Capacity building for conservation: problems and potential solutions for sub-Saharan Africa

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Accepted for publication in *Oryx* published by Cambridge University Press. The original publication will be available at: https://www.cambridge.org/core/journals/oryx

Abstract

To successfully achieve their stated conservation goals individuals, communities and organisations need to acquire a diversity of skills, knowledge and information (capacity). Despite current efforts to build and maintain appropriate levels of conservation capacity, it has been recognised that there will need to be a significant scaling-up of these activities in sub-Saharan Africa. This is because of the rapidly growing number and extent of environmental problems in the region. This paper presents a range of socio-economic contexts relevant to four key areas of African conservation capacity building: protected area management, community engagement, effective leadership, and professional e-Learning. Under these core themes, 39 specific recommendations are presented. These were derived from multi-stakeholder workshop discussions at an international conference held in Nairobi (Kenya) in 2015. At the meeting, 185 delegates (practitioners, scientists, community groups and government agencies) represented 105 organisations from 24 African nations and 8 non-African nations. The 39 recommendations constitute five broad types of suggested action: those that recommend (i) the development of new methods, (ii) the provision of capacity building resources e.g. information or data, (iii) the communication of ideas or examples of successful initiatives, (iv) the implementation of new research or gap analyses, (v) the establishment of new structures within and between organisations, and (vi) the development of new partnerships. A number of cross-cutting issues also emerged from the discussions. For example, all four workshops highlighted the need for a greater sense of urgency in developing capacity building activities in response to ongoing and rapid socio-environmental change in the region. Delegates also felt that conservation organisations, responsible agencies and donors need to recognise capacity building as one of the most urgent conservation issues we face. The need to develop novel and cost-efficient capacity building methodologies (and associated evaluation metrics), was also identified as a key issue. However, it was stressed that future of capacity building efforts will be best served by integrating new methods with more established activities. Importantly, given the broad suite of social, cultural and economic contexts found across sub-Saharan Africa, the need to move away from ‘one-size-fits-all’ approaches was strongly recommended in all thematic areas. Lastly, it was recognised that closing the gap between capacity need

and capacity provision in the region will only be achieved through multi-partner capacity initiatives and networks.

Key words

Capacity building; protected area management; community engagement, leadership, e-Learning.

Introduction

The biological diversity of sub-Saharan Africa (and associated islands) is under severe pressure from a range of anthropogenic activities, and it is widely accepted that the ongoing loss of species and habitats requires concerted and coordinated action across the region (Stuart and Adams 1990; Craigie *et al*. 2010; Beresford *et al*. 2012; BirdLife International 2013; Perrings and Halkos 2015; United Nations Environment Programme's World Conservation Monitoring Centre, UNEP-WCMC 2016). To address changes to sub-Saharan environments and biodiversity, a large number of local, national and international conservation plans have been produced. These often contain detailed goals and time-bound targets (Secretariat of the Convention on Biological Diversity 2014; Ozur et al. 2016). However, delivering these plans requires a wide range of diverse skills, knowledge and information to achieve the stated objectives. Collectively, these elements are often called 'capacity' and the process of acquiring them is called 'capacity building'. However, an agreed definition for the building capacity concept remains elusive for the conservation sector, and there are a large number of terms and definitions used by different individuals and organisations (capacity development, competency, capability, *etc*). A discussion of these various terms is beyond the scope of this paper, but comprehensive overviews are provided by Whittle et al (2012) and Appleton (2015). Here, a 'working' concept of capacity building is used which largely follows the UN approach of focussing on 'the combination of all the strengths, attributes and resources available within a community, society or organisation that can be used to achieve agreed goals' (United Nations Office for Disaster Risk Reduction, UNSIDR 2016).

Beyond attempts to pin down a definition, the key capacity issue for conservation in Africa is that few of the multitude of plans to halt and reverse the loss of biodiversity include a qualitative and quantitative assessment of the capacity required for the successful delivery of stated aims. To discuss the ongoing issue of capacity building for conservation and natural resource management, 180 delegates representing 105 organisations from 24 African nations and 8 non-African nations met in Nairobi (Kenya) in 2015. These practitioners, scientists, community groups and government agencies used a framework of four main conference themes (outlined below) to discuss methods for the acquisition and long-term maintenance of skills, knowledge, information and competencies within the conservation sector. However, any discussion of capacity building also needs to recognise the large number of associated issues that can alter the scope and extent of impact in different contexts: local/national enabling environments, levels of available funding, public awareness and attitudes, required scale of impact, *etc*. These issues therefore formed the 'cross-cutting' themes of the meeting and a background perspective for the key recommendations from each thematic workshop. This paper provides an overview of the broad thematic backgrounds to the four workshops, as well as reporting the key discussions and recommendations made during the four day meeting.

