member Innocente Mutimucuo - inocente.mutimucuo@uem.mz and MAST contact: Prof. Soodursun Jugessur, President - sjugessur@mrc.intnet.mu with staff member Dr. Yousouf Maudarbocus mbmltd@intnet.mu].

3.2 Networking support

In addition to the capacity strengthening activities with the four selected academies, the NASAC secretariat will proactively involve other NASAC members to seek their input and participation in the joint activities. For instance, for the youngest academies (ASM and MAST), mentorship shall be sought from the Academy of Sciences of South Africa (ASSAf), which currently acts as the NASAC's lead academy in creating awareness for science academies in the Southern African region. Furthermore, through networking support, the selected academies will also participate in a number of capacity building training workshops which cover topics such as: i) organisational development, ii) resource mobilisation, and iii) communications and public relations. These activities are aligned to the “programme officers training workshops” that NASAC is envisaging with funding from the Netherlands Ministry of Foreign Affairs, whose outcome is to ensure that academy staff execute their tasks with a high degree of professionalism. Given that KNAW has a vibrant Communications Department, it is expected that some key personnel from that

department would contribute by sharing their expertise and experiences with other academies in Africa.

3.3 Launching the collaboration

The NASAC-KNAW collaboration shall officially be launched through a meeting of all participating academy officials, together with officials and staff members of both NASAC and KNAW. During the launch meeting in-depth discussions shall focus on the intended collaboration activities, specified responsibilities, and expected outputs and outcomes. This launch meeting, which shall be held on 12-13 July 2010 in Nairobi, Kenya, shall be combined with the meeting of the Organizing Committee for the first conference.

3.4 Scientific Conferences

The proposal is to organise two scientific conferences on the theme *Impact of and Adaptation to Climate Change in multiple sectors such as Food Security, Renewable Energy etc.* The first of which shall be hosted in Kenya (early 2011), and the second shall be hosted in Mauritius (early 2012). At each conference, all academies will be actively involved in planning and sharing experiences, while engaging with key resource persons and policy makers in the identified themes. Table 1 below provides a brief overview of the conferences.

Table 1: Overview of scientific conferences

Operational aspect	2011 Conference	2012 Conference
Host academies	KNAS and AAS	MAST and ASM
Venue	Nairobi, Kenya	Port Louis, Mauritius
Desired number of participants	50 international 15 local (from host country)	45 international 15 local (from host country)
Number of days	3 days	2 days
Provisional dates	23-25 February 2011	1-2 March 2012
Planning period	7 months prior to event hence from June 2010	7 months prior to event hence from July 2011

The added value of such an alliance for the selected academies is that it will build their institutional capacity and help them gain international visibility by organising international events. The events will be open to all interested top scientists in Africa, meaning that scientific meetings will also be open to non-NASAC members. For this reason, it makes sense to include the African Academy of Sciences (AAS), whose membership stretches far beyond the formal membership boundaries of NASAC. KNAW will be expected to provide input to conference content and resource persons, hence where possible provide Dutch expertise through the involvement of its own membership. It is therefore assumed that a designated project official shall be provided by KNAW, who shall be the central contact person for this collaboration. Specific responsibilities shall be shared as highlighted on Table 2 below.

Table 2: Specific responsibilities for the conferences

Task	Responsible party	Tentative Time-lines	Assumptions
Developing terms of reference (ToRs) for Conference Organizing Committee	<ul style="list-style-type: none"> NASAC secretariat and respective host academies Input from KNAW 	June 2010 (conf.1) July 2011 (conf.2)	Decision on relevant aspects of the conference theme will be reached on time.
Selection and meeting of Organizing Committee	Each partner academy and KNAW to nominate 2 experts on the theme.	July 2010 (KNAS & AAS) August 2011 (MAST & ASM)	Maximum of 10 members accept to serve on committee on voluntary basis.
Development of programme and identification of resource persons	<ul style="list-style-type: none"> Organizing Committee (OC) to draft programme and identify resource persons. Host academies to provide OC co-chairs. NASAC to provide secretariat support to the Committee's work. 	Immediately after constitution of organizing committee	Suitable resource persons and sessions are identified for the 2-day programme.
Local hospitality and logistical arrangements	Host academy secretariats	Immediately after first conference announcement	Secretariat staff time available to make the necessary arrangements.
Post conference activities: (i) publication and dissemination of proceedings (ii) Establishment of a taskforce to develop concept note for follow-up activities. (iii) Release of NASAC statement based on the recommendations from the conference.	(i) NASAC secretariat and host academies; (ii) Organizing Committee	Immediately after conference	Conference participants or OC members can serve as taskforce members.

