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Heartland Conservation Process (HCP)

*A framework for effective conservation in AWF's
African Heartlands*

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AWF HEARTLAND CONSERVATION PROCESS (HCP)

Background

The African Wildlife Foundation's (AWF) *African Heartland* program is a collaborative, landscape-level management approach to conserving Africa's unique wildlife resources. Heartlands are large landscapes of exceptional wildlife and natural value where AWF works with a variety of partners, including local people, governments and other resource users to fulfill our mission of conserving wildlife and wild places in Africa. AWF believes that Africa's wildlife can only be saved in large, coherent conservation landscapes that are prioritized for conservation and made viable ecologically and economically. Because Africa's wildlife cannot be conserved everywhere, the great majority of AWF's resources and efforts are invested in these Heartlands.

Heartlands comprise land units under different management and ownership regimes--national parks, private land and community land in a single ecosystem ranging in size from one million acres to over 40 million acres. Some Heartlands fall within a single country; many extend across the borders of two or more countries. AWF's initial planning horizon for work in a Heartland is 15 years.

This document describes the Heartland Conservation Process (HCP), by which AWF first prioritizes and selects Heartlands, then plans and implements activities in these priority landscapes, and adapts when and where necessary. AWF uses a science-based planning process developed with help from The Nature Conservancy to establish conservation goals for each Heartland, identify threats and to design interventions to address these threats. The HCP process was developed for AWF's use in African Heartlands.¹

The stages of the HCP are the following:

- 1. Priority Setting**
 - a. Analysis of landscape value
- 2. Heartland Selection**
 - a. General review using selection criteria
 - b. Initial scoping
- 3. Heartland Conservation Planning**
 - a. Mandate building
 - b. Participatory planning meetings

¹ In the early stages of developing the HCP, AWF borrowed heavily from The Nature Conservancy's SCP process as described in, "Site Conservation Planning: A Framework for Developing and Measuring the Impact of Effective Biodiversity Conservation Strategies, April 2000".

- c. Site conservation target and goal setting
 - d. Socio-economic analysis
 - e. Threat and opportunity analysis
 - f. Implementation planning
- 4. Implementation, Evaluation, Adaptive Management**
- a. Implementation and learning

1. PRIORITY SETTING

As AWF considers the range of landscapes in Africa that merit our investment, it is clear that AWF and our partners simply cannot work everywhere there is wildlife. This reality necessitates strategic prioritization of high value landscapes for conservation action. Good prioritization work at continent level has been conducted by other conservation organizations active in Africa (e.g., World Wildlife Fund's ecoregions, Conservation International's biodiversity hotspots, Birdlife International's important bird areas). AWF has built on this prior work, focusing on issues of scale. Our research has revealed that while much prioritization work has been done at continent scale, or conversely at the scale of an individual protected area, little work has been done to prioritize for investment at landscape scale. AWF's prioritization efforts, therefore, seek to address this gap and implement landscape conservation programs at a scale that we consider appropriate for effective management intervention. Furthermore, when prioritizing areas for consideration as a Heartland, AWF establishes the overall landscape value of a site in relation to regional and global biodiversity values.

2. HEARTLAND SELECTION

A. General review using selection criteria

In order to select potential Heartlands, AWF conducts a general review of areas that merit our investment as a priority conservation landscape in Africa. Working roughly from WWF's ecoregions and other colleague prioritization efforts, AWF applies a set of selection criteria that yield a suite of biologically outstanding landscapes where, with partners, we can put in place an operational conservation program geared to achieving real impact. These selection criteria are divided into three categories: biological; feasibility; and innovation and learning. The questions applied to these criteria are the following:

Biological

- Is there an ecologically intact core?

- Is there high potential to enhance ecological function by restoring or maintaining connectivity?
- Is there high biological value based on species diversity and endemism?
- Are there endangered and/or declining species currently or historically present on the landscape? (AWF species theme)
- Does this add a different habitat type(s) to AWF's landscape portfolio?

