climate change counts

An initiative of sarua

Managed by HEMA

Strengthening University Contributions to Climate Compatible Development in Southern Africa

Final Scoping Report: AAAF-0010

Scoping the development of a transdisciplinary research programme to address climate compatible development needs in the SADC region

July 2013

Note: This document is a Final Scoping Report of the SARUA CCD project, and as required by the Terms of Reference, provides an analysis of the workshop design, main outcomes and learning from the scoping stage and implications for any redesign for the mainstreaming phase as derived from consultative workshops conducted in Namibia, Botswana, Mozambique, Swaziland and Zambia.

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Contents

1 Introduction

A comprehensive brief has been provided for "Scoping the development of a transdisciplinary research programme to address climate compatible development needs in the SADC region". As specified in the Terms of Reference a Scoping Report is required that reports on an analysis of the workshop design, main outcomes and learning from the whole scoping stage and implications for any redesign for the mainstreaming phase**.**

This Scoping Phase report includes an overview on the preparatory work done for the consultative workshops including workshop design development, bid development work, questionnaire development work and reports on the trialling, testing and set up of these additional processes.

An overview is provided on the workshop process and outcomes as well as the main products developed during this scoping phase which has included draft country reports and workshop reports.

Finally some Conclusions are provided on the main lessons learnt and outcomes achieved, as well as proposed adjustments to the approach followed.

2 Preparatory work

Following the inception phase of the programme, the following set up activities were undertaken to prepare for the workshops:

- **GENERAL ORIENTATION DOCUMENT:** Design and development of a background document to provide orientation to all stakeholders on the initiative. This was written by Penny Urquhart and Heila Lotz-Sisitka, with feedback from HEMA team and CDKN. It has proven to be a very useful orientating document, and is also used in the workshops as background material. Two case studies of knowledge co-production were sourced to illustrate the interests and directionality of the initiative, one of which was published in the general orientation document. The two case studies are also proving very useful in communicating the intended outcome of the programme.
- **DEVELOPMENT OF WORKSHOP DESIGN AND TOOLS:** Design and development of the workshop structure and programme (based on early discussions in the December project meeting). A draft PowerPoint presentation and facilitators guide were developed by Penny Urquhart and Heila Lotz-Sisitka. These were circulated for comment, and comments were received from CDKN. This PowerPoint and facilitators guide was re-developed for the 1.5 day workshop format after its first testing in Namibia. The use of the facilitators guide was tested in the Namibian workshop, and it was revised for the Botswana workshop, and applied in the workshops in Mozambique, Swaziland and Zambia. This included design and refinement of rapporteur sheets to capture detailed discussions in groups.
- **COUNTRY-BASED BACKGROUND INFORMATION DOCUMENTS:** Penny Urquhart led the design and development of the first Background Information Document (BID) for Namibia. In preparing this document, we were able to establish the methodology and approach for BIDs for the other countries. The BIDs are serving the designed purpose of providing a useful summary of key national policy and strategy documentation on climate change for each country, to show that the SARUA process is building upon existing initiatives and studies and to ground the workshop discussions in national climate change priorities and gaps. The

outline and approach for the BIDs were re-designed following the first workshop to provide a stronger analysis of existing identified knowledge, research and capacity gaps, which provides a basis for further work in this regard during the country consultations, as well as for the country-based needs analysis.

- **QUESTIONNAIRE DESIGN AND TESTING:** Design and development of the questionnaires by Heila Lotz-Sisitka. A questionnaire was developed for university partners, and a separate questionnaire was developed for stakeholders. The questionnaires were pretested, and comments were received from CDKN and were worked into the questionnaires. The first set of questionnaire data (collected at the Namibian workshop) has been entered into an excel database, and the questionnaires have been uploaded onto SurveyMonkey to allow for follow up questionnaire completion. Efforts are being made to have questionnaires completed during the workshops to ensure more detailed feedback from workshop participants, but a follow up questionnaire 'drive' is also underway to strengthen data inputs and to obtain information from those on the invitation list who were not able to attend the workshops. Additionally, faculties in the universities are requested to complete the questionnaires.
- **TRANSLATION:** All workshop materials have been translated into Portuguese (and basic background documents in French), and have been used and tested with local country facilitators who have been assisting with the running of the consultative processes in country.
- **LOCAL FACILITATORS TRAINING AND INVOLVEMENT:** Briefing and orientation of local facilitators has also taken time, and has been an important dimension of the success of the programme so far. This requires that either Penny Urquhart or Heila Lotz-Sisitka (or both) work through the intentions, logic and design of the workshops, the workshop activities with the local country facilitators, and support them to ensure that the rapporteurs are well prepared for their important role in the programme.
- **STAKEHOLDER LISTS AND DATABASE DEVELOPMENT:** Development of stakeholder lists and database development has also been a key activity. Critical to this has been the need to develop a systematic, robust approach to stakeholding, and to strengthen access to climate change education, research, policy and practice networks and a standard 'categories of stakeholders' list was developed after the first workshops. This approach is documented and attached as Annexure A.
- **DEVELOPMENT OF A TEMPLATE FOR WORKSHOP REPORTS:** Based on lessons learned after the Namibia consultations, Penny Urquhart has developed a template for the workshop reports, to be compiled by the local facilitator after each country consultation, to ensure a higher standard and for consistency between countries. This template has been further refined following the further workshops. Apart from documenting the process, the workshop reports serve to collate the raw data from the country consultations. The workshop reports will be circulated to participants in each country as soon as they are compiled, for data verification and to fill in any gaps. They will then serve as one of the key sources of information for the development of country reports.
- **DEVELOPMENT OF A FRAMEWORK FOR COUNTRY REPORTS:** Based on the brief (needs analysis and institutional analysis) and the data generated through the BIDS, the Country Workshop Reports and the Questionnaire Data, Heila Lotz-Sisitka developed a template for the Country Reports. Feedback was received from CDKN and included in a revised template and structure. The first country report is complete in semi-final draft form and is serving as

an 'exemplar' to guide development of the other country reports and analysis of the questionnaire data.

3 Workshop process

3.1 Programme structure

The first two rounds of country consultations were held in Namibia on 13 and 15 March 2013[1], and in Botswana on 18 and 19 April 2013, and were reported on in detail in the Interim Scoping Report submitted to CDKN on 3 May 2013. The Namibia consultations were structured as a two day programme, with Day 1 focused on Government stakeholders, and Day 2 focused on University stakeholders.

