GERMAN MINISTRY FOR ECONOMIC COOPERATION AND DEVELOPMENT
KFW

# Blue Action Fund for Coastal and Marine Protection

## Technical Concept Paper

Submitted on 7.6.2016

A pre-study for an upcoming Programme of the German Financial Cooperation implemented through KfW in cooperation with IUCN

**Lead Consultant**

Dr. Susanne Pecher

Susanne Pecher Consulting
Hofbüro
Schottmüllerstr. 20 A
20251 Hamburg
Germany

sp@susanne-pecher-consulting.de
Tel.: +49 (0) 40 - 46 0098 56
Mobile: +49 (0) 160 157 07 23

http://www.susanne-pecher-consulting.de

**Cooperating Partner**

Dr. Georg Nehls
BioConsult SH GmbH & Co. KG
Schobüller Str. 36
25813 Husum
Germany

Tel.: +49 (0) 48 41 - 66 32 9-11
Fax: +49 (0) 48 41 - 66 32 9-19
Mobile: +49 (0) 160 8423181
www.BioConsult-SH.de

# Table of content

# List of Figures

## List of Tables

# ACRONYMS

| | |
|---|---|
| ABNJ | Area Beyond National Jurisdiction |
| BAF | Blue Action Fund |
| BMZ | Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung<br>Federal Ministry for Economic Cooperation and Development |
| CBD | Convention for Biological Diversity |
| CITES | Convention on International Trade in Endangered Species of Wild Fauna and Flora |
| CLCS | Commission on the Limits of the Continental Shelf |
| CMS | Convention on the Conservation of Migratory Species of Wild Animals |
| EBSA | Ecologically and Biologically Significant Area |
| EEZ | Exclusive Economic Zone |
| FAO | Food and Agriculture Organization |
| FSA | Fish Stocks Agreement |
| GDP | Gross Domestic Product |
| GEF | Global Environment Facility |
| GIS | Geographic Information System |
| GMP | Gross Marine Product |
| GPS | Global Positioning System |
| GVA | Gross Value Added |
| HLPE | High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security |
| ICZM | Integrated Coastal Zone Management |
| IKI | Internationale Klima-Initiative<br>International Climate Initiative |
| IMO | International Maritime Organization |
| IUCN | International Union for Conservation of Nature and Natural Resources |
| ISA | International Seabed Authority |
| ITLOS | International Tribunal for the Lay of the Sea |
| KfW | Kreditanstalt für Wiederaufbau |
| LMMA | Locally Managed Marine Area |
| MPA | Marine Protected Area |
| MSC | Marine Stewardship Council |
| NAMA | Nationally Appropriate Mitigation Actions |

| | |
|---|---|
| NGO | Non-Governmental Organization |
| ODA | Overseas Development Assistance |
| OHI | Ocean Health Index |
| PES | Payments for Ecosystem Services |
| PSIDS | Pacific Small Island Development States |
| PSSA | Particularly Sensitive Sea Area |
| RFMO | Regional Fisheries Management Organization |
| RSP | Regional Seas Programme |
| SDG | Sustainable Development Goal |
| UN | United Nations |
| UNCLOS | United Nations Convention on Law of the Seas |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| USD | US Dollar |
| WBGU | Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen<br>German Advisory Council on Global Change |
| WCMC | World Conservation Monitoring Centre |
| WCPA | World Commission on Protected Areas |
| WIO | Western Indian Ocean |
| WPC | World Parks Congress |

# GLOSSARY

This glossary includes the basic definitions and key concepts of essential terms used in this document.

***Transboundary conservation*** is a cooperation to achieve conservation goals across one or more international boundaries. *Cooperation* in this context implies *transboundary collaboration for conservation purpose*, at least regular communication and information sharing and ideally consultation, coordinated action, joint management planning and/or joint implementation of decisions. The transboundary collaboration encompasses either two or more countries sharing international borders or non-adjacent countries that host habitats with key ecological functions to sustain populations of migratory species. Transboundary conservation refers to protected areas or a conservation landscape/seascape with multiple resource use areas and to wildlife habitats of migratory species (Vasilijević et al. 2015).

***Protected Area:*** A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve designated conservation objectives. *Space* includes the *three dimensions* (length, width, height/depth) *of land, inland water, marine and coastal areas* or a combination of two or more of these. *Clearly defined* means that the *area has agreed borders that are demarcated by physical features or by management action* (CBD 2005; Dudley 2008). Category VI of the IUCN protected area categories allows for protected areas with exploitation as the main aim of the area.

***Marine Protected Area (MPA):*** Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment. MPA is used as a generic term to cover all sites that meet the IUCN definition, regardless of purpose, design, management approach or name (e.g. Marine Reserve, Sanctuary, Marine Park) (IUCN-WCPA 2008).

***Marine Protected Area Network:*** A collection of individual marine protected areas operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels, in order to fulfil conservation aims more effectively and comprehensively than individual sites could acting alone (IUCN-WCPA 2008). Marine Protected Area Networks can be national or regional, i.e. transboundary.

***No-take areas*** prohibit all forms of extraction of resources, especially fishing, and can represent an entire MPA or part of it. No-take areas are fundamental to an effective MPA management (IUCN-WCPA 2008).

***Locally Marine Managed Areas (LMMAs)*** represent areas in which communities manage marine natural resources following use restrictions that they established according to traditional rights. Some countries recognize LMMAs as one form of marine protected areas through their regulatory frameworks and the respective legal structures.

***Seasonal and temporary management areas*** include areas where seasonal, full-time, temporary or permanent controls are placed on fishing methods, gear and/or access. These are critically important conservation areas for sites, such as fish spawning aggregation areas or migratory routes, where species are vulnerable at specific and predictable times of the year but which may not need more specific management attention than surrounding areas at other times of the year (UNEP-WCMC 2008).

# ACKNOWLEDGEMENT AND DISCLAIMER

This technical concept paper was elaborated on behalf of KfW by the consultants Jakob Katzenberger, Mirjam Rödl, Dr. Georg Nehls and Dr. Susanne Pecher based on the KfW short proposal for a regional programme on global coastal and marine protection.[1]

The 1st draft of the technical concept paper has the purpose to present preliminary findings of ongoing works. It is based on the findings of the 1st Ocean Expert Talk in December 2015 and an in depth literature research as well as interviews with the participants of the Ocean Expert Talk and outcomes of discussions held during two Expert Panel meetings with representatives from IUCN and KfW: Carl-Gustav Lundin, Pierre-Yves Cousteau and Dr. Ralph Kadel as well as Dr. Uwe Klug. We would like to express our sincere gratitude to all participants of this process for their dedication, openness and availability.

The assessment is ongoing and will be complemented by the results of the upcoming 2nd Ocean Expert Talk on 15 June 2016.



1 Dated 25.11.2015

# INTENTION AND STRUCTURE OF THE REPORT

The report addresses decision makers and planners in order to provide an information basis that demonstrates the importance, benefits and potential of improved marine biodiversity protection through the swift promotion of MPA networks. The report is also intended as information basis for the formulation of the BMZ Programme that is required to fund the first grant cycle and associated operational costs of the Blue Action Fund.

It is circulated to the participants of the Ocean Expert Talk with the intention to receive feedback and comments on areas that are deemed relevant or missing. Feedback is also requested for the proposed strategy and direction of the Blue Action Fund as well as the BMZ Programme.

The report is presented as a first draft that will be further refined following this feedback and the subsequent discussions during the upcoming Ocean Expert Talk.

The report includes information on the status of the oceans, with specific reference to marine biodiversity (section 2) and touches on the government frameworks for marine biodiversity management (section 3). Section 4 gives an overview on the economic importance of marine biodiversity, healthy oceans and fishery as well as the associated challenges, in particular with overfishing. Section 5 presents Marine Protected Areas (MPAs) as a tool to combine conservation and sustainable use of marine biodiversity and demonstrates the potential economic impact of MPAs and the benefits of their expansion.

By collating the information in the report and assessing trends and patterns alongside with interviews and exchanges, the study team iteratively developed the strategy for the Blue Action Fund. The overall approach as well as principles and funding criteria for the Blue Action Fund are described in section 6. The BMZ Programme with associated indicators and output areas is included in section 7.

Therefore, readers who are well familiar with the marine realm and do not have sufficient time for reading, might want directly jump to sections 6 and 7. However, comments and feedback are welcome for all of the sections.

# 0 EXECUTIVE SUMMARY

On September 25th in 2015, countries have developed a new sustainable development agenda to end poverty, protect the planet, and ensure prosperity for all towards 2030. The agenda consists of 17 so-called Sustainable Development Goals (SDGs). SDG #14 relates to the conservation and sustainable use of life below water and #17 to global partnerships. Both goals are crucial to achieve the overall vision of the agenda 2030. This goal directly links to the CBD Aichi Biodiversity Target #11 to expand marine protected areas to 10% globally. Likewise, the Paris declaration on climate protection in December 15th confirmed the crucial role that oceans play for human well-being.

*SDG #14: "The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind."*

The Federal Ministry for Economic Cooperation and Development (BMZ) launched the ***10-Point Action Plan for the protection of oceans and sustainable fishery*** on May 18th this year at the Geomar Helmholtz Center for Ocean Research in Kiel. Point 1 is to promote ***"more and better managed Marine Protected Areas"*** through an international financing instrument that cooperates with international, accredited NGOs across international boundaries.

More than two thirds of the Partner Countries of BMZ are Island- or Coastal states with a large and growing portion of the population living near the ocean[2]. In these developing countries, oceans and coastal areas hugely contribute to food security and livelihoods due to their biodiversity, abundance in natural resources and productivity.

More than 90% of the population depending on fishery and aquaculture for their livelihoods do live in developing countries, where more than 90% of fishery occurs in the Exclusive Economic Zone (EEZ). Globally, the primary sector of fisheries (small- and large-scale) and aquaculture employs around 60 million people of which 84% are in Asia, followed by Africa. Especially women find employment in fishery, processing and marketing. The small-scale fishery sector is crucial for securing livelihoods as it provides direct access to food and income. In addition, there is an important economic potential for income generation from marine-based ecotourism in regions possessing large reef systems, tropical, sandy beaches and islands.

However, due to their economic potential oceans and coastlines are heavily under pressure through destruction of habitats by extractive and non-extractive use, overfishing and pollution as well as due to the effects of climate change. Today, no area in the ocean is without influence from human activities, with a large fraction of more than 40% being strongly affected (Halpern et al. 2008) and human pressure on marine ecosystems keeps on rising (Butchart et al. 2010; Halpern et al. 2015).

Globally, this entails loss of biodiversity with species extinctions and habitat destruction or degradation affecting marine ecosystems and the services they provide (Butchart et al.

[2] By 2020, 2/3 of the global population will live in coastal regions.

2010; McCauley et al. 2015; UN 2016). The last century has seen an increasing defaunation of the oceans, with human depletion of marine animals from the smallest forage fish and invertebrates to the largest megafauna (McCauley et al. 2015). The population size of more than 1,200 marine animal species declined on average by 49% from 1970 to 2012 (WWF 2015). Marine habitat of high conservation value is dwindling: Mangroves are being lost at 1-2% per year globally and kelp forests and seagrass meadows are declining worldwide (UN 2016). Less than 50% of the globally existing coral reefs are healthy and under little stress, but these are threatened through climate changed induced ocean warming[3] and acidification (IUCN GMPP 2015).

The oceans are more dynamic and complex in processes, scales and threats than most terrestrial ecosystems (Maxwell et al. 2015). Away from shore, open ocean habitats are based on properties of water masses, surface currents and wind-driven mixing, resulting in horizontal and vertical transport of resources and organisms but also pollutants (Briscoe et al. 2016; Game et al. 2009). The tragedy of the commons is even more pronounced, especially in areas beyond national jurisdiction (ABNJ); and what happens in those areas can severely affect waters that are legally under the control of nations (exclusive economic zones (EEZ)).

Therefore, marine biodiversity loss affects human well-being in numerous ways by imperiling food sustainability, increasing social conflict, impairing coastal protection and reducing flows of other ecosystem services (McCauley et al. 2015; UNEP 2006; Worm et al. 2006). Ecologically, the depletion of marine fauna has wide ranging effects on ecosystems, which alter species abundance and reproduction and ultimately decreasing ecosystem stability (Estes et al. 2011; McCauley et al. 2015). Additionally, current human exploitation leads to marine animals becoming smaller and less fecund by selective pressures and evolutionary change, but also to a decrease in genetic diversity and thus adaptive potential (McCauley et al. 2015). Around 90% of the global fish stocks are overexploited and two-third need urgent recovery to prevent major population breakdowns. This loss of resilience in the marine environment is especially threatening for impoverished coastal nations (FAO 2014) that depend disproportionately high on fish protein in their diets and, in particular, populations of remote coastal areas in developing countries, as they don't have alternatives for income generation.

There are three driving key threats to this vicious cycle: (1) the destruction of critical coastal and marine habitats, (2) overfishing and (3) pollution. Furthermore, the oceans suffer from the aggregated effects and interlinkages with global warming and increased emissions of greenhouse gas like ocean warming, enhanced acidification and sea level rise. Due to the very nature of oceans – their fluidity and interconnectedness - key threats and their underlying root causes link through complex interactions that amplify each other.

To cope with the consequences and to mitigate the threats, a holistic and integrated approach across sectors, levels and nations is required. Furthermore, preventive action in

[3] A recent survey of coral bleaching at Australia's Great Barrier Reef due to the unusual long „El Niño", the climate phenomenon that warms water in the equatorial Pacific, has been pushing the reef into a very critical zone: Only 7% of the reef system has avoided coral bleaching entirely. The northern section is hit the hardest: 80% of the reefs were found to be severely bleached and in-water surveys have confirmed 50% mortality (Normile 2016).

order to promote the natural capacity of marine ecosystems to recover is needed and local action has to be linked to regional approaches in order to create a critical mass of institutions and protected areas that collaborate across larger networks towards jointly agreed conservation and sustainable management objectives.

