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Challenges encountered when doing research back home: Perspectives from African conservation scientists in the diaspora

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Abstract

African conservation scientists in the diaspora are still a largely untapped resource for conservation efforts in Africa. Institutions that harbor diaspora scientists from Africa should view their presence, motivation, and skills as an excellent opportunity to build strong bridges with the continent and undercut parachute science. Yet, parachute science is still the prominent way of doing conservation science in Africa and it can be difficult to escape, even for Africans working abroad and conducting research in their home countries. Espousing an alternative model to parachute science is possible, but it requires conscious effort and systemic changes at all scales (individual, departmental, universities). In this perspective, we describe six situations that help illuminate the layers of factors that diaspora African researchers must navigate while building cross-continental collaborations in the absence of adequate institutional support. They include the questioning of our “local-ness,” accusations of nepotism, over-explaining our intentions and dealing with the demand for “ground-breaking and globally relevant research.” We propose actions and best practices for harnessing the potential of diaspora faculty to build meaningful, equitable and long-term research collaborations with partners in Africa.

KEYWORDS

Africa, collaborative research, diaspora, parachute science

1 | INTRODUCTION

More than 30 million Africans live away from their countries of origin, approximately half of whom live as migrants in other continents (Helene et al., 2014). As with migrants everywhere, Africans in the diaspora tend to maintain close links to their home countries and many long to contribute in significant ways to improve conditions “back home” (Ojo et al., 2013). For many Africans living abroad (as the

four of us are), the call to improve conditions back home is persistent and loud, best described as an ever-present inner-voice reminding you of your obligations to “your people” and to the nation whose traditions and culture still guide and define you. Consequently, diaspora Africans contribute immensely to the continent, notably to the economy, education, health, and development sectors. Indeed, so significant has been the contribution of Africans abroad to Africa that in 2009, the African Union acknowledged

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African Diasporas as Africa's "sixth region" (Galperin et al., 2019; Kamei, 2011).

In the past 20 years, the field of conservation biology has become much more diverse globally with increasingly more scientists from low-income countries and minority groups playing a key role in large research projects in their home countries (Serra & Lempinen, 2016). In Africa, however, this global trend has been rather slow in taking off. A lot of conservation research projects there are still predominantly designed and led by non-native scientists working almost exclusively at research institutes in higher income countries, primarily from Western Europe and North America (collectively referred to as the Global North). This research model—with its strong echoes of "parachute science" or "fly in, fly out research"—is increasingly being questioned in all scientific fields—not just conservation science (Baker et al., 2019; Chaudhury & Colla, 2021; Iyer, 2018; LGH, 2018; North et al., 2020; Stefanoudis et al., 2021). It is characterized by the absence of local collaborators in the design phase of the research, the tendency to limit local participation to administrative and field assistant roles, and failure to invest in local scientific talent and infrastructure. Parachute science is an extractive form of doing research that is driven by outsiders' assumptions of what is important; it perpetuates dependencies on external experts and hierarchical N-S relations and it is rarely useful for addressing local conservation concerns (de Vos, 2020; Stefanoudis et al., 2021).

Meaningful conservation science in Africa requires transdisciplinary models of doing research that are founded on strong North–South and South–South collaborations, respond to locally defined conservation issues and build African conservation capacities (Mbaria & Ogada, 2016; Sebunya, 2017; Western, 2003). Such collaborations require transparency and accountability, institutional support, resource sharing, good communication, knowledge exchange and investments in trust building (Cockburn et al., 2016; Mbaria & Ogada, 2016). They also need team members who are: (a) conversant of the socio-cultural and institutional contexts in which collaborating partners operate, (b) comfortable navigating within this intercultural space, and (c) motivated to serve as conduits for knowledge exchange. Diaspora African conservation scientists are strategically positioned to facilitate such models of research collaborations and in doing so, reverse concerns with "brain drain" and foster "brain circulation" instead (Chand, 2019; Saxenian, 2002). Having worked at home and abroad, we have direct and personal experience with how cultural norms and institutional requirements influence what partners seek in collaborations. We can also help bridge the language, culture and expectation divides that often characterize such collaborations (Western, 2003). Importantly, African

diaspora scientists are strongly motivated by an innate urge to contribute meaningfully back home.

