

Science Education and Literacy in Africa through NASAC

Jackie Olang Kado
Executive Director, NASAC

IAP SEP Global Council Annual Meeting 20-21 August 2019 – Bangkok, Thailand

Outline

Network of African Science Academies (NASAC)

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- 5. Spin-offs from SEP initiatives

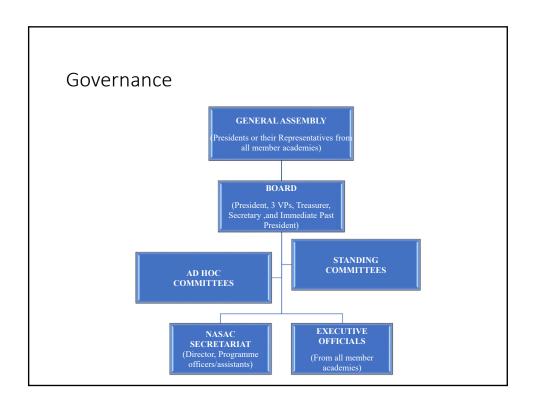
About NASAC

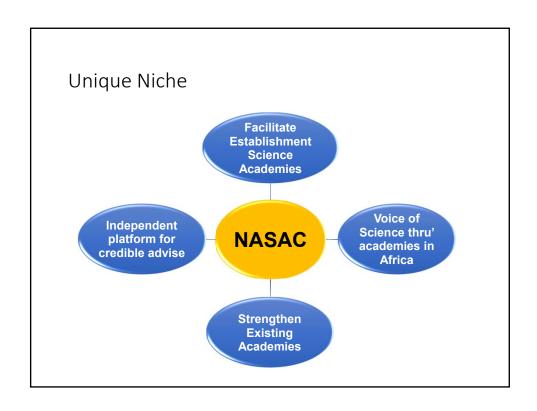
Membership and mission

| 28 Member-Academies | |
|---------------------|-----------------|
| AAS (Regional) | Mauritius |
| Algeria | Morocco |
| Benin | Mozambique |
| Botswana | Nigeria |
| Burkina Faso | Senegal |
| Cameroon | South Africa |
| Congo Brazzaville | Sudan |
| Ethiopia | Tanzania |
| Ghana | Togo |
| Ivory Coast | Uganda |
| Kenya | Zambia |
| Madagascar | Zimbabwe |
| Rwanda (2018) | Burundi (2018p) |
| Tunisia (2018p) | Egypt (2018p) |

Founded in Dec. 2001 as independent network for African science academies to:

"provide authoritative science advice for policy formulation for development in Africa"





Flagship programmes and outputs



Other programmes and outputs





SDGs dimension

Science Education Programme (SEP)

Science Education Programme (SEP)

- NASAC's flagship programme since 2007 and SEP Working Group members appointed by the Board as an advisory group
- Regional and international collaboration on SEP (jointly hosted SEP events in Cameroon, Chile, Finland, France, Kenya, Senegal, South Africa, Uganda)
- Enhanced capacity to deliver on SEP Mandate
 - ➤ Terms of reference for governance and role
 - ➤ Hold face-to-face meetings
 - ➤ Adopt training-of-trainers activities for teachers
 - Engage students and early career researchers for posterity
 - ➤ Support IBSE pilot schools in Cameroon and Uganda

Partnerships for SEP

IAP partnership for NASAC-SEP

- Workshop on Gender Mainstreaming for Science Education in Africa in April 2017 in Nairobi, Kenya (joint event for WfS and SEP working groups)
- Training Seminars for science teachers in partnership with French Academy's La main à la pâte
- Academy mentorship on SEP for new NASAC members (encourage peer to peer learning and sharing of practical experiences)
- Meetings of the SEP Working Group members on 8-9 October 2019 in Nairobi, Kenya - 'Promotion of Climate Change Education in Africa'





Network of African Science Academies (NASAC)

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Chinese and French Academies Partnership

BRISECC

- Member of Belt and Road International Science Education Coordinating Committee (BRISECC) and Partner
- Fostering IBSE (Inquiry-based Science Education) for African students, science teachers and scientists through Belt and Road Teenager Makers Camp and Teacher Workshop by CAST/CYSC
- Encourage the participation of NASAC members and involvement in Science for students

AEMASE

- Co-organized [with the French Academy] and supported the participation of science education experts to the African European Mediterranean Academies for Science Education (AEMASE) conferences
- Supporting the participation of African scientists to CESAME centers and at AEMASE activities

Spin-offs from SEP initiatives

Enhanced science culture in Africa





- Popularization of science at community and policy levels targeted at improved science teaching and learning
- Championing pursuit of science careers among students in general and girls in particular
- Engaging with young researchers and early career scientists in transdisciplinary research (LIRA2030)
- Facilitating a SEP community of practice among teachers and scientists
- Utilization of local materials for science lessons with an emphasis on relevance for place-based knowledge

Linking science education and literacy to global UN-SDGs and regional AU-STISA



- Contextualize global issues in local environments e.g. Climate change education
- Focus on solution-oriented science education to reduce resource duplication and wastage (relevance)
- Secure SEP buy-in by involving all stakeholders from the onset (academia, policy, public) to factor SDG/STISA
- Attempt to address sustainability issues upfront (acknowledging inkind contributions by schools and the private sector)
- Consistently applying gender lens

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