

Africa Biodiversity Collaborative Group

Food Security Brown Bag Summary

15 September 2011

What is ABCG?

The Africa Biodiversity Collaborative Group (ABCG) comprises seven international conservation NGOs (African Wildlife Foundation, Conservation International, the Jane Goodall Institute, The Nature Conservancy, Wildlife Conservation Society, World Resources Institute, and World Wildlife Fund) with the goal of working collaboratively and efficiently and effectively to further a sustainable future for the African continent. Funding has been generously provided by The John D. and Catherine T. MacArthur Foundation, the Critical Ecosystem Partnership Fund, the U.S. Agency for International Development, the U.S. Fish and Wildlife Service, and our members.

ABCG's Vision

ABCG's vision is of an African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods.

ABCG's Mission

ABCG's mission is to tackle complex and changing conservation challenges by catalyzing and strengthening collaboration, and bringing the best resources from across a continuum of conservation organizations to effectively and efficiently work toward a vision of an African continent where natural resources and biodiversity are securely conserved in balance with sustained human livelihoods.

Stay Involved

Information, presentations, and other resources from this workshop and others are available on the ABCG website: www.abcg.org. To keep up with ABCG, you are invited to join our listserv, follow us on Twitter (@ABCGconserve) or "like" us on Facebook (www.facebook.com/ABCGconserve).

ABCG Brown Bag: Three Presentations on Food Security and Conservation in Africa

ABCG's Food Security Working Group is a joint collaboration between African Wildlife Foundation, Conservation International and Wildlife Conservation Society. The objective of the working group is "to develop an integrated set of foundation-year activities that will begin to allow enhanced understanding of the conditions necessary to improve food security, and improved on-farm adoption of biodiversity-sensitive intensification practices."

ABCG held a brown bag presentation and discussion on September 15, 2011 from 12:00 – 1:00 pm featuring ABCG Food Security Working Group representatives Bemmy Granados (CI), Jimmiel Madima (AWF) and Michael Painter (WCS). Presentations centered on the content of an in-progress report. The work presented in this brown bag is supported by the U.S. Agency for International Development's Biodiversity Analysis and Technical Support (USAID BATS) program of the Africa Bureau.

Food Security and Conservation in the African Context
Review of Spatial Planning and Community Engagement Approaches

Bemmy Granados (presentation prepared with Terry Hills), Conservation International

The objective of the Food Security Working Group is to develop foundation year activities to promote understanding of conditions necessary for conservation agriculture to improve food security and uptake of biodiversity-sensitive intensification practices. This Food Security (FS) initiative builds on previous work; ABCG isn't new to working on FS issues. There have been previous workshops and collaborations, in particular an October 2004 workshop entitled "FS and Conservation in Africa: Addressing Hunger Issues and Farming Issues to Conserve Wildlife."



Today's discussion is based around the content of a report that is currently in progress and will soon be finalized. Conservation International's contribution to the report is a review of spatial planning and community engagement approaches with: 1) Emphasis on the capacity of approaches to facilitate better management of tradeoffs and synergies between FS and conservation across the landscape; 2) Land use activities and where they are positioned on the landscape influence dynamics and pressures between smallholder farmers and natural ecosystems; 3) Focus on smallholder producers as the target agricultural sector and beneficiary group

A sample illustrative graphic demonstrates that across the landscape, there can be different conservation and food security scenarios of tradeoffs and synergies over time and space. Land use is a very dynamic process and conditions will change and vary – even moving from one quadrant to another. There are some overarching assumptions when assessing food security and conservation: A) Longer term food security is underpinned by good environmental management and biodiversity conservation; B) In meeting shorter term food security needs, ecosystem health is often traded off; and C) Supporting sustainable agricultural systems for smallholders can minimize the tradeoffs and optimize the synergies.

For the purpose of this report, conventional agricultural practices are defined as any type of farming system relying on practices popularized during the green revolution. There are many overlaps in the array of environmentally friendly agricultural approaches. "Conservation Agriculture" (CA) is used as an umbrella term but in practice, CA integrates other like approaches in the field. The family of environmentally integrated agricultural approaches includes Conservation Agriculture, Conservation Farming, Organic Agriculture, Ecoagriculture, Greening Agriculture, Sustainable Agriculture Intensification, Sustainable Agricultural Development, and Sustainable Land Development.

In practice, spatial planning and community-based approaches represent a continuum of broad-scale approaches to those which are localized and community-led and owned processes, so the following three categories of approaches are considered to better support decisions to increase uptake of CA: 1) Broad-scale Spatial Planning Approaches; 2) Localized Mapping Approaches; and 3) Non-spatial Participatory Natural Resource Management Tools. Examples are elaborated on in the PowerPoint and Report.