Marine Protected Areas (MPAs) have been established for decades in order to safeguard protection of areas of high ecological value. MPAs may efficiently reduce habitat loss and marine wildlife mortality, thereby increasing populations and reproduction of marine species. They are a valuable tool to reduce ongoing biodiversity loss (Edgar et al. 2014; Gaines et al. 2010; Game et al. 2009; Lester et al. 2009). Globally, there is a wealth of well-tested good practices for the establishment and management of MPAs available. Especially MPA networks represent an opportunity to enhance connectivity of habitat and ecosystem functions and to provide corridors for migrating species across international boundaries. They also represent an institutional option to better cope with the scale challenge of managing MPAs that are large enough to cover critical ecosystem functions.

Today, although MPAs are widely recognized in the conservation world as a proven concept, their benefits and potentials are still insufficiently known at strategy and policy level across relevant sectors. Consequently, only 4% of the EEZ or 1.6% of the global oceans have currently received a protection status, which is still far away from the Aichi target of 10% and even further from the 20-30% that would be required for an effective marine ecosystems protection. No-take zones only represent a tiny fragment of the current MPA area although they are one out of five critical success factors for a positive impact on marine biodiversity. Many existing MPAs are fragmented, too small and isolated. As a result, they lack connectivity with important habitats to sustain their key ecosystems functions or they are not properly placed to effectively protect marine species. Many of the larger MPAs do suffer from a scale problem, insufficient management capacities, too expensive protection approaches and lacking integration with sustainable fisheries outside their boundaries. There is a lot of information available but a general lack of comparable and compatible data that can be used to demonstrate progress and to adapt management approaches.

Consequently, positive effects on marine habitats and fauna are often questioned, because they are difficult to prove. Decision makers therefore need more and strongly visible evidence of the potential of MPAs in order to link conservation and sustainable use of marine biodiversity and thereby produce benefits that can outweigh costs in the medium term. They need access to and knowledge of low cost technologies for the surveillance and monitoring of large scale areas and they require solutions to cope with the increasing competition for ocean space.

An approach to cope with the above-sketched challenges, is the development of MPA networks. Loosely defined, a network of MPAs is a collection of individual sites with a range of protection levels that cooperate and are designed to meet objectives, which a single reserve could not achieve. Hence, MPA networks are ecologically and institutionally integrated management approaches that are expected to have properties greater than the sum of its parts. In practice, this means that single MPAs may be smaller, because they receive larvae input to sustain wildlife populations within their boundaries from other MPAs that are close enough. This strategy intends to minimize no-take MPA size, while

simultaneously providing conservation as well as benefits to fisheries from spillover. It allows the incorporation of protection and use zones and/or an integration of MPAs with locally managed marine areas (LMMAs) and sustainable fishery zones with technology- or season-based regulations. By harmonizing management and protection objectives across a network of MPAs, transboundary marine conservation management becomes more feasible as the scale challenges and competing ocean space uses can be factored into the network design. Furthermore, integration of locally managed marine areas (LMMAs) as part of a larger system/network of marine protected areas can help to achieve international recognition for community managed areas, enhance security of their use rights and therefore establish a sound cooperation for the protection and management of marine biodiversity. It is estimated that MPA networks that are ecologically coherent and protect 30% of each habitat in our oceans are expected to contribute significantly to the recovery of marine biodiversity and a productive ocean (Gell and Roberts 2003; O'Leary et al. 2016; Sanchirico, Cochran, and Emerson 2002). This in turn can contribute to the reduction of poverty, enhanced food security, creation of employment and protecting coastal communities (Brander et al. 2015; Leisher, van Beukering, and Scherl 2007).

The Blue Action Fund should be a globally acting financial instrument that promotes network-oriented local action for the establishment and improvement of MPAs and sustainable use zones in order to manage and protect marine resources, especially in countries where coastal communities heavily depend on marine biodiversity resources. The theory of change is, that by together pulling forces, funding and knowledge in sub-regions that critically depend on sustainable marine biodiversity protection and use, the Blue Action Fund provides evidence for the benefit of MPA networks and generates knowledge to address on the ground challenges for their development and implementation. Thereby, stakeholders across existing networks jointly develop an enhanced understanding of priorities and approaches. Decision makers in public, private and non-governmental as well as civil society organizations start mainstreaming marine protection related issues into strategies, regulations and budgets.

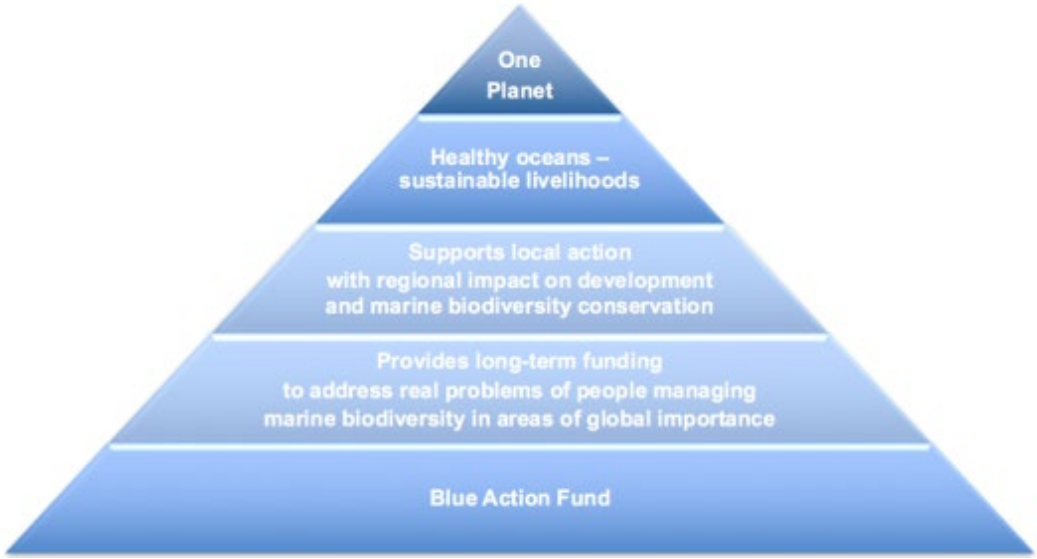
The intention is threefold:

- To generate sub-regional clusters of successfully managed MPAs and their adjacent sustainable use zones that feed into a wider MPA network.
- To provide planning frameworks, evidence and knowledge that feed into existing institutional and social networks promoting the adoption of approaches and technologies in favour of sustainable management of marine biodiversity.
- To facilitate the generation of a critical mass of financial support from various sources in order to support ecosystems services and biodiversity protection across marine regions.

The ultimate goal of the Blue Action Fund is to contribute to healthy ocean ecosystems and thereby secure the basis for sustainable livelihoods in developing countries because we all live on one planet and will be affected by the consequences of unhealthy oceans. The Blue Action Fund therefore pursues the vision that

***Key actors protect and sustainably use marine biodiversity across a network of significant marine protected areas for the benefit of livelihoods and healthy ocean ecosystems.***

In order to work towards this vision, ***the Blue Action Fund provides long-term funding for coordinated local action to promote MPA networks as a tool for conservation and sustainable use of marine biodiversity*** (mission).




**Vision and mission of the Blue Action Fund** (Source: Susanne Pecher Consulting)

The Blue Action Fund would have the following features:

- Provide flexible long-term funding to enhance capacities for innovation and adaptive management for marine biodiversity conservation and sustainable use in accordance with an ecosystems oriented approach
- Support local action but with a network and/or transboundary[4] and/or cross-sectoral scope in areas of significant importance[5]
- Promote transparency and knowledge exchange on the status of marine biodiversity and protected areas for key decision makers
- In addition to NGOs doing grant proposal preparation, the BAF will catalyse complementary funding to likeminded programmes

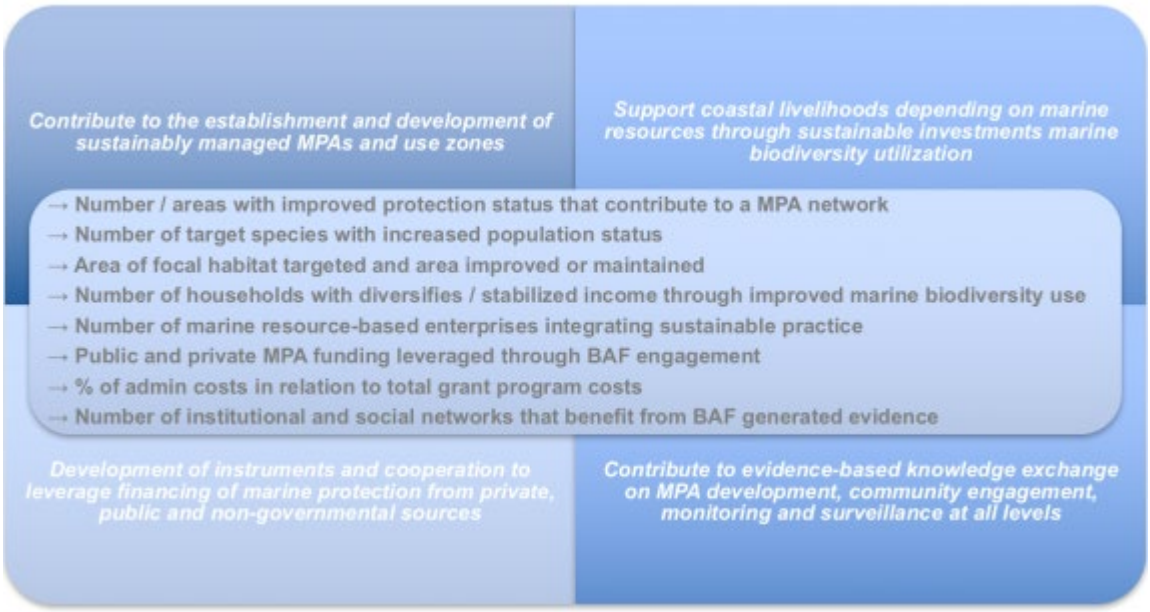
4 Whereas “transboundary” or “regional” does not necessarily mean the implementation of simultaneous activities in two or more countries. It means the implementation of activities in one country by being aware of its potential impacts for another country and by promoting a positive impact respectively mitigating potentially negative impacts and by working towards a jointly accepted network/regional approach for marine biodiversity management and protection

5 i.e. areas that fulfill at least two out of the following three criteria: important for biodiversity protection and/or productivity across a regional scale; areas that might experience particular risk of overutilization at present or in the near future (e.g. through oil and gas production); areas the biodiversity of which considerably contributes to livelihoods and economic potential of a region

BAF is primarily a ***grant-maker*** that seeks to promote activities that align with its intervention areas by:

- A competitive allocation of grants through efficient and practice oriented criteria
- A well-designed strategic programming of grant calls that is regularly adapted to field level needs
- A rigorous monitoring and evaluation programme with an efficient and visualized reporting
- A powerful and efficient approach for sharing knowledge and good practice

The Blue Action Fund will achieve its mission through grant allocation to capacitated international NGOs that do cooperate with relevant stakeholders for the implementation of grant programmes that do contribute to the key performance areas of the Blue Action fund (see figure below).




**Business areas and performance indicators for BAF** (Source: Susanne Pecher Consulting)

The intention of the four business areas and key performance indicators is to accommodate a variety of programmes funded through likeminded donors under the roof of the Blue Action Fund, the first of which will be the BMZ funded programme.

The proposed BMZ Programme shall have the purpose to establish the Blue Action Fund and to start the first funding period. The programme contributes to ***conservation and sustainable management of marine biodiversity across a network of globally significant marine protected areas for the benefit of healthy oceans and sustainable livelihoods*** (overall programme objective).

***Through the Blue Action Fund, the BMZ Programme will co-fund NGOs*** to pursue two objectives:

***(A) To support management bodies in establishing and managing marine and coastal protected areas and use zones in close cooperation with relevant stakeholders.***

***(B) To support relevant governmental and non-governmental stakeholders to contribute to a regional coordination of funding for conservation and sustainable use of marine and coastal biodiversity.***

The Results Matrix, Annex 1, contains the detailed list of indicators, outputs expected and measures planned.

For the implementation of BAF co-funded grant programmes, the NGOs will cooperate with relevant intermediaries such as management bodies of MPAs, relevant governmental organizations, local NGOs, applied research organizations and the private sector in order to achieve the agreed objectives.

The beneficiary group (“the target group”) are coastal communities in remote areas of countries that represent (1) significant marine biodiversity and ecological processes with relevance for MPA networks and (2) high dependency of coastal population on ocean resources for their livelihoods and (3) a potential for sustainable use of marine biodiversity for income diversification.

Co-funding and harmonization of investments to support MPA networks are key performance areas for the Blue Action Fund. Therefore, an important area of activity for the BAF executive management will be the coordination with likeminded programmes, in particular of the German Development Cooperation as well as with relevant programmes for research and environmental protection (e.g. the International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety).

Furthermore, through its cooperation with IUCN, which is an accredited organization for the implementation of GEF programmes as well as programmes of the Green Climate Fund, BAF can tailor its calls for grant proposals in such a way that they will be harmonized with interventions of these two funding instruments.

In addition, NGOs applying for BAF funding will have to present proposals that demonstrate synergies with relevant ongoing and upcoming programmes as well as to prove co-funding leveraged through likeminded organizations, public budgets and donors.

# 1 INTRODUCTION

At the UN Sustainable Development Summit on 25th September 2015, 150 countries have developed a new agenda (Agenda 2030) to end poverty, protect the planet and ensure prosperity for all towards 2030. The agenda consists of 17 so-called Sustainable Development Goals (SDG). SDG #14 is dedicated to life below water in order to conserve and sustainably use the oceans and marine resources.

This goal directly links to the CBD Aichi Biodiversity Target #11 target to expand marine protected areas to 10% globally. Likewise, the Paris declaration on climate protection in December 15th confirmed the crucial role that oceans play for human well-being.

Yet, the marine realm is threatened by a drastic decline of its biodiversity and key habitats as well as an alarming acidification. Root causes are, amongst others, greenhouse gas emissions, overfishing, illegal fishing, pollution and unsustainable use of coastal and marine habitats. These threats are trespassing international boundaries by far and large and required mitigation efforts can only be effectively implemented through coordinated transboundary measures.