From *Table 2* above:

- It is proposed that an Organizing Committee of ten (10) members with expertise on the theme shall be constituted.
- Each partner academy (AAS, KNAS, MAST, & ASM) and KNAW shall be requested to nominate two such experts.
- It is envisioned that the Organizing Committee shall meet once prior to the conferences, and the meetings hosted by KNAS & AAS (Kenya) and MAST & ASM (Mauritius) respectively.
- Academy officials would be welcome to participate in the Organizing Committee meetings as observers. The first Organizing Committee meeting.
- The first Organizing Committee meeting shall be combined with the launch meeting in Nairobi planned for July 2010.

4. *ENGAGING WITH YOUNG SCIENTISTS*

There is a unanimous call for more involvement of young scientists in African academies. The current generation is relatively isolated from international networks. It is important to improve the mobility of African scientists so as to enable them to strengthen their national and international networks. Scientists originating from Africa but currently in the Diaspora should also be involved. Young scientists are instrumental in revitalizing science academies in Africa. As indicated, a maximum of two scientific conferences will be organised on Climate Change and Renewable Energy. These events will prioritize to bring together the best young scientists that Africa and the Netherlands have to offer. A target is set to have at least 30% of the conference participants being scientists of below the age of 45 years, who are either young researchers or young professors at universities or research institutes.

A more interactive approach shall be developed in consultation with KNAW to provide for closer links between KNAW-Young Academy and the NASAC membership. Specifically, it is proposed that:

- The KNAW-Young Academy model and its advantages can be explained to science academies in Africa at one of NASAC's regular meetings, so that members can debate whether this is a suitable model for African academies to emulate.
- Provisions are made for 2 young scientists from Africa to participate in the scientific meetings of the KNAW Young Academy if and when such meetings are organized in the Netherlands.
- Linkage with the TWAS-Regional Office for Sub-Saharan Africa (ROSSA) shall also be established, especially with regard to the annual TWAS-ROSSA Young Scientists' Conferences.

5. LOGICAL FRAMEWORK

Under this collaboration, the key areas of focus shall be to:

- a) Organize two conferences to increase awareness and dialogue between scientists and decision makers on climate change and renewable energy in Africa;
- b) Strengthen operational capacity of the four science academies; and
- c) Engage with young scientists.

Overall Objective			
To provide support to strengthen four science academies in regard to improved decision-making and policy formulation on climate change in Africa by 2013 ² .			
Specific Objectives:	Indicator	Source of Verification	Assumption
1 <i>Influence policy formulation through provision of science-based advice on climate change</i>	<ul style="list-style-type: none"> • 2 regional fora receiving science advice input from academies 	<ul style="list-style-type: none"> • Actual conference announcement, newsletters and websites • Conference reports 	<ul style="list-style-type: none"> • Stakeholders take up scientific input in policy matters
2 <i>Facilitate and provide mutual support to strengthen Member Academies.</i>	<ul style="list-style-type: none"> • 4 science academies with capacity to offer science advice on climate change and renewable energy 	<ul style="list-style-type: none"> • Secretariat staff feedback reports 	<ul style="list-style-type: none"> • Resources are secured for the sustainability of the academies

	Results/Outcomes	Objective verifiable indicators	Source of verification	Assumptions
1.1	Awareness created amongst decision makers on the impact of and adaptability to climate change on multiple sectors (e.g. food security, energy, etc).	<ul style="list-style-type: none"> • At least 1 member academy consults with their national government to formulate science-based policy on climate change adaptation³ • At least 3 government officials from relevant ministries participate in the conference by 2013 	<ul style="list-style-type: none"> - Conference reports - Correspondence between academies and national governments on climate change responses. 	<ul style="list-style-type: none"> • African governments implement recommendations made by the academies • Government officials are available to participate in the conferences.
Activities	1.1.1 Organize two scientific conferences 1.1.2 Invite African young scientists to participate. 1.1.3 Draft and circulate joint communiqué/press releases/statements			

² This overall objective is contributed by other actors as well and only partly by KNAW-NASAC collaboration.

³ Academies participate in government-initiated fora on climate-change-related issues.

	Results/Outcomes	Objective verifiable indicators	Source of verification	Assumptions
2.1	Existing academies' secretariat operations strengthened.	<ul style="list-style-type: none"> • 4 academies receive administrative support to strengthen their operations by 2013. • 4 academies participating in programme officers' training workshops 	<ul style="list-style-type: none"> - Academy annual progress reports - Feedback reports from trained staff 	<ul style="list-style-type: none"> • Availability of resources to implement best practices at the academies
Activities	<p>2.1.1 Provide financial support to academies' priority-activities for the secretariat development.</p> <p>2.1.2 Facilitate academies' staff exposure to regional activities through NASAC-KNAW collaboration.</p> <p>2.1.3 Engage with KNAW Young Academy through collaborative activities.</p>			
2.2	NASAC institutional capacity strengthened.	<ul style="list-style-type: none"> • 4 NASAC staff members apply project management principles in the implementation NASAC-KNAW initiative. • NASAC secretariat and Executive Committee proactively engage members in drafting and disseminating resolutions on climate change and renewable energy. 	<ul style="list-style-type: none"> - NASAC narrative and financial reports - Feedback reports from NASAC staff and Committee Members. - correspondence between NASAC secretariat and stakeholders 	<ul style="list-style-type: none"> • Availability of staff to carry out designated tasks. • Staff attrition will be nil
Activities	<p>2.2.1 Provide for NASAC-personnel staff time in the collaboration.</p> <p>2.2.2 Undertake capacity development for secretariat staff for all partner academies.</p>			

