

National Action Plan for the conservation of the Ethiopian wolf

Revised version 2017



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Revised National Action Plan

Based on mid-term review workshop held in Adama in 22-24 June 2017

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Executive Summary

The Ethiopian wolf *Canis simensis* is the rarest of all canids and Africa's most endangered carnivore. There are no more 500 in half a dozen mountains in Ethiopia, threatened by habitat loss, diseases and persecution. Ethiopian and international conservationists, scientists and educators have devoted great effort to monitor and protect Ethiopian wolf populations throughout the country, within and outside protected areas, for nearly three decades.

On the bases of the critical knowledge gained, a National Action Plan (NAP) for the conservation of the species was produced in a workshop in Lalibela in 2011. The document details priority actions to guide the conservation community along six main goals:

- 1) to secure the survival and genetic integrity of remnant populations;
- 2) to actively manage Ethiopian wolves as a metapopulation, and wherever possible to restore wolves to available habitat within their historical range;
- 3) to protect all Afroalpine habitats from further degradation;
- 4) to ensure long-term coexistence of wolves, people and their livestock;
- 5) to implement the Action Plan efficiently and with support from all stakeholders; and
- 6) to establish mechanisms to fairly share the costs and benefits of conservation.

Five years after its creation, a mid-term review was carried out to determine the level of implementation and success of the NAP, and to adapt objectives and actions for the next five years. The review involved an external consultant and a meeting with key stakeholders in Adama in July 2017.

The independent assessment revealed significant progress with NAP implementation, with 25% of NAP actions achieved and 46% ongoing or starting, but with no advancement on 21% of the actions listed as high priority in 2011. Extensive consultations indicated ample support for NAP but with diverse levels of commitment by different stakeholders. There was a general agreement on the need for a coordinating body to improve communication amongst stakeholders.

During the stakeholders meeting the external assessment was presented and the plan was revised and discussed, action by action. This revised NAP reflects up-to-date timelines and actors, and prioritizes innovative lines of work such as an integrated disease management plan with the use of oral vaccines to minimise the threat of rabies and enforcement of regulations to control domestic dogs in and around protected areas. Participants also explored the value of conservation translocations of Ethiopian wolves to rescue declining populations or to create new ones where wolves are now extinct. Monitoring and research, capacity building and habitat protection remain at the heart of the strategy to save Ethiopian wolves from extinction, together with education and awareness in support of conservation and to understand the wider benefits of protecting the biodiversity and functions of Afroalpine ecosystems in Ethiopia.

Preface

The future of all large carnivores is challenged by conflicts of interests between their conservation and the needs of people sharing the land with them. As a result, many are threatened with extinction. The *ky kebero, jeedala farda* or Ethiopian wolf could be the next such carnivore to lose its place on earth. It is now the rarest of all canids, and is also the most endangered carnivore in Africa. What can be done to save this important icon of the Ethiopian highlands?

Even though Ethiopian wolves are protected by Ethiopian law, this by itself does not guarantee that the Afroalpine habitats where the wolves live are safe. Ultimately, it is the demand for arable land, pasture and firewood that keeps putting pressure on the Afroalpine habitats of Ethiopia, and this process is made more urgent by climate change. With more national parks and community conservation areas established in the highlands, 80% of the habitat suitable for wolves is now under some form of protection and Ethiopian conservationists are better placed to ensure the survival of these magnificent animals.

Yet, it is the domestic dogs that shepherds bring to the highlands that pose the most urgent threat to Ethiopian wolves, as they carry rabies and canine distemper viruses that are lethal for their wild relatives, often causing widespread mortality among Ethiopian wolves.

With perseverance and dedication conservationists have sought to protect the wolves and their habitats from encroachment and disease for many years. This revised National Action Plan for the Conservation of Ethiopian Wolves (NAP), with detailed objectives and actions, should serve as our guiding light for the protection of Ethiopian wolves and their Afroalpine ecosystem over the coming five years. Combining a detailed assessment of progress and feedback from many stakeholders, the new version provides a realist and inspirational plan, with an up-to-date list of priorities and innovative lines of work.

Among our priorities we want to maintain the high standards of research and monitoring that allowed us to implement conservation actions built on sound knowledge. Ethiopian and international scientists have devoted great effort to chronicling and studying the life of Ethiopian wolves. The revised NAP also sets up steps to expand and improve our efforts against the threat of rabies and canine distemper, such as enforcing control of domestic dogs in protected areas and the use of oral vaccines. There was also consensus in that the time is ripe to develop a meta-population management plan for Ethiopian wolves, using conservation translocations in the near future to move



animals to recreate populations where they have gone extinct, or to rescue declining populations.

Habitat protection remains at the heart of our strategy, in combination with education and awareness as to the benefits of protecting Ethiopia's unique flora and fauna, for those living side by side with wildlife and for the country as a whole.

This NAP is more than just a road map for conservation of Ethiopian wolves. As the natural icon of the Ethiopian highlands, Ethiopian wolves serve as a flagship for many other endemic species. The NAP goal is to protect and manage a whole unique Afroalpine ecosystem, for the benefit of plants and animals, and the local peoples whose future depends upon the health of the land.

The Ethiopian government, the conservation community and the people living in and around Afroalpine habitats must now cooperate fully to implement this NAP. The struggle to save the Ethiopian wolf is a long-term task, requiring constant vigilance, cooperation and dedication. This National Action Plan represents an affirmation of the determination of the Ethiopian people that this iconic species will not vanish from our land.

A handwritten signature in black ink, appearing to read 'Ato Kumara Wakjira'. The signature is fluid and cursive, with a large initial 'A' and 'W'.

Ato Kumara Wakjira
Director General
Ethiopian Wildlife Conservation Authority

National Action Plan for the conservation of the Ethiopian wolf

Draft

Compiled by the Adama drafting group following mid-term review, for endorsement by the Ethiopian wildlife conservation authority.

Vision

“To secure viable and ecologically functioning Ethiopian wolf populations and habitats across their present distribution, to extend the species presence to suitable ranges, and to emphasise its role as a flagship for the conservation and sustainable use of the Afroalpine ecosystem and biodiversity, on which present and future generations of Ethiopians also depend.”

Goals:

- All existing Ethiopian wolf populations secured, not at risk of immediate extinction, with genetic diversity maintained, and the number of wolf packs increased.
- Ethiopian wolves actively managed as a metapopulation, including wherever possible the restoration of wolves to available habitat within their historical range.
- Afroalpine habitats protected from further degradation, conserved, and restored.
- Coexistence of wolves, people and their livestock fostered throughout the species' range.
- Efficient implementation of the NAP, with all stakeholders, especially decision makers at the national, regional, and local levels, involved in, and committed to conserving wolves and their habitat.
- Mechanisms developed to fairly share, across generations, the costs and benefits of wolf and Afroalpine conservation.