Some initial take-away thoughts on the tools analysis are: 1) Each approach has its strengths and weaknesses; 2) Given the data constraints in Africa, there is a need to utilize a combination of broad-scale, localized and non-spatial tools; 3) This analysis can be connected to the Participatory Land-Use Planning (PLUP) approach that AWF and WCS used in their case studies; and 4) Serves as a foundation piece to guide next steps and tools for the ABCG FS Working Group. Next Steps for CI are based around CI's New Food Security Initiative: *"Support creation of landscapes in which management of wild and domesticated biodiversity and improved production and harvest*

practices ensure resilient, sustainable food production.” This requires an integrated approach that is spatially explicit and leverages expertise with partners. CI knows and will ensure that this Initiative works in close collaboration with ABCG FS Working Group Members

Linking Food Security and Biodiversity Conservation: Zambezi Heartland Case

Jimmie Madima, African Wildlife Foundation

African Wildlife Foundation (AWF), headquartered in Nairobi, is celebrating its 50th Anniversary this year. Zambezi Heartland, one of AWF’s nine conservation landscapes, is composed of three countries; however, the focus is on the Zambia side. There are different land tenure systems: Community lands, buffer zones, and core conservation zones. Siavonga District is the pilot site for Participatory Land Use Planning (PLUP). There was a reservoir created upstream and people were displaced. There are degraded areas and a forest reserve; the idea is to create four major zones. There are threats to biodiversity that need to be accepted, yet people still need to make a living. The charcoal business, incompatible land use, human-wildlife conflict (especially with elephants) and rampant poverty compose some of the major threats.



To succeed in conservation, you have to address issues of agriculture. AWF links agriculture and conservation for the following reasons: 1) Landscape economic and ecological viability achievable when all aspects of the rural livelihoods & economy are strengthened, AND agriculture is a key pillar in the Zambezi case; 2) Agriculture offers opportunities to diversify AWF’s traditional enterprise portfolio; and 3) Intensification of agriculture in appropriate areas helps mitigate human – wildlife conflict, reduces illegal resource extraction, and contributes to ecosystem health. There is a tendency to move into forest areas that look rich but we need to look at a map and focus on improving systems by putting food systems in certain areas to reduce wildlife conflict.

Key project components include: Training of extension workers & focal farmers (to get better yields without expanding); Supply of input packs (for better products); Monitoring and evaluation; Field days; and Exchange visits for learning. There are important crop varieties being explored and other complementary FS strategies including small livestock production focusing on goats and diversifying to deal with fish in the river with formally organized fishing groups.

Some key lessons learned in this case study include: smart partnerships are essential (see the PowerPoint for a list) for project lifespan, scale is important and the current scale is inadequate, and farmers with CA experience performed better than new entrants. Some challenges include: multiplicity of support agencies, whose approach and techniques were often disjointed and weak result in weak impacts; inadequate appreciation of the link between agriculture and biodiversity conservation; prevalent culture of dependence on food-aid relief; and low crop yields that rendering market linkages unviable.

Key next Steps for AWF include 1) Replicate CA techniques among more farmers in appropriate zones within the landscape to scale it up, 2) Roll out PLUP in other areas, and 3) Establish and strengthen CBOs; and inform AWF’s Agriculture Strategy from lessons learned in the pilot case studies.

Participatory Land Use Planning and Food Security in the Ituri Forest Conservation Landscape, DRC

Michael Painter, Wildlife Conservation Society

Wildlife Conservation Society's (WCS) Ituri Forest Conservation Landscape has existed since the 1980s and is one of CARPE's priority landscapes. The Landscape is 40,862 km² in area, contains 300,000 people and is a high biodiversity area for Central Africa. Agricultural expansion is driven by the access to land in the Forest that attracts immigrants from the nearby highly density population provinces. This landscape and its wildlife are under threat from small scale logging and agriculture, ivory poaching, bushmeat hunting and unregulated small scale and large scale mining. Elephant poaching has been reduced since the trade started in 1996 but there are a number of hunting units still active in the landscape outside the protected area. The bushmeat trade has increased everywhere with demand in urban bushmeat centers and for rural household consumption. Unregulated small-scale mining and large scale mining are also threats.



In addition to the threats to the landscape and wildlife, there are also land management challenges such as: population growth (immigrants from neighboring dense areas attracted by road repair and perceived land abundance); indiscriminate land grants and sales by chiefs; and social and institutional conflicts. These challenges are addressed through PLUP. Zoning goals, through PLUP, include: meet the present and future needs of population (farmers and hunter-gatherers); secure prior and legitimate land and resource access and use claims of OFR residents; reconcile land use interests of different stakeholders; and construct shared vision and institutional mechanisms for landscape management. It's possible to move ahead based on a shared vision of development for the areas.

