FOCUS-AFRICA 1st EXTERNAL STAKEHOLDERS WORKSHOP REPORT

Theme country:
Food Security in South Africa

BACKGROUND INFORMATION

FOCUS-Africa's main objective is to demonstrate the full value chain of climate services in the Southern Africa Development Community (SADC) region in four key sectors: agriculture and food security, water, energy, and infrastructure. The full value chain of climate services will be demonstrated by piloting eight case studies in six countries involving a wide range of uses and stakeholders. The case studies will illustrate how climate science, forecasts, and projections can maximize socio-economic benefits in the Southern Africa region and potentially in the whole of Africa.

The First FOCUS-Africa External Stakeholders Workshop took place virtually on December 9th, 2020 via teleconference. This workshop was preceded by an Internal Stakeholders Workshop, which took place from November 30th, to December 1st, 2020.

This workshop is the first workshop of six planned for FOCUS-Africa throughout the duration of the project. For this first Workshop, South Africa was selected as the theme country, and the discussions focused on the related food security case study to incentivize broader local participation. The remaining external stakeholder workshops will be conducted on different sectoral and country focuses. The purpose of these workshops is to gather information from stakeholders, climate experts, climate services providers, sectoral actors, and policymakers to explore their needs and

Specific objectives of the external stakeholder workshop

- Showcase the state of FOCUS AFRICA Project to engage with the stakeholders in South Africa who are interested in climate services.
- Assess users' perspectives of climate related risks
- Map the existing climate risk mitigation and adaptation measures and responses.
- Raise awareness of climate services tools and knowledge.
- Identify lessons learned from 2020 and COVID-19.

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requirements, including socio-economic expectations.

64 participants attended the first project External Stakeholders Workshop, including project team members, partners, Advisory Board members, and external stakeholders from various sectors, including agriculture, water, policy, energy, infrastructure, insurance, academia, and civil society. There was a 40:60 female to male gender split in participants.

This document provides an overview of the presentations and discussions on the selected theme and briefly summarizes the outcomes of the internal workshop.

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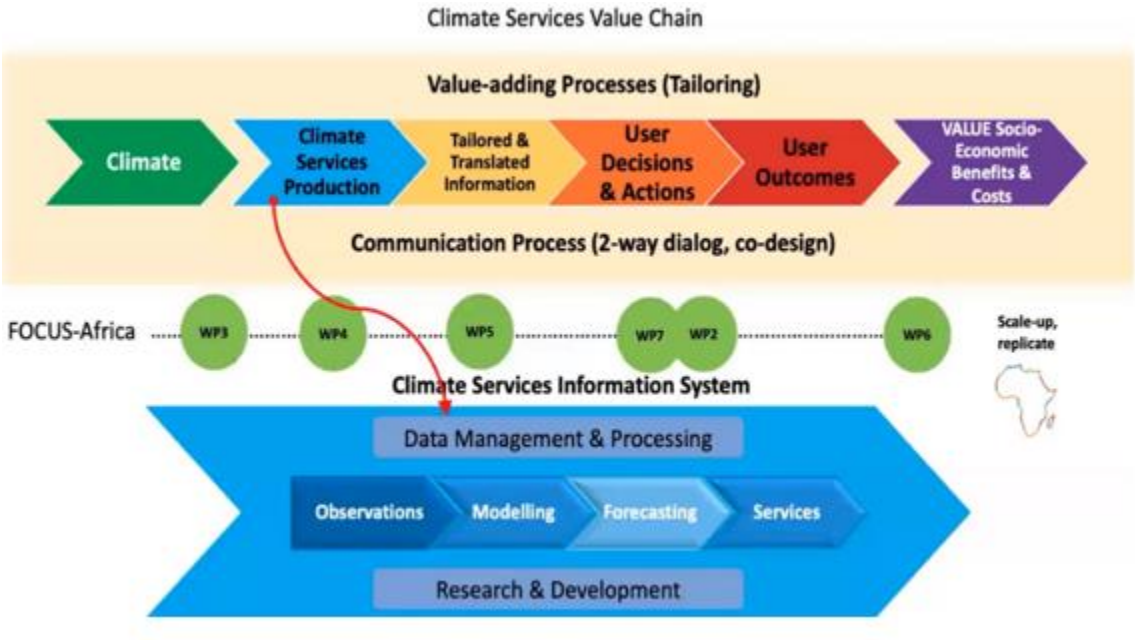
OVERVIEW OF THE PRESENTATIONS FROM SOUTH AFRICA SPEAKERS