*SDG #14 Facts:*

*Oceans cover three quarters of the Earth's surface, contain 97% of the Earth's water and represent 99% of the living space on the planet by volume*

*Over 3 billion people depend on marine and coastal biodiversity for their livelihoods*

*Globally, the market value of marine and coastal resources and industries is estimated at USD 3 trillion per year or about 5% of global GDP*

*Oceans contain nearly 200,000 identified species, but actual numbers may lie in the millions*

*Oceans absorb about 30% of carbon dioxide produced by humans, buffering the impacts of global warming*

*Oceans serve as the world's largest source of protein, with more than 3 billion people depending on the oceans as their primary source of protein*

*Marine fisheries directly or indirectly employ over 200 million people*

*Subsidies for fishing are contributing to the rapid depletion of many fish species and are preventing efforts to save and restore global fisheries and related jobs, causing ocean fisheries to generate USD 50 billion less per year than they could*

*As much as 40% of the world oceans are heavily affected by human activities, including pollution, depleted fisheries and loss of coastal habitats*

The Federal Ministry for Economic Cooperation and Development (BMZ) prepared a 10-Point Action Plan for Marine Protection and Sustainable Fishery. Based on this, KfW is requested to develop a global funding mechanism with the purpose to (1) promote coastal and marine protected areas in priority regions and (2) foster sustainable use and production of marine resources in harmony with marine protection – the ***"Blue Action Fund"***.

The purpose of the technical concept paper is to justify the value added of the Blue Action Fund (BAF) from a technical perspective and to identify associated challenges and potentials of marine protection that should become part of its intervention areas. Therefore, the paper concludes with the proposed business purpose and strategy of the Blue Action Fund and outlines some fundamental funding criteria. Thereby, it also provides the foundation for formulating the BMZ programme that is required to provide the funding for the first grant cycle and associated operational costs of the Blue Action Fund.

# 2 BACKGROUND TO MARINE CONSERVATION

The oceans cover more than 71% of the surface area of planet earth. On account of their biodiversity and productivity they contribute enormously to food security and livelihoods. The oceans provide food, energy as well as other resources and there is evidence that they produce more than half of the globally available oxygen. Furthermore, the oceans regulate the climate and, as part of the hydrological cycle, drive weather patterns that determine rainfall, drought and floods. They play a fundamental role in adaptation to climate change by absorbing around 25-30% of the anthropogenic emission of carbon dioxide. Additionally, the upper layers of the ocean absorb around 90% of the world's increased surface temperature caused by the burning of fossil fuels (Böhnke-Henrichs et al. 2013; Hoegh-Guldberg et al. 2013, 2015; IPCC 2013; Reuchlin-Hugenholtz and McKenzie 2015; WBGU 2013).

Although humans are only living on the shore, human impact on marine ecosystems is ever increasing and existent even up to the remotest areas. Preserving marine biodiversity is of paramount interest to traditional and modern societies, because any service of the oceans and their ecosystems is dependent on ocean health and can only be provided if marine resources are used in a sustainable way.

This chapter provides a condensed overview of the current status and overall value of marine biodiversity as well as current challenges in marine conservation in order to provide the background for further planning of conservation efforts through the Blue Action Fund.

## 2.1 Oceans under pressure

Human impact on the marine environment is widespread and increasingly threatening biodiversity and services provided by the oceans (Halpern et al. 2015; WWF 2015).

Anthropogenic use affects the oceans in multiple ways. It is evident that a high number of fish stocks are threatened by overfishing and marine ecosystems suffer from nutrients, toxins and plastic waste through human activities and pollution as well as indirect effects of climate change and ocean acidification (Halpern et al. 2008; Hoegh-Guldberg et al. 2013; UN 2016). Today, no area in the oceans is without influence from human activities (cf. figure 1), with a large fraction of more than 40% being strongly affected. In future, due to ever improving technologies, human pressure on marine ecosystem will further increase and changes are likely to be accelerating and if not halted or reversed within the next decades will have serious and in some cases irreversible ramifications for marine ecosystems and human well-being (Butchart et al. 2010; Halpern et al. 2008, 2015).

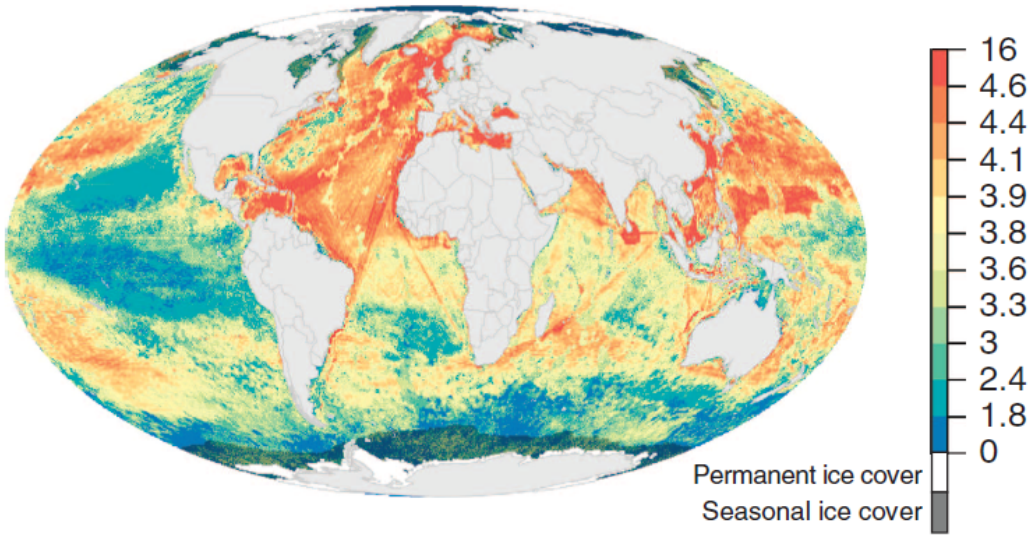



**Figure 1: Cumulative human impact to marine ecosystems (Halpern et al. 2015)**

Globally, this entails loss of biodiversity with species extinctions and habitat destruction or degradation affecting marine ecosystems and the services they provide (Butchart et al. 2010; McCauley et al. 2015; UN 2016). Direct human exploitation is the major cause of decline in marine species, but global change with increases in sea surface temperature by 0.31°C to 0.65°C, sea level rise due to melting of the polar ice caps, ocean acidification as well as loss and degradation of marine habitats are also increasingly threatening marine biodiversity (McCauley et al. 2015; WWF 2015). Pollution and eutrophication cause the rising emergence of oxygen-depleted marine dead zones while marine industries, coastal population and development as well as exploitation of the oceans is still growing further. Furthermore, above-mentioned increase in atmospheric carbon dioxide concentrations and associated changes to the climate are projected to exacerbate the influence of direct pressures from fishing, habitat destruction and pollution. Marine megafauna[6] is especially threatened from harvesting and bycatch in fisheries. In addition, land-based pollution, noise and habitat disturbance cause further negative impacts (Lewison et al. 2014; UN 2016).[7]

## 2.2 Status of marine fauna

The last century has seen an increasing defaunation of the oceans, with depletion of marine animals from the smallest forage fish and invertebrates to the largest megafauna (McCauley et al. 2015). The population size of more than 1,200 marine animal species declined on average by 49% from 1970 to 2012 (WWF 2015). When historical data are considered, even more drastic declines are observed. For example, the green turtle (Chelonia mydas) and the hawksbill turtle (Eretmochelys imbricata) have declined by more than 80% over the last century. Inclusion of historical baseline data for five oceanic sharks species leads to population declines of more than 96% (McClenachan, Ferretti, and Baum 2012). Sea turtles

6 A grouping of large animal species including for example: Whales and dolphins, turtles, seals, seabirds, sharks and rays as well as tunas and billfish.

7 See also the assessment of threats and root causes in chapter 6.

have by far the highest proportion of endangered species, but the highest proportion of extinctions have occurred with seals and seabirds (cf. figure 2). The most threatened groups of marine animals are those directly interacting with humans as they have terrestrial contact during some part of their life-cycle (McCauley et al. 2015).

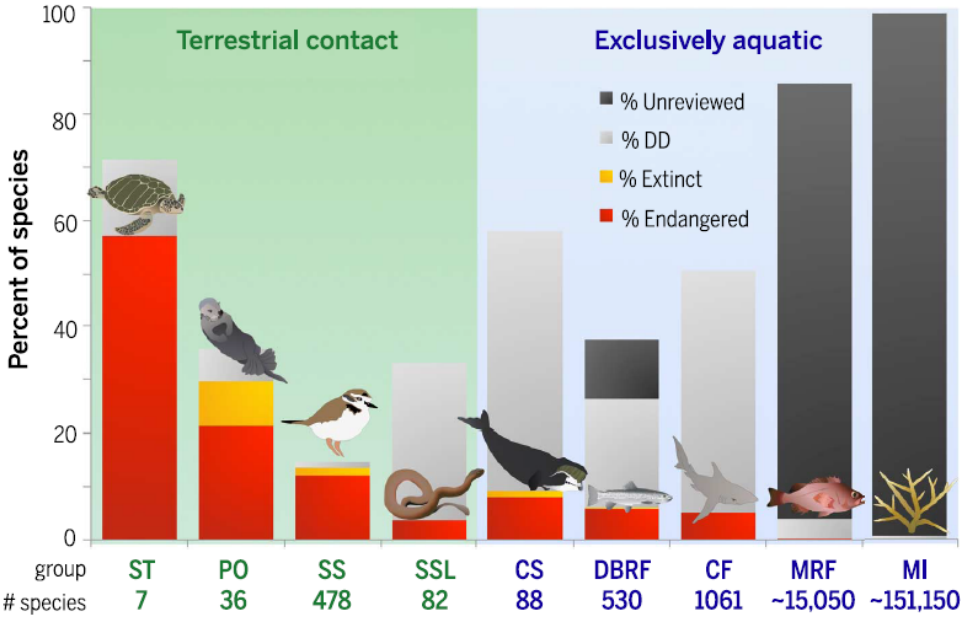



**Figure 2: Threat categories for marine fauna groups as chronicled by the IUCN Red List. DD=data deficient (McCauley et al. 2015)**

Evaluating extinction risk is however not possible for many marine animals, because there is simply no information available on population trends and threat levels, showing a dire need for further research and monitoring (WWF 2015). This being the case, only few marine species have been declared extinct and the extinction risk in general perceived to be lower for marine species. Nevertheless, for the best known taxonomic groups extinction risk is similar in marine and terrestrial systems, with on average 20-25% of species per group at risk of extinction (Webb and Mindel 2015). However, in contrast to the terrestrial world, megafauna is still present and wide-ranging in the oceans and many marine habitats are less developed and polluted than terrestrial ones (McCauley et al. 2015).

### 2.2.1 Assessing threat levels

The authoritative reference to evaluate the level of threat for plants and animals is the IUCN Red List (http://www.iucnredlist.org/), which informs about the global extinction risk of listed species. The categories 'Vulnerable', 'Endangered' and 'Critically Endangered' classify species as being threatened, with increased risk of extinction. Marine megafauna feature prominently on the Red List because for most other marine species data is not sufficient for an evaluation of threat levels. Some marine invertebrates like abalone or sea cucumbers are listed as threatened as well, because they are heavily exploited for fisheries and some

populations are close to collapse. The spatial distribution of marine species known to be threatened shows that globally the highest numbers are found in the Indian Ocean, in Oceania and in the Mesoamerican-Caribbean region (cf. figure 3).

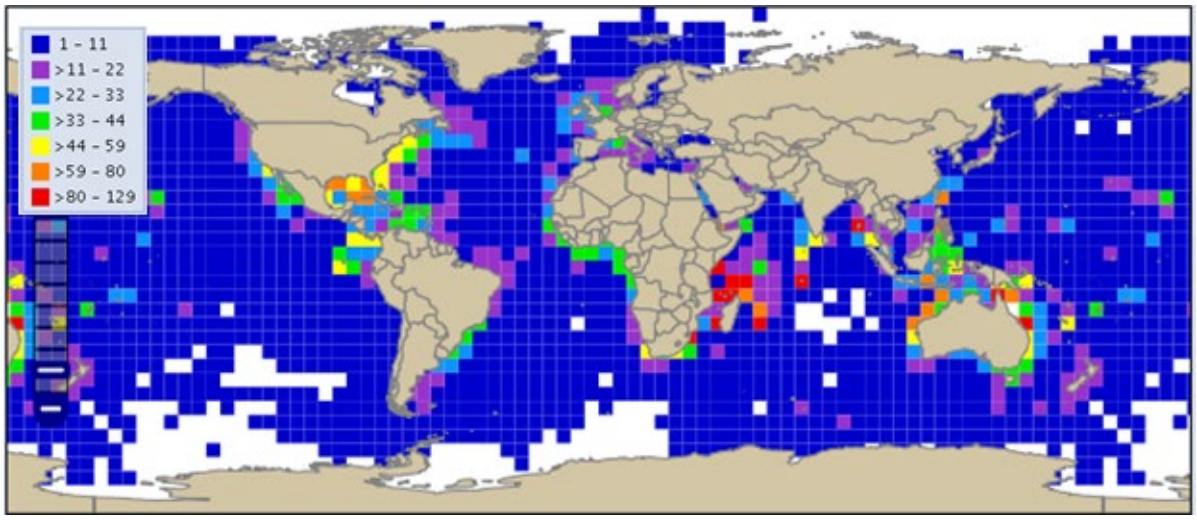



**Figure 3: Global distribution of IUCN Red List marine species counts (OBIS 2016)**

### 2.2.2 Legal species protection

A listing on the IUCN Red List does not confer to legal protection and elevated risks of extinction have been translated to protection more efficiently for some marine groups than for others. For example, there are more endangered marine turtles and birds, which are legally protected than many sharks and rays or bony fish species (McClenachan et al. 2012).

