

PORTFOLIO REVIEW: AFRICA CLIMATE CHANGE ADAPTATION INITIATIVE
HIGHER EDUCATION SUPPORT PROGRAM
OCTOBER, 2015

i. Problem Statement & Rationale for OSF Engagement

The countries of the African continent hold little responsibility when it comes to the issue of climate change: Africa's share of world carbon emissions is around 3%, and most sub-Saharan African countries are still below the estimated rate of sustainable fossil fuel use. Yet the continent is especially vulnerable to the effects of climate change, due to widespread poverty, dependence on climate-sensitive natural resources, other pre-existing stressors on the environment, as well as weak institutions and governance systems. The changing climate is exacerbating pre-existing issues as weather patterns alter leading to reduced agricultural yield and the spread of tropical diseases to previously unaffected areas.

The countries of sub-Saharan Africa were largely lacking the human capacity necessary to conduct research on the science and impact of climate change, as well as manage the associated risks. Moreover, despite numerous international conferences on the issue, African countries were also under-represented at such discussions due to a dearth of qualified professionals able to speak to the particular issues the people of the continent face. Those few African experts, who were available, were generally trained abroad and could offer only a limited perspective on the issue with different regions and people of Africa experiencing the effects of climate change in radically different ways.

Climate change is often seen as a primarily scientific issue, rather than a societal issue, negatively impacting the economically deprived and socially marginalized populations in particular. Thus, although OSF is not traditionally a science or environmental funder, the foundation has an important role to play in ensuring that its focus on rights, governance, accountability and equity are integrated into climate policies. Climate change is impacting many of the issues that OSF has traditionally prioritized in its grant-making: management and equitable distribution of mineral and natural resources; transparency and accountability of budgets and funding; migration; public health; protection of vulnerable minorities; economic justice; access to information; intellectual property rights and technology transfer; and perhaps above all democratic participation and oversight of government policies and priorities. Assisting African universities in producing a critical mass of African citizens with the requisite expertise to guide the various countries of Africa in their response to these challenges is consistent with OSF's longstanding commitment to social change.

ii. Initial Setup of the Africa Climate Change Adaptation Initiative

The Africa Climate Change Adaptation Initiative (ACCAI) was established by a decision of the OSF Global Board meeting held during the Africa Forum convened in Dakar, Senegal, in February 2008. At this meeting the impact of climate change in Africa was discussed and the Global Board decided that one significant contribution OSF could make would be to draw on its existing expertise and establish a higher-education based initiative to build African capacity and leadership around the issue of climate change.

Following a period of extensive consultation within OSF and with other actors active in the field (including DFID, IDRC, START, IISD, IIED, the Tyndall Centre, TERI and others¹), ACCAI was established in 2009 under the leadership of Rhett Bowlin, former director of HESP.

Following a request for proposals in late 2009, seven universities were awarded OSF grants:

- Mekelle University (Mekelle), Ethiopia (\$499,085).
- University of Dar es Salaam (UDSM), Tanzania (\$2,000,000).
- University of Ghana (UGhana), Legon (\$1,638,677).
- University of Nigeria (UNN), Nsukka (\$2,191,449)².
- University of the Witwatersrand (Wits), South Africa (\$931,650).
- University of Nairobi, Kenya (\$157,198)³
- Stellenbosch University (Stellenbosch), South Africa (\$1,032,602 for five years).

The commitment of ACCAI to universities in the first round⁴ of grant making totalled **\$8,450,661**.

The main focus of these grants was on supporting masters and doctoral training. Some of the universities established new institutes or/and masters programs focused on climate change, while others chose to strengthen and integrate climate change research and studies into their existing offerings. The grant to Stellenbosch was different: it was to serve as a lead for the university consortia for the TRECCAfrica⁵ program, and to provide trainings in transdisciplinary research methods⁶ twice a year to students and staff of the other ACCAI grantee institutions.