NAP meeting

For each action an indication of resources needed is provided. These can include man power, equipment and financial input. All monetary figures quoted are in US Dollars (not revised from original NAP). The indicator of success allows the organisation accountable to determine whether the objective has been achieved. The indicators were assessed during the NAP mid-term revision process in Adama, with participation of the main actors and of the organizations accountable for its implementation. The NAP version 2017 indicates finite activities already completed at the time of the revision, presents updated timelines for activities not yet implemented or ongoing, and incorporates new actions suggested by the review working group.

Objectives and Actions linked to specific goals:

GOAL 1. *All existing Ethiopian wolf populations secured, not at risk of immediate extinction, with genetic diversity maintained, and the number of wolf packs increased.*

OBJECTIVE 1.1: **To have the information available to detect changes of status and threats in all populations.**

1.1.1. Action: *Monitor trends in all wolf populations (regularly), including more intensive monitoring in lesser known populations.*

High

Timeline: Immediate; continuing.

Actors: EWCP; PA managers; CCA monitors.

Accountability: EWCA.

Resources needed: \$ 30,000 per year. EWCP wolf monitors and wolf ambassadors; PA experts.

Indicator of success: Population trends (indices); annual population figures and rates of change.

1.1.2. Action: *Collate available information on threats (including rates of change) from existing protected area monitoring systems.*

High

Timeline: Ongoing.

Actors: EWCP; PA managers and experts.

Accountability: EWCA.

Resources needed: EWCP one person for one week annually.

Indicator of success: Data collated into a database.

*Change from NAP 2011: *Elevated to High priority.*

1.1.3. Action: *Monitor threats in all populations, including illegal wildlife trade.*

High

Timeline: Immediate; continuing.

Actors: EWCP; PA managers and experts; Kebele personnel.

Accountability: EWCA.

Resources needed: \$ 5,000 per year. EWCP wolf monitors, wolf ambassadors and education officers; PA experts and scouts.

Indicator of Success: Regular, reliable information from each site available; early detection of epizootics and any sudden threats.

*Change from NAP 2011: *No discrimination between inside and outside protected areas.*

1.1.4 Action: *Centralize information from various types of biological samples available for diagnostic and research (i.e., blood, tissue, bone, hair, faecal, semen); including storage location and storage responsibilities.*

Medium

Timeline: Ongoing

Actors: EWCA; EWCP; PA experts; EBI; APHA.

Accountability: EWCA

Resources needed: £1,500.

Indicator of success: Samples securely storage and data centralized into one database

*Change from NAP 2011: new action.

OBJECTIVE 1.2: To reduce dog populations living in or using wolf habitat by: a) 80% within 5 years in protected areas; b) 30% within 5 years in unprotected areas.

1.2.1. Action: *Develop and implement settlement management plans for protected areas.* High

Timeline: Year 2 – 5; ongoing.

Actors: PA authorities.

Accountability: National and Regional PA authorities.

Resources needed: \$ unknown. National and Regional PA personnel.

Indicator of success: Completed management plan; People resettled.

1.2.2. Action: *In remaining settlements in PAs, enforce settlement management plan clause that no dogs are allowed in settlements.* High

Timeline: Ongoing.

Actors: National and Regional PA authorities.

Accountability: National and Regional PA authorities.

Resources needed: EWCP; PA personnel.

Indicator of success: No dogs in settlements within protected areas.

*Change from NAP 2011: Original indicator achieved; revised action focuses on enforcement.

1.2.3. Action: *Ensure no dogs are allowed in any remaining settlements in protected areas through education, and implementation of humane dog control policy.* High

Timeline: Ongoing.

Actors: PA authorities; Woredas and Kebeles.

Accountability: National and Regional PA authorities.

Resources needed: \$ 10,000 per year. Education and enforcement personnel.

Indicator of success: 80% less dogs in settlements inside protected areas.

1.2.4. Action: *Implement education programmes to reduce the number of free ranging dogs accompanying livestock.* Medium

Timeline: Ongoing.

Actors: EWCP; Other NGOs.

Accountability: EWCP.

Resources needed: \$ 10,000. Education and agricultural officers.

Indicator of success: 30% less dogs.

*Change from NAP 2011: *No discrimination between inside and outside protected areas.*

1.2.5. Action: *Develop livestock management tools and improved sanitation to reduce need for dogs.* Medium

Timeline: Year 6 – 10; ongoing.

Actors: EWCP; Other NGOs.

Accountability: EWCA.

Resources needed: \$ 10,000 for pilot / demonstration site.

Outreach and agricultural officers; Ministry of Health.

Indicator of success: 30% less dogs in the demonstration site.

*Change from NAP 2011: *No discrimination between inside and outside protected areas.*

OBJECTIVE 1.3: a) To reduce the incidence of rabies in small and medium wolf populations to zero (no outbreaks) within 5 - 12 years, and b) To ensure no losses of breeding units within large wolf populations from rabies within 5 - 12 years.

1.3.1. Action: *Test feasibility, safety and efficacy of oral rabies vaccines in wolves.*

Completed

Timeline: Completed in 2016.

Actors: EWCP; EWCA; EPHI; BMNP.

Accountability: EWCA; EWCP.

Indicator of success: Test results analysed and available.

1.3.2. Action: *Develop integrated disease management plan, based on trial results.*

High

Timeline: Year 6.

Actors: EWCP; EWCA; PA managers.

Accountability: EWCA; EWCP.

Resources needed: \$5,000. EWCP; EWCA; PA managers.

Indicator of success: Plan developed.

*Change from NAP 2011: Plan drafted, ready for approval.

1.3.3. Action: *Implement integrated disease management plan, with priority in smaller populations.*

High

Timeline: Year 6 - 10.

Actors: EWCA; EWCP; PA managers; Woredas and Kebeles.

Accountability: EWCA; EWCP; Regional PA authorities.

Resources needed: \$ 30,000 per year. EWCP personnel; PA personnel.

Indicator of success: No rabies outbreak in small populations in years 8 – 12, (and/or no breeding units lost).

1.3.4. Action: *Continue to vaccinate dogs living in wolf habitats in Bale Mountains against rabies.*

High

Timeline: Ongoing in priority areas (e.g. Bale Mountains).

Actors: EWCA; EWCP; PA managers.

Accountability: EWCP.

Resources needed: \$ 30,000 per year. EWCP vet team.

Indicator of success: No rabies outbreak in wolves in years 6 – 12, (and/or no breeding units lost).