The 3.5-hour workshop began with a brief introduction of the project's objectives and design from Roberta Boscolo, the FOCUS-Africa coordinator, followed by several speakers from South Africa. Roberta listed the partners involved in the Focus-Africa consortium (10 institutions from Africa and 10 from Europe) and explained that the project would work on and deliver eight case studies in six countries in Southern Africa (South Africa, Malawi, Mozambique, Zambia, Tanzania, and Mauritius).

Image 1 shows how the project is designed to cover the full value chain of climate services delivery through the flow of the work packages supporting the project.

Figure 1: The Full-Value Chain and the Work Packages



The workshop continued with presentations from experts across different sectors (The list of presenters is available in Annex 1).

External stakeholder workshop outcomes

- The workshop offered an excellent opportunity to raise the profile of FOCUS-Africa within the food security sector in South Africa, with communications proving successful in attracting a wide range of stakeholders from academia, civil society and industry (see Annex 2) from diverse geographical locations with significant attendance representing South Africa (see Annex 3).

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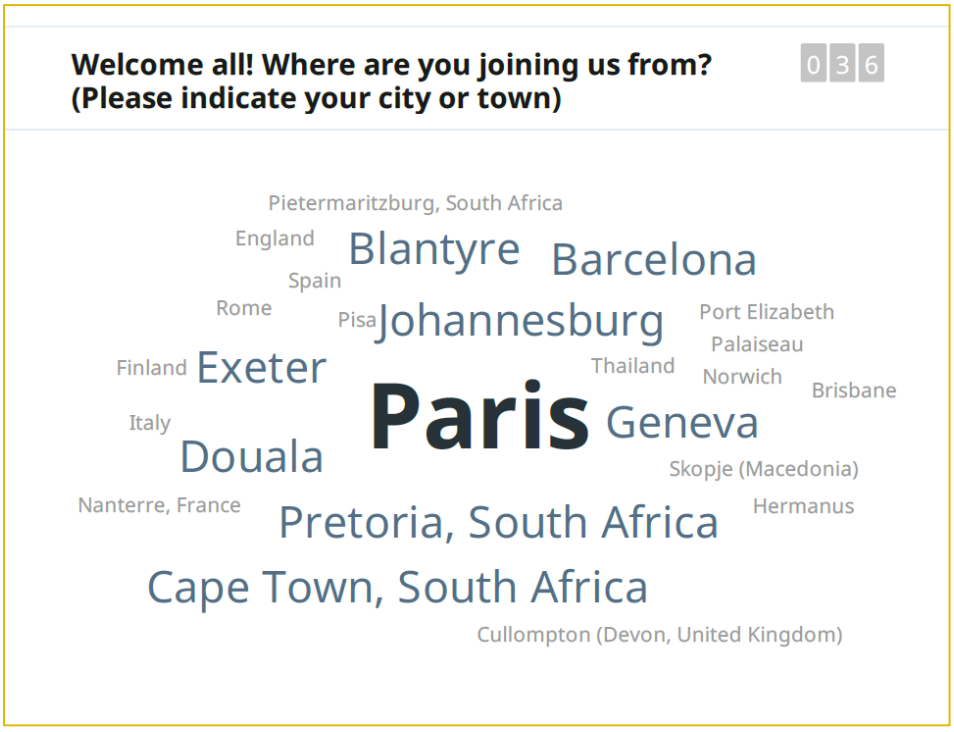
- The workshop enabled successful communication and dissemination of the project's overall aims and especially of the South Africa case study. The invited experts addressed the long-term benefits of climate information for their business while providing clear insight into industry stakeholders' operational needs and the requirements for a successful application of the climate services. This outcome will allow the project team to move into the next planned phase of work with a clear view of how to tailor the climate information to the needs for decision-making, and realize longer-term socio-economic benefits based on the most effective practical applications.
- The event achieved the objectives of strengthening interaction among key stakeholders within the project (consortium partners, related research institutions, industry partners, and advisory board members). It ensured that interested parties external to the project are aware about how FOCUS-Africa's climate services can support agriculture, water, energy, and infrastructure sectors in the SADC countries.
- The speakers well-articulated the needs of the users leading to insightful and informative discussion after each presentation. The questionnaire exercise (along with the collection of participants views via SLIDO, illustrated in the examples below) brought a dynamic and interactive element to the day.

