

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 3 Implementation Plan (FY 2012) October 2011 – September 2012

As was the case last year, this implementation plan for USAID review 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 implementation plan 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. With our new strategic plan, 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 (Bolivia and 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. The immediate target area of focus is one of southern Africa's major transfrontier conservation areas, 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.

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) is to prevent movement of susceptible animals between areas where TADs occur and areas where they do not, 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, AU-IBAR (African Union Interafrican Bureau for Animal Resources), OIE (World Organization for Animal Health), and FAO (Food and Agricultural Organization), 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 efforts 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).

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 (TADs) 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 regulations for LLP emphasize geographic or 'zonal' freedom from disease (i.e. miles of cordon fencing separating wildlife and livestock). Commodity-based approaches to trade, in combination with HACCP (hazard analysis and critical control points), focus on the science and safety of the *process* by which products are produced rather than their *regional origin*, and in so doing offer the potential for developing countries to be able 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.

Appropriate application of commodity-based trade offers a legitimate scenario under which the control of TADs (especially those that are directly transmitted such as FMD) can be achieved. The process should allow livestock producers to access markets previously unavailable to them and at the same time allow for rigorous disease management and control. Commodity-based trade alone will not directly reduce morbidity or mortality associated with infectious disease outbreaks. However, improved animal husbandry and cattle-post management, effective vaccination strategies, reliable transportation, intensive health monitoring and disease surveillance, quality control during slaughter, de-boning, de-glanding, aging and chilling of meat- all components of the commodity-based trade scenario- represent in combination what appears to be the most practical and effective opportunity for managing disease transmission in complex landscapes.

OIE Terrestrial Animal Health Code guidelines (Article 8.5.25) now recognize a disease management scenario under which commodity-based trade 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 Technical Committee, 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 the region – and one of the greatest threats to such connectivity is the disease-control game fencing that crisscrosses much of the region. Loss of habitat corridors through land-use restrictions driven by disease control requirements is a further factor contributing to habitat fragmentation and the loss of migratory and dispersal routes.

PROGRAM STRATEGY - OVERVIEW OF OBJECTIVES AND ACTIVITIES

Through this policy-based initiative, WCS will contribute to the overall SCAPES goal of conserving biodiversity and securing the livelihoods of the rural poor through 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 and nations. Authorities from the Ministries of Environment and Agriculture are critical. Efforts in Year-3 will continue to include engagement with the major multilateral bodies such as SADC, OIE and FAO, all of which have endorsed the AHEAD program. Both OIE and FAO have a critical presence in the southern African region and are headquartered in Europe (the favored market for many of southern Africa's animal-derived export products). AHEAD is currently working closely with SADC, AU-IBAR and other regional partners including OIE and FAO, to draft an IRCM (Integrated Regional Coordination Mechanism) implementation plan for the prevention and control of TADs and zoonoses. The IRCM is a continent-wide, collaborative project of AU-IBAR, aimed at promoting an integrated, multi-sectoral approach to disease management in Africa. Through the IRCM, AU-IBAR seeks to increase the capacity of SADC member states to address TADs and zoonoses using a holistic, One Health approach. AU-IBAR has acknowledged the importance of the AHEAD model in developing their strategy for achieving this goal. In addition, AHEAD continues to engage the various TFCA governing bodies, especially those responsible for overseeing animal health issues, to ensure we offer the most targeted support in terms of the needs and goals TFCA member countries have themselves outlined. For example, we have engaged with the KAZA TFCA Secretariat and convened and participated in the first meeting of the Animal Health sub-Working Group during Year-2. We look forward to working closely with them in Year-3 and beyond.

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. This third year implementation plan is primarily concerned with addressing the full range of activities identified for Objectives #1 and #2, and furthering the process of developing recommendations for cross-sectoral policy responses to transboundary animal health conflicts where appropriate, as identified under Objective #3.