7. ESTIMATED COLLABORATION BUDGET IN EUROS

Outcomes	Activities	1 Jun 2010-31 Dec 2010 (6-months period)		1 Jan 2011-31 May 2012 (18-months period)		1 Jun 2012-31 May 2013 (12-months period)	
		NASAC	KNAW	NASAC	KNAW	NASAC	KNAW
0. NASAC-KNAW collaboration is launched	Travel for 2 KNAW and 4 (MAST and ASM) academy officials		7,200				
	Travel for 5 NASAC officials	6,000					
	Accommodation and meals for 11 officials for 3 nights	6,600					
	Conferencing for 17 officials for 2 days	1,360					
	Activity 0. subtotal	13,960	7,200				
1. Awareness created amongst decision makers on the impact of and adaptability to climate change on multiple sectors	1.1 Hold Conference Organizing Committee meeting						
	Travel to meeting venue for 8 experts @ €1200 each		9,600		9,600		
	Accommodation and meals for 3 nights @ €200	6,000			6,000		
	Conferencing for 10 members for 2 days		800		800		
	Hire of equipment, stationary and communication		1,500		1,500		
	Local transportation		1,000		1,000		
	Miscellaneous costs		500		500		
	Activity 1.1 subtotal	-	19,400	-	19,400		
	1.2 Host first scientific conference in Kenya						
	Travel to meeting venue for 50 participants @ €1200 each			60,000			
	Accommodation and meals for 4 nights @ €200			40,000			
	Conferencing for 60 participants for 3 days @ €40			7,800			
	Hire of equipment, stationary and communication				2,000		
	Local transportation				1,500		
	Miscellaneous costs				1,000		
	Activity 1.2 subtotal	-	-	107,800	4,500		
	1.3 Host second scientific conference in Mauritius						
	Travel to meeting venue for 45 participants @ €1200 each						54,000
	Accommodation and meals for 3 nights @ €200						27,000
	Conferencing for 60 participants for 2 days @ €40						4,800
Hire of equipment, stationary and communication						2,000	
Local transportation						1,500	
Miscellaneous costs						1,000	
Activity 1.3 subtotal	-	-	-	-	90,300		
1.4 Draft and circulate joint communiqué and press releases for the conferences					1,750	1,750	
2. Existing academies' secretariat operations strengthened	2.1 Support academies' priority activities for secretariat development @€3,000 per academy		12,000		12,000	12,000	
	2.2 Facilitate participation of 2 young scientist to KNAW Young Academies scientific meetings						
	Travel to Netherlands for 2 scientists @ €1500 each		3,000		3,000		
	Accommodation and meals for 3 nights @ €300		1,800		1,800		
	Local transportation and miscellaneous		600		600		
	Activity 2.2 subtotal		5,400		5,400		
3. NASAC institutional capacity strengthened	3.1 Institutional support and staff time for collaboration work	3,240	2,000		25,000	20,000	
	Subtotal	17,200	46,000	107,800	68,050	-	
	Contingency and overheads at 5%		2,300		3,403	6,203	
	Grand total	17,200	48,300	107,800	71,453	0	
Total Collaboration Contributions:							
	NASAC	125,000					
	KNAW	250,005					
	Total funds	375,005					

Budget Notes:

(i) The organizing committee shall meet in the countries hosting the conferences hence it is assumed that 2 experts will be local residents and not require travel. The meetings shall take place immediately after members are selected i.e. in July 2010 and August 2011. The first OC meeting shall be combined with launching of the project.

(ii) Travel and accommodation charges are based on average estimates.

(iii) Academies shall develop proposals for follow-up in-country staff or members activities for up to a maximum of €3,000 annually.

(iv) The selection of young scientists to participate in the KNAW Young Academy meetings will be done competitively and will be open to all members of NASAC.

(v) The institutional support shall be provided to guarantee staff time and facilities in the course of the collaboration. In the first 6 months of the project staff involvement shall be supplemented by the Ministry's funding already secured.

(vi) Contingency and overhead cost shall be used to meet the inherent costs of operations such as office facilities, stationery, communication and utilities.

Signed: NASAC President 

Network Coordinator 