Following an assessment by CDKN, SARUA and the HEMA Consortium of the Namibia workshops, a revised approach was adopted for Botswana. It was decided to follow an integrated approach and to combine the stakeholder and university workshops, and present the workshop over a one and a half day period. This format has subsequently been followed in the Mozambique (29 and 30 April), Swaziland (6 and 7 June)[2] and Zambia (9 and 10 July)[3] workshops, and the outline is as follows:

3.1.1 Country workshops – DAY 1:

Time	Activities
08h00 – 08h30	Coffee and registration
08h30 – 09h00	Welcome and introductory remarks
09h00 – 09h30	SARUA Initiative overview
09h30 – 10h00	**SESSION 1:** Framing Climate Compatible Development (CCD)
10h00 – 10h30	Tea/coffee
10h30 – 11h30	**SESSION 2:** Country priorities and needs Knowledge and institutional gaps and capacity
11h30 – 13h00	**SESSION 3:** Group discussion (Breakaway) Country priorities and needs Knowledge and institutional gaps and capacity
13h00 – 14h00	Lunch
14h00 – 15h00	**SESSION 3:** Plenary report-back and discussion
15h00 – 16h15	**SESSION 4:** What is the role of the University sector? Identifying other knowledge partners
17h00	Closure

[1] The Namibia consultations were made possible through the kind contribution of the University of Namibia.

[2] The Swaziland consultations were made possible through the kind contribution of the University of Swaziland.

[3] The Zambia consultations were made possible through the kind contribution of the University of Zambia.

3.1.2 Country workshops – DAY 2:

Time	Activities
08h00 – 08h30	Coffee and registration for new participants
08h30 – 09h00	Re-cap of Day 1, Agenda for Day 2
09h00 – 10h30	**SESSION 5:** Breakaway groups & plenary discussion • Who is doing what and where in Universities in CCD? (Research, Teaching, Community Engagement) • Who is doing what and where amongst stakeholder groups? • How does this respond to the needs and priorities? • What are existing University plans? What are the gaps?
10h30-11h00	Tea/coffee
11h00 – 12h00	**SESSION 6:** Plenary discussion • Knowledge co-production introduction and example of transdisciplinary research programme • Gaps in enabling environment, and needs for policy & practice support
12h00 – 12h45	**SESSION 7:** Opportunities for collaboration Policy implications for government, universities and donors
12h45 – 13h00	**SESSION 8:** Way forward and closure
13h00 – 14h00	Lunch

Following the Mozambique workshop CDKN communicated their decision to impose a budget cut on the project as outlined in their letter to the HEMA Consortium dated 29 May 2013. In this letter CDKN indicated that the "visit to Mozambique led to an assessment that the project's approach to mapping and analysis could be adjusted to achieve greater efficiencies" and requested that "HEMA assess the current scope and methodology and adjust the approach within the reduced budget envelope, which should consider more efficient approaches to the consultation and research processes and potentially limiting the scope to fewer SADC countries".

An assessment by HEMA of an appropriate and most efficient methodology was conducted and submitted to CDKN in a "*Proposal: Revised SARUA Climate Change Counts methodology to address CDKN budget cut*" on 17 June 2013. As outlined in this proposal and in considering adjustments to the approach, HEMA submitted the rationale for the continuation of the 1.5 day workshop based approach, for the following reasons:

- It brings together multiple stakeholders to one venue, who can interact, engage, and take back key messages to their groups;
- It allows for research activities not covered by country background research and stakeholding research to be conducted in a controlled environment within a set time frame;
- It addresses the core objective of network building and collaboration, which is also a crucial platform for the proposed SARUA five-year programme ;
- It reduces the interaction time of team experts, who already have limited time to do research, facilitation, analysis, report-writing and engagement, while allowing for face-to-face communication with in-country stakeholders;
- It creates the best opportunity for buy-in, as evidenced by the comments received in Namibia, Botswana, Mozambique, Swaziland and Zambia, and massively deepens the engagement of SARUA beyond its former VCs-only level, thus potentially contributing

significantly to the sustainability of SARUA, and the implementation take up of the proposed five year programme.

It is also somewhat unfortunate that the budget cut process has led to some time delays, and has also affected the final intended detail in the outputs. As pointed out in the detailed submission by HEMA "*Proposal: Revised SARUA Climate Change Counts methodology to address CDKN budget cut*", *supra*, detailed consultations with university partners as earlier anticipated would not be possible in terms of the revised approach necessitated by the budget cut.

3.2 Key messages on the initiative

Key points communicated to participants at the workshops on the purpose of the *Climate Change Counts* scoping study were:

1. To strengthen the contributions of universities to addressing existing country needs and priorities related to the impacts of climate change, through meeting identified knowledge and research gaps, and growing capacity within the country for climate compatible development.
2. To build greater in-country and regional collaboration across the higher education sector on climate compatible development and to enhance the relevance of Namibia and Botswana's university education in supporting societal innovation and change for climate compatible development.
3. To support and increase the collaborative production and use of knowledge with key stakeholders, including government, private sector and communities.
4. To build university's networks outwards to other universities in the SADC region and to strengthen our collaborative capacity around a key development challenges for Namibia, Botswana, Mozambique, Swaziland, Zambia and the region.

3.3 University collaboration

A core objective of the programme is to establish effective collaboration between SARUA and relevant University stakeholders to ensure ongoing interaction in terms of the envisaged Knowledge Co-production Framework. The Scoping Phase shows that this is one of the positive outcomes of the process so far.

3.3.1 University of Namibia (UNAM)

Contact was established with the University of Namibia (UNAM), as the only SARUA member in Namibia, to build a database of possible stakeholders for the country consultations. Through the Climate Change working group, established at UNAM and chaired by Dr Nelago Indongo of the Multi-Disciplinary Research Centre (MRC), a stakeholder list was compiled and logistics arranged. UNAM hosted the event and covered the venue costs. The two individuals from UNAM who presented opening remarks were:

- Dr Kenneth Matengu, Director: External and International Relations
- Prof Isaac Mapaure, UNAM Research Coordinator, Research & Publications Office

3.3.2 University of Botswana (UB)

The Vice Chancellor of the University of Botswana was formally approached by SARUA in December 2012 to endorse and participate in the programme. This contact was followed up by the HEMA Consortium with several calls, e-mail communications and visits to the Office of the Vice Chancellor. The VC was formally invited to open the workshop proceedings. HEMA was informed on 17 April 2013 that as UB had not yet formally endorsed the SARUA programme, it was not possible for the VC to open the workshop, or for official UB participation in the workshop.

The opening address for the workshop was conducted by the Deputy Permanent Secretary of the Ministry of Education, with attendance as well of the Deputy Permanent Secretary of the Ministry of Environment. The Botswana consultations were also attended by Mr Thabang Botshoma, the Director of the Department of Meteorological Services, who is the UNFCCC national focal point.