African contexts for conservation & resource management

Sub-Saharan Africa is one of the most biodiverse regions on earth with more than 100000 species of insects, 50000 species of plants, 1100 species of mammals, 2355 species of birds, 3000 species of freshwater fish, 950 species of amphibians, and 1600 species of reptiles (Stuart *et al.* 2004; United Nations Environment Programme, UNEP 2010; Myers et al. 2012; Han 2016). Five of the world's biodiversity hotspots, 373 Ramsar sites, and over 1250 Important Bird and Biodiversity Areas are sited in Africa, and many taxonomic groups contain relatively large proportion of endemics (Mittermeier *et al.* 2011; Birdlife International 2013). Patterns of species diversity in the region generally follow latitudinal gradients, and the equatorial tropical forests are amongst the most productive natural systems in the world (Net Primary Productivity of more than 800 g C m^{-2} yr^{-1}) (Pan *et al.*2015). Africa also has an extensive network of

protected areas (>2M km^2) covering approximately 10% of the 119 recognised African ecoregions (WWF 2016).

Despite this considerable natural capital, when measured across a range of socio-economic metrics, Africa is the world's poorest region. In the 21st century, it is predicted to have the largest population growth of any continent and all of the ten nations with the world's highest fertility rates are in sub-Saharan Africa. This has resulted in 43% of the region's population being below fifteen years of age (He *et al.* 2016). The current human population is 1.1 billion, and this will rise to at least 2.4 billion by 2050 (assuming that family planning initiatives achieve targets for declines in the birth rate of key countries). These population increases are not predicted to be accompanied by economic growth that will lead to a proportional rise in employment or governmental investment in infrastructure and resilience (United Nations Department of Economic and Social Affairs Population Division, UNDESAPD 2015). The predicted outcome of this population growth is further extensive land use change (agricultural conversion) accompanied by increased direct/indirect impacts on natural resources (soil erosion and degradation, loss of biodiversity, habitat fragmentation, loss of ecosystem services, *etc*.). Pressures on water resources (and associated wetland biodiversity) are also predicted to increase, with many watersheds suffering from over-abstraction, pollution and degradation (McKee *et al*. 2003). Over the next century, these pressures will be exacerbated by the impacts of climate change. The region is particularly vulnerable to climate alteration as a result of agricultural practices that rely on rainwater and that lack drought resilience. *Per capita* access to land is very low in many African countries, and the United Nations' Food and Agriculture Organization (FAO) predictions suggest that population growth will result in an additional 36 million Africans impacted by drought related famine by 2050 (Bruinsma 2009; Turral *et al.* 2011). It is in this context of ongoing social, economic and land use changes that African government agencies, conservation organisations, Civil Society Organisations (CSOs), and local community groups must develop strategies, policies and actions to ensure a sustainable future for people, wildlife and natural systems.

Responses to environmental issues in Africa

Conservation responses to pressures on African biodiversity and natural capital occur at a number of nested operational and ecological scales. Many conservation organisations and agencies work across these scales (communities to international). However, this can have huge implications for how they set priorities, their operational costs, and the reach, impact and sustainability of their actions. These scale effects are also present in considerations of capacity building, and there is a considerable need for research to measure the relative cost-effectiveness and impact of conservation actions implemented at different levels and scales (Henson *et al*. 2009; Guerrero *et al*. 2013). At the international level, trans-boundary issues and actions have always been a feature of African conservation. Most sub-Saharan nations have signed up to the key Multilateral Environmental Agreements (MEAs), and efforts are being made to integrate these with national legislation and administrative frameworks. This includes harmonising capacity building efforts across different the conventions (Jones 2003; Steiner *et al.* 2003; Burnside 2004; Kannan 2014; Ozor 2016).

