



## SCALING UP CONSERVATION SUCCESS WITH SCAPES

A Program of the Wildlife Conservation Society Supported by the USAID/ EGAT SCAPES Program

### BEYOND FENCES: POLICY OPTIONS FOR BIODIVERSITY, LIVELIHOODS AND TRANSBOUNDARY DISEASE MANAGEMENT IN SOUTHERN AFRICA

*Year 5 Implementation Plan (FY 2014)*

*October 2013 – September 2014*

As has been the case in previous years, this Year-5 implementation plan should be viewed as a living document as we utilize on-going USAID support to thoroughly consult regional experts in an iterative, adaptive management fashion. We wish any regional stakeholders who review this document to *know that we know* it has not yet benefited from a thorough regional vetting, and is thus subject to modification.

#### A. OVERVIEW

##### PROGRAMMATIC APPROACH

The principal goal of the WCS SCAPES program is to conserve biodiversity and to secure the livelihoods of the rural poor through targeted site-based and policy initiatives at globally important sites for biodiversity conservation. WCS is building on USAID's Global Conservation Program (GCP) decade-long tenure which enabled partners to explore landscape-scale conservation approaches that consider complex and integrated social, economic and ecological factors.

SCAPES support enables us to adapt and extend our efforts to scale-up across boundaries where it makes most sense for wildlife, and to capitalize on our accumulated learning to focus on the interrelated needs to develop and sustain enabling conditions for adequate governance mechanisms, policies in key areas, and efficient markets to finance conservation and facilitate development.

Taking action to abate threats that risk the loss of biodiversity, depletion of ecosystem goods and services and increased impoverishment of marginalized, resource-dependent communities is central to WCS's mission of saving wildlife and wild places. WCS is mobilizing expertise and resources to address four global conservation challenges: adaptation to climate change; sustainable extractive industries; secure human livelihoods; and healthy wildlife, people and ecosystems. Implementation of our SCAPES activities will help us address many of these challenges, as well as give us the opportunity to extend effective conservation to new people and places, and their related institutions and organizations, thereby increasing chances of ecological, social and financial sustainability of our conservation actions.

The USAID SCAPES elements – a threats-based approach, sustainability, adaptive management, and scaling-up – are essential, interdependent components of successful conservation efforts. Each is critical to a positive and sustainable long-term impact on biodiversity conservation at a landscape or seascape scale and to secure local livelihoods. These elements are integrated into the activities presented below.

The SCAPES program at WCS is designed to ensure biodiversity conservation in three areas of global importance. We do this by identifying actions to conserve landscape species, and by increasing the capacity of local and national organizations to implement such actions. The three areas of global biodiversity importance for WCS involvement and USAID activity are currently:

- Daurian Steppe (Mongolia, Russia and China)
- Madidi-Tambopata Landscape (Perú)
- Kavango Zambezi Transfrontier Conservation Area (Angola, Botswana, Namibia, Zambia and Zimbabwe)

## **PROJECT GOAL AND APPROACH**

The WCS 'Beyond Fences' program aims to address problems facing biodiversity conservation and development in large, transboundary landscapes by focusing on the critically important linkages among wildlife health, domestic animal health, and human health and livelihoods. Our focus is one of southern Africa's major transfrontier conservation landscapes, the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA). The development of TFCAs to further the conservation of biodiversity and sustainable development through the harmonization of transboundary natural resource management is a priority for SADC (the Southern African Development Community) and the five countries that encompass the KAZA TFCA: Angola, Botswana, Namibia, Zambia and Zimbabwe. Nature-based tourism (photographic safaris, trophy hunting, etc.), the primary economic driver of TFCA development, now contributes about as much to the GDP of southern Africa as agriculture, forestry, and fisheries combined – a remarkable and relatively recent development documented by the Millennium Ecosystem Assessment. However, the management of wildlife and livestock diseases (including zoonoses – diseases transmissible between animals and people) within TFCAs like KAZA presents a range of emerging policy issues of major concern to livestock production, associated access to export markets, public health, and rural development in the region. Livestock farming is, of course, an important traditional way for communities in sub-Saharan Africa to build and maintain wealth, not to mention attain food security.

Transboundary animal diseases (TADs) are “animal diseases that are of significant economic, trade and/or food security importance, which can easily spread beyond national borders and have potential to reach epidemic proportions and their control and management, including exclusion, requires coordinated efforts in more than one country” (Food and Agricultural Organization, FAO). Globally, foot and mouth disease (FMD) is considered one of the most important TADs because of its significant economic/trade impacts. In livestock, morbidity associated with infection can be extremely high but mortality is usually low and affected cattle tend to recover completely.