Dr Mphmelang Ketlhoilwe, a Senior Lecturer at the UB Faculty of Education and Mainstreaming Environment and Sustainability in African Universities Chair (a project implemented in partnership with the SADC Regional Environmental Education Programme (SADC REEP) and UNEP) was appointed as the local facilitator for the workshop and assisted with the identification of key participants.

3.3.3 Botswana International University for Science and Technology (BIUST)

The Vice Chancellor of the BIUST, Professor Steve Howell formally endorsed the Programme in March 2012 by undertaking to "provide our full support for the implementation of the proposed SARUA Programme for Climate Change Capacity Development across the SADC Higher Education Sector". In telephonic and e mail communications with Prof Howell he confirmed that BIUST would not be able to support the workshops through funding, but that that BIUST would ensure the attendance of the workshop by key academics working in the Climate Change related fields. As can be noted from the attendance register below, BIUST was represented at the workshop.

3.3.4 University Eduardo Mondlane; University of Lurio; Universidade Pedagogica

The above Universities in Mozambique all participated in the workshop. Professor Jorge Ferrao of Lurio actively assisted with stakeholder mobilisation and participation. Climate change partners of CDKN in Mozambique were also carefully targeted and included. The SADC REEP database of active environment and sustainability educators involved in climate change in Mozambique was also used as a source to identify stakeholders. Vladimir Russo (former advisor to the Minister of Environment in Angola) facilitated the workshop, supported by Penny Urquhart and Heila Lotz-Sisitka. This workshop served as a first 'pilot' of running the workshop in another language, and it was decided early on that the HEMA team would use this as a reflective workshop to confirm the methodology and approach. CDKN management attended this workshop.

3.3.5 University of Swaziland

Mandla Mhlipa, a Senior Lecturer at the School of Education at the University of Swaziland, who is also the Swaziland MESA Chair (working with the SADC REEP and UNEP), acted at the local facilitator for the workshop and provided assistance with logistical arrangements and stakeholder mobilisation. The workshop received high level support from the Vice Chancellor, and from other national stakeholders. The University of Swaziland has a multi-disciplinary MESA committee responsible for mainstreaming environment and sustainability across the university and into all faculties. They were

all involved in the workshop, along with major national stakeholders that are also involved in the national Swaziland Education for Sustainable Development Strategy implementation process.

3.3.6 University of Zambia; Copperbelt University; Malangushi University

All three Zambian universities were represented at the workshop. The workshop was opened by the Vice Chancellor of the University of Zambia Professor Stephen Simukanga and the closure was conducted by the Dr Oswell Chakulimba the Dean of the School of Education.

Professor Charles Namafe (Zambia MESA Chair working with the SADC REEP and UNEP) and Manoah Muchanga of the School of Education at the University of Zambia assisted with facilitation at the workshop, as well as with finalising the list of invitations and advance logistical arrangements.

A keynote presentation was done by Professor Prem Jain from the Energy and Environment Research Group (EERG) at the Physics Department, University of Zambia and UNESCO Chair in Renewable Energy and Environment on “Zambia priorities and needs”.

Dr. George Kasali of the Department of Biology of the Copperbelt University in particular shared progress in integrating climate change into the environmental engineering and biological studies curricula.

4 Main outcomes of workshops

4.1 Framing Climate Compatible Development

The main aim of this session was:

- To create clarity on the basic definition/components of CCD;
- To begin to build an understanding of the different framings of CCD.

Main issues discussed were:

- Climate change effects appear to be accelerating in recent years and in many countries, the incidences and/or severity of extreme events such as droughts and floods are increasing.
- There is a need to build resilience and adaptation capability among communities, and to address differential levels of vulnerability.
- Given uncertainties in climate projections, and the complex manner in which climate change and other drivers such as environmental degradation, globalization and economic development processes interact, climate compatible development necessitates an iterative, learning-by-doing approach.

In summary, the emphasis of the session was to introduce participants to CCD as the intersection of adaptation, mitigation and development, and therefore a conceptualisation of a new developmental pathway which adopts an integrated approach to adaptation, mitigation and development, in order to simultaneously respond to the urgent development and climate change challenges. In all countries, participants enthusiastically engaged with the concept of CCD, and could articulate the meaning of this for their daily work, even though in many cases the concept itself was new and there were questions as to how it differed from other mainstream Climate Change concepts that were

being used in policy discourses (e.g. adaptation). In the Botswana and Swaziland consultations in particular, there was a strong emphasis on the fact that CCD is located within the broader concept of sustainable development.

4.2 Country Priorities and Needs

Participants provided a range of responses to this question, indicating a strong level of engagement with the issue. Participants provided practical examples of the impacts on key economic sectors if climate change scenarios were borne out and highlighted the need for the following interventions:

- Sustainable developments that are aligned to changes in sectors such as agriculture and environment due to climate changes;
- Capacity development among graduates to deal with climate change issues to address the expected climate change;
- Develop activities that are more in parallel to climate change;
- Additional information on warming trends, projection for temperature increases and projections for rainfall variations is needed, particularly local level analyses of wider trends data;
- The need to plan and act now for increased unpredictability and variability;
- The importance of climate change / environmental education within the wider community / society was emphasised in all workshops;
- Additional implementation of national climate risk management capacity development plans; and
- The development and implementation of national actions; and related institutional frameworks.

Participants raised concerns about the lack of integration of climate change projections into planning and development, and the effects of climate risks on resources such as water, especially with regards to new projects and new developments.

Key points on the topic of priorities and needs included:

- Coordination in climate change is needed at national level, not just at Higher Education Institutions (HEI) - government ministries are working in silos, and university departments are working with a narrow focus – there is thus a call for collaborative approaches and increased networking;
- A climate change database at HEI level would capture who is doing what in the related disciplines; this would be very useful for facilitating communication on CCD within universities, across institutions, and across the SADC region. There was much support for this amongst participants at the workshops;
- Leadership commitment would be key to enabling a greater role for universities in collaborative knowledge production to address climate change challenges; hence the role of SARUA as mediator with university leadership was also seen to be an important value of the process;
- Capacity building to strengthen and develop collaborative knowledge production and use – or capacity building for implementing inter- and transdisciplinary approaches to research - is required;

- There is a need to strengthen the communication and collaboration between the HEI sector and the key government Ministries relevant to environmental governance and management.