In many sub-Saharan countries over the past 20 years there has been growth in the number of tertiary education establishments offering applied courses associated with biodiversity, conservation, sustainable development and community engagement (World Bank 2009; Vasudev *et al*. 2015). Accompanying this growth has been a huge increase in the provision of environmental e-learning in Africa (Aderinoye *et al.* 2009). E-learning provision has the potential to provide accessible, strategic, low cost and efficient means to building capacity in some areas of conservation. But despite the rapid growth of both face-to-face and E-learning courses, it is clear these need to be pro-actively driven by strategic partnerships between the conservation and education sectors. Research is also needed to measure and evaluate the conservation impacts of different delivery methods.

At the same time as MEAs and tertiary education have been responding to environmental change, there has also been a major grass-roots response (Lewis 2002). This has largely been led through community-based conservation and the rise of African CSOs. Evidence suggests that African CSOs now play an important role in catalysing positive local-level changes that improve natural resource management and the conservation of biodiversity (Armitage 2005; Maliasili Initiatives and Well Grounded 2015).

The other major response to environmental change in Africa that spans all operational and spatial scales is research. For much of the past 50 years, there has been an enormous effort to describe, understand and predict changes to the components and functioning of natural systems. Sometimes this has been undertaken by 'external' organisations, often in partnership with African bodies. More recently, African institutions have been developing, building their own research capacity through the employment of dedicated research staff. However, as with conservation research the world over, there remains a gap between the provision of knowledge and its use in developing conservation actions. The difficulties associated with improving the use of research by African conservation organisations have been known for many years (Lampietti & Subramanian, 1995), but altering the current situation remains a key issue that has yet to be fully resolved (Western 2003).

Capacity implications for the African conservation community

The key implication arising from the extent, severity and speed of environmental change in Africa, is delivering cost-efficient, strategic, evidence-based, sustainable, equitable and adaptive capacity building across the conservation sector. This is coupled with widely varying 'enabling' environments across sub-Saharan Africa (and its associated islands). These internal contexts (organisational) and external contexts (environmental, cultural and socio-economic) change the nature and emphasis of capacity building needs, and how provision might be evaluated. Even ignoring contextual effects, the general efficacy of more established capacity building methods (training, tertiary education, mentoring, etc.) has also still to be fully evaluated (Wilder and Walpole 2008; Washington *et al.* 2015). In the meantime, the sector is trying to broaden the range of methods used. For example, competence-based techniques developed in the 1980s (Burke 1989) have recently been applied to building capacity for protected area managers. The approach identifies core professional requirements (competencies) for staff at different organisational levels and roles (International Union for the Conservation of Nature, IUCN 2015; Müller *et al.* 2015). Advocates of competence-based approaches suggest that they might help overcome the problems associated with more the established capacity building methods. In particular, identifying competencies with specific professional roles is both pro-active and strategic, rather than merely reacting to capacity

needs as they arise. This also enables the raising of professional standards and allows harmonisation across the sector. Nevertheless, despite other sectors (notably public health) having accepted and adopted these approaches, the efficacy of competence-based approaches in conservation have yet to be evaluated (Brightwell and Grant 2013).

It was the need to discuss and generate solutions to the broad spectrum of individual and organisational issues and contexts associated with conservation capacity building that led to the development of the conference in Nairobi in 2015.

Conference development

The 2015 Nairobi conference was explicitly developed to provide a forum for key organisations in sub-Saharan Africa to discuss capacity building issues. The outline thematic areas for the meeting were originally developed by the conference secretariat and an independent panel of conservation and capacity experts. These four core generic themes built on discussions at the first regional conservation capacity building conference held in Colombia (South America) in 2013:

- Capacity for protected area management
- Community engagement and rights-based governance
- Effective leadership and strong organisations
- Professional e-Learning

An African committee was then established with representation from 14 organisations. The remit of the committee was to render the core generic themes into focussed discussion areas relevant within specifically African contexts, and to select speakers for each sub-thematic area. The need for a concrete output from the conference was also discussed at this stage. It was agreed within the committees that there would be a session at the meeting focussing on developing a post-conference community of practice. The sections below provide an overview of the key discussion points and recommendations arising from each workshop in the four thematic areas:

Thematic area 1: Capacity building to support Protected Area management

Thematic background

Protected Areas (PAs) in Africa play a critical role in the conservation and management of some of the most diverse terrestrial and marine sites in the world (Stolten & Dudley 2010; Bertzky *et al*. 2012). Their effective management provides an opportunity for close inter-institutional coordination, synergies between local and national initiatives, and increased understanding of the values of protected areas by a range of communities and stakeholder groups (Kothari *et al.* 2012; 2016; Müller *et al.* 2015; Barnes *et al*. 2016). PAs can also be designed and managed to alleviate poverty for communities living in and around their boundaries and to enhance community-based decision making (Borrini-Feyerabend 2013). However, in 2010 a global assessment found only 17% of 644 assessed African PAs were under 'sound management', 31% had 'basic management', 31% had 'basic management but major deficiencies', and 21% were 'clearly inadequate (Leverington *et al.* 2010a). It is therefore essential that responsible PA organisations in Africa have a clear understanding of the capacity needed to fulfil the increasingly complex goals of these areas, as well as a quantified assessment of gaps in the competencies of their core staff. Since the 1990s, there has been something of a lag between the development of methods for identifying capacity needs of PA staff, compared to the number of initiatives focused on metrics to measure Protected Area Management Effectiveness (PAME) (Leverington *et al*. 2010b). PAME assessments focus on management elements such as planning and adaptive feedback mechanisms, but are not always able to directly measure capacity gaps (Coad *et al*. 2015). The IUCN guidance on PAME stresses that PAME data should be used to identify "the extent to which measured outcomes are due to management interventions or to other factors which may be beyond a manager's control" (Hocking *et al.* 2006). Competency evaluations as part of PA capacity building initiatives therefore form a complementary tool to PAME for enhancing the effectiveness of PA management and achieving PA-related goals.

Table 1 here…

Thematic area 2: Community engagement and rights-based governance

Thematic background

The majority of sub-Saharan African countries have large rural societies i.e. where communities make their living through agriculture, pastoralism or the use of forests and 'wild' products. These livelihoods are

206 therefore strongly linked to the sustainable management of water, soils and forest products, as well as the
207 conservation of the species and habitats within associated ecosystems. Whilst the effective management
208 and conservation of natural systems and the resources they provide, are the concern and responsibility of
209 all citizens of a country, the consequences of environmental degradation (and subsequent conservation or
210 management actions) are experienced locally. This generates strong motivation for action based on local
211 knowledge (ecological, social and cultural). It also allows community-based decisions to be generated that
212 have greater relevance and which are based on rapid reporting of changes to biodiversity or threats.
213 Local communities must therefore be fully engaged in conservation actions and resource management.
214 Sadly, they often do not derive socio-economic or livelihood benefits from environmental stewardship.
215 Nor do they have an equitable voice in decision-making/policy development processes that affect their
216 well-being and livelihoods (Agrawal & Gibson 1999; Maathai 2009). African governments who are
217 signatory to the African Charter on Human and Peoples' Rights (the African Charter), must respect human
218 rights in all areas relating to natural resources governance, and develop a clear legal framework to deliver
219 these rights. This is as a result of a resolution adopted in 2012 by the African Commission on Human and
220 Peoples' Rights (African Commission), in the context of the Rio+20 Conference (Rio+20 portal, 2016). The
221 African Commission noted how "natural resources governance is often hampered by ill-planned
222 development, mis-appropriation of land, corruption, bad governance, and prevailing insecurities". They
223 also noted how communities in Africa "continue to suffer disproportionally from human rights abuses in
224 their struggle to assert their customary rights to access and control various resources, including land,
225 minerals, forestry and fishing". The role of women in resource governance and CSO activity was also
226 recognised by the Commission because women can often be side-lined from the community and regional
227 decision-making processes that affect them (FAO 2011). Whilst the core concepts of community
228 engagement and rights-based governance are mainstreamed into African legal frameworks and local
229 governance actions, there is still a long way to go in building the requisite capacity of local communities. A
230 major trans-national survey of more than 70 leading African CSOs, international organisations, funders
231 and organisation development experts (Maliasili Initiatives & Well Grounded, 2015), found that African
232 CSOs:

- Play a central role in catalysing positive changes in natural resource governance and conservation.
- Face enormous challenges in their efforts to build the capacity to sustain their impact.
- Need evidence of the impacts of capacity building and organisational strengthening.
- Without strong leadership often have operational focus skewed by external influences (partners)
- Can have capacity building aims related to compliance with contractual obligations to funders.

There is therefore an urgent need for continued efforts and research on effective community engagement, and good practice in capacity building for Civil Society Organisations in key areas.

Table 2 here….