1.3.5. Action: *Emergency response using parenteral vaccination in wolves, if and when an epizootic is detected.*

High

Timeline: As required.

Actors: EWCP; EWCA.

Accountability: EWCP; EWCA.

Resources needed: \$ 15,000. EWCP vet team; EWCA vet.

Indicator of success: Target 40% of affected population inoculated (up to 60% for small populations).

1.3.6. Action: *Preventive oral rabies vaccination in wolves.*

High

Timeline: Years 6 - 10. Actors: EWCP; EWCA.

Accountability: EWCA; EWCP.

Resources needed: \$ 30,000 per year. EWCP vet team; EWCA vet.

Indicator of success: Target 20-60% of wolf population inoculated, depending on population size.

*Change from NAP 2011: New action.

1.3.7. Action: Increase capacity of Woredas to control rabies in dogs near wolf habitat.

Medium

Timeline: Year 7-9.

Actors: EWCA; EWCP.

Accountability: EWCP.

Resources needed: \$ 3,000 per year. EWCP vet team.

Indicator of success: Woredas detect outbreaks and control rabies in dogs in their areas.

*Change from NAP 2011: New action.

OBJECTIVE 1.4: a) All tools to prevent or control outbreaks of canine distemper virus (CDV) in wolves are available within 5 years, and b) To reduce the incidence of canine distemper virus in all wolf populations to zero within 7 - 15 years.

1.4.1. Action: Trial injectable CDV vaccines in Ethiopian wolves for safety and efficacy.

High

Timeline: To be completed by 2018.

Actors: EWCP; EWCA.

Accountability: EWCA; EWCP.

Resources needed: \$ 10,000. Researcher; Capture team.

Indicator of success: Test results analysed and available.

*Change from NAP 2011: Field trial completed early 2018; report to be circulated by mid-2018

1.4.2 Action: Investigate feasibility, safety and efficacy of oral CDV vaccines in Ethiopian wolves.

Medium

Timeline: Year 3.

Actors: EWCP; EWCA; MoARD; EPA; IBD.

Accountability: EWCA; EWCP.

Resources needed: \$ 30,000. Researcher; Capture team.

Indicator of success: Test results analysed and available.

*Change from NAP 2011: No oral CDV vaccine commercially available; priority changed accordingly.

1.4.3 Action: Incorporate CDV control into integrated disease management plan (action 1.3.2), based on trial results.

High

Timeline: Year 6.

Actors: EWCP; EWCA; PA managers.

Accountability: EWCA; EWCP.

Resources needed: \$ 5,000. EWCP; EWCA; PA managers.

Indicator of success: Plan developed.

*Change from NAP 2011: CDV control now incorporated into the integrated plan (action 1.3.2).

1.4.4. Action: Implement CDV vaccination, with priority in smaller populations.

High

Timeline: Year 6-10.

Actors: EWCA; EWCP; PA managers.

Accountability: EWCA; EWCP; Regional PA authorities.

Resources needed: \$ 30,000 per year. EWCP personnel.

Indicator of success: No CDV outbreak in wolves in years 7 – 15.

1.4.5. Action: Vaccinate dogs living in wolf habitats against CDV.

Medium

Timeline: Immediate in priority areas (e.g. Bale Mountains, small populations at risk).

Actors: EWCA; EWCP.

Accountability: EWCP.

Resources needed: \$ 24,000 per year. EWCP vet team.

Indicator of success: No CDV outbreak in wolves in years 7 – 15.

*Change from NAP 2011: Priority changed to Medium.

1.4.6. Action: Increase capacity of Woredas to control CDV in dogs near wolf habitat.

Medium

Timeline: Year 7-9

Actors: EWCA; EWCP.

Accountability: EWCP.

Resources needed: \$ 3,000 per year. EWCP vet team.

Indicator of success: Waredas detect monitor outbreaks and control CDV in dogs in their areas.

*Change from NAP 2011: New action.

OBJECTIVE 1.5: To conduct research and mitigate the behavioural and ecological impacts of disturbance and competition in Ethiopian wolves

1.5.1. Action: Expand research on wolf-jackal interactions in North Ethiopian populations.

High

Timeline: Year 7-8.

Actors: EWCP; WildCRU; Ethiopian Universities.

Accountability: EWCP.

Resources needed: \$ 2,500. 1 Masters student.

Indicator of success: Understand the relationship between wolves and jackals; circulate technical reports.

1.5.2. Action: Expand research on effect of human disturbance on wolf behaviour and survival; including a) presence of people, dogs and livestock; b) roads disturbance and road kills; and c) trekking and other tourism activities.

High

Timeline: Year 6-8; ongoing.

Actors: EWCP; WildCRU; Ethiopian Universities.

Accountability: EWCP.

Resources needed: \$ 5,000. 2 Masters students.

Indicator of success: Technical reports and guidelines to mitigate the mortality and behavioural changes caused by human disturbances circulated.

*Change from NAP 2011: Action includes new disturbances; indicator updated; upgraded to High priority.

1.5.3. Action: Install road signs in high risk areas to alert drivers and to diminish wildlife road kills in Afroalpine areas.

High

Timeline: Year 6-7.

Actors: EWCP; Regional governments; Road authority.

Accountability: EWCP.

Resources needed: \$ 5,000.

Indicator of success: Signs installed in areas of high risk for wolves in all populations.

*Change from NAP 2011: New action.

OBJECTIVE 1.6: To enforce legislation against wolf killings.

1.6.1. Action: *Review relevant legislation on illegal killing of wildlife.*

Medium

Timeline: Year 6.

Actors: EWCA.

Accountability: EWCA.

Resources needed: EWCA personnel.

Indicator of success: Report prepared and circulated.

*Change from NAP 2011: Timeline updated, as EWCA proclamation on this topic is nearly finished.

1.6.2. Action: *Prepare Rapid Response Protocol to deal with poisoning and wolf killings.*

Medium

Timeline: Year 6-7.

Actors: EWCP; EWCA; BFFE.

Accountability: EWCA.

Resources needed: \$ 500. EWCP Field Director; WildCRU; BFFE.

Indicator of success: Final peer-reviewed document.

1.6.3. Action: *Create awareness the new protocol and enforce when necessary.*

Medium

Timeline: Year 6-7.

Actors: EWCP; EWCA; PA managers; Woredas and Kebeles.

Accountability: EWCA.

Resources needed: \$ 500 a year. Education officers.

Indicator of success: No more wolf killings.

*Change from NAP 2011: Action 1.6.4 now included within this action.

GOAL 2. *Ethiopian wolves actively managed as a metapopulation, including wherever possible the restoration of wolves to available habitat within their historical range.*

OBJECTIVE 2.1: To maintain Ethiopian wolf genetic variability and structure.