There are two international conventions that aim to protect species from overexploitation, including many from the marine environment. The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) aims to regulate international trade in wild plants and animals so that their survival is not affected. CITES has three appendices (I-III), but only Appendix I completely restricts trade in the listed species, while Appendix II & III allow export of specimens with a permit. CITES is only used to prevent unsustainable harvest of the listed species for trade, not to protect their habitat. The Convention on the Conservation of Migratory Species of Wild Animals (CMS) aims to protect species that migrate across country borders throughout their range. A listing on CMS Appendix I affords strict protection all over the member states for species threatened with extinction, but CMS also enables habitat conservation and restoration for the listed species. Appendix II of CMS is for migratory species in need of international cooperation and can be used to establish regional agreements. Some examples of key marine fauna groups, their threat status and their protection status on the two conventions (CITES, CMS) are listed in table 1.

**Table 1: Threat level and protection status for example species from key groups**

| Species group | Examples | IUCN Red List | CITES | CMS |
|---|---|---|---|---|
| Seals & sea otters | South American Fur Seal - *Arctocephalus australis* | Least Concern | App. II | App. II |
| | Sea Otter - *Enhydra lutris* | Endangered | App. I &II | |
| Sea turtles | Hawksbill Turtle - *Eretmochelys imbricata* | Critically Endangered | App. I | App. I |
| Seabirds | Short-tailed Albatross - *Phoebastria albatrus* | Vulnerable | App. I | App. I |
| Whales, dolphins & sirenians | Fin Whale - *Balaenoptera physalus* | Endangered | App. I &II | App. I &II |
| | Dugong - *Dugong dugon* | Vulnerable | App. I | App. II |
| Sharks & rays | Giant Manta Ray - *Manta birostris* | Vulnerable | App. II | App. I &II |
| | Great Hammerhead - *Sphyrna mokarran* | Endangered | App. II | |
| Tuna & billfish | Blue Marlin - *Makaira nigricans* | Vulnerable | | |
| | Bigeye Tuna - *Thunnus obesus* | Vulnerable | | |
| Marine invertebrates | Brown Sea Cucumber - *Isostichopus fuscus* | Endangered | App. III | |
| | Northern Abalone - *Haliotis kamtschatkana* | Endangered | | |

### 2.2.3 Protection of migratory marine species

Protecting marine megafauna is challenging due to several reasons: Most of the species have large home ranges and are migratory. Their large size makes them easy prey to anthropogenic hunting efforts, either directly or as result of by-catch, maturity is reached relatively late compared to smaller organisms and fecundity is low, resulting in slow population growth rates. Therefore, marine megafauna is highly threatened by overexploitation and habitat destruction, as well as pollution of coastal water, as this affects them indirectly by decreasing prey populations. For species that travel by sonar, noise produced by shipping, fishing and coastal construction activities also has negative effects (Brander et al. 2015; Hooker and Gerber 2004).

## 2.3 Key marine habitats for conservation

The global ocean can be divided by depth into oceanic pelagic and deep sea (abyssal) zones and the intertidal and coastal zones often delimited by the continental shelf (cf. figure 4).

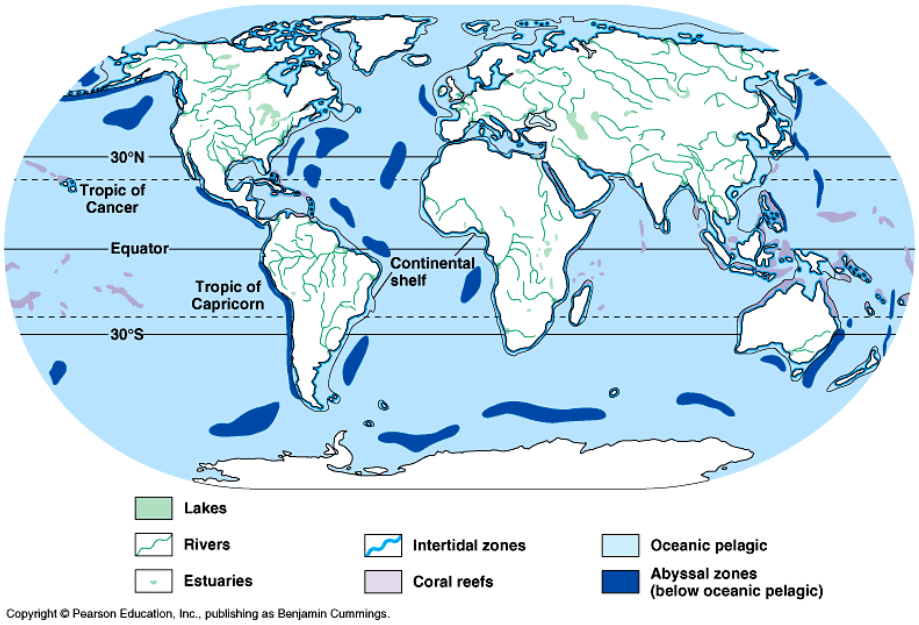



**Figure 4: Distribution of major aquatic biomes (URL 1)**

The coastal zone harbours a number of ecosystems recognized both for their ecological productivity and biodiversity, but the coast is also of utmost human and economic interest (UNEP 2006). The following paragraphs briefly note marine habitats of high conservation value and describe their current status, values and the threats they face as well as general challenges to marine conservation.

### 2.3.1 Status of marine habitats

Marine habitats of high conservation value are dwindling. Especially coastal habitats, including kelp forests, seagrass beds and mangroves, face multiple threats from land-based pollution, species invasion and direct human pressure. Mangroves are being lost at 1-2% per year globally primarily destroyed by overexploitation and conversion due to coastal development. Seagrass beds are affected by siltation, pollution and land reclamation and kelp forests by overfishing and the increase of sea temperature. Coral reefs face major threats of extraction, pollution, sedimentation, destruction and climate change-induced bleaching (UN 2016). Figure 5 shows increasing habitat change in the global oceans and the increase in marine industries.

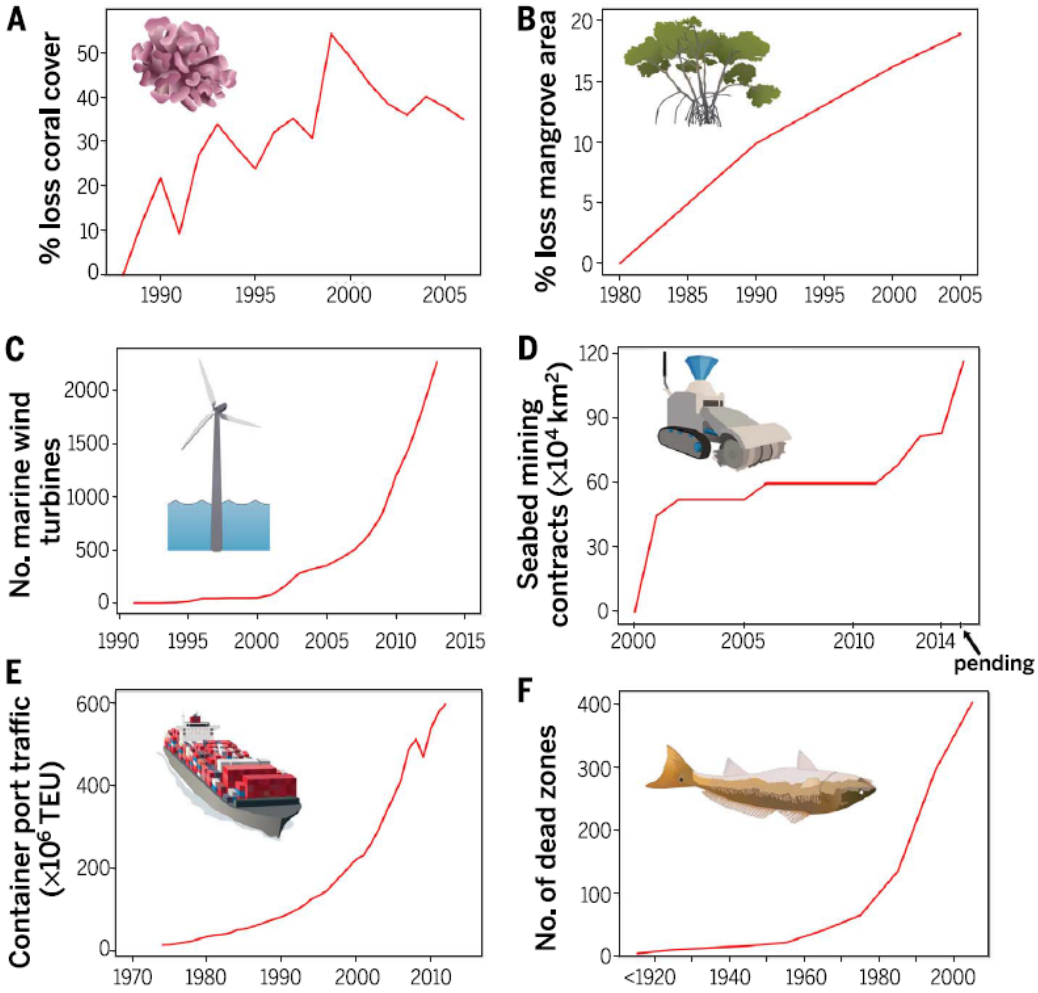



**Figure 5: Habitat change in the global oceans (McCauley et al. 2015)**

For many habitats no assessments have been conducted so far, but coral reefs, seagrass beds and mangroves have each declined in cover between 20-40%, also leading to strong declines in the associated fish communities. Population crashes are also seen for fish in deep sea and polar habitats also indicating major habitat degradation (WWF 2015).

### 2.3.2 Marine biodiversity and ecosystem services

Marine biodiversity represents the foundation of ecosystems that, through the services they provide, affect human well-being. These include supporting services, provisioning services, regulating services and cultural services[8]. When ecosystems can perform their services

[8] Ecosystem services are defined as “direct or indirect contributions to human welfare” (Hoegh-Guldberg et al. 2013; Millenium Ecosystem Assessment 2005a; WBGU 2013) and are classified into four categories:

1. Supporting services: Crucial natural processes that maintain ecosystem functions, which support other services, such as primary production, aquaculture localities, nutrient recycling and the provision of habitats.
2. Provisioning services: Renewable resources from ecosystems (e.g. pharmaceuticals, fisheries, wave energy); non-renewable resources (e.g. minerals, oil, gas)

adequately they are able to provide direct benefits to society and human well-being, like food security, a clean and functioning environment, the protection of coasts and the conduction of recreational and touristic activities (cf. figure 6).

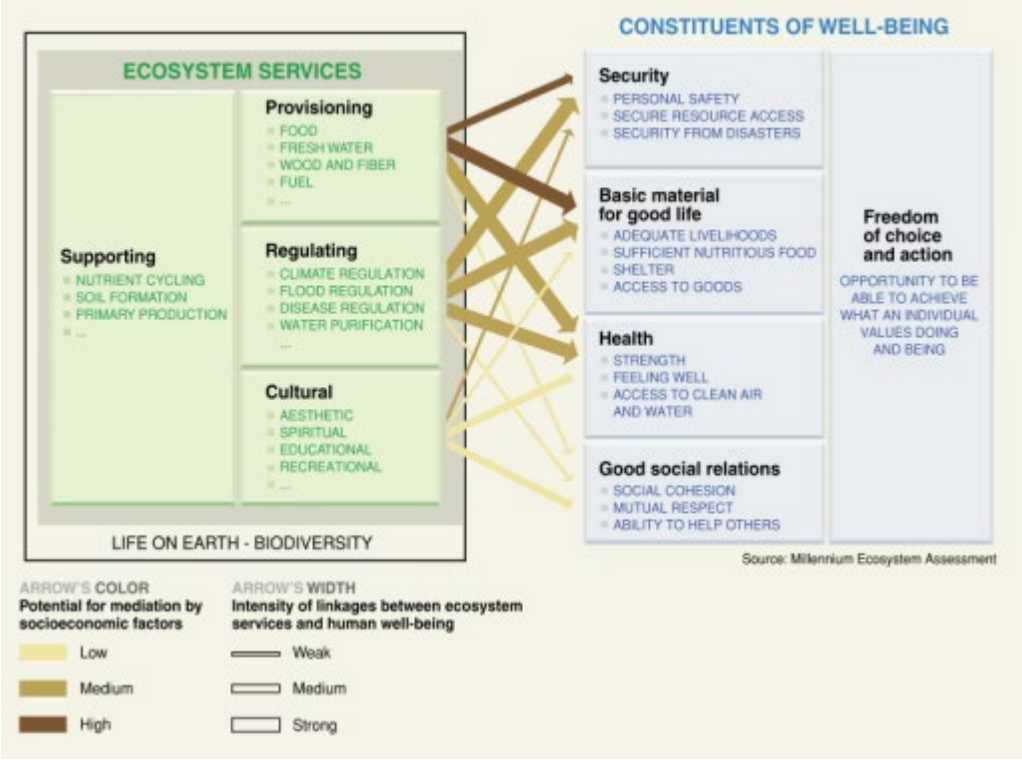



**Figure 6: Ecosystem services that provide benefits to human well-being (Millenium Ecosystem Assessment 2005a)**

A rich biodiversity is especially important for the resilience of marine ecosystems. The presence of a variety of species helps to increase the capability on an ecosystem to be resilient in the face of a changing environment, e.g. where several species perform same or related tasks and one gets lost or relocates due to climate change, another can take over the performed service. Still, the loss of biodiversity reduces the ecosystems' potential to recover and is impairing the ocean's capacity to provide food, maintain water quality and other services as shown in figure 7. Changes in marine biodiversity are directly caused by a number of mainly human-induced stressors, as for example overexploitation, pollution, sedimentation, ocean acidification, habitat destruction and indirectly by climate change and related perturbations of ocean biochemistry. Although marine extinctions only manifest slowly at the global scale, regional ecosystems such as estuaries, coral reefs and coastal and oceanic fish communities are rapidly losing populations, species or entire functional groups, what directly effects coastal populations (Böhnke-Henrichs et al. 2013; Millenium Ecosystem Assessment 2005a; Worm et al. 2006).