Essentially, the TFCA concept and current internationally accepted approaches to the management of transboundary animal diseases (TADs) are largely incompatible. The TFCA concept promotes free movement of wildlife over large geographic areas, whereas the present approach to the control of TADs (especially in respect to directly transmitted infections like FMD) is to prevent movement of susceptible animals between areas where TADs occur and areas where they do not (often through veterinary cordon fencing), and to similarly restrict trade in commodities derived from animals on the same basis. In short, the incompatibility between *(a) current regulatory approaches for the control of diseases of agro-economic importance and (b) the vision of vast conservation landscapes without major fences* represents one of the key threats to transboundary conservation success and thus to risk-diversification of land-use options and livelihood opportunities.

Since 2003, WCS has been focusing on this suite of issues through the Animal & Human Health for the Environment And Development (AHEAD) program, which has worked to facilitate transparent, multidisciplinary policy dialogue and planning at various scales in the region. Using this approach, the 'Beyond Fences' initiative is working to bring key policy makers and relevant sectoral expertise to the table to explore new options for the management of TADs and for policy interventions that will support both transfrontier conservation and rural development objectives.

Through our engagement with the KAZA Secretariat and key multilateral bodies such as SADC (Southern African Development Community), AU-IBAR (African Union Interafrican Bureau for Animal Resources), OIE (World Organisation for Animal Health), and FAO (Food and Agricultural Organization of the United Nations), AHEAD is working to enhance recognition of the critical cross-sectoral issues that pervade the nexus of wildlife health, livestock health, and human health and livelihoods in southern Africa. We are focusing on discussions with member country government officials working in the livestock sector to help facilitate collaborative, integrated approaches to rural development in KAZA, including disease management alternatives such as commodity-based trade (Box 1). Value chain disease risk management and commodity-based, non-geographic approaches to disease control have the potential to facilitate access to new beef markets for southern African farmers and pastoralists as well as to enhance the long-term viability of TFCAs, as FMD management under these conditions would no longer require all of the extensive migration-disrupting veterinary fencing that currently crisscrosses this vast region.

**Box 1: Commodity-Based Trade\***

Market access for livestock and livestock products (LLP) from Africa is constrained by the prevalence of endemic highly contagious transboundary animal diseases such as foot and mouth disease (FMD). These diseases have been mostly eradicated in the developed world, but the fear of their re-entry from endemic reservoirs in the developing world largely precludes large-scale LLP exports from Africa to lucrative markets in the European Union, United States and Japan.

International trade practices for LLP have historically emphasized geographic or 'zonal' freedom from disease (i.e. miles of cordon fencing separating wildlife and livestock). Recently, however, suitable alternate strategies have become available for managing significant disease hazards, strategies that offer more focused yet equally effective standards for risk management. For example, value chain disease risk management and commodity-based, non-geographic approaches to trade focus on the *safety of the process* by which products are produced rather than on their regional origin, and in so doing offer the potential for developing countries to export meat products that are scientifically demonstrable as safe for importing countries while also precluding the need for impenetrable veterinary fencing that currently constrains SADC's vision for regional transboundary conservation.

*\*While there is no single accepted definition of commodity-based trade (CBT) we consider it to represent an array of alternatives that can be used to ensure the production and processing of a particular commodity or product are managed so that identified food safety and animal health hazards are reduced to appropriate risk levels. OIE Terrestrial Animal Health Code guidelines now recognize a disease management scenario under which commodity-based trade, a non-geographic approach to disease management, could be effectively implemented.*

As AHEAD has demonstrated elsewhere in the region, it is only when the wildlife conservation / environment and agricultural sectors are both at the negotiating table that meaningful dialogue on key

land-use policies can progress – hence the importance of AHEAD’s outreach to the KAZA Secretariat, regional agricultural officials, SADC, AU-IBAR, OIE and FAO.

Southern African governments that have agreed to work together to create TFCAs will only continue to invest in this complex type of effort if the economics behind TFCAs make sound development sense. Much of the ‘Beyond Fences’ policy focus relates to that same objective, as we believe there will be no sustainable conservation success without concomitant diversification and improvements of local incomes.

## **THREATS AND PROGRAM RESPONSE**

A key strategy for biodiversity conservation in southern Africa is the securing of biological connectivity across larger landscapes, e.g. through TFCAs. The region’s core protected areas increasingly are facing the threat of becoming isolated ecological islands in agricultural landscapes, with the loss of connectivity so important to maintaining genetic diversity and the viability of globally endangered wildlife populations (e.g. African wild dog, black rhino). Enhanced connectivity across large landscapes will also be a crucial factor in biological adaptation to climate change in southern Africa – and one of the greatest threats to such connectivity is the disease-control game fencing that crisscrosses much of the region.