4.3 Knowledge and Institutional Gaps and Capacity

The purpose of the session was to develop a deeper and more detailed understanding of needs, priorities, knowledge and research gaps and capacity requirements through group work. Participants were asked to identify key priority areas and the related possible knowledge, research, individual and institutional capacity gaps. The outputs of the group work encompassed a wide range of sector-specific priorities such as marine biodiversity management and the impacts of sea level rise and increased storm surge, as well as cross-cutting issues such as mainstreaming of environmental awareness and building resilience and adaptive capacity amongst communities for preparing for and responding to climate change. Cultural issues in CCD and the role of indigenous knowledge systems in helping people to adapt to climate change, as well as the extent to which researchers and other stakeholders are willing and able to work collaboratively with local and indigenous communities in this regard was a common theme that was strongly raised in all countries. The insights gained from the workshops in this regard are being extended and expanded through analysis of the questionnaires, which provide more refined detail on these knowledge, research, individual and institutional capacity gaps. For example, the questionnaires are revealing that there are many lecturers from different disciplines that are getting involved in climate change research but themselves do not yet have PhDs. The questionnaires are also revealing the multi-disciplinary nature of the capacity gaps, thus pointing to how different university disciplines can become involved in knowledge co-production processes.

The consultative process, supported by the data coming in from the questionnaires, in this regard has proved to be extremely useful as it highlights areas of knowledge development and capacity gaps issues that are often not listed in more official climate change documents and policies (e.g. cultural changes; changes in leadership style etc.), providing a more nuanced analysis and understanding of CCD related knowledge, research and capacity gaps.

In response to the question: “Do SADC Higher Education Institutions currently have adequate research and teaching capacity to integrate climate compatible developments into teaching, research and community engagement programmes?” the following points were raised:

- Establishing a climate change resource centre and a climate change database would be a good initiative to prioritise moving forward;
- There is not a research strategy and action plan in place to fill these knowledge gaps, and this was identified as an area that will need attention in future.
- The professional development of university academics for integrating CCD related issues into disciplines that traditionally are not associated with climate change (e.g. sociology, gender studies etc.) was noted as also being important for CCD knowledge and capacity development.

As mentioned above, useful insights are being gained into the university staff profiles with regards to their experience and qualifications related to climate compatible development knowledge production. For example, it was noted in one set of questionnaires that most staff involved in climate compatible development in the university had only been involved in this area for 1-3 years,

while they had more extensive (more than 10 years) experience in their mainstream disciplines. This shows that there is a re-orientation of focus taking place within the disciplines which has staff capacity development implications (see point above about staff with PhDs).

4.4 The Role of the University Sector and Other Collaboration partners

Interactive group work sessions were held aimed at developing an understanding of how the University sector could assist other stakeholders with CCD, as well as identifying specific knowledge partners and networks (at country and regional level) that could strengthen university-based engagements with CCD. Data on this is also being generated via the questionnaires, were detailed insights into stakeholder networks is being captured.

In response to the question: "What is the role of the University Sector?" a number of themed areas were identified:

Curriculum development, teaching and learning and capacity building	Community Engagement
• Provide capacity building programmes for climate change adaptation	• Enhance community engagement on climate change issues.
• Transform teaching and learning through curriculum development	• Provide capacity and guidance for grass roots businesses (e.g. women's groups) and informal traders so that they can be more resilient to climate change conditions which will affect their livelihood.
• Introduce New programme on CCD	• Work with governors, councillors, traditional healers in regions
• Raise awareness & mainstream climate change into existing programmes across the university disciplines	• Provide practical training on issues that are relevant in the private sector and government sector.
• Introduce a new post-graduate course on climate change environmental management	**Networking and partnership building**
• Include climate change issues in the curriculum development cycle of the institution	• Identify other knowledge networks at country level.
• Provide post graduate programmes in environmental management	**Policy contributions and monitoring**
• Create or make internships mandatory, adopt other successful systems from other countries	• Help to identify and clarify country priorities and needs
• Inspire innovation, be practical, make education fun, make science and math more interesting.	• Help to understand and contribute to the policy and institutional context for CCD in Namibia.

Research	Youth mobilization, motivation and career orientation
• Help to establish public private partnerships for CCD research	• Provide info to young adults on what jobs they can do with different types of education
• Gather and disseminate international research findings	• Provide orientation to the variety of jobs and careers that can contribute to climate compatible development
• Establish and expand country pilot projects e.g. with MET, Africa adaptation network, local authorities	• Establish student clubs focusing on climate compatible development practices
• Encourage debate on concepts, ethics and planning implications in universities	• Open up opportunities to young adults to learn from other countries
• Lead in sector based and relevant research in collaboration with industry in CCD	
• Implement knowledge based data bases on sector based CCD	
• Pool financial and academic resources for robust research	

Research	Youth mobilization, motivation and career orientation
• Research cultural and gender aspects of climate compatible development	
• Undertake explorative research on mitigation and adaptation strategies	
• Do research on how CCD can help respond to climate change.	

In all counties, participants generated detailed lists of initiatives being undertaken in the HE sector that are relevant to CCD, which have been included in each of the country workshop reports. These will constitute an extremely useful start to the database to be developed in the Climate Change Counts study, and will be of immediate use for all participants once they receive the workshop reports.

4.5 Multi-, inter- and transdisciplinary knowledge co-production

Discussions were held which focused on modes of knowledge co-production and the importance of producing and using knowledge in a collaborative manner.

Extensive discussions were held, which yielded many responses, including:

- Any Government targets regarding the proportion of funds allocated to Research and Development as part of the GDP are relevant and monitoring of this should be pursued.
- Universities should set the research agenda in collaboration with government.
- Universities should have a clear communication plan of action concerning research activities and their outcomes.
- Participants were asked to estimate and categorise their assessment of the proportion of transdisciplinary, multi-disciplinary, and single discipline research.
- An overall theme was the funding constraints to conducting transdisciplinary research, including at the problem analysis stage, when the funding needed to travel to be able to engage stakeholders to define the problem jointly, is very hard to obtain.

In all the workshops, and as illustrated in workshop reports, the value and benefit of partnerships between government and HEI were regarded as important to develop into the future SARUA climate change capacity development programme, especially when nodes are identified as productive regional partnerships can be further facilitated by such interactions. Questionnaire data is showing that it is those academics with more experience in climate change, and with PhD qualifications that appear to be leading inter- and transdisciplinary approaches to knowledge production where they exist. This has implications for the knowledge co-production framework, and for the capacity development that will be embedded in the SARUA five year programme.