Recognized as critically important in the initial phase of the project, the process of relationshipbuilding will remain a strong focus in Year-3. 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 will continue to be an important role of the "Beyond Fences" Coordinator (i.e. AHEAD Senior Policy Advisor, Dr. Mark Atkinson). Given the continued need to engage key stakeholders, our implementation plan in Year-3 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 eight years now, "Beyond Fences" is still understandably viewed as a relatively new initiative, necessitating substantial on-going investment in building productive and trusting relationships with and among key actors across the landscape in Year-3, and beyond. Figure 1. Objectives Tree (*italics* indicate 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
- **YEAR-3 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

Objective #1: Facilitate an enabling environment for enhanced cooperation between conservation, agriculture and health experts and agencies in TFCAs	Objective #2: Identify and promote mechanisms for controlling TADs without complete reliance on cordon fencing	Objective #3: Influence cross-sectoral policy responses that support TFCAs while controlling TADs
Activities: 1.1 Continue "institutional mapping" study establishing current key actors and agencies involved in (a) conservation and development of the TFCA, (b) agriculture, livestock development and disease, and (c) human health and livelihoods 1.2 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 1.3 Convene, multi-disciplinary workshops, colloquia, 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; build on established linkages with Daurian Steppe SCAPE 1.4 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	 Activities: 2.1 Assemble information on the status of TADs and current control measures for TADs in the SADC region focusing on the five KAZA member states; support SADC member states; integration of One Health approaches to TADs and zoonoses management and control 2.2 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 2.3 Conduct comprehensive socioeconomic analysis of disease management alternatives and projected development outcomes in the KAZA region 2.4 Research and analyze key constraints to conservation and development success at the wildlife/livestock/human interface across the southern African subregion 	 Activities: 3.1 Produce and disseminate policy briefs and reports based on activities carried out under Objectives 1 & 2 through informal and formal mechanisms 3.2 Establish awareness, visibility and outreach channels (website, e-updates) for the program (initiated via Objective 1) 3.3 Attend conferences and meetings and present project ideas, results and approaches to selected audiences 3.4 Liaise with appropriate national, regional and international agencies to foster implementation of identified 'win-win' conservation and disease management policy options and opportunities In collaboration with KAZA Secretariat, identify opportunities for funding support (e.g. GEF) that promote cross-sectoral policy review and TFCA-related disease management

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. In part as a result of the "Beyond Fences" initiative, there is now enhanced cooperation between conservation and agriculture sectors at the Working Group level in KAZA as well as at the broader regional level in SADC. 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, will be vehicles for facilitating this dialogue. In Year-3, the "Beyond Fences" Coordinator will continue to spend a portion of his time meeting informally and formally with key decision-makers and other stakeholders across the region.

Activity 1.1: Continue "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, and (c) human health and livelihoods

In addition to government agencies and multilateral organizations, there are several donor agencies and international and local NGOs involved in conservation, rural development, and both human and animal health programs active in the five KAZA member states. A broad analysis of the actors and agents involved at the interface between conservation and animal and human health in the region is referred to here as "institutional mapping" and is an important ongoing process that contributes to understanding institutional dynamics in the region and facilitating an enabling environment for enhanced cooperation among stakeholders. Based on the framework established during compilation of the Zimbabwe institutional map undertaken in Year-2, country overviews for Botswana and Namibia will be completed during Year-3; the remaining two (Zambia and Angola) will be completed during Year-4. Information will be gleaned from country site visits, formal and informal meetings with relevant stakeholders and online searches.

RESULTS/OUTPUTS:

• Institutional mapping overview for Botswana and Namibia completed

Activity 1.2: 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 wellstaffed KAZA Secretariat, and financial backing from international partners - as well as a progressive strengthening of the professional relationship between AHEAD and the Secretariat - the KAZA Technical Committee is now better positioned to address core cross-sectoral issues of critical importance to the long-term viability of the TFCA. Strong professional relationships between AHEAD and regional entities such as SADC, AU-IBAR, FAO, and OIE have also been established since project inception. These developments set the stage for the type of 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 two years clearly illustrate the importance of continuing this activity through the next phase of the program. The "Beyond Fences" Coordinator will therefore 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. For example, we are on-track for further engagement with the Government of Botswana and the Botswana Meat Commission during Yr-3. In addition, our on-going engagement with AU-IBAR and SADC with respect to the development of an IRCM for the control of TADs in the region is proving to be important and will continue.