2.1.1. Action: *Systematic EW faecal sample collection across all populations to enable a genetic study.*

Medium

Timeline: Ongoing

Actors: EWCP; ZSL.

Accountability: EWCP.

Resources needed: \$ 2,000. EWCP wolf monitors.

Indicator of success: Adequate sample sizes for all populations delivered to lab.

2.1.2. Action: *Expand research on nuclear DNA to establish intra-specific levels of genetic divergence, risk of inbreeding and genetic monitoring of all populations, particularly the ones surviving in isolated patches.*

Medium

Timeline: Year 6-10.

Actors: ZSL; WildCRU; EWCP.

Accountability: WildCRU.

Resources needed: \$ 10,000.

Indicator of success: Peer-reviewed publication.

*Change from NAP 2011: Action expanded; timeline updated.

OBJECTIVE 2.2: To establish a metapopulation management plan to enhance the viability of Ethiopian wolf populations.

2.2.1. Action: *Comprehensive assessment of current status of all wolf populations, carrying capacity and areas of suitable habitat for wolves across Ethiopia.* High

Timeline: Year 6-8, ongoing.

Actors: EWCP; WildCRU; PA managers.

Accountability: EWCP; EWCA.

Resources needed: \$ 5,000. EWCP monitors; WildCRU researcher, modeller.

Indicator of success: Report circulated.

*Change from NAP 2011: Action expanded; timeline updated.

2.2.2. Action: *Habitat loss and climate change impacts understood across the species range.* High

Timeline: Year 6-8.

Actors: EWCP; WildCRU.

Accountability: EWCP; EWCA.

Resources needed: \$ 15,000. EWCP monitors; WildCRU researcher, modeller.

Indicator of success: Report circulated.

*Change from NAP 2011: New action.

2.2.3. Action: *Develop a metapopulation management plan using information from objectives 2.1 and 2.2, identifying and ranking conservation translocation options across a spectrum of possible interventions.* High

Timeline: Year 6-8.

Actors: EWCP; EWCA; WildCRU.

Accountability: EWCA.

Resources needed: \$ 15,000. EWCP; EWCA; WildCRU.

Indicator of success: Plan agreed and distributed.

*Change from NAP 2011: Action expanded.

OBJECTIVE 2.3: To explore the feasibility of conservation translocations of Ethiopian wolves to specific sites within their historical range

2.3.1. Action: *Research cause of extinction and visit Gaysay, Mt Guna, and Mt Choke, to evaluate habitat and prey quality, threats and suitability for translocations of Ethiopian wolves.* Medium

Timeline: Year 6-8; ongoing.

Actors: EWCP; EWCA, Relevant Regional body.

Accountability: EWCP; EWCA.

Resources needed: \$ 5,000. EWCP monitors; PA ecologists, WildCRU researcher.

Indicator of success: Report prepared.

*Change from NAP 2011: Action expanded; timeline updated.

2.3.2. Action: *Social surveys to gauge acceptance and tolerance of local communities around specific sites for translocations of wolves in Gaysay, Mt Guna, Delanta and Mt Choke.*

Medium

Timeline: Year 6-8.

Actors: EWCP; EWCA, Relevant Regional body.

Accountability: EWCP; EWCA.

Resources needed: \$ 5,000. EWCP monitors; PA experts; researcher.

Indicator of success: Report prepared.

*Change from NAP 2011: New action.

2.3.2. Action: *Model effect of supplementation and reintroductions on population size and persistence.*

Medium

Timeline: Year 7-9.

Actors: EWCP, WildCRU.

Accountability: EWCP; EWCA.

Resources needed: \$ 3,000. WildCRU (researcher; modeller).

Indicator of success: Peer-reviewed publication.

*Change from NAP 2011: Timeline updated.

2.3.3. Action: *Develop movement and release protocol for Ethiopian wolves.*

High

Timeline: Year 6.

Actors: EWCP; EWCA.

Accountability: EWCP; EWCA.

Resources needed: EWCP, EWCA personnel.

Indicator of success: Protocol developed.

*Change from NAP 2011: Upgraded to High priority.

2.3.4. Action: *Translocate/reintroduce wolves as per metapopulation management plan to at least one site within 10 years, if site is feasible.*

Medium

Timeline: Year 8-10.

Actors: EWCP; EWCA; Relevant Regional body.

Accountability: EWCP; EWCA.

Resources needed: \$ 50,000. EWCP; EWCA.

Indicator of success: Wolves released; at least one breeding unit established.

*Change from NAP 2011: Timeline updated.

2.3.4. Action: *Monitor survival and behaviour of translocated animals and prey availability.*

Medium

Timeline: Year 8-10.

Actors: EWCP; Relevant Regional body; Ethiopian University.

Accountability: EWCP; EWCA.

Resources needed: \$ 10,000 per year. EWCP monitors; researchers.

Indicator of success: Regular reports.

*Change from NAP 2011: New action

OBJECTIVE 2.4: To collect and safely preserve genetic material of Ethiopian wolves (cryo-preservation) to contribute to the future metapopulation management.

2.4.1. Action: *Pilot collection of Ethiopian wolf semen.*

Medium

Timeline: Ongoing.

Actors: EWCP; EWCA; FVM; EBI; WildCRU.

Accountability: EWCA.

Resources needed: \$ 15,000. EWCP; EWCA; FVM; WildCRU.

Indicator of success: Healthy samples stored.

2.4.2. Action: *Develop semen storage protocol.*

Medium

Timeline: Year 6, ongoing.

Actors: EWCP; FVM; EBI.

Accountability: EWCA.

Resources needed: \$ 500. EWCP; FVM; EBI.

Indicator of success: Protocol peer-reviewed, published and distributed.

2.4.3. Action: *Achieve long-term semen storage.*

Medium

Timeline: Ongoing.

Actors: EBI; FVM; EWCA.

Accountability: EWCA.

Resources needed: \$ 500 per year. EBI; FVM.

Indicator of success: Viable samples after thawing.

2.4.4. Action: *Assess legal framework and potential of assisted reproduction*

Medium

(including egg extraction and in-vitro fertilisation) to contribute to conservation of Ethiopian wolves

Timeline: Year 6-10.

Actors: EWCA; EWCP; EBI; FVM.

Accountability: EWCA

Resources needed: \$ 2,000.

Indicator of success: Technical assessment complete and circulated.

*Change from NAP 2011: New action

OBJECTIVE 2.5: Develop a protocol to respond to situations of Ethiopian wolf rescued due to either injury or illegal trade and to ensure their welfare.