The highest representation of attendees was from France, South Africa and Switzerland (see Figure 2). There was also a diverse regional representation, with participants from other parts of Africa and Europe.

Figure 2: Representation of attendees at the Workshop



Participants views were sought regarding the importance of accurate use of climate information within the region, to enable it to tackle issues related to climate variability and change within the agricultural sector. This would make for more robust planning of climate services in the region, more diverse energy markets and

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management of changing climate risks. The second poll assessed the barriers that impede users' access to climate information.

Figure 3: Participants response to the main barriers to accessing climate information.

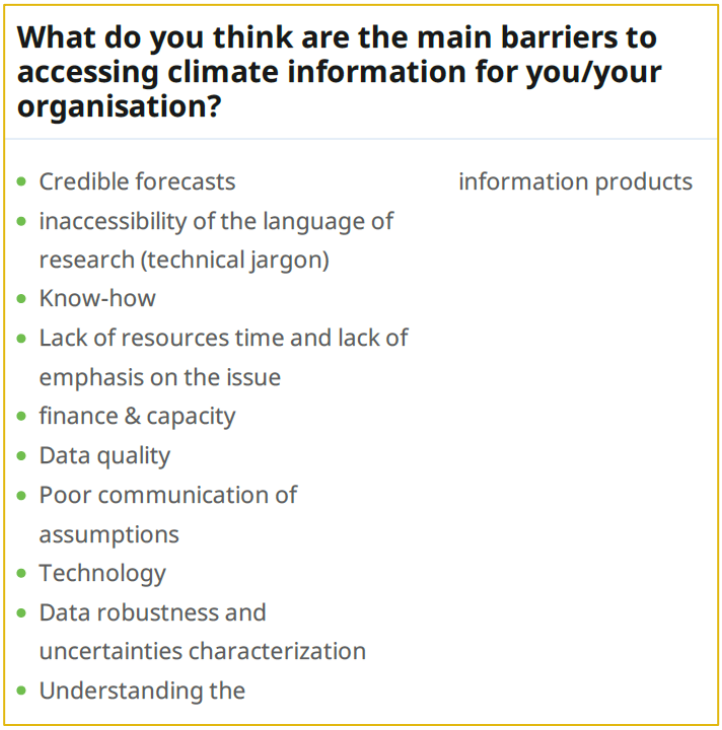

Figure 4: Climate information sources

Most respondents download the data directly from the data provider rather than from a private climate service provider.

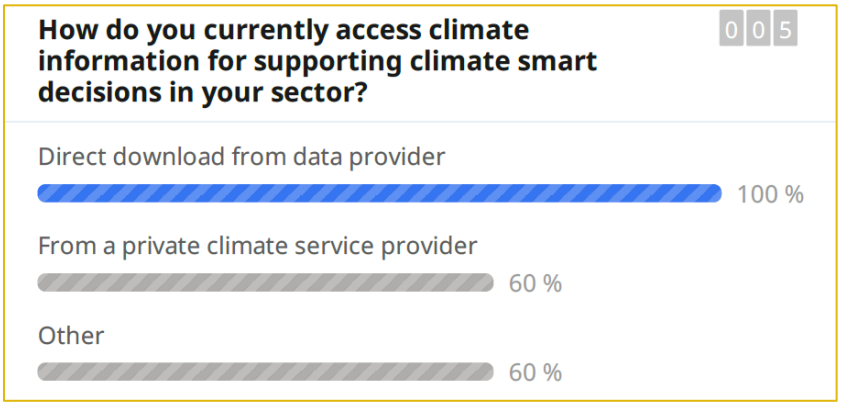

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Figure 5: Factors promoting success of climate services in southern Africa region

81 percent of the participants felt that a multi-sectorial approach to knowledge sharing would be the leading factor in the success of the improved climate services in the region.