Feasibility

- Is there an appropriate niche for AWF?
- Are there appropriate partners with whom to work?
- Can conservation, social and economic and/or commercial benefits be generated that will abate threats in a heartland, and in cost-effective ways?
- Can AWF and partners raise the necessary funds?
- Are there insurmountable political barriers to success?

Innovation and Learning

- Will conservation actions offer scope for innovative solutions and methodologies?
- Does this allow AWF to replicate accumulated expertise in abating certain multi-site threats (e.g., human-wildlife conflict; livestock-wildlife disease etc.)?

These selection criteria yield a Heartland short list. According to the strategic priorities of the organization as a whole, AWF then ranks this short list, and when funding becomes available for initial scoping of new heartlands, a multi-disciplinary team initiates this process.

B. Initial scoping

Before a site becomes a Heartland, a clear strategic vision must be articulated on why the site has been chosen as a potential Heartland. This scoping phase is conducted quietly through literature review and through site visits. Field visits are undertaken to gain a better understanding of the operational context and feasibility of starting a Heartland program at the site. AWF must analyze and profile the biological, social, political, legal, administrative, macro-economic and enterprise qualities of the Heartland and determine the added value that AWF investment will contribute towards sustainable conservation of resources in this landscape. Initial mapping should be completed during this stage with preliminary Heartland boundaries demarcated, depending on a variety of factors including land use/land cover, species' ranges and habitats, protected area boundaries, human settlements, and management authorities that are present in the landscape. Furthermore, we must determine the initial scope and direction of an AWF program in the potential Heartland.

In order to assess the potential success of investment in a site, AWF must review the financial and human resources available and determine resources needed to implement an effective program. AWF will decide on the scale of investment that is needed at the site and if it warrants being declared a Heartland. This includes determining the minimum staffing requirements and what the staffing structure of the Heartland should be. Adequate funding for the site should be identified at this stage for a minimum of 3-5 years. Also, a suite of potential long-term donors for the Heartland should be identified.

3. HEARTLAND CONSERVATION PLANNING

A. Mandate building

AWF has learned that in early planning phases, it is critical to build support for its involvement, particularly at sites where AWF has no implementation history. Without a mandate and acceptance of AWF by local stakeholders, opposition can make working in the landscape difficult. This phase allows a multi-disciplinary AWF team to get to know partners and stakeholders, and to prepare communities for the next step, the participatory planning meetings. For this step a Heartland coordinator is hired, who begins to understand the conservation issues as well as the socio-economic and political context within which s/he will manage AWF's implementation strategy with partners.

The Heartland coordinator and team develop a stakeholder engagement plan to guide introductions and foster the cultivation of reciprocal relationships with stakeholder groups, partners and key individuals. At this stage AWF may not be fully aware of whom the key stakeholders are, and should be careful to be diplomatic, flexible and positive with all parties. Over time, relationships should be built up and managed strategically and reciprocally. Steps to be undertaken include:

- Engagement with key stakeholder leaders: (1) public sector (e.g. wildlife, water, fisheries, natural resources, environment, tourism, local government); (2) community sector and private landowners (civic and customary leadership, resource user and women's groups); (3) private sector (tourism associations and operators); (4) NGOs and donor agencies; (5) others, such as independent research teams, universities;
- Identify and manage stakeholder perceptions of AWF and expectations of the HCP methodology;
- Identify key issues, actual and potential conflicts and synergies and develop strategies to manage them.
- Support preparation for participatory planning meetings (see next step).

It is essential that all key stakeholders participate in, and send well-briefed representatives to, the participatory planning meetings. This may require substantive preparatory work and active relationship management with some stakeholders. Practical experience in many sites in Africa has shown that decisions made without stakeholder participation or an adequate grasp of the human context can create misunderstandings with local communities and other key resource users, governments, local authorities and private sector – which can ultimately undermine site-based conservation over the long-term. The participation of key stakeholders and local communities in the Heartland Conservation Process can ensure their responsible role in efforts to promote sustainable resource use at a site, and ultimately the success of the conservation plan’s implementation.