3. Regulating services: Processes that maintain the climate, coastal integrity, water quality and buffers for waste)
4. Cultural and other services: Nonmaterial benefits which support spiritual and religious values, and recreational and community benefits such as coastal and oceanic recreation and tourism; shipping and transportation for approx. 90% of the commodities traded around the world

Thus, biodiversity and human well-being are intimately linked. Changes in drivers that indirectly affect biodiversity, such as population, technology and lifestyle (figure 7, upper right corner) can lead to changes in drivers directly affecting biodiversity, such as the catch of fish or the application of fertilizers to increase food production (lower right corner). These result in changes in biodiversity and to ecosystem services (lower left corner), thereby affecting human well-being. These interactions can take place at more than one scale (global, regional, local) and can cross scales. Similarly, the interactions can take place across different time scales (long-term or short-term). Strategies and interventions can be taken either to respond to negative changes or to enhance positive changes at almost all points in this framework (Millenium Ecosystem Assessment 2005a).

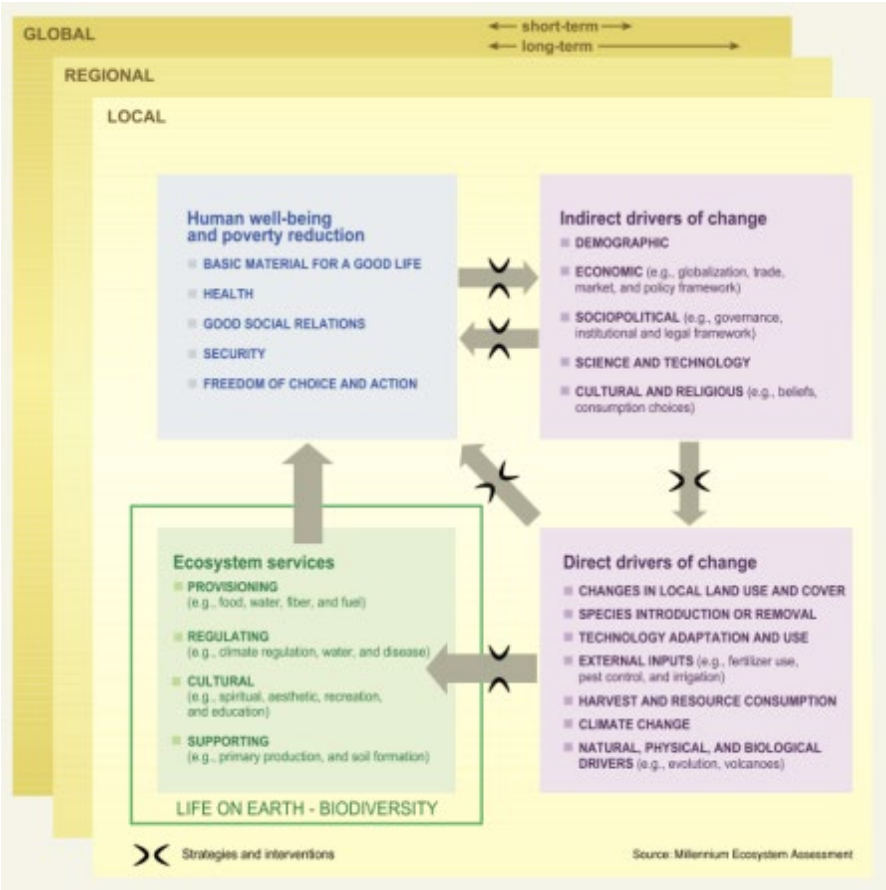



**Figure 7: Conceptual framework of interactions between biodiversity, ecosystem services, human well-being and drivers of change (Millenium Ecosystem Assessment 2005a)**

### 2.3.3 Threats to marine habitats – Coastal development and resource use conflicts

Coastal zones and their ecosystems provide a wide range of ecosystem services: Coastal protection, sink for domestic wastes, the maintenance of global biogeochemical cycles, source of income and employment, destination for tourism, source of building materials, sites of human habitation as well as objects of cultural and spiritual value and environments for recreation. Furthermore, they play an important role in generating oxygen and mitigating

climate change by absorbing carbon dioxide and heat. Coastal habitats store 5x more carbon than tropical forests and are therefore the world's largest carbon sinks (Brown et al. 2008; Hoegh-Guldberg et al. 2013; Reuchlin-Hugenholtz and McKenzie 2015).

Nevertheless, coastal ecosystems and the services they support are under increasing pressure from a range of drivers and if trends persist, they will be unable to support human well-being, as already mentioned above. Future pressures from climate change, population increases in coastal areas, pollution, aquaculture development, greater human mobility and the spread of invasive species are likely to exacerbate these trends. As coastal ecosystems build the interface between marine and terrestrial living, they are closely interconnected to near-shore terrestrial as well as intertidal up to deep sea ecosystems. This means, changes or destruction of these habitats also affect coastal ecosystems (changes in nutrients, sediments, freshwater to coasts, which is especially important for mangroves as they need freshwater), lead to loss of mangroves and seagrasses, which in turn leads to sedimentation of coral reefs. A loss of coral reefs leads to decreased storm buffering and therefore to erosion, which in turn negatively affects terrestrial habitats, which leads to socio-economic changes for coastal populations (e.g. decreased fisheries/income/food, tourism revenues) Table 2 provides a comprehensive overview of major threats impacting marine habitats and correspondingly threatened important ecosystem services (Brown et al. 2008; Millenium Ecosystem Assessment 2005b; WBGU 2013).

**Table 2: Key marine habitats, associated ecosystem services and threats. Shading denotes comparative strength of global threats** (Halpern et al. 2007)

| Zone | Habitat type | **Important ecosystem services** (Brander et al. 2015; UNEP 2006) | **Major threats** (Halpern et al. 2007) dark shading = highly threatened, light shading = lower avg. threat |
|---|---|---|---|
| Intertidal | Rocky shore | Food provisioning, coastal protection, nutrient cycling | Coastal engineering/development, direct human impact, sea level rise & temperature increase, invasive species, pollution |
| | Mudflat/marsh | Food provisioning, nutrient cycling, biol. regulation | Organic pollution, coastal development, invasive species |
| | Mangrove | Carbon sequestration, erosion prevention, spawning grounds, coastal protection… | Decreased freshwater input, coastal engineering/development, direct human impact, aquaculture, sea level rise, artisanal fishing, commercial activity |
| | Beach | Recreation, tourism, erosion prevention | Coastal engineering/development, direct human impact, sea level rise |
| Coastal | Coral reef | Erosion prevention, recreation, fisheries, food provisioning, coastal protection… | Increased sediment input, coastal development, artisanal fishing, sea temperature increase, disease, pollution |
| | Seagrass | carbon sequestration, erosion prevention, spawning grounds | Increased sediment input, nutrient input, coastal engineering/development, direct human impact, aquaculture, sea level rise |
| | Shelf | food provisioning, climate regulation, nutrient cycling | Nutrient input, pollution, demersal/pelagic fishing, recreational fishing, invasive species, hypoxia |
| | Kelp forest | Nutrient cycling, coastal protection, raw materials | Demersal/recreational fishing, sea temperature increase |
| | Other reef | Food provisioning, biol. regulation, disease control, | Sediment/nutrient input, pollution, coastal engineering/development, direct human impact, |

| | | | |
|---|---|---|---|
| | (rocky/biotic) | nutrient cycling… | demersal fishing, disease, invasive species |
| | Polar/ice | Biodiversity, food provisioning, tourism | sea temperature increase, invasive species, coastal engineering /development, increased sediment input |
| Oceanic | Seamount | Biodiversity, food provisioning | Demersal fishing, ocean acidification |
| | Soft bottom | Carbon sequestration, energy reserves | Pollution, demersal fishing, sea temperature increase/acidification |
| | Canyon | Biodiversity, water circulation, climate regulation, food provisioning | Pollution, demersal/illegal fishing, sea temperature increase, hypoxia, offshore development |
| | Surface water | Nutrient cycling, primary production, food provisioning, water circulation, climate regulation | Pollution, pelagic fishing, sea temperature increase, invasive species, hypoxia, harmful algal blooms |
| | Deep water | Nutrient cycling, primary production, food provisioning, water circulation, climate regulation | Sea temperature increase, hypoxia, pelagic fishing, pollution |

Though, coastal development and its adjacent impacts (population increase, tourism, port development and expansion, soil sealing, pollution, plastic waste, farming etc.) are among the main drivers of change for marine and coastal habitats as briefly described in the following paragraphs.

#### 2.3.3.1 Coastal population, tourism, construction and habitat destruction

Around 60% of the world's population lives no more than 60 km from the coast and the number is likely to increase in the future. Above, the majority of megacities (>10 million inhabitants) are located in coastal areas intensifying human activities along coastlines. Especially coastal construction work leads to the transformation or clearing of coastal ecosystems (e.g. mangrove systems, estuaries, intertidal areas, lagoons and sea grasses, rock and shell reefs, coral reefs), which in turn has negative impacts on fisheries, by a lack of adequate areas to find refuge or reproduce. Tourism development is also one driver for the conversion of land for construction. Due to the desire to locate as close to the sea as possible, much of the coastal infrastructure construction has resulted in the destruction of coastal wetlands, dune complexes and mangroves. Notably, the impact of coastal tourism extends beyond the coastal zone, including road and rail networks, airports, housing development for employees, large shopping centres etc. leading also to conversion of near-shore terrestrial ecosystems.

Moreover, the vulnerable populations of remote coastal areas in developing countries (principally located in Southeast Asia, Western Indian Ocean (WIO), West Africa, Gulf of Mexico, which highly depend on fisheries for subsistence and income, is more affected than the urban coastal population, as coastal cities also provide alternative job opportunities to fisheries. To date, already 35% of global mangrove forests, 30% of sea grass beds and 20% of coral reefs have been destroyed as a result of expanding coastal population centres and it is estimated that a growing number of people will relocate to coastal urban areas (Bollmann et al. 2010; Thomas et al. 2014; UNEP 2012; WBGU 2013).

#### 2.3.3.2 Pollution and litter

Further human activities conducted in coastal zones, like farming, also aquaculture farming, industrial production, transport and urban development causes inevitable release of pollutants, e.g. nutrients, chemicals, metals, solid waste to water, land and air, which degrades coastal and ocean water quality and ecosystem health. The worst-affected areas are densely populated regions or regions with a level of tourism, where large amounts of untreated sewage are released into the sea. Tourism-related marine pollution also derives from the discharges from tourist yachts, excursion boats, car ferries and cruise ships (Bollmann et al. 2010; Thevenon, Carroll, and Sousa 2014; UNEP 2012, 2014)

Solid and plastic waste in particular has become one of the most serious problems affecting the marine environment. Plastic waste not only affects coastal areas of developing countries that lack appropriate waste management infrastructures, but also for the ocean as a whole because slowly degrading large plastic items generate micro plastic particles which spread over long distance and have several adverse effects on marine ecosystems and species and possibly entering the human food chain as well through consumption of marine organisms. 80% of plastic litter comes from land-based sources, whereas shipping, cruise lines and fishing account for the remainder 20% (Bollmann et al. 2010; Thevenon, Carroll, and Sousa 2014; UNEP 2014).

Altogether, this puts severe pressure on coastal ecosystems, food provisioning, the job market and therewith on the ocean itself, harming the very resources on which these goods, services and activities depend.

### 2.3.4 Challenges of marine conservation

The oceans are more dynamic and complex in processes, scales and threats than most terrestrial ecosystems (Maxwell et al. 2015). Away from shore, open ocean habitats are based on properties of water masses, surface currents and wind-driven mixing, resulting in horizontal and vertical transport of resources and organisms but also pollutants (Briscoe et al. 2016; Game et al. 2009). This also means that habitats in the marine environment, especially for highly mobile megafauna, are not necessarily fixed in space and time but can be shifting, preferentially used areas, tracking ocean dynamics and productivity (Scales et al. 2014). Therefore, area based protection measures are not necessarily as effective as in the terrestrial world. However, marine conservation has to account for large dimensions of marine ecological processes. To conserve the marine realm properly conservation efforts, have to extend far beyond national boundaries and even form global networks of protected areas.

## 2.4 Areas of conservation interest

Useful criteria to identify marine areas in need of protection have been defined by the Convention for Biological Diversity (CBD) to describe ecologically or biologically significant marine areas (EBSAs, https://www.cbd.int/ebsa/). These are seven criteria to fully evaluate areas in the marine environment for biodiversity conservation but also for ecosystem functioning (Bax et al. 2015):

1. Uniqueness or rarity
2. Special importance for life history stages of species
3. Vulnerability, fragility, sensitivity, or slow recovery
4. Biological productivity
5. Biological diversity
6. Naturalness
7. Importance for threatened, endangered or declining species and/or habitats

Further definitions and examples of the EBSA criteria can be found in Bax *et al.*, (2015). The designation of EBSAs is a possibility to prioritize marine areas for protection, based on scientific evidence, by means of protected area designation or other management approaches (Dunn et al. 2014). Some criteria with similar meaning appear in a number of other international mechanisms to define areas of ecological importance by institutions such as FAO, UNESCO, RAMSAR convention, Birdlife or IUCN, but the EBSA process has synthesized the most relevant ones (Dunn et al. 2014). The EBSAs already designated in the world's oceans are thus an essential geographical reference for areas worth to be protected. Moreover, the seven EBSA criteria can also be a starting point, with supporting data, for the evaluation of biodiversity conservation benefits promised by proposals of MPA designation.

An approach to regulate shipping in marine areas by the International Maritime Organization (IMO) are the Particularly Sensitive Sea Areas (PSSAs), which can be designated due to ecological, socio-economic or scientific attributes provided they are endangered by shipping activities.

To generally inform priority setting and planning for conservation in the oceans, a classification system describing patterns in biodiversity and the similarity of marine flora and fauna on both regional and global scales is necessary. Such a biogeographic system was developed for coastal and shelf seas with the Marine Ecoregions of the World (cf. figure 8; Spalding *et al.*, 2007). This system is useful to inform ecologically representative approaches to marine conservation in the coastal zone as mandated by international agreements (CBD 2010; UN 2015). In the context of marine protection, ecoregions can be used to understand how well local and regional biodiversity is represented in the global marine conservation portfolio.