2.5.1. Action: *Review existing regulations for rescuing/homing wild animals in Ethiopia.*

High

Timeline: Year 6.

Actors: EWCP; EWCA; BFF-ET.

Accountability: EWCA.

Resources needed: EWCP; BFF-ET personnel.

Indicator of success: Short report.

*Change from NAP 2011: Upgraded to High priority.

2.5.2. Action: *Secure agreement with wildlife care centre, build facility and develop technical know-how to house and treat rescued animals.*

Medium

Timeline: Year 6-7.

Actors: EWCP; EWCA; BFF-ET.

Accountability: EWCA.

Resources needed: \$ 20,000; EWCP; BFF-ET personnel.

Indicator of success: Agreement signed.

2.5.3. Action: *Develop and secure approval of rescue protocol, including responsibilities, and disseminate.*

High

Timeline: Year 6-7.

Actors: EWCP; EWCA; BFF-ET.

Accountability: EWCA.

Resources needed: \$ 500. EWCP; BFF-ET personnel.

Indicator of success: Protocol peer-reviewed, published and distributed.

*Change from NAP 2011: Upgraded to High priority.

GOAL 3. *Afroalpine habitats protected from further degradation, conserved, and restored.*

OBJECTIVE 3.1: **To develop controlled grazing, cutting and carrying and other sustainable resource uses across all community-managed and currently non-managed wolf habitats within 5 years; to enforce implementation of existing management plans in National Parks.**

*Change from NAP 2011: Objective expanded to sustainable resource uses considered in existing management plans for National Parks (BMNP and SMNP).

3.1.1. Action: *Establish community conservation councils within wolf ranges.*

High

Timeline: Year 8.

Accountability: EWCA, Regional authorities.

Resources needed: \$ 3,000.

Indicator of success: Community conservation councils established at Woredas in each population.

*Change from NAP 2011: Action expanded to all wolf ranges; actors updated.

3.1.2. Action: *Develop participatory management plans for controlled grazing and harvesting systems with community conservation councils in all wolf areas, aiming to zero grazing in core wolf areas.*

High

Timeline: Year 6-8.

Actors: FZS; PA managers; Regional authorities; Local/ international NGOs; waredas and Kebeles.

Accountability: EWCA, Regional authorities.

Resources needed: \$ 10,000. Local and international NGOs; agricultural extension and outreach staff; Woreda and Kebele development officers.

Indicator of success: Management plans developed.

*Change from NAP 2011: Action expanded to all wolf ranges; actors updated.

3.1.3. Action: *Implementing/enforcing/monitoring the agreed plans in all wolf areas.*

High

Timeline: Year 7-10.

Actors: FZS; Regional authorities; Local NGOs; Local waredas and Kebeles.

Accountability: EWCA; Regional authorities.

Resources needed: \$ 30,000 for each area. Community participation.

Indicator of success: No overgrazing or illegal harvesting in wolf areas

*Change from NAP 2011: Action expanded to all wolf ranges; actors updated.

3.1.4. Action: *Explore all alternative sources of fodder for livestock around wolf areas.*

Medium

Timeline: Year 6-7.

Actors: ARD office; Regional/Zonal Land Administration and Animal Health offices.

Accountability: EWCA, Regional authorities.

Resources needed: Local and international NGO; agricultural extension and outreach staff; Woreda and Kebele development officers.

Indicator of success: Report produced.

*Change from NAP 2011: Timeline and actors updated.

OBJECTIVE 3.2: To develop fire management plans for all wolf areas under threat.

3.2.1. Action: *Review models for fire management in other protected areas.*

High

Timeline: Year 6-7.

Accountability: EWCA.

Resources needed: Actor(s) personnel.

Indicator of success: Understanding of fire management systems.

*Change from NAP 2011: Timeline and actors updated; upgraded to High priority.

3.2.2. Action: *Research the relationship between fire and ecosystem function in selected areas.*

Medium

Timeline: Year 6-8.

Actors: EWCP; Ethiopian Universities.

Accountability: OFWE.

Resources needed: \$ 2,500. Masters students.

Indicator of success: Thesis finished.

3.2.3. Action: *Implement, and develop where necessary, fire management plan for Afroalpine habitat under threat from fire in all PAs.*

High

Timeline: Year 6-10.

Actors: OFWE; EWCA.

Accountability: EWCA; Regional authorities.

Resources needed: \$ 5,000. Actor(s) personnel.

Indicator of success: Management plan implemented.

*Change from NAP 2011: Action expanded to all protected areas (3.2.4 now merged with this action); actors revised; upgraded to High priority

OBJECTIVE 3.3: To reduce the expansion of agriculture and settlements in a) all protected areas by 100% within the next 5 years, and b) wolf range outside protected areas by 40% within the next 5 years.

3.3.1. Action: *Discuss, negotiate and agree on settlement boundary and buffer zone around settlement areas, with priority focused on larger settlements, for wolf range in all PAs*

High

Timeline: Year 6-10.

Actors: EWCA; FZS; Regional authorities; CCA authorities.

Accountability: EWCA; Regional authorities.

Resources needed: \$ Unknown. PA personnel; FZS and other NGO personnel.

Indicator of success: Settlement boundaries formally agreed.

*Change from NAP 2011: Action expanded to all protected areas; timeline updated.

3.3.2. Action: *Develop and implement a moratorium on immigration into protected areas, with special emphasis in Bale.*

High

Timeline: Year 6-8.

Actors: EWCA; FZS; OFWE.

Accountability: EWCA.

Resources needed: \$ Unknown. BMNP; FZS personnel.

Indicator of success: Moratorium formally agreed.

3.3.3. Action: *Consolidate settlements to within agreed settlement boundaries to limit habitat fragmentation and human-wildlife conflict, with rehabilitation of habitat corridors where necessary.*

High

Timeline: Year 6-8.

Actors: EWCA; FZS; Regional authorities.

Accountability: EWCA.

Resources needed: \$ Unknown. PA personnel; FZS and other NGO personnel.

Indicator of success: No settlement outside agreed settlement boundaries.

3.3.4. Action: *Demarcate the extent of community managed areas in all wolf ranges; include Delanta-Gubalaftu and Mt Choke.*

High

Timeline: Year 6-8.

Actors: Regional authorities; FZS; OFWE.

Accountability: Regional authority; EWCA.

Resources needed: \$ Unknown. Regional, Zonal and Woreda personnel.

Indicator of success: Areas demarcated.

*Change from NAP 2011: Action and actors expanded; timeline updated.

3.3.5. Action: *Formal community management system developed and implemented in all communally managed areas; include Delanta-Gubalaftu and Mt Choke.*

High

Timeline: Year 1-3.

