

NEWSLETTER



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SASSCAL Inaugurates New Members to its Governing Board



Regional experts form part of the Scientific Advisory Committee (SAC)



EXECUTIVE DIRECTOR'S OPENING REMARKS



Dr Jane Olwoch

SASSCAL Executive Director

Rising temperatures, extreme weather and climate events that impact negatively on livelihoods: How do we bounce back??

Several papers, books and websites have described the term resilience. In the recent times, climate resilience has become a household name. And yet, studies show that it is very difficult to put it into actions. According to the “Oxford English Dictionary,” the first reference to resilience was by Francis Bacon in the 17th Century in which the word resilience was used to describe the physical characteristics of an echo and how it bounces back off a wall. Literally and stated recently by the Resilience Portal, resilience literally meant “to bounce back.” “Many people have redefined the term from Bacon’s day, but one aspect has not changed: there must be something to bounce back from.

In consideration of different regions, nations, towns and villages that human beings inhabit and in view of the different physical and geopolitical factors at play, there can never be one resilient model for all. For example, some people must be resilient to too much water, others like in SADC to little water. Therefore, effective execution of resilience requires a deep understanding of risks, impacts of climate change and vulnerability of a system or society.

“Bouncing back” in response to climate change must be addressed from many origins, routes and destinations at the lowest scale possible and yet the causes are global. This underscores a holistic, sustained and coordinated effort to improve climate resilience.

SASSCAL continues to be an example of partnerships across national borders in addressing global change challenges. The signing of the SASSCAL treaty and the Joint Declaration during the second Ministerial meeting in September 2019 was an important milestone that have laid a solid foundation and prepared the organisation towards international status. At the same occasion, the SASSCAL Council of Ministers was successfully inaugurated. The Council of Ministers is the highest organ of SASSCAL and is constituted by the Ministers responsible for SASSCAL in the Member States and the German Federal Ministry of Education and Research (BMBF). SASSCAL also welcomes the new members to its Governing Board and also the Scientific Advisory Committee (SAC).

The second research programme is underway having started the review of the proposals submitted. This paves way for new research projects to be implemented in the region. The SASSCAL Graduate studies programme in Integrated Water Resources Management (SGSP-IWRM) also gained its momentum as the final stages of signing the MoU between SASSCAL and NUST and SASSCAL and ICWRGC (German) are under way.

Then COVID-19 struck!! What has COVID -19 showed us about our resilience? Did we anticipate? Were we prepared? How fast and well have we respond???

Despite COVID-19 and its disruptions, SASSCAL stayed on course with its programme. Deliverables on the WeMAST project that is funded by African Union were on course. SASSCAL also welcomed anew project. The **“Go Green Go Africa Initiative”**, funded by the Renewable Energy and Hydrogen Technologies Department of BMBF expanded SASSCAL’s horizons in responding to climate change. The Atlas of Green Hydrogen Potential in SADC increases SASSCAL’s footprint in the region, first by signing an MoU with SACREEE and implementing the project in 12 Countries in SADC. SASSCAL is also now recognised

among the many institutions looking further than regional responses, but to the global scale in terms of contributing to reduction in Green house emissions and several SDGs.

I would like to thank SASSCAL staff members for staying on top of their deliverables while we work from home and sometimes in the office at a rotational basis.

I would like to thank you all, our valuable stakeholders for your continued support. May I welcome you to read these stories and more in the newsletter presented.



SASSCAL INAUGURATES NEW MEMBERS TO ITS GOVERNING BOARD

The new SASSCAL Governing Board was inaugurated in Zambia on 15 January 2020. The Board will serve for a term of three years from 2020 to 2022. Guided by the Vision,

Mission and Values, the Governing Board provides High level guidance and ensures SASSCAL alignment to Member State's and the region's climate Agenda.