On the whole, participants agreed that the majority of the work they do is not well coordinated, both within the HE sector and externally with stakeholders such as government and the private sector. In further discussion of the benefits and concerns of transdisciplinary research, the following were highlighted:

BENEFITS	CONCERNS
• Making a difference to the livelihoods to those on the ground	• Having to get out of our comfort zone and collaborate with others
• New opportunities for further research	• Fear of being dominated by others and fear for the unknown
• Being and staying relevant	• Limited opportunities to further one's qualifications
	• No incentive or recognition from university for transdisciplinary research
	• Getting acceptance for our work when there are more disciplines involved
	• Old versus new culture
	• Academics tend to work with the same groups of the peers

During the closure of this session in the workshop, the policy implications, or critical enabling factors, for collaboratively producing and using knowledge for changes in CCD policy and practice were identified. Participants generated policy implications for universities and the higher education sector, the private sector, donors and the government sector, working in groups in the plenary and capturing ideas on coloured cards. These were each documented in full for all five country workshops. Common policy implication themes emerging for the university sector included the need to:

- create a culture of research at universities;
- incentivise community level research;
- provide capacity development in writing fundable transdisciplinary research proposals; and
- improve political commitment and HEI top management support.

Participants also highlighted the need for a total change in the current appraisal system and academic culture: for example, non-journal articles should also be recognized for one's annual appraisals, while currently only journal articles are recognized for promotion. A further issue was the need to bridge the current divide between the institutions of higher learning. Participants suggested that the Vice Chancellor and Rectors forum may be a way to bridge the gap and have the top management of these institutions collaborate more amicably and effectively. Renewable energy emerged as a good possibility to foster collaboration between these institutions.

5 Consultation Evaluation & Key Observations

5.1 Participant evaluations outcomes

Workshops were on the whole all positively evaluated, especially in terms of learning more about CCD and to be able to seek ways to apply it in work environments. Participants of Higher Education Institutions stated that they particularly enjoyed hearing about what others are doing in the field of climate change and that they would be motivated to find ways to include CCD in their teaching, learning, research and community engagement.

In general participants reported that they missed representation of some key stakeholders, including leadership of universities and in some cases, senior government representatives.

In the area of networking, participants noted that they do not have sufficient local and regional networks in the area of CCD.

Finally participants stated that they were pleased with the moderation, content and structure of the workshop.

5.2 Facilitators' Observations

5.2.1 Workshop outcomes

The overall objectives of the workshop were met in all countries. Participants walked away with a good understanding of the initiative and of what CCD entails. Furthermore, participants suggested a number of key priorities where HEI could assist with CCD teaching, learning, research and community engagement, and were able to identify related knowledge, research and capacity gaps. An interesting lesson learnt during the consultations was in relation to the role of HEI in the area of CCD research.

Fulfilling this role, however, will not be an easy task, as there are various issues at stake. It was stated that the culture that is inherent to the academic world may be a stumbling block for intensified collaborations and knowledge generation, which the initiative needs to take notice of. Encouraging however, was our ability to identify some examples of the kind of knowledge co-production practice for CCD that was being discussed in the workshops, indicating that there are positive starting points for further development of CCD pathways in countries, but also potentially across the SADC region once a fuller picture can be gained via the remaining workshops. We are documenting these examples in country reports, as well as possible CCD pathways and knowledge development for various countries.

5.2.2 Participation of delegates

As can be assessed in the attendance registers annexed to each country workshop report, the participation of both university and government stakeholders were in general satisfactory on both days. In general, a satisfactory balance could be obtained between university and government stakeholders.

5.2.3 Workshop programme content & structure

The workshop is well-structured and interactive and participants reported that they enjoyed the interactive sessions. To reduce on duplication over two days, and to ensure that the various stakeholder groups are present during the same sessions, the approach used in Namibia was refined for the Botswana consultations to include all participants (government and universities) in one prolonged session of one and a half days. This was found to work effectively in the Botswana workshop, and both groups (stakeholder and university participants) appeared to appreciate the cross exchange of knowledge.

5.2.4 Collaboration with Universities

As noted in Section 3 above, the collaboration with all universities during the scooping phase leading up to and during the workshops was very good. The consulting team was pleased with the support provided by the academic staff engaged with, the local facilitators appointed and the rapporteurs engaged. They all played a key role in assisting with finalising the list of invitations, liaising with university leadership, assisting with logistics and catering arrangements, selection of rapporteurs and organisation of the event itself.

The contacts established provide a solid foundation for establishing and expanding the collaboration envisaged through the knowledge co-production framework.

5.2.5 Questionnaire data and administration of the questionnaires

As noted above two different questionnaires have been designed, one for university staff and one for stakeholders. The questionnaires have been administered at the workshops, which have provided further depth to the data obtained during the workshops. They have also been placed on SurveyMonkey and all members of the invitee list have been requested to complete the questionnaires. Follow ups after workshops are resulting in further submissions of questionnaires. There has been a response to the request for additional questionnaires (particularly from those that were not able to attend the workshops). Questionnaire analysis, as noted above, has started, and is providing additionally useful information especially related to more detail about university staff, knowledge needs and gaps, and actual practices in universities (e.g. in one country it was found that very little inter- and transdisciplinary teaching practices are taking place, and few universities are using service learning approaches that are vital for co-production of knowledge in curriculum contexts).

6 Recording and Product Development

To ensure detailed recording and accurate reporting, and to ensure that product development will be carefully informed by the processes involved in the research and consultations processes each workshop involves 4-5 local rapporteurs, supported by the local facilitator. The local facilitator compiles a workshop report, which is reviewed by the HEMA representatives present at the workshop. A standardised format for workshop reporting has been developed, and tested out in the Namibia workshop, and refined for the Botswana workshop, and thereafter applied in Mozambique, Swaziland and Zambia.

This information – from the workshop report, together with the Background Information Document (based on document analysis), and the questionnaire data is being used to compile the country reports.

The country report is an innovation developed by the content specialists that goes beyond the requirements of the Terms of Reference and the contracted deliverables. An outline for the country reports has been developed which includes a) the needs analysis, b) the institutional analysis, c) implications for CCD learning and knowledge development pathways, and d) implications for knowledge co-production in country. Each country report will be accompanied by a country-based database and networking list. Each country report will comprise background information on climate change in the specific country, the findings and further insights into knowledge and research needs and capacity gaps (individual and institutional), a mapping of existing university roles and contributions to CCD; as well as a discussion on possibilities for CCD learning pathways and future collaborative knowledge co-production and use in the country. The country reports therefore combine and synthesise two of the main agreed outputs of the mapping study, namely the needs analysis and the institutional analysis, at the country level, as this will be extremely useful for participants in each country, and will also allow for enhanced analysis across countries on the key areas of investigation of the study. This country-level analysis and synthesis will form part of the final synthesis report of the Climate Change Counts study, which will further include comparative regional

analysis using the outputs of the other SADC countries, as well as the proposed regional framework for collaborative research on climate compatible development.