Actors: Regional EPA; OFWE; FZS.

Accountability: Regional authority; EWCA.

Resources needed: \$ Unknown. Actor(s) personnel.

Indicator of success: Management plans developed.

3.3.6. Action: *Community Conservation Areas (CCA) recognized and formally gazetted; including Delanta-Gubalaftu and Mt Choke.*

High

Timeline: Year 6-10.

Actors: Regional Authorities; OFWE; FZS.

Accountability: Regional authority; EWCA.

Resources needed: \$ Unknown. Actor(s) personnel.

Indicator of success: Areas formally gazetted and recorded in necessary official documents.

*Change from NAP 2011: Action expanded; timeline updated.

3.3.7. Action: *Monitor boundaries and implementation of plans/agreements in all community-conserved/managed wolf habitat.*

High

Timeline: Year 6-10; ongoing.

Actors: Regional authorities.

Accountability: Regional authorities; EWCA

Resources needed: \$ Unknown. Actor(s) personnel.

Indicator of success: Monitoring data analysed.

*Change from NAP 2011: Action expanded; timeline updated.

OBJECTIVE 3.4: To remove all new (within last 10-15 years) settlements and agriculture in protected areas within 5 years.

3.4.1. Action: *Develop a detailed resettlement plan for park resident communities (more detailed steps listed in PA Management Plans for Simien and Bale).*

High

Timeline: Ongoing.

Actors: EWCA; Regional authorities; FZS and other NGOs.

Accountability: EWCA.

Resources needed: \$ 3,000. Consultant (BERSMP).

Indicator of success: Detailed and agreed resettlement plan ratified by Federal and Regional government.

*Change from NAP 2011: Action and actors expanded; timeline updated.

3.4.2. Action: *Implement resettlement plan.*

High

Timeline: Ongoing.

Actors: EWCA; Regional authorities; FZS and other NGOs

Accountability: EWCA.

Resources needed: \$ Unknown -perhaps running into \$ 100,000s. Federal and Regional government; Actor(s) personnel.

Indicator of success: All settlements and agriculture removed from within PA.

*Change from NAP 2011: Actors expanded; timeline updated.

OBJECTIVE 3.5: To reduce the impact of rightful (old) settlers in all areas by developing natural resource use agreements within 5 years (in all sites where rightful settlers are recognised).

3.5.1. Action: *Facilitate the formation of management groups and subcommittees that represent rightful users within communities in all PAs.*

High

Timeline: Ongoing.

Actors: EWCA; Regional and local Governments; Community representatives.

Accountability: EWCA.

Resources needed: \$ 500 per group. Actor(s) personnel.

Indicator of success: All people living within the boundaries of PAs are signed-up members of a User Management Group or similar organization.

3.5.2. Action: *Negotiate and agree on principles and systems of shared responsibility for use, protection, regulation of natural resources, details of activities allowed and levels of use, benefit-sharing mechanisms, and rights and responsibilities of all partners with resource management groups.*

High

Timeline: Ongoing.

Actors: EWCA; FZS; Local Government; Community representatives.

Accountability: EWCA.

Resources needed: \$ 500 per group. Actor(s) personnel.

Indicator of success: All people living within the boundaries of PA are signed-up members of a User Management Group or similar organization.

3.5.3. Action: *Develop and agree system for review and revision of the natural resource management plan based on monitoring and evaluation results.*

High

Timeline: Year 6-10.

Actors: EWCA; NGOs; Regional and Local Government; Community representatives.

Accountability: EWCA.

Resources needed: \$ 500 per group. Actor(s) personnel.

Indicator of success: Systems for review and revision of the natural resource management plans agreed.

3.5.4. Action: *Draw up and sign resource management agreements, that outlines levels and rules of resource use and benefits, rights and responsibilities of all partners, and thus fulfils guidelines for NRM agreement contents.*

High

Timeline: Ongoing.

Actors: EWCA; NGOs; Regional and Local government; Community representatives.

Accountability: EWCA and Regional authorities.

Resources needed: \$ 500 per group. Actor(s) personnel.

Indicator of success: All people living within the boundaries of PA are signed-up members of a User Management Group or similar organizations.

OBJECTIVE 3.6: To support protected area management.

3.6.1. Action: *Investigate and foster capacity-building and experience-sharing opportunities, and on-the-job training, for protected area staff.*

Medium

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Other NGOs; Regional authorities; PA Managers.

Accountability: EWCA; Regional authorities.

Resources needed: \$ 50,000. Actor(s) personnel.

Indicator of success: Appropriately qualified and skilled staff working in protected areas.

3.6.2. Action: *Develop stronger relationships between protected area staff and conservation organisations working in the area, through close cooperation, mutual support and reciprocal respect.*

High

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Other NGOs; Regional authorities; PA Managers.

Accountability: EWCA; Regional authorities.

Resources needed: Actor(s) personnel.

Indicator of success: Healthy and beneficial working relationships in place.

GOAL 4. *Coexistence of wolves, people and their livestock fostered throughout the species range.*

OBJECTIVE 4.1: To develop and expand (where already existing) education and awareness campaigns at different levels at each wolf site in the next 10 years.

4.1.1. Action: *Identify target audiences; including evaluate potential impact of awareness campaigns in urban areas.*

High

Timeline: Ongoing.

Actors: EWCA; EWCP; specialized NGOs.

Accountability: EWCA.

Resources needed: EWCA management, education and outreach personnel.

Indicator of success: Targets identified.

4.1.2. *Identify and mobilise financial resources to fund awareness campaigns.*

High

Timeline: Ongoing.

Actors: EWCA; Local NGOs.

Accountability: EWCA.

Resources needed: EWCA and NGOs personnel.

Indicator of success: More financial resources available.

4.1.3. Action: *Design education plans and print and distribute materials, targeted towards specific audiences and objectives in each wolf site; assess implementation and effectiveness.*

Medium

Timeline: Ongoing.

Actors: EWCA; NGOs; EWCP.

Accountability: EWCA.

Resources needed: \$ 10,000. EWCA; EWCP and NGO education and outreach personnel.

Indicator of success: Plans and materials available.

*Change from NAP 2011: Action 4.1.3 now merged with this action.

4.1.3. Action: Mobilise community meetings and assemblies for distribution of material.

Medium

Timeline: Ongoing.

Actors: EWCANGOs; Regional authorities; Local Woredas and Kebeles.

Accountability: EWCA.

Resources needed: \$ 5,000. Education and outreach personnel, EWCP, FZS and other NGOs.

Indicator of success: Meetings held; materials distributed.

4.1.4. Action: Develop extra-curricula environmental/nature clubs and activities.

High

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS and other NGOs.