RESULTS/OUTPUTS:

- Key influential people and potential champions identified
- Potential partners in further development of the program identified; strategic partnerships expanded

Activity 1.3: 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

In 2008, the SADC Foot and Mouth Disease (FMD) Project in conjunction with regional partners, including AHEAD, and with funding support from USAID, convened a meeting in Kasane, Botswana entitled "Achieving Compatibility Between the Transfrontier Conservation Area Concept and International Standards for the Management of Transboundary Animal Diseases" (http://www.wcsahead.org/sadc_forum.html). The meeting began the process of examining areas of conflict between biodiversity conservation and trade in products derived from livestock, and explored potential solutions such as commodity-based trade. The meeting participants identified several priority issues and actions, highlighted the importance of the AHEAD process, and developed a set of 100-day deliverables. These were not followed-up on, however, as the SADC FMD project was unexpectedly terminated shortly after the meeting concluded, and momentum was lost. AHEAD played an integral role in the development of the defined priorities which included: capacity building, garnering regional and international support for examining approaches like commodity-based trade, information-sharing and cross-sectoral dialog as promoted by the AHEAD process, planning for investment in TFCAs, developing and refining disease control strategies for wildlife and livestock, and enhancing disease prevention and control through appropriate and effective vaccination strategies. Many of these issues remain important to the "Beyond Fences" initiative.

Further, the establishment of a commodity-based trade pilot study in Namibia, promotion of commodity-based trade through the SADC/COMESA/EAC Tripartite Agreement, and plans to establish a commodity-based trade project under SADC illustrate the perceived importance of non-geographic TADs management alternatives in the region. In addition, a series of recent devastating FMD outbreaks in the region suggest currently employed management techniques (including veterinary cordon fencing, animal movement controls, and vaccination) aimed at maintaining disease-free zones and eradicating such TADs are failing. In short, the time is right to convene a high-level workshop that revisits some of the priority issues identified at the Kasane 2008 meeting and using new, current information, facilitates the development of a blueprint for a clear, innovative regional approach to TADs management and control.

In consideration of the current demand for information by sectoral stakeholders, the importance of having a clear and lasting impact in the region, and following careful re-evaluation of our earlier proposals to convene such a workshop, it has become clear that the scale of the type of forum necessary to be effective is much greater than originally anticipated. We are not currently positioned to successfully convene a meeting of this size without first identifying additional funding partners. In Year-3 therefore, we will dedicate time to workshop planning and identification of partners and additional resources. Senior support staff provided through Rockefeller Foundation funding will be instrumental in helping us to tackle these resource issues.

Our goal is to convene a meeting in Year-4 or Year-5 that revisits priority issues, brings together current subject matter experts from the region, and re-establishes the momentum behind the concept of the commodity-based trade approach as a solution to the current incompatibility that exists between current regulatory approaches to the control of TADs and the vision of vast transboundary conservation landscapes in southern Africa. With USAID support of the "Beyond Fences" program through 2014, we believe we are ideally positioned to build substantively on the foundation established by the 2008 Kasane meeting and to maintain the momentum required to maximize opportunities for successful delivery on a set of important objectives.

Other "Beyond Fences" meeting / workshop themes will, in large part, be driven by the needs of the KAZA Secretariat and TFCA Working Groups. In Year-2, AHEAD convened and participated in the inaugural meeting of the KAZA TFCA Animal Health sub-Working Group in Calai, Angola. It is anticipated that continued AHEAD "Beyond Fences" support will be required to convene future meetings.