Although ACCAI was developed by a HESP director it differed in substance from the usual HESP initiatives. For this reason it was initially decided that ACCAI would be established as a stand-alone program, although it was soon brought back under HESP auspices. ACCAI never had a strategy that was approved by the Global board; and there was a quick turnover of staff responsible for the program management. All projects suffered from these interruptions and changes in direction, but most have consolidated by now. The initial project period was three years. Due to delays partly caused by the changes in the strategy and staff and renegotiating the terms as a result, all grants (with the exception of those given to the University of Nairobi) have been extended, refocused and are still active.

At the outset ACCAI was supported by a group of African academics with expertise in the issue of climate change⁷, who provided critical leadership during the establishment of priorities, as well as detailed feedback to the grantees at regular meetings. However, the Reference Group (RG) never had clear Terms of Reference. This resulted in some partners misunderstanding the role of the RG,

¹ Department for International Development (UK), International Development Research Centre (Canada), System for Analysis Research and Training (Washington DC), International Institute for Sustainable Development (Washington DC), International Institute for Environment and Development (London), Tyndall Centre hosted by the University of East Anglia (UK), and The Energy and Resources Institute (New Delhi).

² UNN have so far received only \$932,588 out of the total commitment. HESP is currently following up with issues raised related to the management of the project, which should conclude in a few weeks.

³ University of Nairobi received an interim grant to develop a strategic plan, with a commitment to a further four years' support based on satisfactory progress in planning. By the time they were ready with the proposal the program was closed.

⁴ Initially two more rounds were planned.

⁵ Transdisciplinary Training for Resource Efficiency and Climate Change Adaptation in Africa

⁶ Stellenbosch uses the term "transdisciplinary", which in this context represents the co-design and co-production of knowledge with experts from across disciplines and members of the communities outside the university.

⁷ Members of the Reference Group were: Kevin Urama, Executive Director of the African Technology Policy Studies Network at the time; Youba Sokona, former Director of the African Climate Policy Centre, now at the South Centre; and Coleen Vogel of the University of the Witwatersrand

which exposed the members to various accusations and inconveniences. There was also a perception of a conflict of interest, which further undermined the function of the group. These issues, and the change of focus to food security, resulted in the decision of dissolving the group in 2014. Since then, HESP has engaged with experts as needed.

iii. Our Ambitions: Strategy and Goals

The overall aim of ACCAI was to strengthen African intellectual expertise and policymaking capacity on climate change and sustainable development, in order to address significant knowledge gaps at global, regional, national and local levels. The main mechanism used to achieve this aim was support for university-based teaching, with a focus on the introduction of interdisciplinary methods, and the explicit linking of academia and society in the production of knowledge.

The specific objectives of ACCAI were:

1) *Building capacity through support for the development of university teaching:*

To support the development of masters and doctoral programs at African universities, as well as stand-alone courses and research, focused on climate change and sustainable development.

2) *Transforming higher education to increase its relevance outside the academe:*

To support transformative changes in teaching and research in African universities in this field, especially:

- efforts to overcome institutional barriers to inter-disciplinary teaching and research, including greater involvement of the social science disciplines in the often science-dominated teaching and research on climate change.
- establishing links between universities and society-at-large - including policy makers, civil society organisations, the private sector and affected communities - with the aim of ensuring that university-based teaching and research are designed to solve real-world problems and presented in ways that are useful for those outside academia, be they policy makers or local communities.

3) *Establishing and strengthening Centers of Excellence:*

To support the development of long-term institutional capacity in African universities by establishing centres of excellence working on climate change adaptation and sustainable development issues, so that the impact of the OSF funding lasts well beyond the grant period.

4) *Supporting regional and pan-African cooperation:*

To support the creation of networks – both among partner universities, and with other universities in Africa and across the world, as well as with civil society and policy-makers - in order to extend the initiative beyond the particular grantees and the life span of the grants.

The overarching goal was to support the integration of Open Society values into African university programs on climate change, through a focus on the effects of climate change on governance, transparency, equity, rights and accountability.

iv. Assessment of Achievements and Challenges for ACCAI

In this section we look at examples of the various instruments ACCAI used in pursuit of the above-mentioned objectives, and assess the achievements.

1) Building capacity through support for the development of university teaching:

Most comparable initiatives targeting capacity building related to climate change in Africa were focused on research, providing little or no support for teaching.⁸ Moreover, scholarship opportunities that were available to Africans largely provided for study abroad, which – apart from many obvious benefits- also contributed to brain drain on the continent.