Thematic area 3: Effective leadership and strong organisations

Thematic background

Strong, committed and highly skilled leaders are a crucial element in the ability of an organisation or community to achieve its stated goals. Strong organisations have the ability to assess internal needs, plan and implement organisational development goals, and measure their progress using tangible metrics and indicators. Leaders must therefore be able to develop and maintain the operational efficiency and resilience of their organisations through building appropriate organisational structures, strategies, accountability and finances. Despite the acknowledged role of leadership in conservation, the sector has been relatively slow to adopt evidence-based models of good leadership practices from other sectors (Manolis *et al.* 2009). There have also been more recent attempts to bring greater clarity and definition to what is actually meant by *leadership* in different conservation contexts (Bruyere 2015).

A key starting perspective for the development of leaders is the characterisation of good and bad leadership traits in a range of situations and working environments (Black *et al.* 2011). However, as a result of extensive management research in the 1970s, it has been accepted that leadership is defined as much by behaviours and strategies, as the particular traits and interpersonal qualities of individuals (Senge 2006). Nor can leadership development be viewed as a single regular choice. It is vital therefore that conservation organisations and communities think carefully about succession planning and career

structures, and identify, support and develop future leaders at all levels of an organisation. This approach is key to enable creative and effective engagement with challenging issues and limited resources.

Table 3 here….

Thematic area 4: Professional e-Learning

Thematic background

E-learning is defined as learning that utilises the internet and associated electronic technologies to access an educational curriculum outside of traditional 'classroom' (face-to-face) learning. Despite issues with internet access in some areas, Africa's rural community electrification and the wider information and communications technology (ICT) network is expanding and improving rapidly. A recent survey by Shafika & Hollow (2012) identified significant factors constraining ICT-enhanced learning in 41 African countries. The key constraining factor was found to be limited bandwidth, followed by the lack of financial resources, inadequate human resource capacity and limited electricity. However, ICT enhanced e-learning is positively being embraced in higher learning institutions in Africa who are trying to steer higher education provision towards the use of ICT. Freely available online e-Learning has the potential to provide continued professional development for a wide range of individuals and conservation organisations across Africa. Online training and knowledge exchange platforms allow much needed 'scaling up' of effort to complement more established delivery methods (e.g. attendance at courses). They also have the ability to reach professional end-users who: (i) live in remote areas, (ii) have limited financial resources, and (iii) need to access training material throughout their professional life (not just during an attended course).

Table 4 here….

Discussion

A total of 39 separate recommendations were developed at the Nairobi capacity conference (tables 1-4). For these to deliver real impact and change, they will need to be communicated, interpreted and assimilated into existing frameworks. In particular, in developing these recommendations, conference delegates recognised the need for follow-up and collaboration in the form of a community of practice. To

take this forward, a small subset of attendees committed to develop a range of post-conference activities and funding applications to deliver tangible outcomes in the longer term. Given the time taken to establish and evaluate such a community (network), an assessment of the success and impact of these activities (and hence the conference) will be published in 2018.

Delegates also noted that a number of dominant issues were common to all the conference workshop discussions. First, in the face of ongoing and rapid socio-environmental change in sub-Saharan Africa, there needs to be a greater sense of urgency in developing capacity building activities by organisations, responsible agencies and donors. In these groups, capacity building should be recognised and prioritised as one of the most urgent conservation issues of the 21st century (Rodríquez *et al*., 2006). Second, there is a need to scale-up current capacity building activities significantly in terms of their number, focus and geographical/social footprint. Third, whilst there is a need to develop novel cost-efficient capacity building methodologies (and associated evaluation metrics), the future of capacity building for conservation will probably be best served by integrating new methods with more established activities. Lastly, given the broad suite of social, cultural and economic contexts found across sub-Saharan Africa, there is a need to move away from 'one-size-fits-all' approaches. All of these issues can only be addressed through increased cross-sectoral collaboration and information exchange. Ultimately, closing the gap between capacity need and capacity provision in the region will only be achieved through multi-partner capacity initiatives and networks.

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Acknowledgements

We would like to thank the following organisations for generous support of the conference: Critical Ecosystem Partnership Fund (financial support for delegates), Organisation Internationale de la Francophonie (simultaneous translation into French), East African Wild Life Society (meeting facilities for the organising committee), Fauna & Flora International (staff time and delegate funding). The conference was also supported by conceptual input from Brett Bruyere and Jim Barborak (Colorado State University), Francis Staub (Biodiversité Conseil), Fred Nelson (Maliasili Initiatives) and Robyn Dalzen (Conservation International).