Country	Board member	Alternate member
Angola	Prof Gabriel Luis Miguel (retained)	Prof Virgínia Maria Abrunhosa Lacerda Quartim (new)
Botswana	Dr Oldman Koboto (new)	Mr Balisi Gopolang (retained)
Germany	Prof Rene Haak (retained)	Dr Karsten Hess (new)
Namibia	Ms Sophia Kasheeta (new)	Mr Sageus Kintinu (new)
South Africa	Dr Yonah Seleti (retained)	Mr Dumisani Mthembu
Zambia	Mrs Jane Mubanga Chinkusu (retained)	Mr John Lukonde Chongo (new)



Pictured during the inauguration of the SASSCAL Governing Board on 15 January 2020, in Livingstone, Zambia: From Left: Mr John Chongo – Alternate Board member Zambia, Mr Sageus Kintinu – Alternate Board member Namibia, Ms Sophie Kasheeta – Board Member Namibia, Prof Virgínia Maria Abrunhosa Lacerda Quartim – Alternate Board member Angola, Mrs Jane Chinkusu – Board Chair and Board members Zambia, Prof Gabriel Miguel – Vice-Chair and Board member Angola and Dr Hess – Alternate member Germany.

The Board Strategy Meeting

The Board strategy meeting was held on the 10 -12 March 2020, in Windhoek Namibia. Amongst others, the strategy meeting discussed the Business Plan and the Financial plan of SASSCAL for 2020 to 2024. At that meeting the SASSCAL Governing Board inaugurated the Scientific Advisory Committee (SAC).

REGIONAL EXPERTS FORM PART OF THE SCIENTIFIC ADVISORY COMMITTEE (SAC)

The SASSCAL Governing Board inaugurated the Scientific Advisory Committee (SAC) on 10 March 2020, in Windhoek, Namibia. The SAC will serve for a period of three years (2020 – 2022). The SAC consists of up to 11 ordinary members nominated by the SASSCAL Member States or Funding partner and formally appointed by the Governing Board. The SAC provides scientific advice on research activities that inform and guide decision

making and policy implementation. Among others, the SAC conducts assessments on the scientific progress of the institution, provides recommendations and scientific advice on research activities and ensures that it supports the regional and national level priorities set by the SASSCAL member countries. That SAC also ensures institutional alignment to the national, regional and international research agendas.



From front to the back: Ms Kasheeta – Namibia Board Member, Mr Kintinu – Namibia Alternate Board Member, Mrs Chinkusu – Zambia Board Member and Board Chair, Dr Botai – SAC Chairperson, Dr Matros – Goreses – SAC Vice Chairperson, Dr Olwoch – SASSCAL Executive Director, Dr Pollmann – DLR-PT representative, Dr Kwenye – SAC, Prof Miguel -Angola Board Member and Vice Board Chair, Dr Chikoti – SAC, Dr Mvula – SAC and Dr Helmschrot – SASSCAL Director for Science and Technology pictured at the inaugural of SAC meeting in Windhoek, Namibia.

EXPLORING THE POTENTIAL OF A GREEN HYDROGEN ECONOMY IN AFRICA

The H2Atlas-Africa project is an initiative of the German Federal Ministry of Education and Research (BMBF), lead by Forschungszentrum Jülich GmbH in partnership with a consortium of relevant African research institutions and organizations. The project aims to produce an Atlas of Green Hydrogen generation potentials in Africa. SASSCAL is coordinating the Southern Africa region activities, while the West African Science Service Centre

The project will explore the potential for generating Green Hydrogen in the African continent. The immediate outcome of the project will be an interactive atlas, showing identified Green Hydrogen hotspots. These hotspots will support a Green Hydrogen economy in the region.