## **PROGRAM STRATEGY - OVERVIEW OF OBJECTIVES AND ACTIVITIES**

Through this policy-based initiative, WCS is contributing to the overall SCAPES goal of conserving biodiversity and securing the livelihoods of the rural poor by working to meet the following objectives:

1. Help create an enabling environment for enhanced cooperation among conservation, agriculture and human health experts and authorities (within and between participating countries), anchored through a series of (informal and formal) consultative meetings.
2. Identify mechanisms for controlling transboundary animal diseases (TADs) without complete reliance on current fencing approaches, using expert groups to analyze potential scenarios involving alternative tools and policies.
3. Inform and influence cross-sectoral and transboundary policy responses which support both TFCAs and control of TADs.

Our work involves reviewing key livestock/wildlife interface issues with an emphasis on management of TADs, particularly those diseases that hinder livestock producers’ access to regional and international markets. This will enable exploration of new options for resolving the currently conflicting objectives of establishing TFCAs and controlling TADs. We continue to explore alternatives to reliance on extensive cordon fencing, and new approaches to controlling disease that consider a broader economic development framework.

The success of this approach depends on engagement of multiple experts, sectors (wildlife and agriculture as well as public health) and nations. Efforts in Year-5 will continue to include collaboration with the major multilateral bodies such as SADC, OIE and FAO, all of which have endorsed the AHEAD program. OIE has a critical presence in the southern African region and is headquartered in Europe (the historically favored market for many of southern Africa’s animal-derived export products). We are focusing on discussions with member country government officials working in the livestock sector to help facilitate collaborative, integrated approaches to rural development in KAZA, including disease management alternatives such as those associated with commodity-based trade. For example, in Year-5, we will work to introduce these approaches to key policy makers in Botswana.

## **B. OBJECTIVES AND ACTIVITIES**

The overall framework for the project as summarized in the Objectives Tree (Figure 1) illustrates the long-term and short-term goals of the project, its specific outputs/objectives, and the major activities that will be required to reach those objectives.

Recognized as critically important in the initial phases of the project, the process of relationship-building remains a strong focus in Year-5. We see our role as, first and foremost, supportive to relevant official regional mechanisms already in place. Identifying key actors in this multi-national landscape, and building resilient, trusted relationships amongst all parties must continue to be an important role of the 'Beyond Fences' Coordinator (i.e. AHEAD Senior Policy Advisor) and AHEAD team. Given the continued need to engage key stakeholders, our implementation plan in Year-5 remains an iterative process that may leave some meetings or workshops or analyses unspecified as of this writing. This iterative planning process will help us secure the input of the primary constituents across the region to inform how best to mesh our collective goals. While AHEAD has had a presence in southern Africa for ten years now and is well recognized as a key conservation and development partner, and USAID's support of health, environment and rural development-related programs is widely recognized throughout the region, the 'Beyond Fences' project itself is still understandably viewed as a relatively new initiative, necessitating substantial ongoing investment in building productive and trusting relationships with and among key actors across the landscape in Year-5, and hopefully beyond.

**Figure 1. Objectives Tree** (*italics* indicates activities completed; all other activities are currently underway)

**YEAR-5 GOAL** New approaches for reconciling management of transboundary animal diseases with needs for TFCA connectivity identified, and recommendations for policy modifications developed in collaboration with TFCA partner countries

**SUB-GOAL** Build on past successes and lessons learned to help create an enabling environment to inform and resolve conflicts between the creation of TFCAs and current approaches to the control of transboundary animal diseases

| <p><b><u>Objective #1:</u></b><br/> <b>Facilitate an enabling environment for enhanced cooperation among conservation, agriculture and health experts and agencies in TFCAs</b></p>  | <p><b><u>Objective #2:</u></b><br/> <b>Identify and promote mechanisms for controlling TADs without complete reliance on cordon fencing</b></p>  | <p><b><u>Objective #3:</u></b><br/> <b>Influence cross-sectoral policy responses that support TFCAs while controlling TADs</b></p>  |
|--|--|---|
| <p><b>Activities:</b></p> <p><i>1.1 Assemble the legal and policy frameworks and regulations relating to conservation and diseases and their control within the five countries / SADC as well as those relating to international controls of TADs</i></p> <p><i>1.2 Conduct ‘institutional mapping’ studies establishing key actors and agencies involved in (a) conservation and development of the TFCA, (b) agriculture, livestock development and disease management, and (c) human health and livelihoods</i></p> <p>1.3 Work with key actors and stakeholders and solidify a foundation of trust among them, and with the AHEAD program, through frequent meetings and information sharing; identify key, influential people and champions of various causes related to TFCA development and the control of TADs, and explore links with them as potential partners</p> <p>1.4 Convene multi-disciplinary workshops, colloquia, &amp; other meetings to explore and define ecological, social and political dynamics and specific ways to address challenges identified at the interface between conservation and TADs</p> | <p><b>Activities:</b></p> <p><i>2.1 Research and analyze key constraints to conservation and development success at the wildlife/livestock/human interface across the southern African subregion</i></p> <p><i>2.2 Assemble information on the status of TADs and current control measures for TADs in the SADC region focusing on the KAZA member countries</i></p> <p><i>2.3 Conduct comprehensive socioeconomic analysis of disease management alternatives and projected development outcomes in the Caprivi region of KAZA</i></p> <p>2.4 Continue to explore alternative options and outcomes for the control of TADs in relation to TFCAs, including those related to commodity-based trade, using scenarios with key stakeholders at regional, national and local levels</p> | <p><b>Activities:</b></p> <p>3.1 Establish awareness, visibility and outreach channels (website, e-updates) for the program (initiated via Objective 1)</p> <p>3.2 Participate in conferences and meetings and present project ideas, results and approaches to selected audiences</p> <p>3.3 Facilitate the transfer of technical expertise and disseminate policy briefs and reports based on activities carried out under Objectives 1 &amp; 2 through informal and formal mechanisms</p> <p>3.4 Liaise with appropriate national, regional and international entities to foster implementation of identified ‘win-win’ conservation and holistic (One Health) disease management policy options and opportunities</p> |