Team biographical sketches

The authors form a team of African and international conservationists who helped to develop and deliver the Nairobi capacity building conference. Collectively they represent key conservation organisations, agencies, institutes and CSOs for which capacity building and evaluation is a key issue. They are committed to finding sustainable and context-relevant solutions to this difficult and urgent task. Mark O'Connell is a conservation scientist who has been leading a number of regional meetings on capacity building. These have been designed to identify key common issues, allow discussion of potential solutions, and learn from successful initiatives. Oliver Nasirwa is a leading conservationist in Africa. He has worked on a wide diversity of projects, including building regional capacity for environmental monitoring programmes. Marianne Carter is an international conservationist who leads a team engaged in efforts to develop conservation leadership skills globally.

Table 1. Key discussions and recommendations in relation to the building of capacity to support the management of Protected Areas (PAs) in sub-Saharan Africa.

KEY DISCUSSION POINTS	KEY RECOMMENDATIONS
African PA organisations face capacity building challenges at the individual, organisational and societal levels.	• Strategic planning within PAs should include methods for the co-development of the capacity of individuals, organisations and wider society, and be designed to account for local political, economic and cultural enabling environments.
Professionalisation is a key area of capacity building for PA organisations. PA management must be recognized as a distinct profession, with its own standards, systems and tools.	• Responsible PA organisations should define a set of core competences for all professional levels and adopt a competency-based approach to their capacity building. • Organisations should access available open-source competency resources and adapt them to their specific needs.
The IUCN-WCPA have established a Strategic Framework for Protected Area Capacity Development 2015-2025 (SFCD) that provides information, methods and tools in four programmes: professionalisation, local communities, enabling and evaluation.	• Responsible PA organisations should actively and co-operatively engage with the SCFD framework and the associated resources and support.
The diversity of recognised managers and stewards of protected areas has widened to include indigenous peoples, local communities, CSOs and private owners. The specific capacity needs and contributions of these groups are poorly understood or addressed.	• Capacity building methods specific to indigenous peoples, local communities, CSOs and private owners urgently need to be researched and communicated.

Table 2. Key discussions and recommendations in relation to the building of capacity for community engagement and rights-based governance in sub-Saharan Africa.

KEY DISCUSSION POINTS	KEY RECOMMENDATIONS
The conservation and sustainable management of natural resources requires communities with a shared vision of how goals can be achieved in an equitable and mutually beneficial way.	• Information about the characteristics of successful community-based conservation and engagement initiatives should be collated and disseminated using suitable platforms.
Community engagement will only be truly effective if it is long-term (beyond project duration) and achieves the required community change though a process of coordinated evolution.	• Community conservation initiatives must build capacity in community engagement that aims to mainstream conservation and resource management throughout an engaged community.
Communities effectively engaged in conservation and natural resource management have: • People with positive views of natural systems and who are involved in their management. • Equitable and supportive community organisations with long-term systems in place for governance, finance, benefit sharing and membership. • Vertical linkages between local organisations and external agencies/NGOs that ensure coherent policy development and reduce financial risk.	• Research should be conducted to develop indicators that measure the extent to which community engagement has been developed (in addition to the attainment of ecological goals).
The engagement, education and involvement of young people within communities are essential for the sustainability and mainstreaming of community-based conservation and resource management.	• Information about the characteristics of successful initiatives involving 'next generation' engagement should be collated and disseminated.
A community, no matter how 'engaged' is still subject to a range of local contexts that can inhibit or facilitate their conservation and resource management actions. Many of these will involve local government organisations and individuals.	• Community-based conservation initiatives should ensure that capacity building for local government is also a key focus.

Table 3. Key discussions and recommendations in relation to the building of capacity to develop effective leadership and strong organisations within the conservation sector of sub-Saharan Africa.