Accountability: EWCA; EWCP; FZS.

Resources needed: \$ 20,000 per year. EWCA, EWCP, FZS other NGOs, education and outreach personnel.

Indicator of success: Nature Clubs established.

4.1.5. Action: Mobilisation meetings for policy makers. Establish and maintain forums for local authorities, communities and conservationists working in the area. With due gender consideration.

Medium

Timeline: Ongoing.

Actors: EWCA; Local Woredas and Kebeles. EWCP; FZS and other NGOs.

Accountability: EWCA; EWCP; FZS.

Resources needed: \$ 5,000 per year. EWCP and FZS education and outreach personnel; Woreda and Kebele education staff.

Indicator of success: Forums established.

4.1.6. Action: Create community ambassadors to promote the cause of the Ethiopian wolf and to sustain a long-term awareness programme.

High

Timeline: Ongoing.

Actors: EWCP; NGOs; Local Woredas and Kebeles.

Accountability: EWCP; FZS.

Resources needed: EWCP and FZS education and outreach personnel; Local Woreda and Kebele education staff.

Indicator of success: Community ambassadors promoting wolf cause.

OBJECTIVE 4.2: To reduce the number of incidences of carnivore-human conflict (including direct persecution, killing, direct and indirect poisoning, predation) by 80% across all wolf populations within 10 years.

4.2.1. Action: Promote the appropriate use of fencing and livestock guarding to reduce predation on livestock (see 1.2.5), taking into account management plans and legal frameworks.

High

Timeline: Year 6-8; ongoing.

Actors: Local governments; PA managers; NGOs; EWCP.

Accountability: EWCP.

Resources needed: \$ 50,000. PA and NGO personnel; EWCP education officer; Ethiopian agriculture/natural resource management student.

Indicator of success: Number of livestock killed by large carnivores reduced each year; local attitude toward large carnivores improved.

High

4.2.2. Action: *Develop, implement and enforce community bylaws against killing of wolves in community areas.*

Timeline: Ongoing.

Actors: Regional and Local authorities; NGOs.

Accountability: EWCA.

Resources needed: \$ 500. Actor(s) personnel.

Indicator of success: No wolves killed in community-managed areas.

4.2.3. Action: *Appropriate authorities to enforce regulations which outlaw the killing of wolves in protected areas.*

High

4.2.3. Action: *Appropriate authorities to enforce regulations which outlaw the killing of wolves in protected areas.*

Timeline: Ongoing.

Actors: EWCA; PAs; Regional and Local authorities; EWCP; NGOs.

Accountability: EWCA.

Resources needed: \$ 500. Actor(s) personnel.

Indicator of success: No wolves killed in PAs.

High

4.2.4. Action: *Appropriate authorities to enforce regulations and bylaws against the use of poisoning as a method to eradicate dogs and predators.*

Timeline: Ongoing.

Actors: EWCA; FZS; MoARD; EWCP.

Accountability: EWCA; MoARD.

Resources needed: \$ 500. Actor(s) personnel.

Indicator of success: Poison is illegal and use decreases.

GOAL 5. *Efficient implementation of the NAP, with all stakeholders, especially decision makers at the national, regional, and local levels, involved in, and committed to conserving wolves and their habitat.*

OBJECTIVE 5.1: To make key stakeholders aware of the Ethiopian wolf NAP.

High

5.1.1. Action: *Secure endorsement and institutionalise the NAP into EWCA and Regional Authority strategy and annual management plans.*

Timeline: Year 6.

Actors: EWCA; Regional authorities; EWCP.

Accountability: Focal person appointed by EWCA.

Resources needed: EWCA Focal person.

Indicator of success: Visible (signed) endorsement of action plan.

High

5.1.2. Action: *Print and distribute revised NAP to all stakeholders, in Amharic, Afaan Oromo and English.*

Timeline: Year 6.

Actors: EWCA; EWCP.

Accountability: EWCA.

Resources needed: \$ 2,000. EWCP; EWCA personnel.

Indicator of success: Revised NAP printed and distributed.

High

5.1.3. Action: *Presentation to key stakeholders, and sensitisation through meetings, etc.*

Timeline: Year 6

Actors: EWCA; Regional authorities; EWCP.

Accountability: EWCA; Regional authorities; EWCP.

Resources needed: \$ 3,000. Presentation team.

Indicator of success: Meeting conducted.

OBJECTIVE 5.2: To ensure coordination among all relevant stakeholders at the national and regional level for the implementation of the Ethiopian wolf NAP, throughout the lifespan of the plan.

High

5.2.1. Action: *Identify and appoint focal persons within EWCA, regional level and each wolf range. Regional political bodies take note of the NAP and support its implementation under the coordination of EWCA.*

Timeline: Year 6.

Actors: EWCA.

Accountability: EWCA.

Resources needed: EWCA.

Indicator of success: Positions filled successfully.

*Change from NAP 2011: Action expanded to include contact person at all levels.

High

5.2.2. Action: *Establishment of Ethiopian Wolf Working Group (EWWG) for coordination and guidance of action plan implementation. To be chaired by EWCA. Identify key stake holders as members.*

Timeline: Year 1.

Actors: EWCA; Regional authorities; other relevant institutions.

Accountability: EWCA.

Resources needed: EWCA focal person.

Indicator of success: Working group formed and convened for first meeting.

Medium

5.2.3. Action: *Hold regular EWWG meetings.*

Timeline: Twice a year.

Actors: EWWG.

Accountability: EWCA Focal person.

Resources needed: \$ 1,000 per year. EWWG.

Indicator of success: Approved minutes of the meeting.

5.2.4. Action: *Monitoring and evaluation of action plan implementation by EWWG.*

High

Timeline: Annually.

Actors: EWCA; Regional authorities; EWCP; FZS.

Accountability: EWCA focal person.

Resources needed: EWCA; Regional authorities; EWCP; FZS.

Indicator of success: Actions being implemented.

OBJECTIVE 5.3: To ensure the commitment and coordination of all stakeholders at the site level to implement the action plan.

5.3.1. Action: *Ongoing engagement with relevant Woreda and Kebele natural resource management offices, Woreda/Kebele conservation councils to ensure implementation of the action plan.*

Medium

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Regional authorities; Woreda conservation councils.

Accountability: Relevant site managers.

Resources needed: Outreach and education staff.

Indicator of success: Site level commitment to implementation of the action plan.

5.3.2. Action: *Sharing experiences at each site for cost-effective implementation of the action plan.*

Medium

Timeline: Year 6; ongoing.

Actors: EWCA; EWCP; FZS; Regional authorities.

Accountability: Relevant site managers.