**OBJECTIVE 1: Help facilitate an enabling environment for enhanced cooperation among conservation and agriculture, as well as human health experts and authorities (within and between TFCA member countries), anchored through a series of (informal and formal) consultative fora**

WCS has demonstrated the value of health as an entry point for facilitating more transparent and robust cross-sectoral governance and land-use planning. As a direct result of the 'Beyond Fences' initiative, there is now enhanced cooperation between conservation and agriculture sectors at the regional level in SADC and internationally (OIE, FAO). We continue to build on this to support and enhance communication and cooperation among the conservation, veterinary, agriculture and human health authorities within and between countries, as well as between governmental and non-governmental entities within the region, including universities. Larger meetings with sectoral (wildlife conservation, agriculture, public health) leaders from TFCA member countries, and smaller consultative fora with individual agencies, continue to be vehicles for facilitating this dialogue. In Year-5, the 'Beyond Fences' Coordinator and key AHEAD consultants will continue to spend a significant portion of time meeting informally and formally with key decision-makers and other stakeholders across the region.

**Activity 1.1: Assemble the legal and policy frameworks and regulations relating to conservation and diseases and their control within the five countries / SADC as well as those relating to international controls of TADs**

This activity was completed and reported on in 2011.

**Activity 1.2: Conduct 'institutional mapping' study establishing current key actors and agencies in southern Africa involved in (a) conservation and KAZA TFCA development, (b) agriculture, livestock development and disease management, and (c) human health and livelihoods**

Over the course of the past four years, working with regional consultants, we have gathered information to complete institutional mapping analyses for Botswana, Namibia, Zimbabwe and the KAZA TFCA itself. The accompanying institutional engagement, together with the mapping reports, assisted us greatly in targeting key government institutions, other important stakeholders and identifying champions of various causes related to TFCA development and the control of TADs. However, due to capacity constraints and challenges associated with scheduling, access, travel and language (Angola), we have been unable to make significant progress in preparing reports for Angola and Zambia. 'Beyond Fences' policy traction in the region has, however, been achieved through institutional engagement with key multilateral institutions, and with governmental and non-governmental partners in the three countries we have completed institutional mapping reports for. Given where we are in the trajectory of the project, we do not plan to undertake analyses for Angola and Zambia. We will, however, continue to facilitate cross-sectoral dialog and an enabling environment for enhanced cooperation among the agriculture and wildlife sectors (Objective 1) through consultation (both informal and formal) undertaken under Activities 1.3 and 1.4. The project will of course continue to engage with key Zambian and Angolan stakeholders, as we have since the start of the program.

**Activity 1.3: Networking and relationship building. Work with key actors and stakeholders and solidify a foundation of trust among them, and with the AHEAD program, through frequent meetings and information sharing; continue to identify key, influential people and champions of various causes related to TFCA development and the control of TADs, and explore links with them as potential partners**

As a result of ongoing support from member state governments, establishment of a permanent KAZA Secretariat, financial backing from international partners, and regular input from formalized national

steering committees, the KAZA Joint Management Committee is now better positioned than ever to address core cross-sectoral issues of critical importance to the long-term viability of the TFCA. Strong professional relationships between AHEAD and important regional entities such as the SADC Food, Agriculture and Natural Resources (FANR) Directorate, AU-IBAR, FAO, and OIE have also been established and built upon since project inception.