As evidence of our strengthening relationship with regional multilateral bodies, in Year-3, following an invitation from the SADC Secretariat, AHEAD will continue to participate in meetings of the SADC Livestock Technical Committee and will participate in SADC/AU-IBAR workshops to finalize the draft Integrated Regional Coordination Mechanism for the prevention and control of TADs and zoonoses in SADC member states.

We also plan to continue exploring commonalities in approaches to related disease issues in the Daurian Steppe SCAPE in Year-3. The recent foot and mouth disease (FMD) outbreak in Mongolia has provided on-going opportunities for collaboration, and during Year-2, an FMD expert from southern Africa visited the DS region to provide guidance for future research, surveillance and disease control strategy development. This productive exchange was a result of close coordination between the WCS "Beyond Fences" and Daurian Steppe programs, and led to a high level of collaboration and information sharing which is ongoing.

RESULTS/OUTPUTS:

- Detailed plan for Year-4 or Year-5 TFCAs/TADs Workshop developed; suitable partners identified and sufficient funding being sought
- Technical and financial support provided to convene cross-sectoral TFCA Animal Health sub-Working Group as requested by KAZA Secretariat
- Exchange of experiences on wildlife / livestock health issues with Daurian Steppe SCAPE continued

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 in Years 1 and 2 during which time we began gathering information related to potential alternative approaches for managing TADs that could potentially meet international trade requirements (e.g. commodity-based trade).

Activity 2.1: Assemble information on the status of TADs and current control measures for TADs in the SADC region focusing on the five KAZA member states. Support SADC Member States' integration of One Health approaches to TADs and zoonoses management and control.

During Year-3 the "Beyond Fences' Coordinator, in close collaboration with subject matter experts and regional partners, will continue the process of assembling information on the status of TADs and current control measures for TADs in the SADC region. The study will focus on the five KAZA participating countries (Angola, Botswana, Namibia, Zambia and Zimbabwe) but will also evaluate possible TADs threats posed by their neighbors (Democratic Republic of Congo, Malawi, Mozambique, South Africa and Tanzania) and will explore alternative options and outcomes for TADs management and control. This report will identify known distributions of TADs in the region, particularly in relation to the KAZA TFCA, factors influencing present and likely future distribution and impacts relevant to KAZA, and control measures currently adopted including wildlife aspects and policies or practices that may be in conflict with TFCA development.

In light of the current importance of foot and mouth disease (FMD) in the SADC region (four separate outbreaks reported to the OIE in the first half of 2011 alone), AHEAD will continue to focus on this disease and produce, in collaboration with international FMD experts, a special edition of the AHEAD Update Newsletter. This newsletter will focus on FMD in the SADC region and contain updated, explanatory information including interpretation of laboratory results to help inform those involved / interested in animal health management in the region.

These reports will help identify knowledge gaps, collate data across the region, and support strategies for management of TADs in the region- all likely underscoring the need for policy re-evaluation.

During Year-2, the "Beyond Fences" Coordinator 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. As requested by meeting participants, including representatives from FAO and OIE, the "Beyond Fences" Coordinator will also attend future IRCM meetings and will continue to represent the wildlife/environment sector in the development of policy guidance within the draft implementation plan for the SADC region.

Results/Outputs:

- Comprehensive review and analysis of information on TADs relevant to KAZA countries completed
- Relevant reference material compiled and made available on the Zotero online document library. We are also in the process of evaluating other, potentially more user-friendly document management systems than Zotero.
- Draft IRCM implementation plan for SADC member states completed

• Interim and final reports compiled, provided to relevant KAZA TFCA Working Groups and sub-Working Groups and posted in the public domain online

Activity 2.2 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

Closely linked to Activity 2.1 and to be conducted concurrently during Year-3, 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).

Highlighting recent disease outbreak events as they relate to the establishment and maintenance of FMD-free zones in southern Africa, the analysis will explore the application of alternative non-geographic approaches to TADs management and trade applicable to integrated livestock production and wildlife conservation with an emphasis on TFCAs. During this exercise, new documents relating to policy and legislation and related matters in the five KAZA member countries will be collected and added to the existing document database.