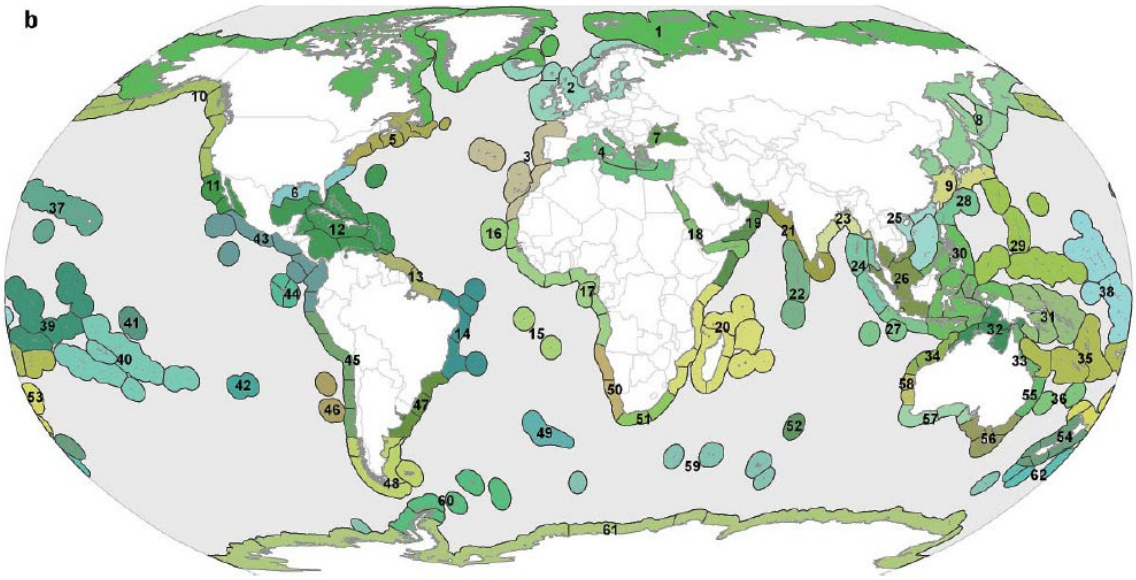



**Figure 8: Marine provinces with ecoregions outlined (Spalding et al. 2007)**

## 2.5 Key indicators for marine health

A global indicator for the state of marine biodiversity is the marine Living Planet Index (http://www.livingplanetindex.org) that tracks the size of currently >5,800 populations from >1,200 marine animal species over more than four decades (WWF 2015). A more holistic indicator that includes humans as part of the ocean is the Ocean Health Index (OHI) (http://www.oceanhealthindex.org), which also evaluates current and future provision of benefits and services from marine ecosystems on the scale of the global ocean but also tracks the contribution and development of individual countries.

## 2.6 Marine protected areas

Where areas of conservation interest and human activities meet, marine protected areas (MPAs) are central tools to promote nature conservation and sustainable use of marine resources in spatially explicit seascapes (UNEP-WCMC 2008). To be formally recognized as MPA a site needs to conform to the IUCN definition: 'A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley 2008).

The IUCN database lists more than 8,000 MPAs worldwide, differing widely in size and protection level but restricted mainly to coastal zones and oceanic islands (cf. figure 9).

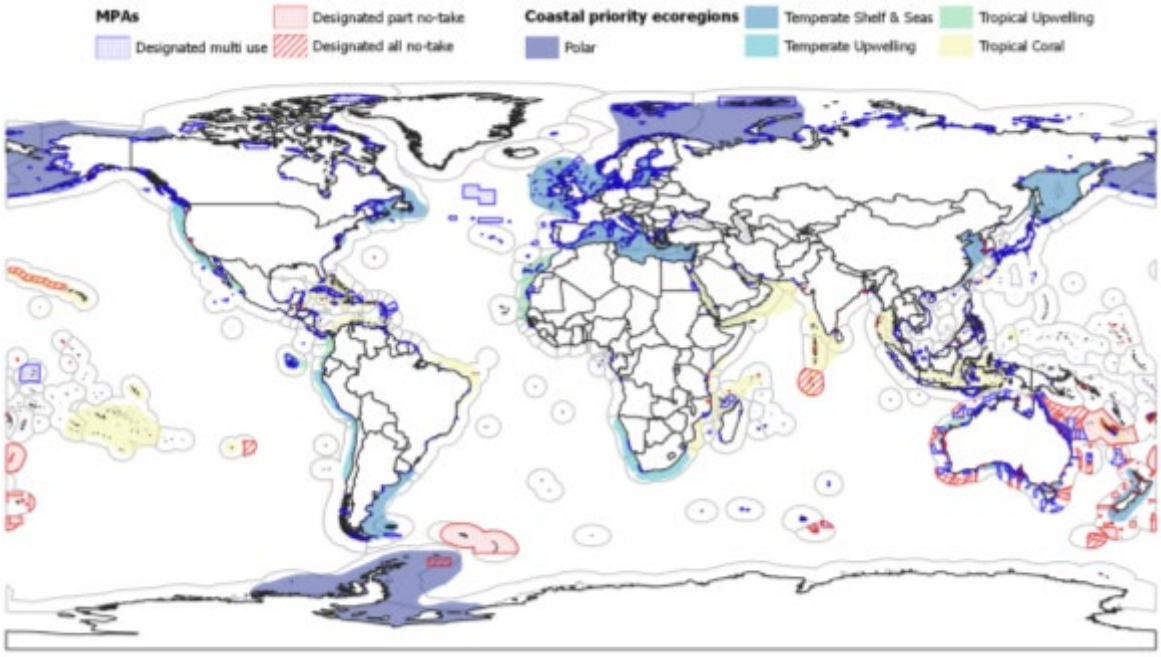



**Figure 9: Current global distribution of designated multi-use and no-take MPAs (IUCN and UNEP-WCMC 2016) in relation to marine Global 200 priority ecoregions (Olson and Dinerstein 2002) and exclusive economic zones**

## 2.7 Dynamic ocean management

Recently, increasing attention is paid to large-scale ocean dynamics and inclusion of productivity in marine conservation planning (Maxwell et al. 2015). A historical focus on hotspots of biodiversity in conservation was until now unsuccessful to address highly productive marine ecosystems with lower species richness but of central importance for ecosystem function and services (Briscoe et al. 2016). Additionally, the productivity in dynamic transition zones between water masses, currents and upwellings, forms critical foraging habitats for marine megafauna (Scales et al. 2014). Such productive frontal zones, where steep physical gradients (e.g. temperature, salinity) in water masses occur, show large spatial overlap along shelf breaks and coastal upwellings between human exploitation and critical habitat for marine vertebrates (Scales et al. 2014). To reflect these priorities in marine conservation, productivity needs to be included in priority-setting for marine protection and ecosystem-based management facilitated in potentially large-scale and dynamic areas of the oceans (Briscoe et al. 2016; Maxwell et al. 2015; Scales et al. 2014).

# 3 OCEAN GOVERNANCE FRAMEWORK

In recent decades, some new policy instruments have been introduced in attempt to reverse the overuse of critical resources. Some solutions have been found to halt and even reserve the decline on ocean resources, but they tend to focus on only a single sector or component of the socio-ecological system. To stem the ocean's declining health, new and proven innovative solutions need to be scaled up, integrated, and improved to match the vastness and complexity of the ocean, the range of stakeholders and the ocean's multiple uses as well as other sectors that have impacts on the ocean.

## 3.1 Global and regional governance

Worldwide there are a range of legal instruments, institutions and organizations that collectively establish rules and policies for managing, conserving and using the ocean. These include multinational, regional as well as national levels, which make it hard to establish a unified approach to marine conservation. The overarching legal framework for ocean governance and management on a global scale is the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS represents a comprehensive international treaty, which, together with accompanying agreements, functions as kind of "constitutions of the seas". Major institutions and instrument as presented in table 3 (WBGU 2013; World Ocean Council 2014). This chapter provides a brief overview over some of the most relevant instruments and institutions concerning ocean protection and use, especially fisheries (red shaded in table 4).

**Table 3: Major Ocean Institutions and Instruments**

| Short Name | | Full Name |
|---|---|---|
| Global Ocean Governance: UN Instruments and Institutions | | |
| UNCLOS | | United Nations Convention on the Law of the Sea |
| UNCLOS Institutions | CLCS | Commission on the Limits of the Continental Shelf |
| | ITLOS | International Tribunal on the Law of the Sea |
| | ISA | International Seabed Authority |
| IMO | | International Maritime Authority |
| Regional Ocean Governance | | |
| RFMOs | | Regional Fisheries Management Organizations |
| UNEP-RSP | | Regional Seas Programme |
| Further UN-Arrangements with Reference to the Ocean | | |
| CBD | | Convention on Biological Diversity |
| CITES | | Convention on International Trade in Endangered Species |
| CMS | | Convention on Migratory Species |
| FSA | | Fish Stocks Agreement |
| SDGs | | Sustainable Development Goals |
| UNESCO World Heritage Marine Programme | | |

### 3.1.1 UNCLOS and legal zoning

UNCLOS is the most important basis for the conservation and use of the seas in international law. It establishes a comprehensive regulatory framework for the conservation and use of the oceans and, as a framework convention, standardizes rights and obligations on a wide range of different uses of the ocean space and its resources. UNCLOS was adopted in 1982 by the international community and came into force in 1994 (WBGU 2013).

UNCLOS divides the sea into various legal zones to solve the fundamental conflicts between the free use of the seas by all states and the claims to the sea made by individual coastal states (cf. figure 10). The sovereignty of a state declines with increasing distance from their coastline (Bollmann et al. 2010; WBGU 2013).

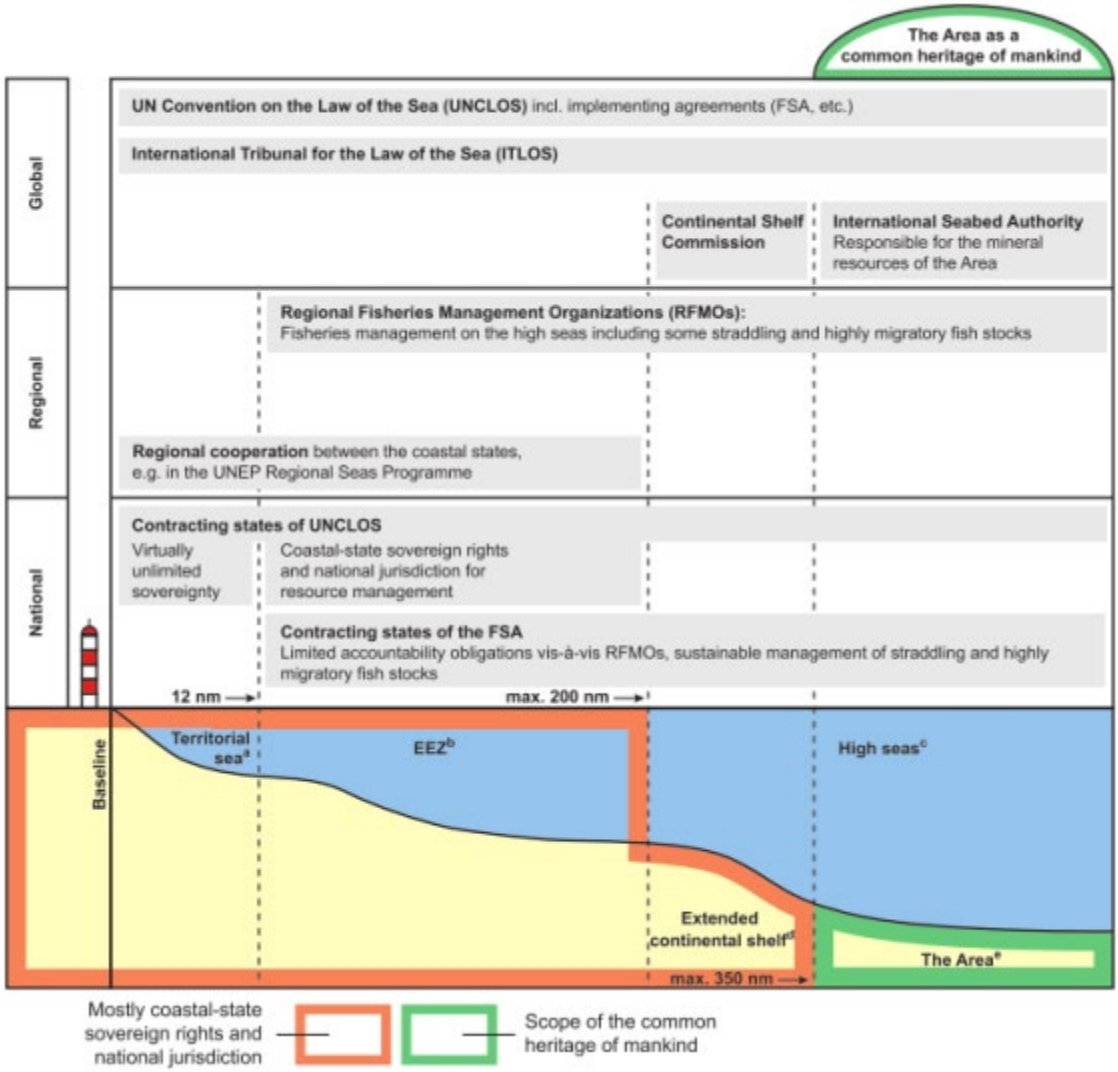



**Figure 10: Legal zoning of the sea according to UNCLOS and relevant governance bodies (simplified) (WBGU 2013)**

i. Territorial sea and contiguous zone

Adjacent to its territorial baseline every state has a territorial sea (a), which is also known as the 12-nautical-mile-zone. It comprises, inter alia, the seabed and its subsoil and belongs to

the states' sovereign territory. The peaceful passage of international shipping is allowed. The so-called contiguous zone is a border-control zone extending up to 24 nautical miles from the baseline. Its exclusive purpose is that of border control. It does not have any territorial legal status (Bollmann et al. 2010; WBGU 2013).

ii. Exclusive economic zone

The exclusive economic zone (EEZ) (b) extends for up to 200 nautical miles from the territorial baseline and comprises the water column, the seabed and its subsoil. It does not form part of the national territory, but within the EEZ the coastal state has sovereign rights to explore and harvest living and non-living resources. They are thus permitted to exploit oil, gas, mineral resources and fish stocks or erect wind turbines. Third parties are excluded from such activities. This is especially significant from an economic perspective, as around 90% of all commercially relevant fish species occur in the coastal states' EEZs and those just account for 35% of the total seas' area. Marine research within the EEZ is also under jurisdiction of the coastal state as matters to the protection and preservation of the marine environment: The coastal state alone may propose the designation of a MPA within its EEZ to the International Maritime Organization (IMO), which is responsible for ocean traffic, in order to protect the area concerned against pollution from ships (Bollmann et al. 2010; WBGU 2013).

iii. Continental shelf

The continental shelf (d) is a natural extension of the mainland and can extend beyond the EEZ. If the natural continental shelf of a coastal state extends beyond the EEZ, the coastal state can file an application for recognition of an extended continental shelf to the Commission on the Limits of the Continental Shelf (CLCS) to extend its EEZ to a maximum of 350 nautical miles from the baseline. Within the extended continental shelf, the coastal state has sovereign rights to explore and harvest resources on or under the seabed (Bollmann et al. 2010; WBGU 2013).

iv. High seas and the Area

Adjacent to the EEZ is the area of the high seas (c), which are not subject to any national sovereignty are therefore available to be used by all countries. Therefore, the high seas are also referred to as areas beyond national jurisdiction (ABNJs). However, as the high seas are limited to the water column, activities comprise in particular freedom of fishing, shipping and scientific research. The non-living resources of the seabed and its subsoil beyond the EEZ, referred to as the Area (e), have been declared part of the common heritage of mankind and are administered by the International Seabed Commission (ISA). Extraction is subject to rules that are geared towards the benefit of mankind as a whole (Bollmann et al. 2010; WBGU 2013).