These developments have allowed for the progressive, cross-sectoral dialog and action needed to advance innovative TADs management and control initiatives in the region. The results of such networking and relationship building during the past several years clearly illustrate the importance of continuing this activity through the final phase of the project. While perhaps at a slightly reduced level compared to the first four years of the project, the 'Beyond Fences' Coordinator and our team of consultants from the region will continue to dedicate significant effort to meeting key, influential people and champions of various causes related to development of the KAZA TFCA and the control of TADs, and will continue to explore links with them as potential partners.

#### RESULTS/OUTPUTS:

- Key influential people and potential champions identified and engaged
- Potential partners identified; strategic partnerships explored, developed and expanded
- A greater awareness among decision-makers, key actors and stakeholders of the issues related to TFCA development and the control of TADs

#### **Activity 1.4: Convene and attend multi-disciplinary workshops, colloquia, and meetings to explore and define ecological, social, and political dynamics, and specific ways to address the challenges identified at the interface between conservation and TADs**

Establishment of the MCA-funded market access/commodity-based trade study in Caprivi, promotion of commodity-based approaches by SADC and COMESA (Common Market for Eastern and Southern Africa), adoption of OIE's Terrestrial Animal Health Code (TAHC) Article 8.5.25 as a regional standard by the SADC LTC, and endorsement of The Phakalane Declaration ([http://www.wcs-ahead.org/phakalane\\_declaration.html](http://www.wcs-ahead.org/phakalane_declaration.html)) by the SADC LTC all clearly illustrate the growing recognition and acceptance of the need for non-geographic TADs management alternatives in the region. In addition, a series of FMD outbreak events in the region, increasing in frequency and impact since 2011, highlight the failure of management techniques currently employed to prevent disease outbreaks from occurring. Through 'Beyond Fences', AHEAD is facilitating the development of a clear, innovative, and practical alternative approach to TADs management in the region and our activities in Year-5 will continue to focus on building upon the strong foundation already established and maintaining the momentum required to maximize opportunities for successful delivery on a set of important cross-sectoral objectives related to this and other TADs. An important aspect of this approach involves expert convenings, and in Year-5 we anticipate participating in and helping to organize several important local and regional meetings.

The AHEAD team originally anticipated providing technical and financial support to the KAZA Secretariat to convene the KAZA TFCA Animal Health sub-Working Group during Years 4 and 5. Such specialized working groups have, however, recently been dissolved under the KAZA TFCA Treaty. Following a recent request by our wildlife partners in Botswana (Department of Wildlife and National Parks), we are, however, assisting in the design, planning and execution of a Botswana Wildlife Research Symposium in 2014. The symposium aims to bridge the gap between wildlife research and conservation area management, covering a range of issues related to land-use, livestock and conservation planning in the Botswana portion of the KAZA TFCA.



In response to a specific request from the SADC Secretariat, AHEAD will play a lead role in facilitating the LTC Working Group's review and development of comments on the OIE's draft TAHC FMD Chapter update (see Activity 3.3).

RESULTS/OUTPUTS:

- SADC LTC to review TAHC FMD Chapter revisions for consideration by OIE
- Botswana Wildlife Research Symposium convened in partnership with the Department of Wildlife and National Parks
- Technical reports and other relevant materials produced, disseminated to partners as appropriate, and posted on the AHEAD website

**OBJECTIVE 2: Identify mechanisms for controlling transboundary animal diseases (TADs) without complete reliance on current fencing approaches, using expert groups to analyze potential scenarios involving alternative tools and policies**

Activities to achieve this objective will build on work carried out during the past four years during which time we gathered information related to potential alternative approaches for managing TADs that could potentially meet international trade standard requirements (e.g. commodity-based trade). In Year-5 we will refine innovative alternatives that build on these foundations (e.g. integrated food safety and sanitary risk management along value chains) and work to develop specific guidelines by which commodity-based trade and non-geographic disease management can be implemented and reliably certified in KAZA member countries.

**Activity 2.1 Research and analyze key constraints to conservation and development success at the wildlife/livestock/human interface across the southern African subregion**

This activity was completed and reported on in 2011.

**Activity 2.2: Assemble information on the status of TADs and current control measures for TADs in the SADC region focusing on the five KAZA member states**

This activity was completed and reported on in 2012.

**Activity 2.3 Conduct comprehensive socioeconomic analysis of disease management alternatives and projected development outcomes in the Caprivi region of KAZA**

This activity was completed and reported on in 2013.

**Activity 2.4: Continue to explore alternative options and outcomes for the control of TADs in relation to TFCAs, including those related to commodity-based trade, using scenarios with key stakeholders at regional, national and local levels**

Initiated in Year-3 and due for completion in Year-5, this Activity will allow us to further explore suitable alternative options and outcomes for the management and control of TADs in southern Africa (FMD in particular). This exercise will help identify international animal disease management/trade standards that could impact the long-term success of TFCAs in southern Africa. (Importing nations in the EU, for example, require southern African countries to meet a disease management standard that significantly exceeds the international standards set by the OIE. Existing systems / abattoirs in the KAZA region are unlikely to have the capacity to meet these 'extra' standards - especially as they pertain to

the control of FMD. As a result, communal livestock farmers will likely need to focus on regional and alternative international markets if proposed alternative approaches like commodity-based trade prove successful.)