The project has a high potential to make Africa an exporter of green hydrogen, thus gaining more



Pictured during the launch of the H2Atlas-Africa project: (from left) Prof. Harry Vereecken (Director of the Institute for Bio and Earth Sciences, Agrosphere), Dr Solomon Agbo (project coordinator), Dr Heidi Heinrichs (Institute for Energy and Climate Research, Techno-Economic Systems Analysis), Parliamentary State Secretary Thomas Rachel, Chairman of the Board Prof. Wolfgang Marquardt, Prof. Detlef Stolten (Director Institute for Energy and Climate Research, Techno-Economic Systems Analysis), Dr Wilhelm Kuckshinrichs (Head of the Institute for Energy and Climate Research, Systems Research and Technological Development) and Prof. Uwe Rau (Institute for Energy and Climate Research, Photovoltaics).

for Climate Change and Adaptive Land Management (WASCAL) coordinates the West African region's implementation activities.

The project was launched in Forschungszentrum Jülich GmbH on 10 June 2020. SASSCAL virtually participated at the launch of the H2Atlas-Africa project (<http://www.sasscal.org/wp-content/uploads/2020/06/message-from-sasscal.mp4>).

relevance in the international energy market and reducing dependence on fossil fuels. Generation of Green Hydrogen should contribute to the socioeconomic needs, diversification of the regions' economy and impact job creation in the region.

SASSCAL AND SACREEE SIGN AN MOU TO KICKSTART THE H₂ATLAS-AFRICA PROJECT



SASSCAL Executive Director Dr Jane M Olwoch (left) and SACREEE Executive Director Kudakwashe Ndhulukula (right) pictured during the signing of the MoU.

SASSCAL has identified and signed a Memorandum of Understanding (MoU) with the SADC Centre for Renewable Energy and Energy Efficiency (SACREEE) as a key partner to the Southern African regional implementation of the H₂Atlas-Africa project. The MoU establishes long term cooperation in areas of mutual interest for the two institutions. As the two institutions share the need to further strengthen the climate change - energy nexus, this collaboration will be extended to include other areas such as research, capacity development and data sharing aligned with sustainable development. Both institutions recognise the need to promote the use and sharing of data in support of regional planning and socio-economic development.

SACREEE has the mandate to promote renewable energy and energy efficiency technologies and services through a market-based approach by resource mobilisation, policy harmonisation, quality assurance,

capacity building and knowledge management and communication in the SADC region. SASSCAL's mission is to strengthen the regional capacity to generate and use scientific knowledge products and services for decision making on climate change and adaptive land management through research management, human capital development and services provision.

The H₂Atlas-Africa project will explore the potentials of Green Hydrogen production from the enormous renewable energy sources within the African continent. Current studies have revealed that coal supplies 75% of power generation in Southern Africa. Transitioning from fossil fuels to renewable energy represents a co-benefit in terms of reduction of greenhouse gases and reducing pollution from fossil fuels. Hence, this project is relevant to the SADC region which is generously endowed with renewable energy resources such as solar, wind and hydro.

AUC GMES AND AFRICA DELEGATION TECHNICAL TOUR

SASSCAL welcomed and hosted the African Union Commission (AUC) Global Monitoring for Environment and Security (GMES) and Africa high-level experts' team from 2 to 3 March at the Regional Secretariat in Windhoek, Namibia. The team

reviewed the project workplan for the final year of implementation. The visit provided the opportunity for the WeMAST design team to share the first version of the geoportal prototype and gain valuable inputs from the AUC technical team. The WeMAST consortium is in the



Front row from left: Dr Tidiane Ouattara - Space Science Expert and GMES & Africa Programme Coordinator, Dr Jane Olwoch - Executive Director of SASSCAL, Ms Hedwig Black - Programme Officer, SASSCAL Namibia Node, Ms Chipso Chirefu-Toto - Director Administration and Finance, SASSCAL, Dr Joerg Helmschrot - Director Science, Technology and HCD, SASSCAL, Mr Hamdi Kacem - AUC, Mr Samson Mwinga - OADC Coordinator, SASSCAL, Mr Panduleni Hamukwaya - Programme Coordinator, SASSCAL Namibia Node, Mr Albano dos Santos - Software Developer, SASSCAL, Dr Mahaman Bachir Saley - AUC, Ms Silvia Thompson - GIS Analyst, Ms Chenayi Marangwanda - Fundraising and Contracts Officer, SASSCAL.

was led by Dr Tidiane Ouattara, the coordinator of the African Union Commission (AUC) Global Monitoring for Environment and Security (GMES) and Africa. This was their second Monitoring and Evaluation (M&E) visit to SASSCAL.