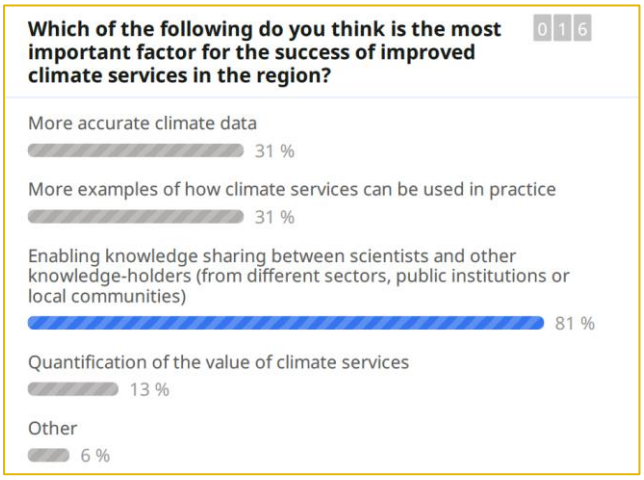
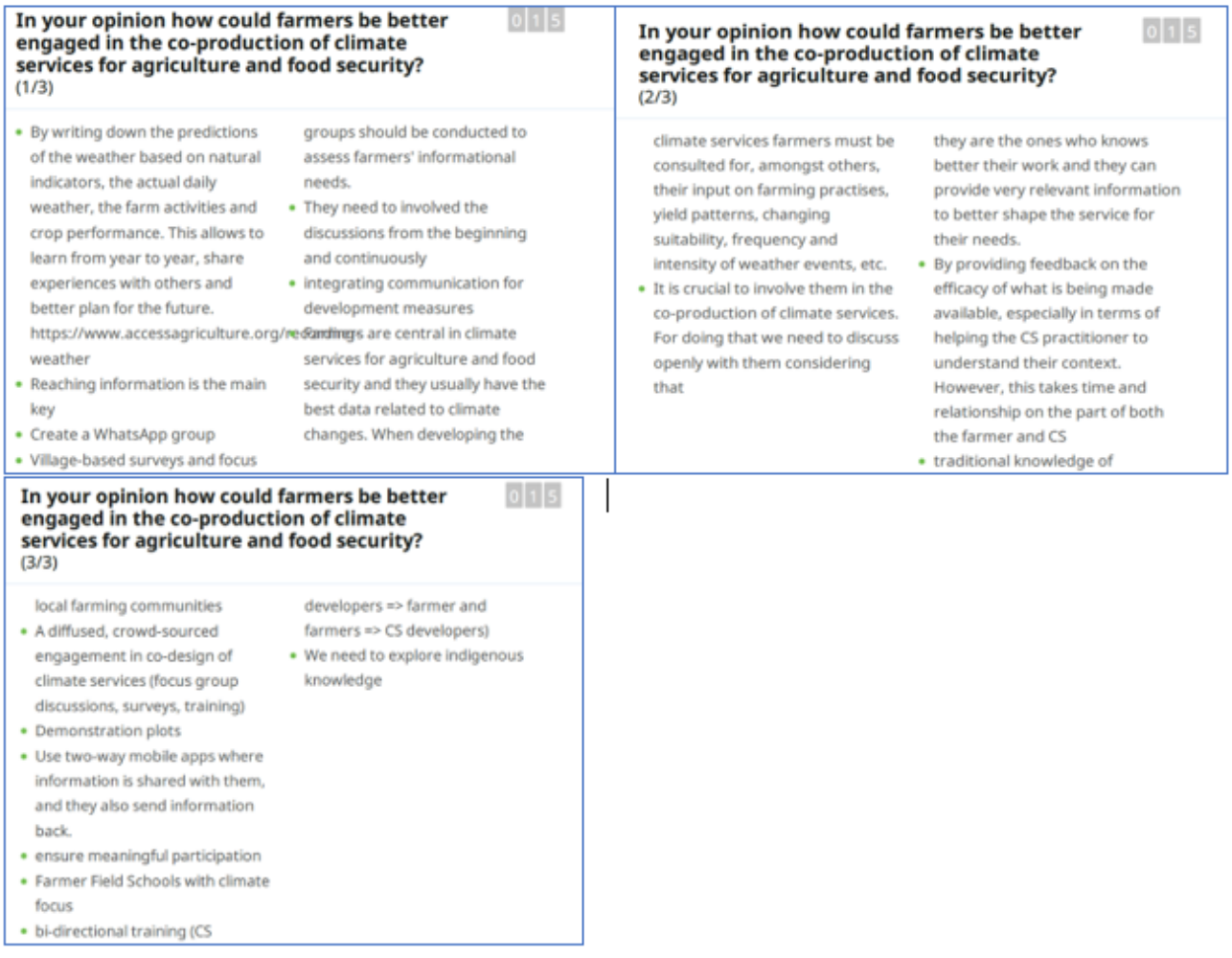