B. Participatory planning meetings

This step of Heartland planning is an iterative process of participatory meetings with stakeholders to develop a shared implementation vision for the landscape. From these meetings we gather the information needed to undertake the next four steps of HCP i.e.

- Site conservation target and goal setting
- Socio-economic analysis
- Threat and opportunity analysis
- Implementation planning

These planning meetings are generally kicked off with a participatory scoping meeting, which officially marks AWF’s entrance into a landscape. This important meeting with stakeholders and partners begins the process of scoping out landscape level conservation priorities and develops indicative strategies. Generally, AWF co-hosts this first meeting with one or more partners in the region to help ensure buy-in to our presence in the landscape. The way AWF plans for and executes this meeting in individual Heartlands will vary depending on whether it’s a new site for AWF or one where we’ve worked previously. However, the basic objective and outline of the meeting remain consistent across Heartlands. Members of the AWF team must ensure that all participants feel welcome and involved and that community participants feel actively engaged in the process.

The primary objective of the initial scoping meeting is to agree upon an overall operational framework and to build momentum towards a common vision for conservation in the Heartland. With our partners at this meeting, we develop a shared vision for the landscape by getting clarity on: what we’re trying to protect (conservation targets); threats to these targets; opportunities, and indicative strategies. Initial zoning and mapping is also undertaken at this early meeting, in order to start

determining priority areas of intervention based on spatial factors (threats) affecting the health of conservation targets. At this meeting we jointly investigate, and try to reach initial agreement on the following core elements²:

- *Targets*: the elements of biodiversity at a site, and the natural processes that maintain them, that will be the focus of Heartland planning and around which strategies will be developed. The intent of target identification is to develop a short effective list of species, communities, or large-scale ecological systems whose protection will capture all the biodiversity at the site.
- *Threats*³: the types of degradation and impairment afflicting a target(s) at a site.
- *Source of Threat*: the proximate agents generating the threats to conservation targets.
- *Opportunities*: conditions that lead to improving production potentials through better land management; we aim to develop opportunities that exist and depend on the conservation of various natural resources e.g. wildlife, trees, water.
- *Strategies*: the types of conservation interventions that can be implemented to abate threats to conservation targets, or to take on opportunities.

Additional participatory planning meetings, not necessarily involving the full range of stakeholders, are then arranged in order to gather more detailed information and take forward consultation on specific targets, threats, opportunities and strategies, as well as to support the development of an implementation plan.

C. Site conservation target and goal setting

In this step we finalize and assess the viability of site conservation targets, and establish baselines for targets in terms of quantity, quality, distribution and other indices of biodiversity health. The viability of focal conservation targets will depend upon maintaining the natural processes that have supported them in the past, the careful setting of conservation goals to maintain those processes, and the definition of boundaries for conservation action based on the targets' ecology and biological needs. The following steps are useful in assessing the viability of conservation targets.

(C1) Assess the size, condition, and landscape context of each focal target at the site. Three factors – size, condition, and landscape context – should be considered in characterizing viable occurrences of the focal conservation targets. These can be assessed quantitatively, but categorical assessment (very good, good, fair, poor) may be

²These elements were partially derived from TNC's Site Conservation Planning methodology.

³ AWF has adapted TNC's terminology in some cases. In TNC parlance, the term 'stress' is synonymous with AWF's 'threat' and TNC's 'source of stress' is the same as our 'source of threat'. AWF has found when working both with partners and internally, that the stress/source terminology has been problematic, thus we have adapted the terminology for our own use.

more appropriate given the uncertainty of precise features of long-term viability for a given target.

(C2) Rank the focal conservation targets for viability.

The viability of a conservation target is a function of the size, condition, and landscape context of the target, as described above. Based upon the best available knowledge and expert judgment, target viability is assigned to one of four viability classes (Very Good, Good, Fair, or Poor) based strictly on its *current* size, condition, and landscape context. The Nature Conservancy has developed a useful tool (the “Measures of Conservation Success” Excel workbook) for assessing viability and documenting the careful thinking used in its assessment. AWF has adapted this tool and uses it as part of its HCP.

(C3) Determine “Biodiversity Health” of the site.