The expert team was briefed on the progress of the Wetland Monitoring and Assessment Service for Transboundary basins in southern Africa (WeMAST) project and discussions were held on key challenges encountered by the implementation consortium. SASSCAL, as the lead consortium member for the project, showcased the progress on the work programme and

process of developing the WeMAST geoportal which will complement and transform wetland monitoring and assessment procedures in the region and will effectively integrate Earth Observation technologies into these procedures. The WeMAST team was encouraged to draw on lessons learned by other consortia within the GMES and Africa programme and to strengthen partnerships that will allow successful development of the WeMAST geoportal. Dr Ouattara congratulated SASSCAL and its partners on the progress made thus far and called for strengthened coordination mechanisms between SASSCAL and the AUC to ensure success of the project.

BIODIVERSITY AND PREVENTING FUTURE PANDEMICS

SASSCAL participated in the high level and well-attended webinar on biodiversity and preventing future pandemics held on Wednesday 17 June 2020. The Webinar was hosted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO). The minister of environment in the government of Rwanda Hon Dr Jeanne d'Arc Mujawamariya was the guest speaker. She stated that pandemics like COVID-19 force us to rethink on how we manage our behaviour towards biodiversity. If we value biodiversity and respect nature, we stand a better chance as our lives depend on the services of biodiversity and nature. Hon Mujawamariya called on people to put nature at the heart of everything. She also emphasised that nature can survive without us, but we cannot survive without nature.



The SASSCAL Executive Director (ED), Dr Jane M. Olwoch, in her presentation at the webinar highlighted that all forms of life are dependent on biodiversity and ecosystems health, yet these important topics are neglected in many aspects. This dependency is evidence of the interconnection of food chains, people, animals and climate among others. Thus, the integrity of ecosystems maintains a healthy environment for both animals and humans, she noted. Dr Olwoch also showcased the interconnection of the Sustainable Development Goals (SDGs). With the COVID-19 pandemic, attainment of SDG 3 which aspires to ensure health and well-being for all,

including a bold commitment to end AIDS, tuberculosis, malaria and other communicable diseases by 2030 has become even more urgent. The ED discussed how attaining this single SDG would contribute towards addressing other SDGs. For example, health and well-being for all is directly reliant on, no poverty (SDG 1), zero hunger (SDG 2), quality education (SDG 4) clean water and sanitation (SDG 6), affordable clean energy (SDG 7), climate action (SDG 13) and partnerships to achieve the goals (SDG 17) among others. Despite such evidence of interconnection, people continue to conduct research in silos resulting in duplication of efforts and wastage of resources.

Dr Olwoch pondered whether “at the moment, the human race could be demonstrating the peak of Hardin’s tragedy of the commons”. Climate change is not acting alone, there is high population growth, overexploitation of natural resources, rising of greenhouse gasses, and unsustainable land management practices. This results in the loss of biological diversity and thus diminishing nature’s defence system. People are indeed using and overexploiting natural resources for personal use and to their advantage without considering the good of a group, society and even future generations. The world’s carrying capacity is limited, overexploitation has a direct impact on the quality of lives. A rich biological diversity is fundamental for the protection of human health and well-being, she added.