Figure 6: Ideas on methods to further engage farmers within climate services



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Participant feedback was extremely helpful for the organizers towards improving future stakeholder workshops. This is shown is illustrated in Figure 7 to 10.

Figure 7: Usefulness of workshop poll

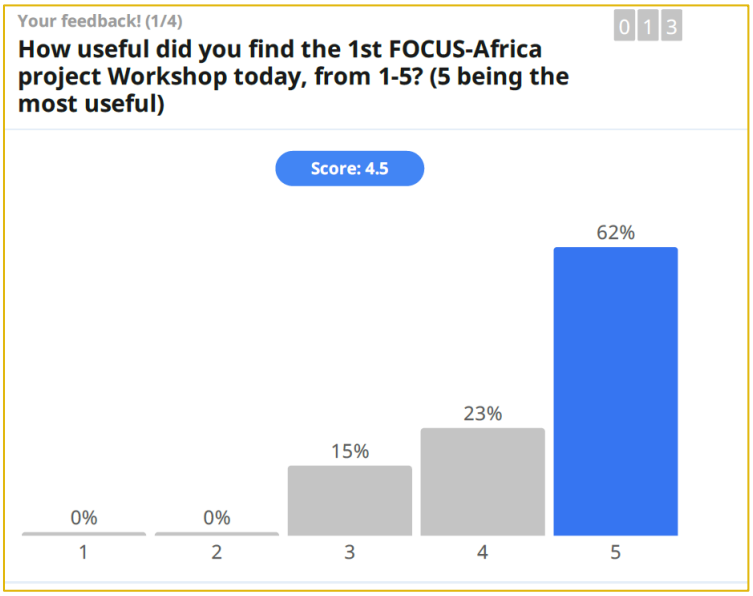
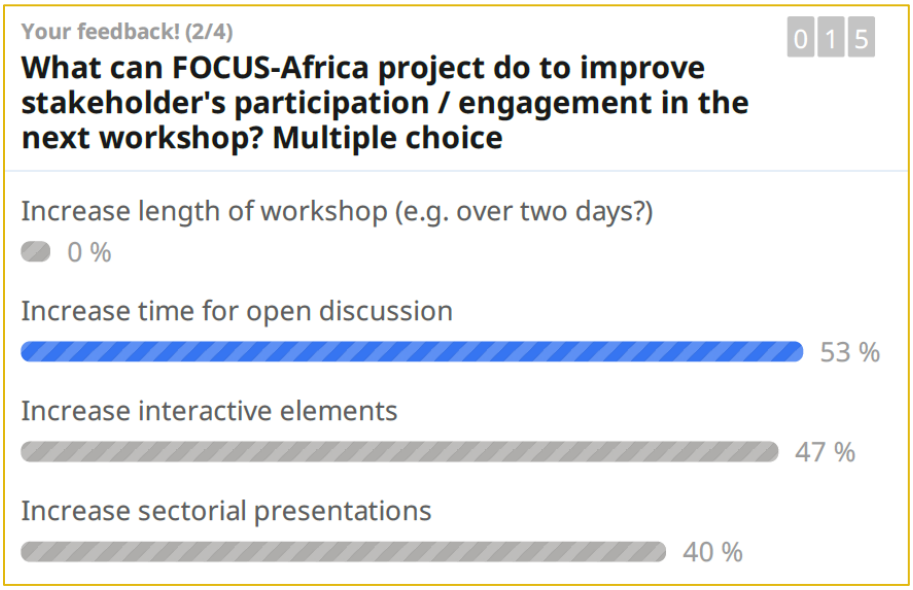


Figure 8: Participant feedback on future workshops



The question in Figure 8 provided an opportunity for participants to have their say about the structure of future workshops.