During Year-5, the 'Beyond Fences' Coordinator will continue to participate in the groundbreaking 'Development of Export Opportunities for Beef Products in the Caprivi' study initiated by a consortium of government and non-government partners during Year-2 and funded by the Millennium Challenge Account - Namibia. This project was put on-hold in Year-3 due to closure of the export abattoir in Katima Mulilo by the Namibian Directorate of Veterinary Services in response to an outbreak of FMD. Project partners resumed work on the study in Year-4 however, and hope to complete the project during Year-5. The Caprivi study is particularly relevant and timely - while stakeholders in the region are beginning to recognize that alternative disease management options / trade standards exist (ones that don't rely on strict separation of livestock and wildlife with veterinary fences), these concepts have so far not been field tested in the region. Consequently, no 'blueprint' exists that can aid operationalization of commodity-based trade more broadly. This project aims to demonstrate proof of concept and provide practical guidelines that can be adopted (and adapted) by, as a start, the Namibian livestock industry. AHEAD staff will continue to provide technical assistance related to conservation, wildlife ecology and health/disease. We also anticipate working with project principals and other regional experts to develop a set of guidelines for broader regional application.

#### RESULTS/OUTPUTS:

- A practical set of guidelines developed for business ventures in southern African countries by which commodity-based trade and non-geographic management of disease risks along value chains can be implemented and reliably certified
- Relative eradicability of TADs (especially FMD) in southern Africa evaluated to highlight the difficulties associated with eradication approaches; findings prepared for submission to peer-reviewed scientific/animal health journal
- Comprehensive evaluation of currently available buffalo and cattle distribution and movement data facilitated by AHEAD, and data incorporated to support work being done by Caprivi project consortium (DVS requested this information for improved disease risk management)
- Communication and the sharing of such information among the MCA-funded Caprivi project partners, including WWF-Namibia, facilitated by AHEAD; strengthening of the foundation for appropriate TADs management and the conservation of biodiversity in the KAZA TFCA
- Report findings disseminated to key stakeholders as appropriate, and posted online
- Relevant proceedings, scientific papers, published reports and policy documents added to the Zotero online document library

#### **OBJECTIVE 3: To inform and influence cross-sectoral policy responses which support both TFCAs and control of TADs**

The incompatibility between (a) *current regulatory approaches for the control of diseases of agro-economic importance* and (b) *SADC's vision of vast conservation landscapes without major fences* represents one of the key threats to transboundary conservation success and thus to risk-diversification of land-use options and livelihood opportunities. The 'Beyond Fences' project is iteratively building on the knowledge gained through the first two objectives, thereby providing a basis for animal health and disease control policy recommendations. In this final year of the project, we anticipate engaging more frequently in high-level discussions and briefings, and where appropriate, with ministerial representatives from KAZA member states.

### **Activity 3.1: Establish awareness, visibility and outreach channels (website, e-updates) for the program (initiated via Objectives 1 & 2)**

Establishing awareness and visibility of the 'Beyond Fences' project is being achieved through various media channels. A section of the AHEAD website devoted to the KAZA TFCA was developed in Year-2 ([http://www.wcs-ahead.org/workinggrps\\_kaza.html](http://www.wcs-ahead.org/workinggrps_kaza.html)). In Year-5, new technical papers and other relevant resources will be added to the site on a regular basis. As in previous years, reports will be flagged in the AHEAD Update (e-newsletter) and posted in the KAZA section of the AHEAD website ([http://www.wcs-ahead.org/workinggrps\\_kaza.html](http://www.wcs-ahead.org/workinggrps_kaza.html)). The AHEAD Update is now distributed to more than 2,300 natural resources managers, agriculture experts, health professionals, development specialists, policy-makers and other interested parties around the world.

During Year-2, a map of the KAZA TFCA was developed by the 'Beyond Fences' project, which includes population centers, protected areas, and veterinary cordon fencing. The map has proven to be an extremely valuable resource in meetings as many stakeholders are unfamiliar with the area in its entirety. It was revised in Year-3 to include updated fence lines and modified TFCA boundaries, however, Integrated Development Plans (IDP) for some KAZA Member States are only now being completed, and some countries have proposed expanding the amount of territory included within the TFCA. For example, inclusion of much of Ngamiland District and parts of Central District in Botswana will expand the KAZA TFCA by an additional ~80,000 sq. km. As a result, additional edits to the map will be required in Year-5. We will also continue to work on translating key documents (like this map) into Portuguese for the benefit of our Angolan partners.