The webinar concurred on the need for humanity to rethink its position on how to bring harmony between humans and nature. Humanity is totally dependent on the wellbeing of biodiversity as well as the attainment of international, regional and national targets like the SDGs and Africa Agenda 2063. Panellist also emphasised on the importance of indigenous knowledge towards sustainable development. There was a consensus that the African continent has many local research outputs yet there is evidence that most policies are not informed by science. The need to strengthen the science-policy interface remains crucial. For as long as there are limited conversations and insufficient dissemination of information, the continent will continue to languish in limited knowledge and uninformed policies. The webinar also called on the promotion of harmony between people and nature as well as solidarity and equity between generations.

In her closing remarks, Dr Olwoch advocated for the implementation of the vast research outcomes for the development of sustainable and resilient institutions, infrastructure, cities and countries. “There is an urgent need to prioritise land-use planning to safeguard ecosystem functioning”, she said. Climate change and ecosystem services are not localised. Strong and international partnerships are fundamental not only for preserving biodiversity and preventing future pandemics but also for addressing global challenges.

Institutions must, therefore, explore new partnerships like the Future Earth Regional Office for Southern Africa (FEROSA) that has the role to bring science and policy together. Dr Olwoch also highlighted the need to invest and support renewable energy especially Green Hydrogen as a means of ensuring a greenhouse gases emission-free future. She challenged the world to ‘rethink our ways and plan better’.

SASSCAL COVID-19 Response

SASSCAL adhered to all member states regulations and guidelines in all its offices. All SASSCAL offices were closed and staff were working from home. Weekly internal meetings were held on the Microsoft Teams Meeting Platform. External engagements were also moved to virtual platforms including the signing of the MoU with SASCREEE.

When the easing of lockdowns started. SASSCAL also conformed to country regulations with the guidance of the SASSCAL ED. At the Regional Secretariat, a Head of the SASSCAL COVID-19 Return to work Operations was appointed. The offices were all sterilised, hand sanitizing stations were implemented, masks were procured for staff, social distancing is observed at all times, a register was adopted. Various other efforts have been implemented including information posters around the offices. Staff members were kept abreast of developments through correspondence including internal memos and all staff meetings by the ED.

As the global village begins to recover from the pandemic, SASSCAL looks to the horizon for what is to come, as it is met with an opportunity to learn from the recent months and begin planning for a future operational state that is more resilient in the face of such hazards. While SASSCAL, like many organisations and even the world at large, was not prepared for the pandemic, management had to make rapid decisions that were aligned with all member states COVID-19 response plans. SASSCAL has thus far achieved comprehensive business resilience.



GMES AND AFRICA EARTH OBSERVATION COMMUNICATION WORKSHOP IN ADDIS ABABA

The GMES and Africa Earth observation (EO) Communication Workshop, was held at the Africa Union Commission headquarters from 9 to 12 March 2020 in Addis Ababa, Ethiopia. The workshop was attended by GMES and Africa consortia, representatives of the GMES and Africa Program Management Unit (PMU) and various representatives from AU and consultants from Space-Tec. The workshop was officially opened by Dr Tidiane Ouattara, GMES and

with tools and techniques to communicate more effectively on earth observation as well as GMES and Africa's activities within their regions. The SASSCAL-led WeMAST (Wetland Monitoring and Assessment Service for Transboundary Basins in Southern Africa) was represented at the workshop by Ms Sylvia Thompson and Ms Kalkidan H. Tesema.

The workshop emphasized on the importance of using



GMES and Africa EO Communication Workshop Group picture

Africa Program Coordinator. Dr Ouattara emphasized the importance of communication on EO as well as GMES and Africa's activities across the continent. The workshop was facilitated by representatives of Space-Tec who are the consultants of Copernicus.

The workshop brought together communication functionaries of GMES and Africa's regional consortia, to help strengthen their communication output and impact. It took the form of a capacity building and best practice sharing that equipped participants

social media particularly, Twitter, to communicate the GMES & Africa support programmes activities. In line with this, the workshop also equipped the participants with tools and guidelines from Copernicus best practices and challenges.