Therefore, and especially in light of HESP’s particular strengths and long-term experience in supporting curriculum and faculty development, it was a natural decision to start building capacity through supporting the establishment of new degree programs, including the creation of new curricula and university courses.

Over the past five years, partner institutions have reported the introduction of 55 new courses, as well as the establishment of eight new interdisciplinary masters and two new PhD programs. In total, 102 students graduated from these programs, and another 178 are currently enrolled. *(See Appendix I for information on courses, research, and students)*

The pace of program development varied at each of the partner institutions. Some, like UDSM started the process before HESP funding even began. Others, like Wits or the UNN, took time to assess the status and needs of their institutions. Mekelle initially had issues with teaching capacity, which have since been solved, in part via the employment of new graduates from the funded program. As of today, all the universities have gone through the long process of having their new programs accredited both by their university senates and national accreditation agencies. This means that the programs will continue operating even after HESP funding comes to an end.

ACCAI’s unique contribution is reflected in the scale of results: nearly 300 African experts in climate change (holders of Masters or PhDs) have graduated, or will do so soon. At the current rate of enrolment, this figure could double by the end of 2017, leading to the formation of an unprecedented cadre of climate change specialists on the continent.

At this point we have only limited data of those in alumni. Based on site visits and meetings with students, we know that many who enrol in masters programs work for national parks, local governments, and sustainability institutes. Many return to similar jobs after graduation. Others go on to pursue Ph.D. studies or begin teaching in the programs. For example, a program graduate at Mekelle has become the “right hand” for the project leader and is instrumental in the expansion of the program and successful application for new grants. One of the project graduates at UGhana teaches her own courses and is now working with OSIWA on the development of a new program with OSIWA’s small holder farmer organization partners. According to the Deputy Vice-Chancellor of Wits there is a large demand for graduates of these programs at ministries and government agencies, so many Wits graduates are employed at decision making bodies, governments, ministries.

⁸ Key examples of this approach are such major initiatives as the CCAA (Climate Change Adaptation in Africa) and the ongoing CARIAA (Collaborative Adaptation Research Initiative in Africa and Asia) co-funded by DFID and IDRC; or ACCFP (Africa Climate Change Fellowship Program), which is also partly funded by the IDRC through START. Altogether these initiatives have achieved significant results: over 200 African organizations supported and 50 new PhD dissertations defended on climate change adaptation issues.

2) Focus on universities and the transformation of higher education:

During the ACCAI planning phase, there was an extensive discussion around whether capacity should be built at research/ policy think tanks or at universities. HESP strongly argued for placing capacity building activities at universities. HESP's reasons were twofold: ensuring sustainability of the centers and contributing to the reform of African higher education. HESP's aim in introducing ACCAI to universities has been to transform teaching and learning at universities by increasing both their capacity and relevance to major global debates.

- Interdisciplinary methods and co-production of knowledge

Climate change is a complex issue, which can be viewed from many different angles—from hard science to human rights to public health, among others. Not surprisingly, the aim of ACCAI was to transcend disciplinary barriers that many universities still used in their teaching and research. Much of the project developed a strong focus on the co-design and co-implementation of programs with 'users' or actors from outside the university, including local farmers, priests, community members and policy makers. Stellenbosch has been a great promoter of this method, which is gaining ground in the partners' research design and teaching practice. Today it is working especially well in Ethiopia, Tanzania and Ghana, where the communities are the both "laboratories" and the beneficiaries of specific research (*See Appendix II: Exhibitions*).

- Students working with the communities

The HESP programming also encouraged student-centered learning and research, as well as students learning with communities outside the university⁹. This proved to be quite difficult to implement, especially in more traditional settings like Nigeria, where the system is simply too hierarchical and lacks motivation to change. Wits, on the other hand, has designed a program for student "sensitization" and is paying extra special attention to students' learning process and career paths.