#### RESULTS/OUTPUTS

- AHEAD Update (e-newsletter) produced and emailed to 2,300+ subscribers 3 to 4 times per year
- Following approval by USAID, Year-5 implementation plan translated into Portuguese, both versions being made available on AHEAD website and to key stakeholders
- KAZA TFCA map updated
- KAZA section of AHEAD website expanded to include new and updated resources
- AHEAD resource library (Zotero) expanded to include new documents and policy reports

### **Activity 3.2: Participate in conferences and meetings and present project ideas, results and approaches to selected audiences**

AHEAD and partners are building a unique and rapidly growing knowledge base to draw upon when evaluating alternative approaches to reconcile the management of TADs in the context of TFCAs. To facilitate broad dissemination of ideas, results and approaches to select audiences, AHEAD will attend relevant conferences and meetings during Year-5 and use these opportunities to highlight animal health policy challenges, objectives and developments in the region. As previously mentioned, the implementation plan is an iterative process that may leave some meetings and conferences unspecified at the time of writing. An annotated list of conferences and meetings will be included in future USAID reports.

## RESULTS/OUTPUTS

- Anticipated participation in the following conferences and meetings:
  - Global FMD Research Alliance (GFRA) meeting on 'Epidemiology, Surveillance, Transmission and Control of FMD in Endemic Settings of Africa' (Arusha, Tanzania, October 8-10, 2013)
  - Botswana Wildlife Research Symposium on 'Bridging the Gap between Conservation Science and Management' (Maun, Botswana, February 4 – 6, 2014)
  - Great Limpopo Transfrontier Park (GLTP) Veterinary Committee (Location and date TBD, 2014)

### **Activity 3.3: Facilitate the transfer of technical expertise, produce and disseminate policy briefs and reports based on activities carried out under Objectives 1 & 2 through informal and formal mechanisms**

Policy analyses, papers, and other relevant findings that result from studies undertaken under Objectives 1 and 2 will assist in informing policy recommendations for governing animal health and disease control strategies in TFCA member states. The AHEAD team makes significant efforts to disseminate the results of such analyses, and in Year-5, as in previous years, reports will be made available through the AHEAD website, via AHEAD Update e-newsletters (see Activity 3.1), and in some cases distributed as hard copies to stakeholders and partners.

With a goal of disseminating regionally appropriate policy concepts and recommendations to a much wider audience and extending the reach of the 'Beyond Fences' project, we anticipate the publication of two peer-reviewed papers (see results/outputs below) submitted to the scientific journal 'Emerging and Transboundary Diseases' in Year-5. The first paper makes the case for integrating the management of food safety and animal disease risk along value chains, thereby offering a commodity-based alternative to currently favored geographic or 'zonal' management systems (which rely on vast veterinary cordon fencing systems). The second paper builds on these principles, and describes the key challenges to practical implementation of such systems and offers a mechanism for making progress in achieving balanced rural development in southern Africa. Together, these papers are expected to form the basis of a recommended 'way forward' for southern African countries looking to implement non-geographic disease risk management methods. Once published, these papers will be shared with KAZA and SADC partners, and via the AHEAD website. In addition, we anticipate working on a 4<sup>th</sup> edition of the Southern Africa FMD Bulletin during Year-5.

AHEAD will also facilitate the transfer of technical expertise related to animal health and disease control strategies at the country and regional level through activities carried out under Objectives 1 and 2. Working closely with consultants, we will provide the SADC LTC with input on the Terrestrial Animal Health Code (TAHC) chapter on FMD currently under revision; and continue to provide input on Botswana's SPS (Sanitary and Phytosanitary) review being undertaken by the Botswana Institute for Development Policy Analysis (BIDPA).

## RESULTS/OUTPUTS

- 'International trade in commodities and products derived from animals: the need for a system that integrates food safety and animal disease risk management' – paper published in 'Transboundary and Emerging Disease' journal

- ‘Balancing livestock production and wildlife conservation in and around southern Africa’s transfrontier conservation areas’ – paper published in ‘Transboundary and Emerging Diseases’ journal
- Development of Southern African FMD Bulletin (4<sup>th</sup> Edition)
- Transfer of technical expertise facilitated by AHEAD: SADC LTC Working Group submits regionally appropriate comments to the OIE on draft revisions to the TAHC Chapter 8.5 on FMD
- Transfer of technical expertise facilitated by AHEAD: through engagement with BIDPA, core ideas on non-geographic approaches to the management of TADs are considered in a report prepared for Botswana’s Parliamentary Select Committee
- Key reports and policy analyses shared with stakeholders and partners, including via AHEAD website

**Activity 3.4: Liaise with appropriate national, regional and international agencies to foster implementation of identified ‘win-win’ conservation and holistic (One Health) disease management policy options and opportunities**