In our quest to build more meaningful collaborations with counterparts in Africa, we have come to realize that—to be successful—these efforts not only require strong institutional backing from our resident departments and universities, but they also depend on erasure of long-standing prejudices in conservation science. Without this, the collaboration landscape can be a rugged, exhausting and lonely endeavor whose success and impact are limited to what single individuals can achieve. Also, there are significant career implications of single-handedly coordinating long-term collaboration processes that include high research transaction costs, slower and lower publication rates, and unsustainable work-life balance (Sellberg et al., 2021). These setbacks are universal and well-articulated in a growing body of literature on the challenges of doing transdisciplinary research in traditional university settings (e.g., Moore et al., 2014; Patterson et al., 2013; Sellberg et al., 2021). Given this grim panorama, "parachuting home" can seem like the wise and self-preserving route to take. Yet, it—too—comes at a great personal cost. When we have chosen to parachute home, our experiences have included anxiety (for knowing that we were perpetuating paternalistic research relations), disappointment with ourselves (for not fulfilling our obligations back home), and frustration (at not being able to leverage on the incredible opportunity that we represent for "turning the tide of parachute science"; Stefanoudis et al., 2021).

Here, we share six situations to exemplify the awkwardness of parachuting home as a diaspora African researcher and of navigating cross-nation, cross-culture and cross-institution collaborative efforts in the absence of institutional support. We acknowledge that these situations are unlikely to be unique to African researchers and that some (if not all) might resonate with diaspora professionals from other regions. For each situation, we highlight the effect it can have on individual motivation to do research back home or to pursue a career in academia; we also briefly identify ways to avoid the situation altogether. Table 1 situates these anecdotes in a broader understanding of how the motivations, skills and actions of diaspora scientists can be harnessed by their host institutions to support diaspora faculty and incorporate their efforts into the values and aspirations of their departments and institutions.

1.1 | Situation 1: Is not that just an excuse for an extended vacation back home?

It the pursuit of scientific impact and a fun-filled career, it is broadly accepted and expected that conservation

TABLE 1 Institutional support structures for harnessing the motivations and skills of diaspora conservation scientists to build equitable and impactful collaborations with their home countries

Motivations of diaspora scientist	Associated skills	Actions and practices for impact	Risks and potential misunderstandings	Institutional support to leverage on skills and minimize risks
Sense of obligation to “give back” or contribute to conservation success of home country	<ul style="list-style-type: none"> Familiarity with expectations of institutions in both countries or regions Familiarity with local conditions including language and culture. May have better understanding of what is needed locally 	<ul style="list-style-type: none"> Can identify what the local issues are that can be incorporated into the research. Will identify local champions to support and train along the way. Identify elders and local experts to enrich research approach 	<ul style="list-style-type: none"> Activities might be perceived as beyond the call of duty by resident institute. Could be perceived as inefficient and losing track of research objectives. May be overwhelmed with responsibility of being the “go to expert” for students, and colleagues for all issues related to home country 	<ul style="list-style-type: none"> Diversity hires should ensure that a single individual is not asked to over-represent (One African faculty cannot represent all of Africa) Explore ways to align department or institution’s missions with the aspirations of diaspora
Strong motivation to build national capacity of home country in conservation science and practice	<ul style="list-style-type: none"> Well trained, motivated, and often with access to larger pools of financial and material resources than colleagues in home country 	<ul style="list-style-type: none"> Offer training to address skills gaps in home country. Help local partners with research grants and publications. Offer skills and knowledge to decision makers (become available for consultations). Have an open-door policy for students and others from home country to regularly consult 	<ul style="list-style-type: none"> Might be seen as taking time and energy away from research. These training might not count towards teaching responsibilities at resident institution. Risk of overshadowing local partners Risk of being “ultra-altruistic” to the detriment of one own’s interests and career 	<ul style="list-style-type: none"> Include these activities in formal valuation of scientist. Explore ways to formalize these activities as part of services offered by department or institution to external actors (extension services) Monitor workload that these activities imply and discuss ways to reduce them or distribute them across more people.
Long-term commitment to study area, region and home country	<ul style="list-style-type: none"> High willingness to persevere through the difficult periods of collaboration. Interested in addressing differences to foster long-term relations. More likely to invest in generating high quality data and building local research capacity. 	<ul style="list-style-type: none"> Might plant roots locally by purchasing land and building a small residence. Might travel often to study area (home) and stay for long periods of time. Might never quite “disconnect” even when not in “the field” 	<ul style="list-style-type: none"> Risk becoming the team diplomat & scapegoat during misunderstandings. Losing sight of your own research objectives Issues of conflict of interests raised by colleagues on real motivation for conducting research at home. Question real commitment by local partners if you do not build roots 	<ul style="list-style-type: none"> Provide leadership and conflict resolution skills; Facilitate bureaucracy needed to work with non-institutional partners. Explore how to align short, medium and long-term goals of project with that of the department or institution. Check unconscious biases in how such projects are discussed in the institution
Personal interest in ensuring that research results are	<ul style="list-style-type: none"> Interested in extending project area of influence to 	<ul style="list-style-type: none"> Become involved in a local conservation NGO 	<ul style="list-style-type: none"> Conflict of interest issues might be raised. 	<ul style="list-style-type: none"> Link project to international and