Therefore, as required by the Terms of Reference, and based on the experience gained through the five country scoping phase, the following key outputs will be delivered by the assignment:

6.1 Needs analysis report

Each country visited will have a workshop report (record of the discussion) and a country report, which forms the basis of the country needs analysis and will address at least the country's CCD priorities over the next 5 years and the implications of these CCD priorities for knowledge and research requirements, including the value of co-production approaches.

6.2 Institutional assessment report

The country report will also include an institutional assessment which will focus on the main findings from the country workshops and a mapping of current CCD-related research, teaching and external engagement activities, individuals, networks and collaborations and their future potential. The institutional assessment report will also include a synthesis of the findings in light of broader SARUA collaboration.

6.3 Strategic knowledge co-production framework

The knowledge co-production framework will summarise *inter alia*:

- Key regional and in-country priorities and themes;
- Implications of these priorities and framings for regional and in-country research, knowledge, teaching and learning requirements over the next 5 years;
- The specific role and value of transdisciplinary and co-production approaches;
- An outline for the development of agreements between SADC governments and the SARUA CCD programme;
- How the diverse country contexts influences the framing of CCD and how it relates to other knowledge production processes and systems of knowledge;
- Existing core areas of expertise in the region.

The framework will include a database of researchers and institutions with relevant knowledge and expertise across the region.

6.4 Policy learning briefs

Three potential types of policy learning briefs are envisaged – for those who fund CCD research, for those who manage the university outputs and for those who produce the output. The briefs will be short, clear and strategically directed to the support and enabling factors needed to co-develop knowledge on CCD, and how this can be supported and fast-tracked.

7 Conclusion

The preparatory work and the first five workshops substantially achieved the overall objectives of the SARUA Climate Change and Development programme, and in particular contributed to some essential lessons learnt to maximise outputs required for the remaining workshops.

The workshop approach and the data gathered to date through the various processes utilised have provided confirmation that valid deliverables can be produced though the adopted scoping study methodology. At this point the indication is that the following pre-conditions can be met as critical success factors

- Establishing good university and other CCD stakeholder collaboration as basis for various networks establishment at an "on-the-ground" basis
- Facilitating multiple stakeholder communication in one venue
- Providing for comprehensive scanning of current CCD related research and development activities in multiple sectors
- Complementing research activities not covered by country background research and stakeholding research to be conducted in a controlled environment within a set time frame
- Allowing for face to face questionnaire distribution completion, complemented by on line surveying
- Providing for cost effective time utilisation by content experts and facilitators to do research, facilitation, analysis, report-writing and engagement, while allowing for face-to-face communication with in-country stakeholders
- Creating the best opportunity for buy-in, as evidenced by the comments received in Namibia, Botswana, Mozambique, Swaziland and Zambia, which deepens the engagement of SARUA beyond its former VCs-only level, thus potentially contributing significantly to the sustainability of SARUA

In term of workshop format, the change in Botswana to a one and a half day workshop combining stakeholders and HEI was regarded as a success in terms of participation and maximising interactions and synergies between the different stakeholders (HEIs, government, NGOs and private sector).

As a pilot and as part of the Scoping Phase, it is furthermore of importance to assess all aspects of the workshop, from the preparation to the evaluation and reporting stage. The time allocated for the sessions was in general sufficient. For most of the workshops the actual turnout was considerably less that those confirmed. In future even more time has to be considered for follow up of invitations and responses, and to confirm dates provided by the University partner independently.

In all countries the actual time required to "build the stakeholding" proved to be significantly more than had been budgeted for, and a particular constraint was the impossibility of the HEMA team to spend significant time on site in advance of the workshop to meet with key individuals, secure commitment and identify other networks or individuals. Much reliance is placed on the time and resourcefulness of the local facilitator.

In the case of Botswana the fact that the UB had not endorsed the SARUA programme in advance proved particularly problematic. Substantial time and energy was committed to securing their support, endorsement and participation which was formally withheld a day before the workshop.

The programme for further workshops has thus accordingly prioritised those universities that have endorsed the programme.

A further observation is that an essential characteristic of the programme has to be some bottom up demand coming from the country and HEI in question, and that the exercise of mobilising stakeholders has to be done with a sufficient balance between this factor, and encouraging participation from the top through SARUA.

The above factors related to stakeholding have all been carefully assessed and included in a revised approach and categorisation of key groupings per country with the input of CDKN, SARUA and the HEMA team. In compiling stakeholder lists, however, it was noted that it is extremely important to have local country-based knowledge of CC and HEI networks prior to the workshops. Utilising this factor, good representation was achieved in Botswana, Mozambique, Swaziland and Zambia. The SADC REEP network has proved to be extremely helpful in this regard, as they have in-country knowledge of the environmental and climate change stakeholders. However, there has been a need to focus very specifically on climate change stakeholders' information centering on the UNFCCC focal point.

The HEMA team has identified immediate outcomes and benefits of the mapping study for participants. These can be summarised as follows:

- In all five countries, several participants mentioned that the consultations provided the first opportunity for them to meet with key people in the university sector, and/or the government sector for discussion on the knowledge needs associated with climate change. They thus placed high value on the networking opportunities inherent in the consultations.
- Similarly, university participants highlighted that it was the first time for them to hear about many of the initiatives of other university staff, and in some cases also to hear of key policy and strategy developments on the part of the government. They thus placed high value on the learning opportunities inherent in the consultations.
- In Namibia, the HEMA team was able to link up a private sector person who had attended Day 1 with a university researcher who attended Day 2 – both of these participants were working on similar issues within their sectors (marine biodiversity and surveys) and had expressed interest and willingness to share data, on the separate days. There could thus be immediate positive spin-offs for CCD from this introduction. Similar connections were made between stakeholders in other workshops which may have further positive outcomes.
- A further benefit of the process is the in-country and 'on the ground' identification of potential groups and organisations who can work together with SARUA at regional level, as was the case of a link up made between SASCAL and the SARUA project during one of the workshops.. Mapping these possible future partners for SARUA at a regional level will be an important outcome of the mapping process. The link between the SARUA programme, and the SADC REEP / UNEP MESA programme has also developed through working with the MESA Chairs in the three countries: Zambia, Botswana and Swaziland. Professor Lotz-Sisitka has also informed like-minded networks (MESA and GUPES – the Global Universities Partnership for Environment and Sustainability) of the SARUA mapping study. Professor Lotz-Sisitka and Mr Pesanayi from SADC REEP also presented the programme and its objectives to the SADC National Network Representatives (government representatives) at the recent SADC REEP meeting. This has contributed to the visibility of the programme. Professor Lotz-Sisitka has been invited to the World Science Forum in Rio in September (invited by UNESCO)

which is focussing on sustainable development and will be part of a university panel where the SARUA programme can also be presented subject to SARUA agreement.