### 3.1.2 International Maritime Organization (IMO)

Due to the wide range of institutions setting the frame for ocean governance, the system is highly fragmented especially with regard to the fact that the institutions mainly focus on a specific sector. The International Maritime Organization (IMO) aims to reduce or completely prevent marine pollution by ships and to improve the overall safety and security of ships and

shipping. Several international conventions have been developed up to now under IMO, including the International Convention for the Prevention of Pollution from Ships (MARPOL). Areas of the ocean that are highly frequented as transport routes and therefore require protection measures to prevent marine pollution from oil and garbage can be designated 'special areas', thereby placing them under protection. In addition, member states can apply to the IMO to have an area designated a Particularly Sensitive Sea Area (PSSA). These are areas where shipping is restricted or prohibited in order to protect fishing grounds, whale breeding grounds or areas of ecological value or important for tourism (Bollmann et al. 2015; WBGU 2013).

### 3.1.3 Regional Fisheries Management Organizations (RFMOs)

Usually the coastal states of a sea region are organized in RFMOs, along with a few larger fishery nations. Figure 11 shows cross-regional RFMOs. For example, the members of the RFMO responsible for the Northeast Atlantic, the North East Atlantic Fisheries Commission (NEAFC), include the European Union, Iceland, Norway and the Russian Federation. Other nations which do not belong to the RFMO responsible for the given sea area are not actually allowed to fish in that area. Nevertheless, illegal fishing could be taking place in these areas almost undetected, since such misconduct is rarely sanctioned. Irrespective of all the regulation of fishery, this means that even fish stocks in RFMO areas can be overfished. Furthermore, countries that are not member in a respective RFMO do not have to apply to the rules set out by the RFMO (Bollmann et al. 2015). From figure 11 it is apparent that large parts of the mid-Atlantic and South-Western Atlantic are not regulated by a RFMO. These areas can be fished by every country. Signatory partners of UNCLOS should uphold to the commitments made within the UNCLOS framework.

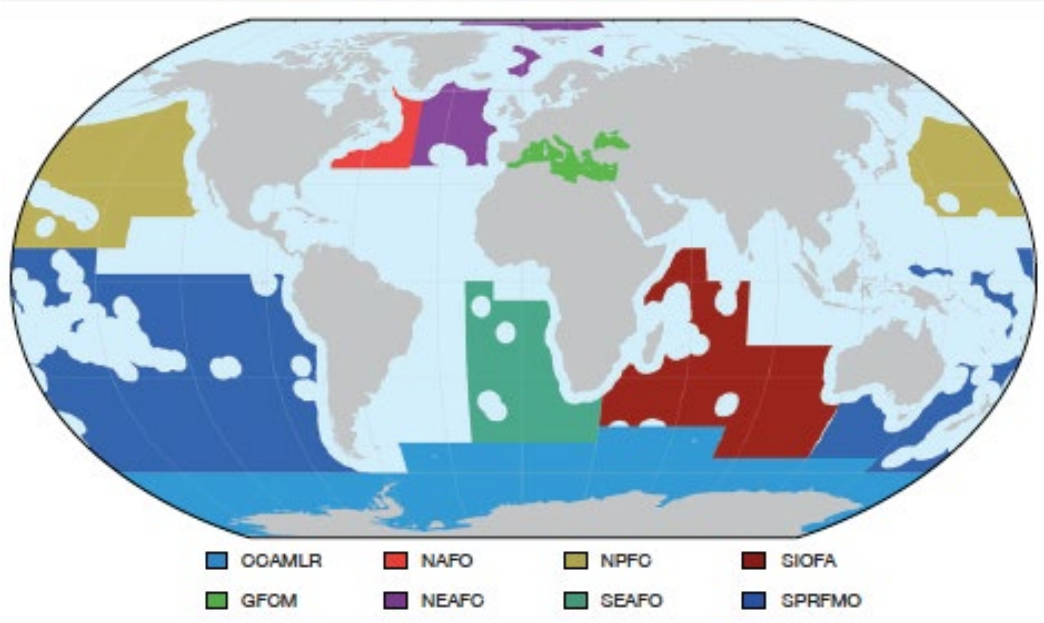



**Figure 11: RFMOs relevant to ABNJ (WBGU 2013)**

### 3.1.4 UNEP Regional Seas Programme (UNEP-RSP)

The UNEP Regional Seas Programme is a central component of ecological ocean governance. It aims to tackle the growing degradation of the world's oceans and coastal areas. The main elements of the programme include maintaining biodiversity, reducing pollution from the land, building governance and management capacity and promoting education and awareness. Up to now, 13 regional programmes have been developed covering significant areas of the world's oceans[9]. A best practice example of the UNEP-RSP is the Oslo-Paris Convention (OSPAR), which covers the North Sea and the Northeast Atlantic. Under the umbrella of OSPAR, progress has been made in designating areas of the high seas MPAs even though these are located outside the EEZs of the OSPAR contracting parties. One example is the Charlie Gibbs MPA, a highly species-rich deep sea habitat located in the Atlantic between Iceland and the Azores. As the OSPAR region also falls under NEAFC (RFMO of that region) it is crucial to negotiate and come to an agreement to protect the MPA from further sea-floor fishing. However, countries which do not belong to the corresponding RFMO are not obliged to respect a MPA in high seas so it is quite conceivable that other countries illegally continue sea-floor fishing in a MPA (Bollmann et al. 2015; WBGU 2013).

### 3.1.5 The tragedy of the commons and current challenges to global marine governance

The high seas and their ecosystems are a common resource; they do not belong to individuals but are available to the whole community. However, most of the ocean's resources are limited, like fish stocks. The exploitive use of global fish stocks, in EEZs as well as high seas, as well as pollution from various sectors and municipalities has led to serious harm to the marine environment. However, for the protection of commons to make sense, many resource users and sectors and/or states need to cooperate. In the case of fisheries, it would be useless if one country alone stops fishing in order to protect overfished populations while other countries continued to fish excessively. It follows, that comprehensive protection of the sea will only be possible in future if all nations will pull together with a common purpose (Bollmann et al. 2015).

Adequate implementation of marine conservation becomes difficult due to separate legislation and governance for the different zones on the background that ecosystems or interactions between ecosystems do not follow territorial boundaries and therefore are globally connected. Fish stocks can move across vast areas, toxic substances travel across national borders with currents and new threats as a consequence of climate change and intensive human impact occurred, as for example ocean acidification and sea-temperature rise, physical destruction of marine habitats, overfishing and pollution, which affect all marine areas equally, across all sectors, zones and borders. Furthermore, new uses, like new shipping routes, extracting energy and mineral resources, marine energy, deep sea

[9] Antarctica, the Arabian-Persian region, the Arctic, the Caribbean, the Caspian Sea, the Mediterranean, the Northeast Atlantic, the Northeast Pacific, the Northwest Pacific, East Africa, East Asia, the Baltic Sea, the Pacific, the Red Sea and the Gulf of Aden, the Black Sea, South Asia, the Southeast Pacific and West Africa.

fishing and offshore aquaculture intensify the present pressure of use. As UNCLOS was established in 1982 it does not account for these recent developments and therefore does not provide sufficient regulatory tools (Bollmann et al. 2015; WBGU 2013).

UNCLOS may recognize the coherence of ocean ecosystems and consequences of ocean-related activities but it is rarely reflected in its regulations. UNCLOS emphasizes the importance of marine environmental protection and requirements for the conservation of the ocean and especially the protection of critical habitats may be valid for all legal zones and all contracting member states, however, UNCLOS does not provide a definition for sustainability or environmental protection standards, so that the states themselves decide whether they meet the protection requirements imposed on them by UNCLOS. The same applies for fishery in high seas. According to the standards set out in UNCLOS, especially in UNCLOS Fish Stocks Agreement (FSA), fishery is regulated in most international marine zones by one of the RFMOs. Nevertheless, countries that are not member in a respective RFMO do not have to apply the same standards and there are vast regions within the oceans, which are not regulated by a RFMO at all (Bollmann et al. 2015; WBGU 2013).

However, what is missing is a legally binding and integrated framework to conserve and sustainably use the oceans and marine resources across all legal zones, to monitor that the ocean is used in an environmentally sustainable way within EEZ as well as high seas and to sanction violations. For example, the sustainability of the management, e.g. exploitation of fish stocks, within the EEZ is neither checked nor sanctioned under UNCLOS, but it has significant impact on the global marine environment. It is therefore necessary to adopt ocean governance from a more systemic approach that allows for accounting for interactions between several sectors affected by and affecting the sea and across borders (Bollmann et al. 2010, 2015; WBGU 2013).

## 3.2 MPA governance

As already mentioned, MPAs are instruments for placing particular areas under protection to preserve marine ecosystems, increase their resilience and adaptive capacity, and help to conserve and replenish overfished stocks and to protect important habitats and life stages. Also, at institutional level, they can help to regulate conservation and use of the ocean and marine resources down to the local level where most of the consequences of marine resource exploitation and pollution materialize. Furthermore, it is crucial to account for cross-sectoral cooperation at every level. This starts at the political level with sectoral ministries responsible for actions having an impact on marine conservation and resource use, e.g. environmental ministry, fisheries ministry and ministries responsible for shipping, building and coastal development, continuing with sectoral organizations, e.g. fisheries cooperatives and tourism operators, and NGOs down to local communities, which also might have differing opinions between use and conservation of marine resources. To this extend, MPAs can provide step stones for sustainable marine spatial planning or Integrated Coastal Zone Management (ICZM) and therefore contribute to the development of viable concepts and regulation for sustainable resource use, while reducing conflicts between sector specific-uses and marine conservation efforts.

To support MPA establishment and especially regional MPA networks ocean governance needs to be revised and comprehensively be aligned to allow for the implementation of conservation measures at international level. The most viable cause of action is cooperation between countries, harmonization of conservation goals and monitoring as well as common presence of policymakers at international level to advocate for and enforce common interests. Starting point for cooperation might be above mentioned regional initiatives as well as several common agreements and conventions (see chapter 3.1, table 3), as for example CBD, CITES, CMS and FSA.

Marine conservation on the high seas is a special case, because there is currently no central authority responsible for establishing and managing MPAs, but it presents a best practice example of cooperation between several countries in order to establish a MPA: Countries which make use of the sea area must reach agreement on the common protection objective, as in the case of the Charlie Gibbs MPA mentioned above (OSPAR and NEAFC). In a few cases to date, this has delayed or completely blocked the designation of MPAs. However, it has nevertheless been possible to create a number of protected areas on the high seas.

At MPA level, governance can take many forms, depending on who holds the authority and responsibility for making decisions. The structure and governance principles of MPAs can vary between top-down approaches through national governance, increasing participation of local stakeholders in a co-management system, to bottom-up community governance in locally managed marine areas (LMMAs) (cf. figure 12).

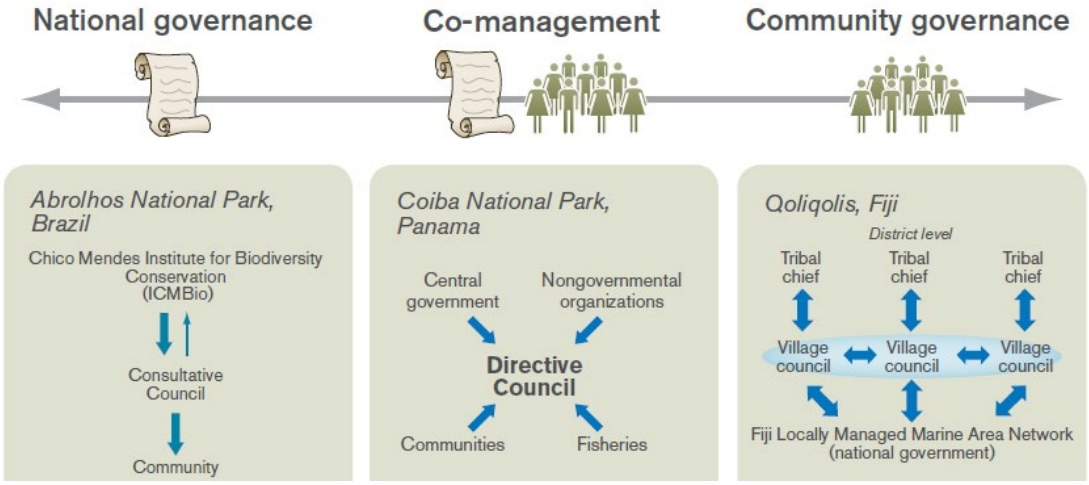



**Figure 12: Different governance structures of MPAs (Orbach and Karrer 2010)**

Most MPAs involve some form of cooperation between public (government) and private organizations (e.g. NGOs) and this form of co-management by inclusion of relevant stakeholders is important for success of both ecological and socio-economic targets of MPAs (Fisher et al. 2015). Close monitoring of the uses in the MPA and strict enforcement of regulations are critical for all forms of MPAs and these tasks depend on the involvement and participation of the stakeholders in the management process (Orbach and Karrer 2010).