Resources needed: Staff from relevant organisations.

Indicator of success: Regular communication (all players aware of others' activities).

OBJECTIVE 5.4: To use the media to promote the conservation of Ethiopian wolves at a national, regional and local level.

5.4.1. Action: *Production and distribution of promotional materials in appropriate language to be used by relevant media at all levels.*

Medium

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Regional authorities.

Accountability: EWCA; EWCP; FZS; Regional authorities.

Resources needed: \$ 2,500. Education staff; relevant media personnel.

Indicator of success: Increased coverage of Ethiopian wolf conservation activities.

5.4.2. Action: *Involving local media in broadcasting of conservation activities (e.g., TV, radio, newspaper, social media and community radio).*

Medium

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Regional authorities.

Accountability: EWCA; EWCP; FZS; Regional authorities.

Resources needed: Relevant media personnel.

Indicator of success: Increased coverage of Ethiopian wolf conservation activities.

5.4.3. Action: *Encouraging national and international wildlife film makers to publicize Ethiopian wolves and the Afroalpine ecosystem.*

Medium

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Regional authorities.

Accountability: EWCA.

Resources needed: Relevant media personnel.

Indicator of success: Increased international awareness and interest in the wolf.

5.4.4. Action: *Maintenance, and regular content update, of website www.ethiopianwolf.org and social media as a repository of information on Ethiopian wolf conservation.*

Medium

Timeline: Ongoing.

Actors: EWCP.

Accountability: EWCA.

Resources needed: \$ 500 per year. www.ethiopianwolf.org webmaster; WildCRU.

Indicator of success: Increased coverage of Ethiopian wolf conservation activities.

GOAL 6. *Mechanisms developed to fairly share, across generations, the costs and benefits of wolf and Afroalpine conservation.*

OBJECTIVE 6.1: To (a) analyse the costs and benefits of implementing the EW strategic action plan within 4 years, and (b) publicise the benefits derived both locally and nationally from effective Afroalpine conservation.

6.1.1. Action: *Prepare 5 year budgets for Ethiopian wolf conservation activities at site level.*

Medium

Timeline: Ongoing.

Actors: EWCA; EWCP; FZS; Regional authorities; Woredas.

Accountability: EWCA; EWCP; FZS.

Resources needed: EWCP; EWCA; FZS personnel.

Indicator of success: Overall budget compiled.

6.1.2. Action: *Conduct assessment into monetary gains achieved directly through the conservation of wolves and their habitat.*

Medium

Timeline: Year 6-8.

Actors: University; Researcher.

Accountability: EWCP.

Resources needed: Researcher.

Indicator of success: Report prepared.

6.1.3. Action: *Make the case, nationally and internationally, for environmental services provided by Afroalpine ecosystems.*

Medium

Timeline: Year 6-8

Actors: MEFCC; EBI; EWCA; Regional authorities; EWCP; FZS.

Accountability: EWCA.

Resources needed: EWCA; EBI personnel.

Indicator of success: Awareness created.

6.1.4. Action: *Explore potential for payment for ecosystem services (water, carbon).*

Medium

Timeline: Ongoing.

Actors: EWCA; MEFCC; EBI; FZS; Other NGOs.

Accountability: EWCA.

Resources needed: EWCA; Other NGO personnel.

Indicator of success: Report prepared.

6.1.5. Action: *Explore international funding opportunities for climate change mitigation in sensitive ecosystems.*

Low

Timeline: Ongoing.

Actors: EWCA; MEFCC; EBI; FZS; Other NGOs.

Accountability: EWCA.

Resources needed: FZS; Other NGO personnel.

Indicator of success: Report prepared.

6.1.6. Action: *Promote a study to demonstrate costs and benefits of effective wolf and Afroalpine conservation to Ethiopia.*

High

Timeline: Year 7; ongoing.

Actors: EWCP; FZS; University.

Accountability: EWCP.

Resources needed: \$ 1,000. EWCP; FZS personnel; Researcher.

Indicator of success: Report prepared and distributed.

6.1.7. Action: *Prepare and distribute, at the site level, education material outlining costs vs. benefits of effective wolf and Afroalpine conservation.*

Medium

Timeline: Year 7; ongoing.

Actors: EWCP; FZS; Other NGOs.

Accountability: FZS.

Resources needed: \$ 2,000. Education officers.

Indicator of success: Material distributed.

OBJECTIVE 6.2: Promote novel sustainable livelihood initiatives based on the Afroalpine natural resources within 5 – 10 years.

6.2.1. Action: *Identify potential resources and enterprises.*

Medium

Timeline: Year 6-7.

Actors: EWCA; FZS; NGOs; Regional authorities; Woredas.

Accountability: EWCA; FZS; NGOs.

Resources needed: \$ Unknown.

Indicator of success: Resources and enterprises identified and feasibility assessed.

6.2.2. Action: *Identify and promote two pilot projects.*

Completed

Timeline: Year 3 – 4. Completed

Actors: EWCA; FZS; NGOs; Regional authorities; Woredas.

Accountability: FZS; NGOs.

Resources needed: \$ 20,000.

Indicator of success: Sites selected; detailed business plans prepared.

*Change from NAP 2011: Two pilot projects completed.

6.2.3. Action: *Scale up initiatives (from Action 6.2.2) at chosen sites in number and extent.*

Low

Timeline: Year 8-10.

Actors: NGOs.

Accountability: EWCA; NGOs.

Resources needed: \$ Unknown.

Indicator of success: Larger projects running.

List of Abbreviations

ARD	Agriculture and Rural Development
BERSMP	Bale Eco-Region Sustainable Management Programme
BFF-ET	Born Free Foundation Ethiopia
BMNP	Bale Mountains National Park
BoA	Bureau of Agriculture
CCA	Community Conservation Area
CDV	Canine distemper virus
EBI	Ethiopian Biodiversity Institute
EWCA	Ethiopian Wildlife Conservation Authority
EWCP	Ethiopian Wolf Conservation Programme
EFWPDA	Environment, Forest and & Wildlife Protection & Development Authority
FVM	Faculty of Veterinary Medicine
FZS	Frankfurt Zoological Society
IUCN	International Union for Conservation of Nature
MEFCC	Ministry of Environment, Forestry and Climate Change
MoARD	Ministry of Agriculture and Rural Development
NGO	Non-governmental organisation
NP	National Park
NRM	Natural Resource Management
NRS	National Regional State
OFWE	Oromia Forest and Wildlife Enterprise
PA	Protected Area
WCN	Wildlife Conservation Network
WildCRU	Wildlife Conservation Research Unit

Appendix: Participants

Stakeholders meeting, NAP Review, Adama 22-24 June 2017

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