A number of extremely important policy milestones were reached during Year-4 of the ‘Beyond Fences’ project: SADC’s LTC have enthusiastically endorsed the ‘*The Phakalane Declaration on Adoption of Non-Geographic Approaches for Management of Foot and Mouth Disease;*’ the SADC Secretariat recognized critical deficiencies in the OIE’s draft FMD chapter update in the Terrestrial Animal Health Code and requested AHEAD’s leadership in conducting a comprehensive review; and the Botswana Parliamentary Select Committee investigating the decline of the beef industry and collapse of the Botswana Meat Commission requested a special presentation on alternative, locally relevant FMD management strategies in the context of regional and international trade in livestock and livestock products. These provide an opportunity for SADC and our country partners to rethink the region’s approach to the management of diseases like FMD, in the interest of enhancing opportunities for trade in beef among SADC countries, while simultaneously facilitating wildlife conservation initiatives like TFCA’s.

During Year-5, ‘Beyond Fences’ will continue efforts to foster close ties with national, regional and international organizations. To achieve this, the ‘Beyond Fences’ Coordinator and key local consultants expect, for example, to attend official SADC LTC meetings and quarterly coordination meetings of the key regional partners (SADC, OIE, AU-IBAR, USDA-APHIS) and AHEAD will continue efforts to present sound policy alternatives at these and other fora. The WCS Executive Director of Wildlife Health & Health Policy will continue liaising with officials in KAZA-country governments, the KAZA Secretariat as needed, multilateral organizations, as well as with relevant USG officials in Washington and overseas.

The ‘Beyond Fences’ Coordinator and AHEAD technical consultants will also liaise closely with the KAZA Secretariat regarding animal health policy issues relevant to TFCA development, and will work to identify specific opportunities to potentially support field-based KAZA TFCA health initiatives (e.g. targeted, regionally focused wildlife disease surveillance programs). In addition, our technical consultants will work closely with partners at the University of Pretoria who have expressed a desire to develop a strong regional policy program with AHEAD’s input, working toward effective, integrated food safety and animal disease management systems.

Both the SADC LTC and the KAZA TFCA Joint Management Committee are strongly supportive of harmonizing veterinary and disease management policy across the region. WCS AHEAD is considered an important NGO partner by both committees and, as a result, the AHEAD Program is seen as an

important and unique 'bridge' and conduit for the flow of information and ideas between the two. In Year-5, AHEAD staff and select technical consultants will further develop these working relationships with SADC and KAZA, encouraging the integration of holistic, One Health approaches to TADs management in the SADC region.

During Year-2, AHEAD participated in an Integrated Regional Coordination Mechanism (IRCM) planning meeting convened by SADC and AU-IBAR in Gaborone, Botswana. An Africa-wide initiative, the IRCM is designed to strengthen the capacity of Regional Economic Communities (RECs) such as SADC to effectively coordinate, harmonize and execute interventions in the prevention and control of TADs and zoonoses. AHEAD was invited to attend future meetings of the IRCM in Year-3 to continue to represent the wildlife/environment sector in the development of policy guidance within the draft implementation plan for the SADC region. Unfortunately, due to budget constraints and staffing challenges, AU-IBAR could not provide leadership and financial support in southern Africa and the meetings did not take place. However, recent discussions with AU-IBAR suggest that seed grant funds are now available, and this platform, promoting an integrated 'One Health' approach to TADs management in southern Africa, will likely be restarted. We therefore anticipate providing input into the process during Year-5.

Ongoing discussions with decision-makers in government and results of regional meetings as described under Activity 1.4 will serve to further evaluate and highlight potential alternative options such as commodity-based trade, inform key stakeholders at regional, national and local levels, and provide an opportunity to build on existing regional support of the AHEAD process and the 'Beyond Fences' project in southern African TFCAs.

#### RESULTS/OUTPUTS

- AHEAD represented at SADC LTC meetings where our program continues to be recognized as key regional partner
- Ongoing collaboration, partnership and dialogue with representatives of SADC, OIE, AU-IBAR etc. through participation in quarterly coordination meetings and other fora
- Options for adopting holistic 'One Health' approaches to the management of interface issues in TFCAs discussed with KAZA and SADC partners; specifically, options for applying 'Beyond Fences' approaches in northern Botswana explored in detail with Botswana Parliamentary Select Committee
- 'One Health' approaches in the management of TADs and zoonoses discussed and explored with AU-IBAR and SADC; incorporated into draft SADC IRCM implementation plan
- Briefings and/or courtesy visits to KAZA member state government officials, USAID Missions and US Embassies, and other regional representatives undertaken, as appropriate
- A greater awareness among key decision-makers of the integrated alternative options available for the management and control of TADs in southern Africa