- There is appreciation amongst university and other partners that the university sector (via SARUA's leadership) are taking this initiative to link up potential partners across the region for addressing CCD issues, which are recognised as being very significant to the region's future development. There is also appreciation for the collaborative approach to knowledge development and use that is being discussed in the initiative. The initiative is also being seen as an important example of what can be done in other regional economic communities.

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Annexure A: Climate Change Counts Mapping Study: Strategy for Stakeholder Engagement

Rationale for this strategy

The Climate Change Counts Mapping Study will hold consultations in 12 of the 15 SADC countries, which have the aim of bringing together higher education and climate change stakeholders, in order to carry out a needs analysis and an institutional analysis for each country, towards enhancing university contributions to climate compatible development. The rationale for stakeholder engagement is two-fold:

- enhanced identification and understanding of knowledge and research needs and gaps for responding to climate change, and a comprehensive mapping of expertise, to feed into the regional analysis that will be an output of the study[4]; and
- initiation of a process of social and peer learning through these workshops, so that stakeholders from the two main thematic areas (higher education and climate change) begin an ongoing networking and learning process that continues beyond the timeframe of the study, and promotes enhanced collaborative production and use of knowledge, for climate compatible development.

These substantive and process-related aims highlight the importance of getting the right people, and combinations of people, to the country consultations. Thus this strategy has been developed, to ensure a strategic and consistent approach in identifying suitable participants for the stakeholder workshops and ensuring *existing higher education and climate change institutional structures* are targeted. Stakeholders targeted will be from the following sectors: government, research and academia, development and NGO, and private sector. A limited number of the most active donors, as well as key knowledge brokers outside of academia and government, may also be invited to the consultations.

Approach

A strategic approach to stakeholder identification and mobilization will be followed, which can be summarized as follows:

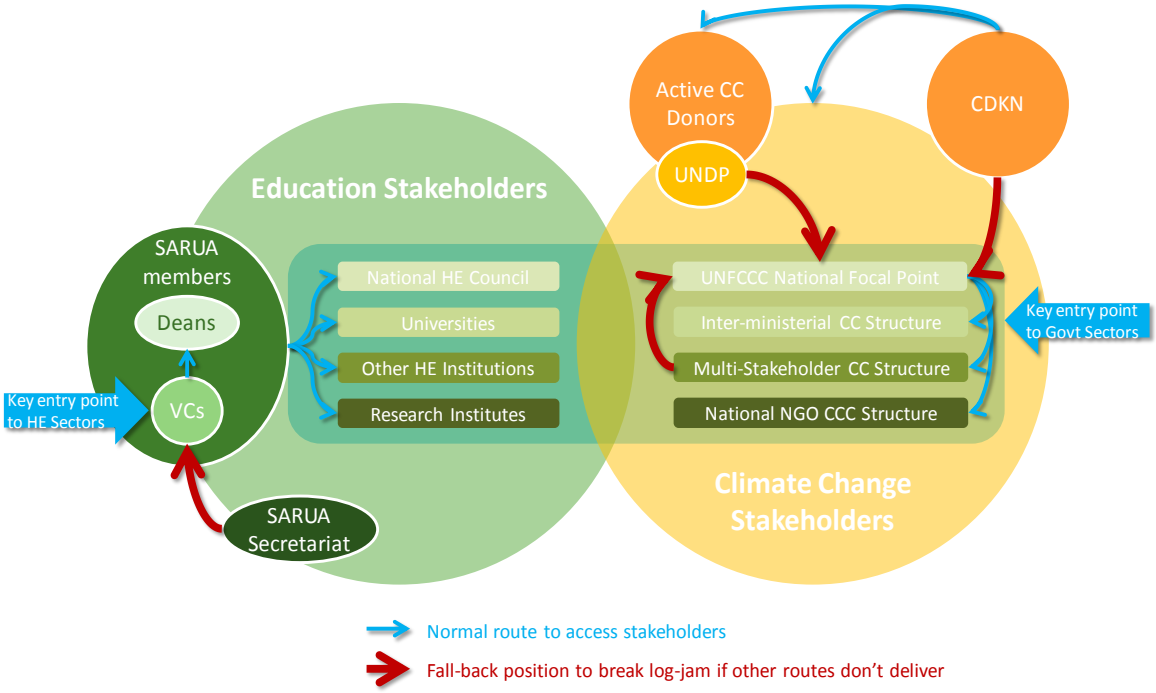
- identify key entry points for the primary target groups – higher education and climate change
- adopt a multi-pronged and hierarchical approach to gaining access to key entry points
- use a process of referral to broaden and deepen the stakeholder lists

The SARUA main contact points in the country – the Vice Chancellors of the SARUA university members - will constitute a third stakeholder hub, and the key entry point for university stakeholders. Local facilitators should work closely with the SARUA contact points, which will also provide additional stakeholder information and in-country 'clout' for stakeholder mobilization.

The two key government starting points for stakeholder engagement are the Ministers of Education and of Environment – the latter for the climate change institutional focal point. The rationale is that we want the Education Ministry to become fully engaged and on board with the climate change priority, but we also recognise that the climate change focal points in the Ministries of Environment are likely to be stronger at championing the climate change cause amongst other Ministries, given that they already have this coordinating role. The key point to stress is that we do not solely want to

[4] For additional information on the process and outputs of the Climate Change Counts Mapping Study, consult the Overview flyer.

target Environment and Education officials, as climate change is a cross-cutting issue that needs to be mainstreamed into broader socioeconomic development. Thus Ministries of finance, economic development, planning, health, water, agriculture, energy, science and technology, transport etc. should also be in attendance to ensure we map and identify the transdisciplinary research needs across these different domains.



Checklist for accessing SARUA/university stakeholders

1. Contact Vice Chancellors of the SARUA member institutions in the country.
2. Work through existing network in HE research and development for referrals (E.g. CHET and CREST Stellenbosch)
3. SARUA is to be the main facilitator for accessing and gaining cooperation from the VCs within each country.
4. Identify and contact Deans and lead climate change researchers in the university via the Deputy VCs; a clear message must be provided to the DVCs about multi-disciplinarity (ask for all Deans to be there). We are looking for researchers/lecturers from all of the faculties, due to the cross-cutting nature of climate change and the need to mainstream CCD into the research and teaching of all faculties and departments.
5. Identify Heads of Institutes and key research programmes involved in climate change related issues in each university.
6. Any researchers' lists we can access – e.g. possible ACDI list of researchers involved in climate change in Africa.
7. Establish contact with HE Councils (E.g. NCHE Namibia, TEC Botswana).