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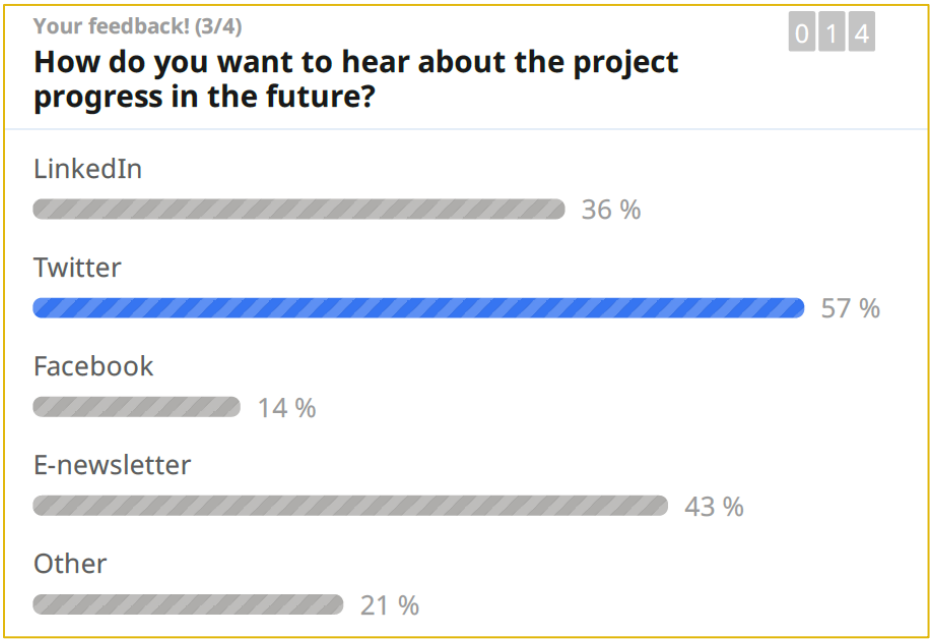
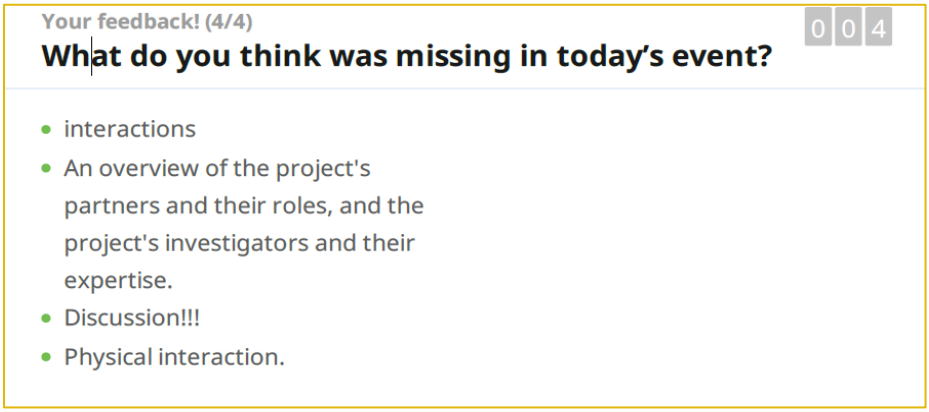
Figure 9: Preferred source of future project progress communication



Many participants commented on how much they enjoyed the opportunity to learn from colleagues of other organizations and understand the perspectives of different stakeholders from researchers to end-user.