The biodiversity health of the site can be determined using the “Measures of Conservation Success” methodology. Assessing the cumulative biodiversity health of a site is helpful when evaluating overall program or project impact and helps us to make effective decisions for biodiversity conservation.

(C4) Set Conservation Goals and Establish the Ecological Boundaries of the Site.

Conservation Goals move conservation action toward the desired future condition of a target – a goal specifies the characteristics for a viable occurrence. It should be recognized that conservation of a target may not be sustainable unless actions occur at scales appropriate to maintain the size, condition, and landscape context dictated by the ecology and natural history of the target.

D. Socio-Economic Analysis

Through team research and participatory meetings we aim to build up a socio-economic profile of the site. Though not necessarily directly linked to the identification of targets and goals, a clear understanding of the social and economic status of local human populations and the dynamics of human use of site resources are essential at this stage in HCP⁴. Understanding these features will be critical to

⁴ The social and economic impact on communities of an AWF intervention can be assessed by measuring the improvements in the productivity of communities’ assets and the consequent impact on their livelihood security and sustainability. Improved management of shared assets can arise through more effective management of shared resources manifested through conservation business ventures. Background information on the following is essential: (1) Land tenure and settlement; (2) demographic profile of the site; (3) human/wildlife conflicts; (4) social and political organization of communities; (5) “on farm” and “off farm” contribution to

successful threat analysis. But also these features may present opportunities for successful conservation interventions that are not necessarily identified through threat analysis.

The AWF team should undertake the following process steps to build its socio-economic profile of the site:

- Assess communities' existing wildlife and other natural resource assets (e.g. land ownership, use rights, quality of wildlife resources, access to enterprise opportunities) and asset building opportunities. These can be usefully categorized using the DFID sustainable livelihoods matrix that distinguishes financial, natural resources, environmental, social (institutional) and human (skills and knowledge) assets.
- Assess existing community capacity to undertake community based wildlife management and enterprise development, and any constraints to supporting and building that capacity (e.g. policy, institutional development)
- Assess and prioritize natural resource enterprise development to date, and future opportunities:
 - What is the economic base of this area dependent on? (Agriculture? Out-migration? Small industry?), and where is potential future local economic development likely to come from?
 - What types of enterprise are successful in this area?
 - In terms of products (e.g. photographic tourism, hunting, handicrafts, honey making, medicinal plants); and
 - Type of enterprise (Small? Large? Community owned? Partnerships with private sector?).

There are many tools that may be useful in undertaking this analysis. Maps can be a powerful tool, and are readily put together in participatory meetings e.g. stakeholder maps indicating the range of players, their influence and their relationships e.g. GO, NGO, CBO and private sector groups.

These steps should enable AWF to:

- Describe the socio-economic landscape e.g. the 'what' and 'why' of livelihood security strategies, including description of community assets by land management unit.
- Better identify and understand the threats to conservation targets rooted in land and resource use patterns (see next step).
- Prioritize intervention options, and identify opportunities and options by area and by threat.

livelihoods; (6) the potential for common property systems to enhance material and non-material benefits (unity, identity and purpose as well as employment and income).

- Identify clear conservation logic for socio-economic intervention options.
- Build and initiate a stakeholder engagement strategy that prioritizes which parties to engage and for what purpose.

E. Threat and opportunity analysis

In this step an inter-disciplinary team, supported by further participatory meetings if needed, analyzes the biological and socio-economic factors underlying threats to the site conservation targets, in order to develop strategies for achieving conservation impact in the landscape. This step is fundamental in determining the strategic direction for conservation intervention in this landscape. It may also involve subjective decision making based on professional judgment, as many cause-effect relationships cannot be known with certainty.