- Outreach: Training for stakeholders and Advocacy

Another objective was to encourage universities to offer services to the communities, through the development of short courses and training programs. These programs were to be tailored to the needs of diverse audiences and to be based on the data and conclusions drawn from the universities' research findings. Most universities have fulfilled this expectation and enthusiastically connected with local communities - including the immediate university communities, as well as traditional leaders, clergy and policy makers. (*Appendix III on Outreach*)

3) Establishing and strengthening centers of excellence

In addition to promoting teaching programs, ACCAI also sought to establish or support institutions in the form of centers of excellence (*see Appendix IV*). This integrated and longer-term approach privileged a few select institutions. OSF provided significant funding for infrastructure to three universities: UGhana, UDSM and UNN. In most cases, the establishment of the centers have entailed the development of infrastructure and acquisition of academic materials, libraries, furniture, computers, vehicles, climate modelling software, etc.

⁹ In order to emphasize the importance of independent student work involving the communities, HESP has recently started a pilot for supporting student groups' community projects. The Call for applications resulted in 34 applications, of which six are likely to be funded.

The centers created or supported by ACCAI have significant differences between them. These differences reveal in part the weight of the historical and environmental constraints but also the quality of leadership. Two of the centers were pre-existing, while ACCAI can claim full credit for the establishment of the other four. The pre-existing centers, the Global Change and Sustainability Research Institute (GCSRI) at Wits and the Sustainability Institute at Stellenbosch, have received modest funding for infrastructure, and thus mostly benefited from ACCAI resources to better position themselves in the specific field of climate change adaptation. Given their initial capacities, these institutions have increased their visibility and skills in a field that has become prominent.

The two centers where ACCAI has had a much bigger influence are the Center for Climate Change Studies (CCCS) at the University of Dar es Salaam and the Institute of Climate and Society (ICS) at the University of Mekelle. The UGhana project is a somewhat special case: they started with the program development first, and have established the Climate Change and Sustainable Development Center (CCSD) only recently. The CCSD, besides hosting the ACCAI project, organizes scientific events that attract a large audience from West Africa. Their conferences on climate change adaptation are aimed at informing policy and decision makers on the recent research and academic discussions on climate change and food security, among other topics. Discussions are underway to further strengthen this institutionalization with the support of a former president of Ghana who is special envoy of the United Nations on climate change.

The Center for Climate Change Studies at UDSM experienced a similar trajectory in East Africa, as well as managed to raise significant additional funds from other donors. The center advises the government on various occasions and at international meetings. The Institute for Climate and Society (ICS) at Mekelle is not only becoming a major player in Ethiopia on climate change adaptation and food security but gaining international recognition as well.

One of the indicators of the centers' success is the amount of funding they have been able to mobilize from other donors. ACCAI has clearly contributed to enhancing the centers and thus the host universities' profile, which became more credible and professional, and therefore further consolidated with additional financial resources. The first of such funding was the TRECCAfrica consortium coordinated by Stellenbosch to support academic mobility (students, faculty) between ACCAI partners, followed by UDSM and Mekelle raising funds as part of other consortia, or on their own to support students in the new programs. To date, the partners have reported receiving a total of circa \$21million related to ACCAI, while the results of several other tenders are still pending. *(Appendix V)*

While the establishment or the strengthening of the centers was relatively smooth, the current challenge is with the staffing of the centers. In that respect HESP underestimated the importance of charismatic individuals and their position in the university hierarchy in the success or failure of the centers. The Stellenbosch Sustainability Institute has recently gone through a leadership change, which allowed two young and energetic faculty members to take over the leadership of the project. Mekelle has a relatively young and enthusiastic leader, although it could use additional capacity especially if it wins the World Bank tender. The Center for Global Change at Wits University has just been reinforced with Coleen Vogel, who has re-joined the university after a brief lectureship at the University of Pretoria. However, the charismatic prof. Pius Yanda of the Center for Climate Change Studies at UDSM and the similarly respectable prof. Yaa Nbaidou of the Climate Change and Sustainable Development Center at UGhana seem extremely overstretched, especially since the UDSM is now involved in the shared framework project, and the latter has taken on the leadership of the ACCAI network. Moving forward we would like to focus our attention on supporting further strengthening of the leadership and administrative capacity of the centers. There are more serious

issues with the administrative capacity and some policy matters at UNN. The HESP staff with the Network Audit Department has recently performed a review (*see report in Appendix VI*). HESP needs to make a decision if it should continue working with UNN, which would require significant staff capacity on the OSF/ HESP side, or cancel the grant.