Figure 10: Improvements for future workshops



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KEY MESSAGES FROM THE PRESENTERS (FULL VIDEOS OF PRESENTATIONS ARE AVAILABLE AT THE FOCUS-AFRICA WEBSITE)

Professor Coleen Vogel from the Global Change Institute of the University of the Witwatersrand in South Africa firstlyprovided evidence that Southern Africa is becoming a climate change hotspot, and then addressed the importance of climate adaptation through transdisciplinary approaches involving different societal actors including academia. Prof. Coleen stated that, in South Africa, they are trying to apply platforms and practices to allow engagement with the users right up front. Prof. Coleen continued her presentation by saying that people in Southern Africa are coping with climate change impacts and have been coping for many years. Therefore, she hopes that this project does not only examine climate change coping strategies, but that FOCUS-Africa also gets to the heart of climate services and addresses the real motivation for long-term collective actions. There are many examples in South Africa of collaborative platforms of multiple realities to derive climate action plans and development projects, and FOCUS-Africa could help to scale them up. Prof. Coleen commented that the word "end-user" should be changed to fellow-user because we are all users, and there is no END user. Professor Vogel concluded her presentation by saying that it is essential to discuss and challenge the system's power inequities, tourge scientists to get out of their own way, be more open and humble, and to bring into the room social scientists, conscious leaders and thinkers, spiritual actors etc. She acknowledged François Engelbrecht's contributions. Prof. Vogel's presentation achieved considerable comments and interactions from attendees on the chat.

Dr Mary-Jane Bopape from the South African Weather Service (SAWS) stated that an essential part of adapting to climate change is to issue early warnings for preparing and reducing the impacts associated with severe events. SAWS provides weather and climate information from nowcasting to multi-decadal timescales, and the organization has implemented an impact-based severe weather forecasting system. This means instead of only stating what the weather is going to be, the forecast also speaks to the likely impact related to the event. Dr. Bopape also presented SAWS ongoing work to ensure that a broad spectrum of people receives weather and climate forecast information, e.g., via the community radios, SAWS website, Twitter, Facebook, and the Weather Smart mobile app.

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Mr. Nehru Pillay from the Land and Agriculture Development Bank of South Africa (Landbank) presented the Land Bank mandate which is in line with the South Africa National Development Plan 2030. Agriculture is a central element to achieve socio economic goals. Land Bank's mission is to build a competitive agricultural sector contributing to food security. Mr. Pillay stressed the impact of climate change on agriculture: he explained that the agricultural system is closely connected to the environmental challenges that farmers face., partly because climate change negatively impacts the financing of agriculture. Therefore, he insisted on the fact that banks should integrate climate risk in their risk management strategies. Additionally, hey should explore new opportunities arising from climate change by developing new products and services, and be more proactive in supporting climate adaptation. He highlighted the case study 1 addressing food security in South Africa, for which Land Bank is the enduser.

Dr. Moses Cho from Council for Scientific and Industrial Research (CSIR) provided an overview of the emerging challenges in the Agri-sector in South Africa. Climate variability and change have an impact on the frequency and intensity of extreme events like drought. Such situation is causing decline in food production and increase of poverty. To invert these trends, CSIR introduced Climate-SMART Agriculture (CSA) approach to small to medium farm holders. CSA is an integrated approach to sustain productivity and profitability against the backdrop of the climate challenges. CSIR is creating a precision agriculture system, as part of the CSA agri-system, in order to foster early detection of crop stress, weed, pest and rapid response to optimizes yields, profits while mitigating negative environment impacts. Pr. Cho presented CSIR' work on agriculture precision system.

Mr. Nyiko Maluleke from Buhle Farmers Academy stressed how prolonged dry periods had affected crop and livestock production. He stated that due to the lack of income to afford irrigation, most farmers depend on rainfall as water source for their crop production. One of the challenges is the shifting in the rain and temperature patterns, due to climate variability and change that affect farmers' production of livestock and crop. Another challenge is the lack of financial means to afford crop insurance. Mr. **Maluleke**'s organization urges farmers to adopt some climate change risk mitigation measures such as planting drought-tolerant crops, introducing water harvesting and storage irrigation purposes, using water-efficient irrigation systems, etc. Dr. Nyiko highlighted the importance to invest in capacity building to access and use available climate change information in order to reduce future climate risks. Finally Dr Nyiko shared some stories of farmers dealing with water scarcity, drought, and weather hazards which were very impactful (see the video record in the **FOCUS-Africa website).**

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OVERVIEW OF THE PROJECT APPROACH TO INTEGRATE STAKEHOLDERS INPUTS

After the presentations of the South Africa experts and representatives of the Agriculture sector, the workshop provided an opportunity to reflect on how to better integrate the inputs of the stakeholders into the plan of actions of the case studies in general and in particular the case study in South Africa.