This step can be time consuming and should be undertaken by the heartland coordinator and team using the most appropriate means available, be it through large meetings or through individual consultations with partners, and, where necessary, using consultants to acquire and analyze data to fill critical knowledge gaps. The heartland coordinator will need to consult with area scientists, enterprise specialists, community leaders and others to acquire the information needed for effective heartland planning. The objectives of this step are several:

- Identify threats and sources of threats.
 - Develop baselines for threats (their scale and strength).
 - Establish understanding of threat dynamics: their sources, influences and trends, the likely future trend in threats under different scenarios.
 - Determine proximate and ultimate threats and those that are driven or fuelled by policies/legislation or conflicting ones.
- Undertake integrated mapping of threats (and possible zoning); identify priority information gaps and ways forward.
- Identify intervention strategies.
 - Identify the range and effectiveness of intervention strategies tried to date.
 - Identify optimum strategic intervention opportunities, and AWF's role in implementation.

(E1) Identify threats and sources of threat

A threat leads to the impairment or degradation of the size, condition, or landscape context of a conservation target, which results in reduced viability of the target. Two important steps should be considered in understanding and evaluating the factors that impair conservation targets:

Identify Threats to the Conservation Targets

When identifying the major threats to conservation targets, consider the following important points:

- The threats afflicting *each* focal conservation target need to be identified.
- It is important to be as precise as possible in identifying the threats; this will help focus the subsequent identification of sources of threat, and facilitate development of ecological management and restoration goals and strategies designed to improve biodiversity health.

Rank the Threats

The relative seriousness of a threat is a function of two factors:

- *Severity of damage.* What level of damage to the conservation target can reasonably be expected within 10 years under current circumstances?
- *Scope of damage.* What is the geographic scope of impact to the conservation target expected within 10 years under current circumstances? Is the stress pervasive throughout the target occurrences, or localized?

Based upon the best available knowledge and judgments, the threats to each priority conservation target are ranked (Very High, High, Medium, or Low). The threat ranking should be based on the explicit assessment of severity and scope of the stress.

Identify Sources of Threat

For each threat afflicting a given conservation target, there may be one or more causes or *sources of the threat*. In order to define the strategies that relieve the stresses from our priority conservation targets, we must determine the factors that cause the destruction or degradation of those priority targets at the site.

Most sources of threat are rooted in incompatible human uses of land, water, and natural resources that are ongoing or have occurred in the past but continue to have impact. There are several points to consider when identifying sources of threat to conservation targets:

- When multiple sources all contribute to a given threat, focus threat abatement strategies on the source or sources that are most responsible for the threat.
- Focus on those sources that, if allowed to occur at a site, will have a long-term duration, and thereby cause long-term impacts.
- The sources of threat to consider should be happening now, or have high potential to occur in the near future—do not consider past sources that no longer cause stress to the system.

- Identify the proximate sources (e.g., poaching) and ultimate sources (e.g., human population growth) of each threat. Concentrate intervention strategies on the proximate sources, as sources that are several steps removed from the impacts on targets will not bring us to realize direct, feasible conservation strategies. However, strategies (such as policy influencing) to address ultimate sources must also be considered, as the ultimate sources determine the sustainability of our interventions.

Rank the Sources

The relative seriousness of a source is a function of the following factors:

- Degree of *contribution* to the stress. The contribution of a source, acting alone, to the full expression of a threat (as determined in the threat assessment), assuming the continuation of the existing management/conservation situation. Does the particular source make a very large or substantial contribution to causing a threat, or a moderate or low contribution?
- *Irreversibility* of the threat. The reversibility of the threat caused by the source. Does the source produce a threat that is irreversible, reversible at extremely high cost, or reversible with moderate or little investment?

It is critical that investments in conservation strategies at sites be focused on the abatement of the most critical threats. The findings of threat analysis should be synthesized to identify the critical threats to the conservation targets at a site and allows effective prioritization of interventions.

For each critical threat, collect baseline data, mapping it where possible, to indicate the scale and strength of the threat. This will enable threat monitoring under the AWF PIMA monitoring system.

(E2) Map threats

With clarity on conservation targets and threats to those targets (including socio-economic driving factors), the Heartland team undertakes detailed spatial mapping of targets and strategies (e.g., conservation zoning). Through zoning, the aim is to clearly identify ‘hot spots’ in the landscape and priority habitats and resources which if not conserved will result in severe consequences for the entire conservation landscape. This step calls for clear identification of priority conservation areas for wildlife, important hydrologic features, critical forests, and other areas that require priority conservation interventions.