4) Regional and pan-African co-operation: meetings and joint events

The ACCAI planning body identified a relative dearth of intra-continental collaborations as limiting the possibility of developing a coherent and effective “African” voice on the issue of climate change. Thus, the allocation of funds was deliberately divided between three regions: Western, Eastern and Southern Africa, involving two institutions from each region, with the hope for cooperation within and later between the regions. At the outset, cooperation among ACCAI institutions was not very active. This situation was partly due to differences in initial capacity, agendas, and unfamiliarity with other institutions’ programs as well as lack of openness to learn from one another. Besides the formal partners meetings, which mostly focused on individual agendas, there was no real contact between the institutions. Stellenbosch was supposed to act as a hub for the network through the methodology trainings and leading the TRECCAfrica consortium. Unfortunately the cooperation was limited, partially because of the gap between Stellenbosch’s and the partners’ development statuses, and also because of the partners’ misunderstanding of the new methods and their hesitation to apply those in their own work.

It took more than three years for HESP’s intervention to bring about positive results, as we advocated for increased networking among partners. We also realized that specific funding, coupled with strengthened interpersonal relations, was instrumental to forging effective collaborations. Altogether these efforts resulted in more frequent exchanges (both students and teachers), and various joint initiatives, such as conferences and research projects. The trajectory of Mekelle is emblematic in this regard. Probably due to its remote location and smaller size, the Mekelle center appeared relatively isolated at the beginning. After having tried and failed to work with UNN, Mekelle was finally able to establish a stable and fruitful collaboration with Stellenbosch. UDSM could also have been a natural partner for Mekelle; however, differences between their program foci did not serve as an incentive for cooperation. At the same time Mekelle was open to the methodology and technical expertise offered by Stellenbosch, which also helped the Mekelle Center formulate their own development agenda.¹⁰

v. Change in the Course: Focus on Food Security

Following a strategy discussion in the fall of 2012 with the Higher Education Sub-board and the OSF President and Senior Management Committee, it was decided that no new commitments were to be made beyond the existing approvals. HESP was asked to work with the partners to shift the focus of the work towards food security in the context of climate change, which also became the topic of the first OSF shared framework. HESP spent significant time renegotiating the terms with the partner universities. During this time some partners have found other donors to fund their work on climate change. Thus strengthened, they were open and willing to extend their work onto food security. Now the HESP support goes to work that involves food systems, food sovereignty, and food security issues related to climate change only.

¹⁰ Mekelle University, as coordinating University, has just submitted a project proposal to establish a Center of Excellence in Climate Resilient Integrated Land and Water Management in Drylands of Eastern and Southern Africa (CRILWM) to submit the proposal to the World Bank in response to the Africa Center of Excellence (ACE-II) Call. The following link provides further information about the call: <http://www.worldbank.org/en/region/afr/brief/call-for-proposals-africa-centers-of-excellence-for-eastern-and-southern-africa>; <http://ace2.iucea.org/>

Also, the recent more frequent interactions among the universities have helped to achieve a consensual understanding of the transdisciplinary methods (TD). There is already an agreement on and a common interest in indigenous knowledge. Joint research projects that are being discussed by the grantees will be key opportunities to gradually resolve differences of interpretation and pave the way to the implementation of TD.

Out of the funds available from ACCAI savings, as well as new funds to support food security HESP has awarded two new grants: one to support the establishment and functioning of ACCAI as a network for 3 years, and another to start collaborative research on the various aspects of food security. The work has just started with the recruitment of new students and establishment of the research teams. *(See all grants in Appendix VII)*