KEY DISCUSSION POINTS	KEY RECOMMENDATIONS
Many leaders of conservation organisations have considerable demands put upon them. The isolation and burden that many feel could be overcome by the development of a professional body for African conservation leaders. This would allow them to communicate and share best practice, and to build capacity in appropriate skills.	• A professional body for African conservation leaders should be established. • Organisations should allow staff structured leave from everyday duties to develop their leadership capacity. • Leadership development should be extended beyond the formal higher education system and short term training. • Leadership development should address the need to create functioning teams and facilitate exposure to external conservation initiatives. • Recognition (through awards for example) can have a significant impact on an individual's professional growth. Such schemes should be developed within and between African nations.
Workshop delegates identified 7 key characteristics of impactful and effective organisations. The best organsations have: (1) a culture and values shared by all staff; (2) a clear guiding strategy and long-term vision; (3) accountability to constituents; (4) strong leadership and governance; (5) managers who put their staff first; (6) the ability to learn from experience and employ adaptive management; and (7) systems to seek strategic partnerships pro-actively.	Organisations should….. • Institutionalise their vision, and implement them through clear and accessible strategy. • Avoid mission drift and be able to say no to projects, funding, groups, etc. • Have transparent fundraising strategies focused on the vision (not funding body evaluation). • Proactively share and effectively communicate organisational lessons learned. • Invest far more in effective internal and external communication. • Build leadership capacity at all organisational levels. • Employ novel and creative ways to build organisational capacities.
The relationship between NGOs and funders can be strained by the high levels of oversight and capacity required simply to administer and comply with project grants. There can also be pressure upon a small organisation's vision, which may have to embrace new areas of work to access funds. Smaller organisations can also feel that they are merely agents to execute the project activities of the lead group rather than true partners.	• Conservation funding bodies should adapt their granting models directly towards smaller organisations and avoid pressuring local visions. • Conservation organisations should proactively influence the donor agenda through increased lobbying and creating space for dialogue. • Conservation organisations should build collaborative business skills (with help from private sector) to ensure sustainable funding streams and avoid donor-dependency.
Monitoring and evaluating the impact of organisational and leadership capacity building are vital processes, but difficult to achieve.	• Conservation organisations should improve internal capabilities and funding to measure capacity (or engage social science partners), and create baselines against which future development of capacity can be measured.
The key findings from a major published study were presented and discussed: *Strengthening African Civil Society Organizations for Improved Natural Resource Governance and Conservation;* Maliasili Initiatives and	• Conservation and civil society organisations should review and improve their partnership and investment models. • Conservation and civil society organisations should

Well Grounded, 2015.	seek and support new approaches to leadership development. • Conservation and civil society organisations should promote dialogue around fundamental issues of accountability, constituencies and sustainability.

Table 4. Key discussions and recommendations in relation to the building professional e-Learning to support the conservation and resource management sectors of sub-Saharan Africa.

KEY DISCUSSION POINTS	**KEY RECOMMENDATIONS**
A range of universities and training institutes in Africa currently provide tertiary level conservation courses relevant to pre-career and mid-career practitioners. However, the supply of courses is not currently keeping pace with demand, and the cost of such courses is rising in many parts of Africa. Online courses can be a cost-effective, readily accessible alternative to more conventional learning systems.	• A major gap analysis should be undertaken to understand the key areas of conservation capacity development that would most benefit from e-Learning approaches and to ensure course provision is based on evidence of prioritised needs within the sector.
Whilst e-Learning offers a range of major opportunities for capacity building in the conservation sector, a number of major challenges remain for providers.	E-learning providers should…. • Ensure interactions between students and academics, devise courses that are able to include practical sessions, and safeguard against cheating. • Monitor and reduce course drop-out rates. • Develop capacity to measure the quality and impact of course designs and delivery. • Lever available (and growing) Open Educational Resources (OER).
Relevant institutions often require considerable organisational development to grow their e-Learning provision.	E-learning institutions should…. • Ensure appropriate and long-term ICT and internet infrastructure investment. • Develop their quality assurance capacity. • Provide development and support for staff. • Take advantage of the growing mobile technologies and increased mobile penetration in Africa's rural communities.
Research evidence suggests that uptake of e-learning has been slower in countries with lower *per capita* income (Furuholt and Kristiansen, 2007). Uptake is higher in groups that have already taken part in formal education (not always the main target audience), and the majority of e-learners are aged between 20 and 30.	• E-learning courses to support professional and community conservation should focus course content, methodologies and marketing strategies toward identified key audiences, and address key issues in the widening participation agenda (age, gender, disability, *etc*).
Current E-learning conservation courses have largely been developed without major collaboration with conservation organisations in isolation and using available/known technologies rather than those that appropriate for the task. This has led to considerable 're-invention of wheels', problems with universal access, and a lack of coherence or relevance across the courses provided i.e. a lack of strategic provision within the sector, that is not based on identified conservation capacity development needs.	• Conservation organisations should work with e-learning course developers/providers to create relevant material for life-long learning across all structural levels.