Mapping is a powerful tool that can be used to provide the spatial distribution of the selected targets and the processes that sustain them, delineating the functional conservation site—the area necessary to maintain the viability of the conservation targets overtime, including the natural patterns and processes that sustain the targets. The distribution of threats can be mapped to determine the location of the threats in relation to distribution of the target and the resources required for continued viability. Together this information can be utilized to further refine the strategies and interventions proposed as well as define the priority areas for conservation interventions.

(E3) Identify range of intervention options

In this step we identify and evaluate the range of intervention options to address threats or exploit opportunities. For each threat we should identify:

- Who are the main actors?
- What is their motivation and reward?
- What interventions have been tried/are being tried, and how successfully?
- What options are most likely to deliver future threat reduction?
- Which agencies can/must be involved in implementation of priority options?
What role should AWF play?

The identification of priority intervention options is a potentially highly subjective process. There are many unknowns in understanding and predicting human-ecological dynamics. An intervention that is a clear anti-poaching priority may have unforeseen consequences on timber extraction. Supporting the establishment of community tourism businesses may increase incomes and the values attached to wildlife by local people, but may encourage in-migration, especially in areas with high mobility of local populations (e.g. pastoralists). The quality of AWF's work in this stage of HCP will be driven by the experience, approach and communication skills of the HCP team, and through active collaboration with our partners in the landscape.

F. Implementation planning

This phase allows AWF to refine and consolidate outputs of participatory planning and threat/opportunity analysis. At this point, a Heartland strategy is developed and agreed with partners, and the conservation logic and targets for the proposed interventions are clearly articulated.

This component of the HCP involves pulling together all previous pieces of the HCP into a coherent plan. This plan, that will evolve as AWF and partners move forward with implementation contains important baseline information, and represents a tool for managing across a matrix of land ownership to achieve a landscape level vision,

target by target. This plan is used by AWF and other partners to: fundraise; develop annual implementation plans; and clarify team roles and responsibilities. In this section, critical areas and priority activities should be identified and clearly articulated for use by heartland coordinators.

4. IMPLEMENTATION, EVALUATION, ADAPTIVE MANAGEMENT

A. Implementation and learning

At this stage of the HCP, AWF is ready to implement the conservation program that has been designed through its rigorous planning process. The heartland coordinator will guide and facilitate implementation of priority interventions that were agreed upon through the participative planning process. These strategies will be implemented with the appropriate partners to ensure ongoing stakeholder collaboration towards the strategic goals of the heartland program.

Once the program is underway, it is incumbent on the heartland coordinator to regularly analyze the progress that has been made in the implementation of strategic activities. The analysis and synthesis of results should be regularly undertaken through AWF's monitoring system, its Program Impact Assessment (PIMA) system. AWF has developed this system for measuring the impact of its program in Africa, more specifically to assess the conservation impact of its African Heartlands. This essential management tool is a set of carefully selected and regularly implemented measures that provide us with an objective assessment of our performance and impact to date.

PIMA measures are taken each year and should provide valuable information on progress being made in a heartland. The results from PIMA should inform of program successes and failures and lead to adaptation of the five-year strategies and annual workplans as needed. PIMA is designed to measure both ecological and socio-economic impacts which are essential in demonstrating AWF's ability to achieve its mission.

Conclusion

AWF's Heartland Conservation Process is an iterative process that is currently in different stages across our Heartlands depending on a range of factors in a landscape. The process is not necessarily undertaken in a step wise fashion but is applied adaptively depending on AWF's management presence in a landscape, site context,

funding availability, and the level of stakeholder involvement at a site. In many instances, we have found that with our own understanding of the landscape, along with stakeholder inputs, implementation work can proceed as detailed threat and opportunity analyses are undertaken. The implementation strategies are then regularly evaluated and adapted as site planning continues throughout our involvement in each heartland. In sum, the Heartland Conservation Process provides a useful framework for effective conservation in AWF's African Heartlands.