vi. Lessons Learned

- The main assumption behind the formation of ACCAI was that one way to fight the impact of climate change in Africa is to build academic capacity through the development of new teaching and training programs and the establishment or strengthening of centers of excellence. We believe it worked out really well and it was the right decision to pursue the goals of the program through the institutional capacity building. We can see a diverse set of benefits that these teaching programs and centers brought to the involved constituencies and to the field in general. Through establishing the university programs we now have a small “army” of climate change specialists and the means to educate even more. The universities can offer new, interesting specializations, which deal with current issues and are very relevant to the society. The Centers became strong and have high profiles that help attract other funding and support sustainability. The communities have immediate access to research results and thus contribute to their adaptation strategies. The field of climate change adaptation benefited because the newly trained graduates have a more comprehensive understanding of the issue and so will look for longer term solutions instead of incremental adaptation.
- The assumption was that funding and technical assistance will help overcome the resistance of universities’ hierarchical and rigid structures. I believe that we have underestimated the power of these structures and overestimated the influence our funding would make in accelerating reform efforts. Eventually most of the initial goals about reforming the curricula and introducing new teaching methods were achieved. Continuous technical assistance, and constant attention to the individual university’s needs and understanding of their dynamics, which was not anticipated from the start, was needed to move the process along, including launching an add-on student initiative led by HESP to provide additional avenues for experiential learning.
- At the ACCAI outset the intent was to support the three regions and expand the programs within the three regions. A pan-African cooperation was not among the initial plans. However, later on it became clear that the partners would significantly benefit from closer synergies and mutual learning between them. Hence, additional resources were required to sustain this network and support collaborative research, joint events, and faculty and student mobility. We did not anticipate this need from the start but we can now witness an increased impact of this initiative. For example, Mekelle has built up a strong collaboration with Stellenbosch, which has a bigger network, higher impact and continental credibility. Another example is a recent discussion with Dar es Salaam to give a comparative perspective to a research on the impact of supermarketization, carried out by the University of Cape Town within the OSF Food Security Shared Framework.

- HESP should have involved the regional foundations and OSF thematic programs not only in the planning but also in the implementation phase. This oversight was mainly due to personal and management issues, which prevented ACCAI from being properly profiled and branded within and outside OSF. It took several years for the HESP staff to rebuild relationships with the fellow OSF programs and foundations, so that now the ACCAI partners can contribute to the Food Security Shared Framework meaningfully.
- The topic of climate change was very new in general, and for OSF especially. By running a capacity building program under the Higher Education Support Program, there was a risk of moving away from the issue itself and focusing too much on the structural and procedural questions related to the reform of higher education, which HESP has experience and expertise in. Having more regular consultations with other stakeholders within and outside OSF, or hiring a climate change expert would have given the necessary support and guidance to the participating universities.

vii. HESP Involvement in the Food Security Shared Framework

Although this is not in the scope of this portfolio review, we need to make a note of HESP's involvement in the shared framework. HESP has decided to pursue two approaches:

On the one hand, building on the ACCAI existing capacity HESP is supporting production of knowledge through research and teaching programs in various aspects of food security, food systems and food sovereignty. One example is the cooperation of OSIEA and HESP with UDSM's Center for Climate Change Studies to establish a program on pastoralism that involves OSIEA's partners and universities from Kenya and Uganda. A similar initiative is currently being developed with OSIWA to work with small holder farmers in Liberia and Sierra Leone.

On the other hand, HESP is contributing to building the knowledge pillar for the OSF work in food security through providing funding mainly for research e.g. the project on land access and land rights in Mozambique and Zambia (jointly with HRI and OSISA), or on urban food security in South Africa (with OSF-SA). In the longer term, HESP hopes to continue to integrate the new partners into the ACCAI network.

viii. Way Forward

In the next three years, HESP will continue monitoring the grants that support the ACCAI network activities, and work on an increased visibility.

HESP will put a strong emphasis on the use of information technologies in education to provide access to a wider audience, which is a new element in HESP's general strategy.

We would like to continue working with the OSF colleagues and partners to provide the knowledge pillar for the work on food security, thus also contributing to the expansion of the ACCAI network. In the next few years we expect that the ACCAI network will extend to all countries where OSF works and where they can make large impact both in HE as well as in the CC-FS discourse. We hope to see the partners increasingly present in the arena of national and international policy discussions, scientific publications and policy briefs. We expect that research results will feed into transformative adaptation for communities, and inform decision-making at all levels. We would like to see graduates of the programs working at decision-making bodies and governments.