It is envisioned that the knowledge acquired from the GMES and Africa Communication Workshop will be instrumental for a successful implementation of SASSCAL's communication strategy as well as engaging stakeholders through various media related platforms to promote SASSCAL's activities, products and services.



SASSCAL'S CAPACITY DEVELOPMENT IN PRACTICE

SASSCAL successfully implemented and completed the Innovative Technologies to Improve Climate Resilience in the Zambia Agricultural Sector (InTeCRes) project. The project was funded by the German Federal Ministry of Food and Agriculture (BMEL) and coordinated by SASSCAL under contract to the GFA Consulting Group GmbH on behalf of BMEL. The project was completed in February 2020. Capacity building is one of the three

Research Trust (GART), National Remote Sensing Centre (NRSC), Zambia Agricultural Research Institute (ZARI), Zambia Air Services Training Institute, Zambia Meteorological Department, and the Zambia - German Agricultural Knowledge Training Centre (AKTC).

It is with this background that at the end of the project, all project equipment was handed over to the consortium. The Professional photogrammetry and drone mapping software was handed over to the



ZMD Acting Director, Mr. Edson Nkonde (Right) signing handover documents of the Automatic Weather Station from SASSCAL represented by the Programme Coordinator, Dr. Martin Mbewe (Left).

pillars of SASSCAL and it was a major component of this project. As part of institutional capacity building, it was agreed, prior to implementation, that equipment procured under the project would be handed over to a consortium of local partner institutions under the project. These included the Golden Valley Agricultural

National Remote Sensing Centre (NRSC on 19 February 2020). A BirdsEyeView FireFLY6 PRO drone complete with accessories and a five-band MicaSense RedEdge-MX sensor was handed over to Zambia Air Services Training Institute (ZASTI) on 20 February 2020.



ZASTI Principal, Mr. Billieard Shingalili (L) and the Senior Flight Instructor, Captain Masiye Phiri, after receiving the Drone at the SASSCAL National Node.

The drone will be used for different farm mapping techniques such as crop vigour and stress assessment, identification of pest and disease infestation and crop yield estimation to help farmers plan and manage their farm activities better.



A Dualem-1 geophysical survey instrument (yellow) being carried and used for field data collection.

A Dualem-1 geophysical survey instrument was handed over to the Golden Valley Agriculture Research Trust (GART) and a complete automatic weather station and soil moisture sensors were handed over to the Zambia Meteorological Department (ZMD) on 23 February 2020. The geophysical survey instrument will be used to scan fields and provide data supporting farmers to understand the soil fertility management requirements. The automatic weather station will continuously collect weather data and is now part of the national weather observation network making data available to local users through the Zambia Meteorological Department



Farmers receiving field training using an Automatic Weather Station

weather dissemination platforms, and regionally through the SASSCAL WeatherNet.

Beneficiaries of the project equipment expressed their commitment to ensuring that the pieces of equipment received would be put to good use and that their institutions would ensure that the services and products derived from the equipment will benefit the intended beneficiaries. They further emphasised their institutions' interest to continue cooperating with SASSCAL and looked forward to future partnerships with SASSCAL and other institutions in similar projects.

PARTNERING TO INTEGRATE GENDER RESPONSIVE CLIMATE ACTION INTO REGIONAL DEVELOPMENT

The Gender Action Plan adopted in 2017 at the 23rd session of the Conference of the Parties (COP 23) to the UN Framework Convention on Climate Change (UNFCCC), outlined priority areas of action and gender-responsive implementation of the Paris agreement for all member countries. This



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was an important step towards ensuring an equitable global climate action plan that ensures that no one is left behind. It is recognised that climate change has gender-differentiated impacts due to prevalent historical and existing inequalities between men and women. Moreover, multidimensional social factors such as discrimination based on gender, age and ethnicity also contribute to these differentiated impacts. These systematic inequalities and discriminations increase the vulnerability of women and children, thus subsequently decreasing their adaptive capacity to adverse effects of climate change. It is therefore becoming increasingly important for institutions to adopt a gender-responsive approach to climate action, going beyond just sensitivity to gender differences but actively promoting equality and participation of women, which empowers them to access, engage and contribute in the climate space.