(Continues)

TABLE 1 (Continued)

Motivations of diaspora scientist	Associated skills	Actions and practices for impact	Risks and potential misunderstandings	Institutional support to leverage on skills and minimize risks
taken up locally and nationally in home country	<ul style="list-style-type: none"> management and higher-level decision-making including national or regional conservation policy Likely to be invited to advise the government as a national expert. Motivated to work on solutions and staying to monitor outcomes. 	<ul style="list-style-type: none"> Found a conservation NGO. Establish long-term monitoring program Apply mixed methods approaches to ensure holistic understanding of the problem. Train local experts to continue generating data and knowledge and analysis in their absence. Maintain continued links during the off-season of fieldwork. 	<ul style="list-style-type: none"> Risk of getting caught up in local power struggles. Difficult to separate the research from the practice. Publications might be slower (as ones waits for the solutions to take effect). Exhaustion from consistently being in two places at once. 	<ul style="list-style-type: none"> outreach branches of the institution. Promote the project locally at resident institute to build institutional ownership and pride in the project. Provide clear guidance on proportion of time faculty can allocate to advocacy or policy advise. Provide clear guidance on expected outputs.
Highly motivated to address imbalances in conservation sciences	<ul style="list-style-type: none"> Understanding of the challenges of building traction in Africa as a conservation scientists. Can serve as role models for up-and-coming local conservation scientists. Can generate culturally sensitive “safe spaces” to discuss and address issues of inequities. 	<ul style="list-style-type: none"> Promotes publications by local conservation scientists without co-authoring. Conduct a lot of extra-curricular training. Invite local partners at events that could improve their networks or provide key insights. 	<ul style="list-style-type: none"> Risk of nepotism accusations. Conflicts with local partners about favoritism. Energy and time to do this is in direct conflict with publication needs and other teaching obligations. High risk of burnout. 	<ul style="list-style-type: none"> Provide training and allocate time for faculty to address issues of intersectionality in conservation science in relation to their work and projects. Assess how much of what faculty is doing to address imbalances should 0 in fact—be allocated to trained personnel or expert office
Acute awareness of the enormous potential that exists to pursue meaningful and exciting research in home country	<ul style="list-style-type: none"> Flexible to shift research foci to address local needs. Accepting of the magnitude of the task of building local capacities to undertake research and willing to work with it, regardless. 	<ul style="list-style-type: none"> Undertake several research projects simultaneously 	<ul style="list-style-type: none"> Time management can become a challenge. Research portfolio might be seen as lacking direction (i.e., “chaotic”). Less likely to have a neat publication record for grant applications, especially big grants 	<ul style="list-style-type: none"> Support scientists to identify how to delegate (rather than abandon) research activities

scientists choose to do their research in places they love and have an affinity to. Despite this, African diaspora scientists can find themselves having to “over explain” to their departments (or colleagues) their interest to work in Africa. In subtle and not-so-subtle ways their desire to conduct fieldwork back home can be interpreted as solely

motivated by affinity to place (i.e., as an excuse for an extended annual vacation to the homeland); as lacking research-driven motivations (even though many regions in Africa are considered highly understudied biodiversity hotspots); or as an indication of wavering commitment to their resident institutes. These unflattering accusations

exemplify the subtle ways in which double standards are sometimes applied and the extent to which parachute research is still engrained in conservation science. It can lead to African faculty intentionally avoiding field sites in their home countries or choosing sites that pose no risk of such accusations. Addressing this situation requires breaking down long-held prejudices (Chaudhury & Colla, 2021; Sebunya, 2017).

1.2 | Situation 2: Are not you the local expert?