Checklist for accessing climate change stakeholders

1. Identify and contact UNFCCC national focal point[5], prior to finalising dates for consultations and prior to sending out pre-invitation email.
2. Brief UNFCCC focal point on the study, obtain buy-in by highlighting the value of enhanced university contributions on CCD to the country's ongoing processes to mainstream climate change and strengthen the country's response to climate change, and check on suitable dates for the consultations.
3. Obtain information from the UNFCCC focal point on the existence and composition (including names and contact details) of the following structures:
    a. Inter-ministerial coordinating committee on climate change – it is critical to engage this group early on, to obtain the right entry points into the government sectors /ministries, and to ensure we invite people from as many of the relevant government departments as possible, for their active participation.[6]
    b. National multi-stakeholder committee/structure on climate change.[7]
    c. Any NGO committees/structures on climate change – for example, in South Africa, there is an Adaptation Network, some countries have national Climate Action Networks, etc.
    d. Donor coordination group on climate change (often this is the same coordination group on environment, or natural resources management);
4. It is likely that the UNFCCC national focal point will refer you to a staff member for the above information – this will be someone within the country's version of a climate change unit[8], which is usually located within the National Ministry of Environment (in some countries this may be in The Presidency).
5. If it is not proving easy to access the UNFCCC focal point, then try to access this person via any of the above committees – for example, an influential NGO on the national multi-stakeholder committee on climate change; or an influential donor.
6. Fall-back position: If all else fails, and the local facilitator has exhausted her/his key climate change contacts, then ask CDKN to facilitate accessing the UNFCCC focal point.

Checklist for accessing higher education institutional stakeholders

1. Identify and contact key overarching/convening structures for HE in the country – for example, in Botswana, the Tertiary Education Council.
2. Ministry of Education – contact through initial letter of introduction from SARUA (Piyushi).
3. Curriculum development bodies.
4. Research foundations and networks: Each country will have one or several national research foundations, and/or programmes, dealing with climate change research issues and higher education institutions, such as the National Research Foundation in South Africa, and the DST's Global Change Grand Challenge. Key units within these structures will be important

[5] See http://maindb.unfccc.int/public/nfp.pl

[6] Governments are establishing groups that convene ministries across government to ensure cross-sectoral coordination on climate change and mainstreaming of climate risks into sectoral planning and development. Inter-ministerial structures on climate change are usually chaired by the Environment Ministry, or in certain cases the Office of the President.

[7] The multi-stakeholder CC structure/committee is an institution established by government, with broader representation, including NGO, academia, private sector etc, to provide additional advice and input on CC.

[8] The climate change unit or task team will have been established to coordinate climate change responses, drive mainstreaming of climate change into sectoral ministries and across spheres of government, and to implement CCD projects and programmes. The national CC focal point is usually located in this unit, and may head it.

stakeholders to include in the mobilisation. There are a number of southern African knowledge sharing networks focussed on climate change research that can be targeted for workshop participation as well as research mapping more broadly, e.g. SASSCAL, the Southern African Climate Change Network, etc.

5. See SARUA checklist above.

Selection of dates for country consultations

A number of sources should be consulted simultaneously to determine whether initial provisional dates for the consultations will allow for good attendance by the range of stakeholders. The key people to contact in this regard are: the UNFCCC focal point, the local facilitator, and the main SARUA contact point/s. It is extremely important to contact the UNFCCC focal point, or designated government climate change staff member, as there are currently numerous climate change conferences and workshops, and national climate change government staff are thinly spread. Thus it is important to avoid dates that coincide with pre-planned climate change conferences and events.

Categories of stakeholders to identify and invite

1. Climate change

<u>Government</u>

- UNFCCC national focal point
- Other relevant staff members in national climate change unit, within Ministry of Environment (usually)
- Key sector representatives, from the range of ministries/bodies. Access these initially through the representatives on the National Inter-Ministerial Committee/ other structure on Climate Change. Possible range of ministries includes:
    - Development and Economic Planning
    - Health
    - Agriculture and Forestry
    - Environment – e.g. biodiversity directorate
    - Water Affairs
    - Disaster Risk Management – particularly critical to invite
    - Industry and mining
    - Social Development
    - Transport
    - Science and Technology
    - Treasury
    - Presidency – especially any special coordinating units
    - Ministries dealing with Gender, or Women and children
    - Etc
- Project/programme managers of key climate change programmes/initiatives within government

<u>NGO</u>

- NGO national task teams / coordinating structures on climate change
- Key national / international NGOs working on climate change, e.g. IUCN, WWF; or climate change and development e.g. Oxfam, Action Aid, Care International
- NB to identify some NGOs that are working directly with communities on the ground

Non-academic research institutes, and independent knowledge brokers

- Any independent research institutes / policy think tanks with climate change programmes
- Key independent knowledge brokers on climate change – e.g. consultants that are well-known in the field and hold a lot of the current knowledge, have been involved in developing national climate change policies/strategies/programmes etc

Donor

- UNDP country office – the Energy and Environment focal point. UNDP is critical as they lead the UN's work on climate change in the country, and fund/manage many of the current climate change projects and initiatives being implemented in countries. Note that UNDP coordinates the UN Country Team in each country, so they can also provide information on other UN agencies that may be doing important work on climate change
- Selected key donors funding climate change work in the country. Note that we do not wish to invite the full range of donors, to avoid donor domination of the meeting, but we rather a few influential donors
- Project managers of key donor-funded initiatives – e.g. GEF-funded adaptation or mitigation projects, projects under the Clean Development Mechanism (CDM), Pilot Programme on Climate Resilience (access through World Bank), Africa Adaptation Programme (access the AAP through UNDP)

2. SARUA/university

- All Deans, through the DVCs
- Lead climate change researchers in the university
- Education Faculty/department
- Researchers across the faculties and departments, with work that has some relevance for climate change. This will include predictable and non-typical departments, e.g.
    - Agriculture and Forestry
    - Biology, Ecology, Environment
    - Engineering
    - Transport
    - Psychology
    - Sociology
    - etc
- Key relevant research institutes e.g. UNAM's Multi-disciplinary Research Centre, University of Botswana's Okavango Research Institute, etc

3. Education

- Ministry of Education – accessed via initial letter from SARUA.
- Key overarching/convening structures for HE in the country – for example, in Botswana, the Tertiary Education Council
- Curriculum Development body
- Other institutions of learning and/or research

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