During Year-3, the "Beyond Fences" Coordinator will continue to participate in the groundbreaking 'Development of Export Opportunities for Beef Products in the Caprivi' pilot study initiated by a consortium of partners during Year-2 and funded by the Millennium Challenge Account - Namibia. During the project, he will provide technical assistance related to conservation, wildlife ecology and health/disease, and participate in regular field site visits. Due in large part to the SCAPES "Beyond Fences" and partner initiatives, the importance of such non-geographic disease management approaches is becoming increasingly recognized in the region. The "Beyond Fences" Coordinator will continue to engage new partners and projects as appropriate and where feasible.

RESULTS/OUTPUTS:

- Report identifying international animal disease management/trade standards relevant to TFCA development and potential for application of non-geographic approaches to TADs management in southern Africa completed
- Reports compiled and disseminated to KAZA TFCA Secretariat, Working Groups and other key stakeholders as appropriate, and posted online
- Relevant proceedings, scientific papers, published reports and policy documents added to the Zotero online document library

Activity 2.3 Conduct comprehensive scenarios-based cross-sectoral economic analysis related to disease management options and projected development outcomes in the context of the KAZA TFCA

Scientifically accepted alternatives to current animal disease management practices exist (including for example, creation of export zones with vaccination, compartmentalization, commodity-based trade, and management of TADs for local trade), however the overall cross-sectoral socioeconomic impacts of staying with current approaches ("business as usual") versus adopting such alternatives have actually not been determined. As a result, decision-makers in KAZA TFCA member countries and the broader SADC region do not have the information required to inform sound animal health policy choices - information needed to determine whether particular approaches or investments in the livestock and/or

natural resource management sectors will be economically, ecologically and/or socially sustainable in the long-term.

Beginning in Year-3, we will work with subject matter experts and regional partners to conduct a robust analysis of how different sectors (with an emphasis on rural communities) in the KAZA TFCA would likely fare under a range of animal health policy regimes. The study will seek to determine how livestock- and wildlife-based activities, and human livelihoods, might be impacted by different regulatory approaches. Due to the scope of this undertaking, it is likely this assessment will carry forward into Year-4. In addition, key background information will include a synthesis of available data pertaining to the economic importance of wildlife to KAZA member countries.

RESULTS/OUTPUTS:

- Consultancy studies and analyses on key issues identified and established
- White paper on value and economic importance of wildlife to KAZA member states completed
- Comprehensive scenarios-based cross-sectoral socioeconomic analysis based on review of current and alternative animal health policy options initiated
- Interim and final reports compiled, provided to TFCA Secretariat and Working Groups, and other regional stakeholders and decision-makers, as appropriate, and posted online
- Relevant scientific papers, published reports and policy documents added to Zotero 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 agroeconomic 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 riskdiversification of land-use options and livelihood opportunities. The "Beyond Fences" program is iteratively building on the knowledge gained through the first two objectives thereby providing a basis for animal health and disease control policy recommendations. As the program progresses, we anticipate engaging more frequently in high-level discussions and briefings, and where appropriate, with ministerial representatives from KAZA member states.

Activity 3.1 Produce and disseminate policy briefs and reports based on activities carried out under Objectives 1 & 2 through informal and formal mechanisms

Policy analyses, white 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 KAZA. The AHEAD team makes significant efforts to disseminate the results of such analyses, and in Year-3, as in previous years, reports will be made available through the AHEAD website, via e-newsletters (see Activity 3.2), and in some cases distributed as hard copies to stakeholders and partners.