Roberta Boscolo explained to the participants that the project is still in the initial phase of looking at the climate data in the geographic context of where climate services will be developed.
The project is still exploring the type of data needed and the methods that will be applied to deliver climate services products. Since we are still in the initial development phase, the first day of the internal workshop was aiming at working on each case study in order to:

- Deliver tentative action plans;
- List requirements related to climate data, analysis, products for the service delivery;
- Identify the commonalities across the four sectors and their potential synergies within the CS.

The eight case studies comprise a team of service providers, users, and research institutions. The case study 1 "Food security in South Africa", which aims to assess the impact of climate change on food security in a key maize producing region, involves Land Bank as user. Stakeholder Engagement, presented by Trevor Lumsden, was identified as a major challenge for the South Africa case study implementation since discussions with smallholder farmers must be done and the sanitary crisis situation will not ease the process.

Each case study will consider Responsible Research & Innovation (RRI) principles in the design of their action plans. RRI represents a more society-centered approach to Research and Innovation. It aims to develop innovations that are closer to real societal challenges, offering solutions to global systemic problems. As the global challenges manifest themselves in different ways on a local scale, solutions should also be developed at a local level. RRI is about combining the intelligence of four types of stakeholders (civil society, entrepreneurs, policymakers, researchers – also called the 'quadruple helix'), with a multidisciplinary approach in the innovations (socio, eco, technical, legal, etc.) and involving citizens and stakeholders as equally important actors from the very start of the research and innovation project. Changes are needed throughout the R&I system and certain key issues (or policy agendas) need to be taken into account: (a) ethics; (b) gender

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equality; (c) governance; (d) open access; (e) public engagement; (f) science education; (j) impact. These key issues were considered to brainstorm RRI ideas and actions during the internal workshop.

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Annex 1: List of presentation title and the presenters (the presentations will be attached as annex to this document)

Presentation Title	Presenters	Organization
Getting to the heart of climate change – the role of science and engagement	Prof. Francois Engelbrecht Prof. Coleen Vogel	Institute of the University of the Witwatersrand in South Africa
The South African Weather Service weather and climate information	Dr. Mary-Jane Bopape	South African Weather Service
Climate Services for Credit Decision Making	Mr. Nehru Pillay	Land Bank
Climate Smart Agriculture - the future of agriculture in southern Africa	Dr. Moses Cho	Council for Scientific and Industrial Research (CSIR)
Agriculture and food security	Mrs. Mapuleng Wicky Mpulwana	Black Farmers Association of South Africa.BFASA
Smallholder farmer adaptation to climate change	Mr. Nyiko Maluleke	Buhle Farmers Academy in RSA

Annex 2 – Stakeholder Workshop Participants by Sector

Academia	20
Government	15
Energy	8
Agriculture	7
NGO	7
Water	3
Unknown	2
Banking	1
Insurance	1

Annex 3 – Stakeholder Workshop Participants by Country

South Africa	12
UK	10
Italy	9
Spain	8
France	7
Niger	4
Switzerland	3
Unknown	2
Malawi	2
Mozambique	2
Belgium	1
Cameroon	1
Finland	1
Sudan	1
Thailand	1

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This image was shared by Mr. Nyiko Maluleke from Buhle Farmers Academy

"This is Sharon from South Africa standing on her farm that has been severely hit by the excessive heatwave that resulted in the loss of her beetroot crops. As Mr. Maluleke *stated in his presentation, if Sharon and other farmers could access climate change information on time, it would prevent the loss of their crops hence reduce poverty and increase their food security".*

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FOCUS-Africa Project – ***Full-value chain Optimised Climate User-centric Services for Southern Africa***
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