In response to this global move of gender-responsive climate action, SASSCAL represented by the Namibia National Node entered into an agreement with the

University of Namibia (UNAM) to strengthen the integration of gender-responsive climate action into regional development plans and projects. UNAM in collaboration with the Desert Research Foundation of Namibia (DRFN), the Ministry of Urban and Rural Development (MURD) and Ministry of Gender Equality and Child Welfare (MGEWCW), through the Climate and Development Knowledge Network (CDKN), launched the project “Strengthening regional climate change governance through integration of gender-responsive climate action into regional development plans and projects” in October 2019. This partnership paves the way for gender-responsive climate action implementation at all levels of government, and thus moving one step closer to implementing the Gender Action Plan in Namibia.

Recognising the need to transform ways in which Regional Councils engage with rural communities, the initiative will lead to activities that support socially differentiated communities to improve their livelihoods and reduce food insecurities. Specifically, support is needed to mainstream gender-responsive climate change action into rural development governance systems as well as projects and community engagement at the local levels.

The focus areas for the implementation of the project are the Oshana and Omusati Regions in Namibia which are considered to be highly vulnerable to adverse climate change impacts. In 2019, the Oxfam Vulnerability Risk Assessment (VRA) tool was successfully piloted in Omusati in Namibia and Bobirwa in Botswana. The tool, commonly used to determine community adaptation interventions and help stakeholders to consider a range of issues and how they affect different groups in the society, will also draw lesson learnt from SASSCAL's scientific work. SASSCAL being positioned as a regional scientific advisory, information service and adaptive land management centre will add value to this project through its products and services.



Policy action for climate change - copyright © N. Palmer (CIAT)

DAAD CLIMAPAFRICA PROGRAM AWARDS POSTDOC FELLOWSHIPS TO SASSCAL ALUMNI

Can you also add al other students from Southern Africa that benefited from this programme

DAAD climapAfrica program supports early-career scientists to further expand their research fields. To achieve this, it brings high-potential African researchers in climate change research and protection together with African alumni of German funding initiatives. The program seeks to catalyse uptake and use of research outputs through a vibrant, highly connected network to facilitate the development of regional solutions. The program is implemented by DAAD in collaboration with SASSCAL and WASCAL

(the Germany Academic Exchange Service) under the Climate Research for Alumni and Post-docs in Africa (climapAfrica) program. Both postdoc fellows are alumni of SASSCAL funded tasks implemented in southern Africa from 2012 to 2018.

Dr Hamutoko is a lecturer in the Geology Department at the University of Namibia. Her PhD titled “Groundwater recharge of perched aquifers in the cuvelai – Etosha basin, Namibia” was funded through Task 010: Improving the understanding of groundwater related processes and establishing groundwater budgets



Josefina, doing fieldwork at Okashana artisan borehole, few kilometres north of the Etosha National park Nehale lyampingana gate (Copywrite@Josefina Hamutoko)

from 2019 to 2023. It is against this background that two SASSCAL alumni were awarded scholarships.

Drs Josefina Tulimevava Hamutoko from Namibia and Francisco Maiato Pedro Gonçalves from Angola were awarded postdoc scholarships in May 2020 by DAAD

for water management purposes. Dr Hamutoko completed her PhD with excellent results and was the recipient of the National Commission on Research Science and Technology (NCRST) National Research, Science, Technology and Innovation Award for Young Scientist in 2016.