RESULTS/OUTPUTS

• Key reports compiled and provided to select audiences at regional working group meetings and conferences (such as of the KAZA TC and SADC)

Activity 3.2 Establish awareness, visibility and outreach channels (website, e-updates) for the program (initiated via Objective 1 & 2)

Establishing awareness and visibility of the "Beyond Fences" program is being achieved through various media channels. A new section of the AHEAD website devoted to the Kavango-Zambezi TFCA was developed in Year-2 (http://www.wcs-ahead.org/workinggrps_kaza.html). In Year-3, new policy briefs 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 Kavango-Zambezi TFCA section of the AHEAD website (http://www.wcs-ahead.org/workinggrps_kaza.html). The AHEAD Update is distributed to approximately 2,000 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" program, including population centers, national parks, protected areas, and veterinary cordon fencing. This will be revised in Year-3 to include updated fence lines and recently modified TFCA boundaries. We will continue to work on translating key documents into Portuguese for the benefit of our Angolan partners.

RESULTS/OUTPUTS

- AHEAD Update (e-newsletter) produced and emailed to 2,000+ subscribers 3 to 5 times per year
- Following approval by USAID, Year-3 implementation plan translated into Portuguese and made available on AHEAD website; implementation plan distributed to KAZA Secretariat for review
- 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 3.3 Attend 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-3 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:
 - World Veterinary Congress (Cape Town, South Africa, October 10 14, 2011). Session theme: Integrated Livestock and Wildlife Health and Management. Invited plenary presentation: "Land-Use Paradigms, Wildlife And Livestock: Policy Options For Biodiversity, Livelihoods And Transboundary Disease Management In Southern Africa."
 - SADC Livestock Technical Committee Meeting (Gaborone, Botswana, November 3 5, 2011). Discussion expected to focus on FMD and the Progressive Control Pathway for disease eradication currently being promoted by the OIE, FAO and EU.

- SADC / AU-IBAR International Regional Coordination Mechanism Implementation Planning (Gaborone, Botswana, 2012). Meeting to finalize draft IRCM implementation plan for SADC (see Activity 2.1).
- KAZA TFCA Animal Health sub-Working Group (Location TBD, 2012).
- Joint Wildlife Disease Association / European WDA Conference (Lyon, France, July 22-27, 2012). Theme: Convergence in Wildlife Health. AHEAD proposes to present a paper at this international forum highlighting the progress being made in southern Africa in terms of policy and the identification of alternative non-geographic approaches to the control of TADs in the context of transboundary conservation initiatives. Following attendance at this meeting, the "Beyond Fences" Coordinator will also liaise with OIE Headquarters staff in Paris.

Activity 3.4 Liaise with appropriate national, regional and international agencies to foster implementation of identified 'win-win' conservation and disease management policy options and opportunities

During the past year we have worked to strengthen relationships with national, regional and international agencies and political decision-makers from the region. These interactions are progressing our ability to foster implementation of new approaches to conservation and disease management and are setting the stage for dialog that will be required to effect policy change.

During Year-3, "Beyond Fences" will continue efforts to foster close ties with national, regional and international organizations including SADC, OIE, FAO, and AU-IBAR. To achieve this, the Coordinator expects, for example, to participate in ongoing development of the SADC IRCM (see Activity 2.1), attend official SADC LTC meetings and further engage regional officials in the agricultural sector. He will continue his efforts to present sound policy alternatives at these and other fora. The WCS Director of Wildlife 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 will liaise closely with the KAZA Secretariat regarding animal health policy issues relevant to TFCA development, and will work to identify specific opportunities to support field-based KAZA TFCA health initiatives (e.g. targeted, regionally focused wildlife disease surveillance programs).

The AHEAD team will provide regional United Nations Development Programme (UNDP) representatives information regarding biodiversity conservation and animal health-related efforts in the region and how they relate to, for example, SADC and KAZA TFCA-related sustainable land-use management initiatives over the long-term.

Ongoing discussions with decision-makers in government and a major regional meeting, as described under Activity 1.3 (TFCAs/TADs Workshop), will over time serve to further examine 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" program in southern African TFCAs.

RESULTS/OUTPUTS

• Briefings and/or courtesy visits to KAZA member state government officials, USAID Missions and US Ambassadors, UNDP and other regional representatives, as appropriate