The landscape has three different CARPE zone types. Zoning in the Okapi Wildlife Reserve began in 2000 and zoning permits human subsistence activity in 65% of the area (35% core conservation). Things people like about the zoning are that people don't have to defend their rights to be there, it's easier to get technical support, it's possible to organize labor in creative ways, conjoined areas are more productive than scattered ones and having defined zones means some tasks, like patrolling, are easier. However, there are some issues to be resolved including:

- Snaring – snares confiscated depending on what zone you're in. This creates a converse dynamic because people put out more snares than before in anticipation of some being collected.
- Perennial Crops – protected areas don't allow perennial crops like coffee/cacao yet these crops would help stabilize the area and decrease the desire to expand.
- Rights to Felled Trees – people don't have the rights to felled trees at the present time. Exemptions are rarely given yet there is no reason why people couldn't use those trees.

These are all sore points that need enough institutional and organizational strength to work out mutually accepted solutions. Two CBNRMs to the east of the protected area have technical support to follow the zoning process. They have designated four zones for hunting, agriculture, forestry and a community reserve. Issues to be addressed include gaining buy-in from chiefs, developing institutional capacity to manage, landscape management and economic incentives/livelihood options.

Next Steps for ABCG/Members: ABCG can draw on these experiences and is in a good position to do several things including develop the following for learning and information sharing: A) Best practices improving farm

production sustainably; B) Indicators of resilience and sustainability; and C) Horizontal exchanges among farmers/farmer-led innovation.

Discussion Themes

After the three presentations, the following themes and issues were addressed during the Q&A period.

Partnerships

- Partnerships are essential and over the last 20 years we have seen many linkages, including partnering with some ministries. In looking at agricultural planning, these partnerships are especially important and assessing how to better work with partners to reach our goals will help shape future work. In the Zambezi landscape, AWF collaborates with the Ministries of Agriculture and Fisheries and another quasi-government institution. AWF, CI and others bring in the resources to work with the government. The report delves a little into partnerships and where the dynamics are but in general there is a significant gap – groups and institutions aren't working together.
- As we try to talk to and identify linkages between our conservation community and multiple sector approaches, there is a degree of disconnect so partnerships are harder to achieve. There are limitations on bringing the conservation and development communities together. For effective partnerships, we need shared goals and they might not be as shared as we'd like them to be. In terms of these two landscapes, most of the work is being done in areas that aren't actually being conserved, i.e. buffer zones, edges. Some areas aren't going to be competitive in some sectors (agriculture for example) yet some areas are developed for agriculture out of default. On one side, those that promote development have been remiss in not being critical of the default position. On the other hand, the conservation community has been remiss to not being attention to the other uses of the land for livelihoods (PES undervalued, ecotourism, etc.) We haven't been good at positing alternative approaches to land use in those areas that complement the default position. The ways in which we address and identify issues and zoning need to be more transparent.

Land-use

- One of the approaches is to work with farmers to improve productivity in certain areas. There is some concern that increasing the productivity will result in further expanding to produce more; a worry implicit with the impact of climate change. If you focus on the agriculture success, it's easy to assume that the logic that follows from that is increased income. WCS in particular is starting to figure out how much to increase productivity and what the constraints are. In the report one thing we have really had to look at is adding value to farm production by generating non-farm based economies such as other services and sustainable industries, ecotourism, services, etc. There is no magic solution and the danger is real. If you don't make livelihoods more secure, you are more limited in what you can do in conservation.
- When investors in land-scale land acquisition look for land, they often look to open/bad land to get reclassified for different uses. In developing the report as a foundation document, another thing to look at is status of large-scale land acquisition in savannahs and forests outside of formally protected areas. This issue ties in with ABCG interests for the next three years. It's possible to weave that into the Report and across other ABCG working groups.

Lessons learned and monitoring

- The report delves briefly into human-wildlife conflict, management and lessons learned. There is a quick reference to human-wildlife conflict in the Report: In Zambezi, elephants are damaging crops and people feel that elephants don't provide any benefit to them. They are looking into possible partnerships for enterprise between the public and private sectors for ecotourism, chili pepper fences for elephants, fences for crocodiles, etc. In Ituri, similar things are occurring. One advantage people perceive with agricultural activities only in defined areas is a reduced vulnerability to predation. When crops are all together they can also get "stomped on" easier however, the area is also easier to defend. The real key in many ways is transitions in multi-use areas. There is never a definitive solution – always a negotiation, always an issue of tradeoffs. People perceive a value from wildlife/ecosystems that ranges and figuring that out is a real challenge. As one looks at the long-term, tourism development and agricultural practices must be compared (as an example). The demand for land and the changing value for marginal cropland is a wildcard.
- Right now the case studies are small-scale pilot sites and organizations haven't outlined how to best monitor and evaluate progress. In Zambezi, they are still building interest and talking to farmers about how they've seen CA change and getting information from extension workers. As far as indicators of success, the next level is to look at nutritional value and levels. After that, tracing biodiversity at the same time might be an option. Right now the projects are so small-scale that the indicators of success are yet to be fully defined.