The DAAD-granted research project “Wetland distribution and functioning in the Cuvelai Basin, Namibia: A supporting study for Wetland Monitoring Assessment and Services for Transboundary river basins (WeMAST) project” will be carried out over a period of 24 months starting 1 August 2020. The overall objective of the study is to improve the state of knowledge on wetland hydrology, utilization and management by carrying out a wetland inventory and assessment of the Cuvelai Basin in order to address the deficit of limited information and understanding of wetland systems in the Cuvelai basin. The Cuvelai Basin is an endorheic watershed shared between Namibia and Angola and covers 173 686 km².

The project will be conducted in close collaboration with SASSCAL and the SASSCAL – led WeMAST project (<http://www.sasscal.org/wemast/>). SASSCAL will provide the technical and scientific support in the collection of data, data processing and analysis. Furthermore, scientific expertise will be provided through a strong partnership with the University of Namibia and the Namibia University of Science and Technology as well as the partner consortium in WeMAST supporting with expertise in wetland modelling and assessment.

Dr Francisco Maiato Pedro Gonçalves is an Angolan biologist based at the Herbarium of Lubango, Huíla province since 2010. The herbarium and its ornithological and mammal collections is a colonial heritage, hosted by ISCED-Huíla. He started his PhD with “The Future Okavango Project (TFO, <http://www.future-okavango.org>)” and when the TFO project came to an end, he concluded his studies with the SASSCAL-funded project “Task 154: Plant and vegetation assessments in the region and elaboration of regional vegetation databases and vegetation maps”. Dr Gonçalves has wide field research experience amassed from working in many regional projects, including SASSCAL. Dr Gonçalves and other team members have conducted a first plot-based vegetation survey throughout Huíla province, which resulted in the first classification of vegetation of the region.

The proposed research project, which will be carried out over a period of 12 months from 1 July 2020, is hosted by ISCED – Huíla, with support of the SASSCAL Angola National Node in Huambo. Fieldwork will be conducted in Bicular National Park (BNP), located in Huíla province, SW Angola. The study area comprises



Francisco Maiato, tagging a tree in Bicular (Copywrite@John Godlee)

a total area of 7,900 km². BNP was subjected to complete abandonment for several years and endured many threats such as timber exploitation, overgrazing, and clearing for human settlement and agricultural fields contributed to habitat loss and degradation of woodlands in Bicular. Other disturbances due to long-term fire exposure have contributed to the conversion of important woodland patches to shrublands. These woodlands are also susceptible to rapid changes, considering that BNP is located in an area of Angola that has been affected by a severe drought that is likely linked to climate change, and with serious repercussions for natural and human systems. Thus, it is important to evaluate how the typical woodland trees will respond to climate changes, looking at annual ring-growth, and diameter increment which can be correlated with past, present and future climate conditions. The expectation with this study is to understand how the woodland tree species of BNP will respond or adapt to environmental variations due to climatic changes. With such integrated approach, the proposed study will produce scientific outcomes, which can be used by the forestry authorities, BNP administration and academics with tools to better manage and understand these woodlands and its unique biodiversity.

SASSCAL BOTSWANA NODE FINDS A NEW HOME

The beginning of 2020 ushered in new beginnings for the Botswana SASSCAL Node office. The office which had been located at Fairgrounds office park found a new home at the Department of Meteorological Services headquarters in Gaborone. This move is yet another indication of the commitment of the Government of Botswana to the founding agreement of SASSCAL. The Executive Director of SASSCAL Dr Jane Olwoch echoed the same sentiments adding that this is a recognition of SASSCAL's impact not only in Botswana but the SADC Region. The move also showcases the growth in the partnership between the SASSCAL and the Botswana Government.

This new strategic home is set to increase proximity to principal stakeholders which enhances communication and collaboration. As the country longs for quality climate services products, the Botswana SASSCAL Node intends to partner effectively with the Department of Meteorological services and other service providers in Botswana to develop useful products that will support decision making within a changing climate.



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Notes

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