Familiarity with the local context can be a blessing and a curse for African researchers in cross-culture collaborations. We usually have a nuanced understanding of local conservation contexts including political, cultural and gender dimensions that can influence conservation outcomes. This local knowledge can inform research design and approaches and enrich hypotheses testing. We can also serve as language and cultural translators for our non-native students and colleagues involved in the collaboration. While this can be part of the fun of being the least foreign member of the international team, it can jeopardize one's own field program and generate tensions with local colleagues on who the "real" local experts are (see Situation 3). Indeed, unless the research is being conducted in places that we are highly familiar with, we are unlikely to be the best placed person to serve as the local expert and might depend equally on "more local" collaborators to decipher and navigate some of the contexts. By serving the role of perpetually resolving administrative and logistical issues for others, diaspora and local researchers can be overlooked as peers in the scientific process and their contributions sidelined in important research products such as publications. Hiring local administrative assistants and translators elegantly reduces the risk of such a situation and ensures that everyone gets an equal opportunity to conduct the research they are there to do.

1.3 | Situation 3: My friend, you have been "mzungufied"

While our international colleagues might consider us as the local expert, our local partners may disagree and perceive us as "too foreign" to still be considered "local." There is no denying that by living and working abroad, we have probably assimilated some of our host nations' ways of doing and saying things, that is, we have "mzungufied" (or become foreigners, *mzungu* being the Swahili word for Caucasian). Even though this is precisely what makes us multicultural

and thus assets for international collaborations, it can be the source of misunderstanding, mistrust and alienation with local partners. The diaspora scientist might be perceived as arrogant, as disinterested in one's own culture or as a "lost sheep" that needs reorientation. They might be seen as diplomatic props for the "real" international researchers or occupying a role that should have been given to a "real" local expert. The complex mix of envy, inferiority complex and power imbalances felt between diaspora and local collaborators can be subtle or not. Regardless, it direly weakens the glue for building equitable collaborations, that is, trust.

Addressing this situation requires exercising humility and high emotional intelligence on the part of local and diaspora scientists. These two African proverbs "To travel is to see, to return is to talk" and "If you are filled with pride, then you will have no room for wisdom" capture the essence of our recommendation. Diaspora Africans returning home need to understand that they can seem over-bearing with their newfound knowledge, their eagerness to apply it and impart it widely. In doing so, they can easily overlook local knowledge and abilities and undermine the insights of local partners. In turn, local partners who view the eagerness and new knowledge of diaspora researchers as a threat miss an opportunity to leverage the return of a countryman or woman for the collective. Frequent, honest conversations guided by the principles of co-development and co-production of scientific knowledge (Lemos et al., 2018; Norström et al., 2020; Woodall et al., 2021) facilitate identifying the surfacing of this situation and addressing it promptly. More institutionalized approaches for obtaining collective benefits from diaspora scientists can also be developed by higher education institutes in Africa to boost international research collaboration and networking. For example, "alumni in the diaspora" programs can link academic colleagues "back home" with leading conservation scientists abroad. Hofman and Kramer (2015) describe the success of such a program in the Faculty of Health Sciences at the University of the Witwatersrand, South Africa.

1.4 | Situation 4: Wait, is not that nepotism?

There are only 198 researchers for every million people in Africa, compared to 4,500 per million in the UK and the US (UNESCO, 2015). As a result, only about 1% of scientific publications worldwide are authored by scholars at African institutions, with the bulk of scientific production originating from Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa and Tunisia (Confraria & Godinho, 2015; Duermeijer et al., 2018; UNESCO, 2010).

It is not surprising, therefore, that a lot of the efforts of African diaspora scientists in fostering just collaborations consists of promoting local champions and building local capacity to do research. This usually takes the form of supporting a few local collaborators to build their international networks by attending congresses and meetings and paying for these expenses. It might also include helping local partners apply to higher education institutes abroad. Universities in the Global North are often actively engaged in international capacity building although not necessarily in the field of conservation sciences. These intentions by diaspora Africans to ensure that Africans access meetings and graduate programs can be interpreted as nepotism or favoritism.

To adequately address this situation coordinated systemic change in conservation departments is needed that includes reformulating ways to diversify the field of conservation and to address past injustices. Thankfully, these conversations are getting easier to initiate as more academic societies, departments, and universities in the Global North heed the growing calls to examine their own historical and current role in enabling parachute science (Chaudhury & Colla, 2021; LGH, 2018; North et al., 2020; Stefanoudis et al., 2021). By institutionalizing efforts to engage more Africans in conservation science, the burden of this particular responsibility shifts away from the diaspora researchers. It can also magnify the impact, quality, and reach of programs as well as improve their effectiveness.

1.5 | Situation 5: This is not groundbreaking research!

Unless one is working at a long-term research site or an iconic species, conservation research in Africa often lacks basic geographical, land use, and long-term ecological data (Egoh et al., 2012). When databases exist, they are often hampered by incomplete or out-of-date information, inadequate metadata, incompatibility among various datasets, and inconsistencies in data collection (Mwange et al., 2018). Carrying out projects under such conditions requires starting with collating and formatting very basic information and conducting preliminary studies. This type of research can be used to build local capacity in scientific inquiry and address local conservation challenges, but it is rarely sufficiently “groundbreaking” to be considered by large funding bodies or high impact international journals. Consequently, it takes more time to reach the point of having results that are considered globally relevant. This tradeoff between “locally useful” and “globally relevant” is similar to the one described for transdisciplinary research by Sellberg et al. (2021).

The academic research pathway that we are on obliges us to hone the ability to develop research questions that allow one to “stay ahead of the game” while addressing data scarcity issues. Our recommendation for diaspora researchers is to always work with a few globally interesting research questions that can be conducted in parallel with gap-filling activities. These questions can benefit from data obtained from remote-sensing techniques, interviews and surveys, or literature reviews including national and local conservation policy and government reports. Doing this collectively with local partners will ensure that the questions that the collaborative research project is pursuing are locally relevant even as they address conservation questions that are of interest to a global audience.

1.6 | Situation 6: At this rate, you will never get tenure!

Being successful in academia requires a high rate of productivity and high-quality outputs mostly measured by scientific publications in high-impact international journals. As with Situation 5, however, there is a tradeoff between conducting collaborative research in Africa in the way that we have described here (i.e., research that emphasizes co-production, co-learning, and local-to-global relevance) and meeting the expectations of higher education and research institutions in the USA and Mexico. While some of the work that African researchers do in Africa might be recognized and evaluated as service, what is valued most by academic institutions is teaching, research, and publication volume. Also, the mentoring work and training that diaspora instructors invest into African students who are not registered at their host universities is not usually considered in evaluations, nor are the hours spent assisting Africa-based colleagues with getting their papers published.

Just as we searched for African faculty when we first moved abroad, African students who join our universities look to us for cultural and academic orientation, especially when the diaspora community is small. International student offices at some Universities can and do help African students and visiting professors to adapt especially when they facilitate access to established Africans in the university community. These are roles we gladly accept because they are often enjoyable, fulfilling and allow us to contribute positively to the collective well-being of Africans in our communities. But, they require time and energy that might have been spent on “the things that count,” so yes, they come at a price. For many African scientist abroad, however, this is an essential part of what “counts” and thus, a price worth paying.

2 | CONCLUSIONS

African conservation scientists in the diaspora are still a largely untapped resource for conservation efforts in Africa and those who engage in activities back home are often acting alone with the risk of their efforts being misconstrued and undervalued. As an act of self-preservation, they might undertake parachute science in Africa even when it contradicts with deeply-held principles of “giving back” to efforts on the continent through their skills. The alternative (i.e., single-handedly taking on collaborative research) is an astronomical task; it can come at a high cost to their personal wellbeing and careers. The six situations we describe showcase the web of factors that diaspora researchers from Africa navigate as they pursue a research model that is costly yet personally fulfilling. These situations are likely to resonate with diaspora scientists from other regions and are certainly not limited to North–South research collaborations. Wherever power imbalances exist between scientists, the risk of undertaking some version of parachute science lurks and should be addressed. As individuals and institutions, we have the responsibility to do better. We hope that the solutions we recommend will seem reasonable to everyone who finds themselves in this challenging situation.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHOR CONTRIBUTIONS

All authors were fully involved in the discussions leading up to the conceptualization and drafting of the manuscript. THM led the writing process by incorporating BNE's, ITB's, and KN's written contributions to generate new versions of the manuscript. All authors were also fully involved in revising and editing the manuscript and approved the final versions before submission. All authors agree to be accountable for all aspects of the work.

DATA AVAILABILITY STATEMENT

Not applicable.

ETHICS STATEMENT

The authors declare that all the work presented in this article is original and that all contributions that have influenced the work are adequately acknowledged or

cited. All listed authors have made significant contributions to conceptualization of the ideas presented in the article and to the development of the manuscript.

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