### 3.2.1 Local communities and MPA governance

The creation of MPAs reallocates rights or bundles of rights, which can lead to a combination of benefits and negative consequences for various stakeholders involved. As mentioned before, MPAs can lead to fisheries benefit for local communities through spillover of fish and therefore increased catch and increased catch per unit effort. Nevertheless, these effects usually occur in the long term. Therefore, relationship between MPAs and local communities is often problematic which is a concern since perceptions of benefit may be a precursor of support and ultimately success. Impact studies have shown that MPAs have often led to quite divergent livelihood and socio-economic outcomes for local communities (Bennett and Dearden 2014; Reuchlin-Hugenholtz and McKenzie 2015).

The permeability of MPA boundaries means that conditions, as well as changes within a reserve will influence those outside its boundaries, and activities and conditions outside an MPA will influence conditions and outcomes within it. It is therefore especially important to consider social and economic impacts of MPAs in the context of local fisheries, as well as peoples' perceptions, attitudes, expectations and behaviour regarding MPAs in the context of local fisheries. Information on and understanding of these aspects of MPAs can be used to minimize their negative effects and maximize their positive effects. Failure to consider them can lead to the failure of MPAs to achieve their ecological, social and economic goals.

It has been widely recognized that public participation and local community involvement is an essential factor contributing to the success of MPAs. Fishers must be involved early in the decision-making process to ensure support and ultimately to reap the expected benefits because they possess detailed knowledge of their fishing grounds, which is essential for the design of acceptable and efficient reserves.

Alternative livelihood options need to be considered and a careful sensitization process has to be designed and implemented. Enhancing existing natural resource-based livelihoods, e.g. sustainable fishing practices, as well as diversification into alternative non-natural resource-based livelihoods may also reduce overall pressure on fisheries, but care must be taken in assessing the vulnerability of proposed alternative livelihoods in terms of feasibility and sustainability.

Tourism is one of the most often-suggested alternative livelihood strategies advertised in the course of MPA creation, but it is challenging to achieve in practice. It has indeed potential as a MPA financing tool and may lead to economic benefit on a broader scale, but the level of local community benefit can be minimal, due to outside ownership, centralization and leakage of profits, outside hiring, lack of mechanisms for benefit sharing and lack of local capacity. If local communities are not benefiting from tourism, it is likely to widen pre-existing inequalities and this may even lead to increased fishing effort. Other potential alternative livelihood strategies include agriculture, raising livestock, aquaculture, mariculture, seaweed farming, beekeeping, handicrafts, tree nurseries and pearl farming.

Previous research has shown that a mixture of natural resource-based and non-natural resource-based livelihoods together with participatory, contextualized, adaptive and equitable development programmes are most effective. It is especially important to ensure that there are mechanisms that ensure local benefit from development through limited leakage and outside employment. Payment for Ecosystem Services (PES) might also

provide an incentive for local conservation while providing an alternative livelihood option. MPAs could also contribute to local livelihoods through direct employment in the management of the area; however, locals are generally not very often employed in the stead.

# 4 ECONOMIC VALUE OF THE OCEANS AND PRO-POOR DEVELOPMENT

Due to the oceans' economic value it is crucial to also give thought to economic developments and how to combine conservation and sustainable, regulated resource use, especially in areas where high biodiversity meets high dependency of coastal communities on ocean resources as it usually occurs in developing countries (Hoegh-Guldberg et al. 2013; Pedersen et al. 2014; WBGU 2013). The following paragraph depicts the economic value of the ocean at a global scale, to allow for a general insight of the ocean's economic impact. Later in this chapter the focus is placed at developing countries and their marine-related economic benefit from various sectors.

## 4.1 Global economic value

The ocean is a major contributor to the global economy with direct outputs (fisheries, aquaculture, wave and tidal energy), enabled services (marine tourism, cruise industry, education, research), trade and transportation (coastal and oceanic shipping, ports, ship/boat building), adjacent benefits (direct economic impact of coastal tourism, carbon sequestration, biotechnology) as well as indirect outputs (offshore oil and gas, wind energy) (Brander et al. 2015; Hoegh-Guldberg et al. 2015).

Therefore, besides the need to protect the ocean and marine biodiversity for its intrinsic value and contributions to human well-being as mentioned above, the global economic benefits derived from the ocean are significant and undeniable important, especially for coastal and island states. Oceans are said to account for much of the world's economic prosperity and globally around 350 million jobs are linked to the ocean (in fisheries, aquaculture, transport, research, tourism). It is estimated that around 70% of global wealth is provided by ecosystem services deriving from oceans and coastal natural capital (Hoegh-Guldberg et al. 2013, 2015; Reuchlin-Hugenholtz and McKenzie 2015).

The ocean is economically most frequently used for transportation by ship, extractive uses[10] as well as tourism and, to a certain extent, but not provided by the ocean per se, extraction of oil and gas and wind energy. The ocean's asset value is estimated at more than USD 24 trillion[11] and its annual economic value, referred to as Gross Marine Product (GMP), at USD 2.5 trillion. Ocean-related activities accounting to that figure are classified into five primary categories, presented in the following table. All activities related to the extraction of oil and gas have been excluded to not inflate the true value of the ocean, as they would still be accessible with or without the ocean. The following table shows that more than two-thirds of the GMP depends on healthy oceans and hence intact biodiversity (see last column). However, economic assessments do not yet fully account for the numerous intangible, non-economic benefits (see last row) that influence human well-being, traditions, cultures, faith and recreation for millions of people (FAO 2014; Hoegh-Guldberg et al. 2013, 2015).

[10] Fisheries, harvesting algae, mangroves, reefs and seagrass, tidal and wave energy

[11] Excluding offshore oil and gas and wind energy, as they are not produced by the ocean per se

**Table 4: Economic valuation of the ocean** (Hoegh-Guldberg et al. 2015)

| Category | Activities | Total value (billion) | Affected by ocean health |
|---|---|---|---|
| Direct output of the ocean (activities related to the contents of the ocean) | Fishing/seafood related activities<br>Marine renewable energy (wave and tidal) | USD 400-420 | Yes |
| Services enabled by the ocean (activities occurring in/on the ocean) | Education and training<br>Research & development<br>Ocean surveying<br>Cruise industry, marine tourism<br>Security & control | USD 365-400 | Yes |
| Trade & Transport within the ocean (all activities related to shipping and transportation of goods) | Shipping & transport<br>Ports & marine equipment<br>Marine services<br>Marine IT & underwater technology<br>All activities related to ship/boat building | USD 700-750 | No |
| Adjacent benefits of the ocean (quantifiable benefits enabled by the ocean) | Direct impact of coastal tourism<br>Carbon sequestration<br>Marine biotechnology | USD 890-1,000 | Yes |
| Other intangible benefits of the ocean (all indefinable activities attributed to the presence of the ocean) | Security (coastal protection)<br>Spiritual & cultural benefits<br>Climate change benefits<br>Overall utility | | Yes |

## 4.2 Pro-poor development

Coastal developing countries draw their marine-related economic benefit especially from fisheries and other non-food extractive uses of coastal marine resources. The following paragraphs include some key figures highlighting specifically the importance of fisheries and marine-based tourism activities for pro-poor development of coastal developing countries. However, attention must be given to the way coastal ecosystem services are distributed and used. Poor people dependent on ecosystem services of marine and coastal resources live in a wide diversity of marine environments, mostly remote from social services and markets for their products, but not from local resource degradation and global environmental change and the depredations of the global fishing fleets. They also may be alienated from beaches and reefs they fish due to tourism development. What the poor have in common is their high level of direct dependency on ecosystem services (Brown et

al. 2008; Pedersen et al. 2014). This chapter will focus on various marine-related economic sectors and highlight advantages and challenges for pro-poor development.

### 4.2.1 Fisheries, aquaculture and livelihoods

Oceans, respectively fisheries, traditionally provide the global population with food, as fish and shellfish are an important source for animal protein, vitamins, minerals and fatty acids. Aquaculture is a rising sector, especially since recent years and provides today almost half of fish products consumed by humans. It is estimated that fisheries and aquaculture assure the livelihoods of 10-12% of the world's population and are therefore a vital source of food security and livelihoods, particularly for many of the world's poor coastal communities. More than 90% of the world's population who derive their livelihoods from fisheries and aquaculture lives in developing countries. Around 3 billion people worldwide obtain almost 20% of their animal protein intake from fish out of which 1 billion people live in developing countries and depend on fish as their primary source of animal protein (see figure 13). This share can exceed 50% in some countries, especially West Africa and Asia as well as in most small island states. The need to feed a growing global population and to address a growing demand for fish puts pressure on natural resources and challenges the sustainability of marine fisheries and of aquaculture development. It also raises several issues relating to the management of the fish value chains to realize the right to food of fishing communities and to make fish available for all and questions the roles and contributions of the various actors (fishing communities, smallholders and international fishing companies etc.) as well as the demand for fish (Bollmann et al. 2013; FAO 2014; HLPE 2014; WBGU 2013).

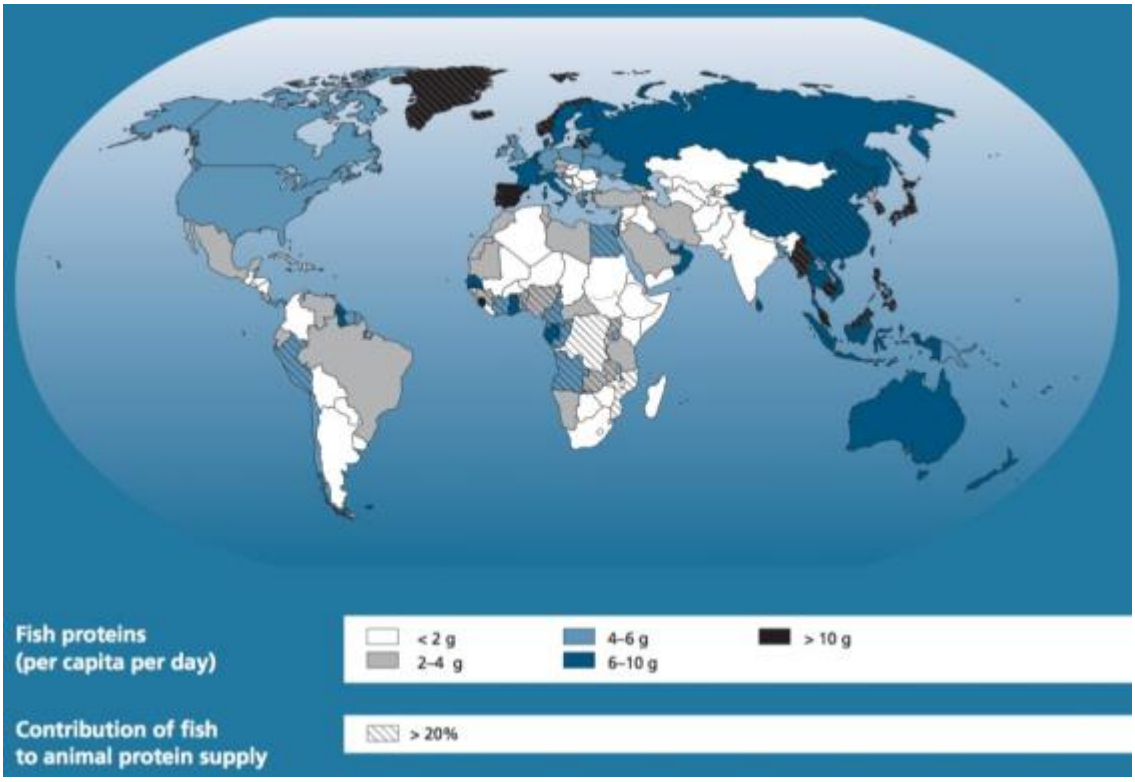



**Figure 13: Contribution of fish to animal protein supply (av. 2008-2011) (FAO 2014)**

#### 4.2.1.1 The importance of small-scale fisheries[12] versus large-scale fishing operations

Globally, fish remains among the most internationally traded food commodities with an annual trade value of EUR 91 billion. For developing countries fishery trade is especially important, in some cases accounting for more than half of the total value of traded commodities with an annual value of EUR 22 billion. The primary sector of fisheries (small and large-scale) and aquaculture[13] employs around 60 million people[14]. Women account for more than 15% of all people directly engaged in the fisheries primary sector and for up to 90% in secondary activities (e.g. processing) (FAO 2014; HLPE 2014).

However, the economic importance of small-scale fisheries is often underestimated in contrast to large-scale industrial fisheries, as they are spatially dispersed and therefore poorly documented and under-reported (especially subsistence fishing). Nevertheless, especially for South and Southeast Asia, Pacific Small Island Development States (PSIDS), the WIO and West Africa small-scale fisheries are an important contributor to poverty alleviation, food and nutrition security and economic growth small-scale fisheries generate income, provide food for local, national and international markets and make important contributions to nutrition. A study from 23 African countries (de Graaf and Garibaldi 2014) estimated the contribution of the fisheries sector to national and agriculture GDPs at more than USD 24 billion, 1.26% of the GDP of all African countries (see figure below). Figure 14 highlights the importance of small-scale (artisanal) fisheries for West Africa and Southern East Africa through their significant contribution (gross value added, GVA) to the countries' GDP (see blue shaded piece of pies) (FAO 2012; de Graaf and Garibaldi 2014; HLPE 2014; Hoegh-Guldberg et al. 2015).

[12] Also called artisanal fisheries; the report refers to marine small-scale or artisanal fisheries, inland fisheries are not included in the following figures.

[13] The report refers to coastal aquaculture or mariculture. inland aquaculture is not especially referred to.

[14] Of which around 84% were in Asia, followed by Africa (more than 10%).

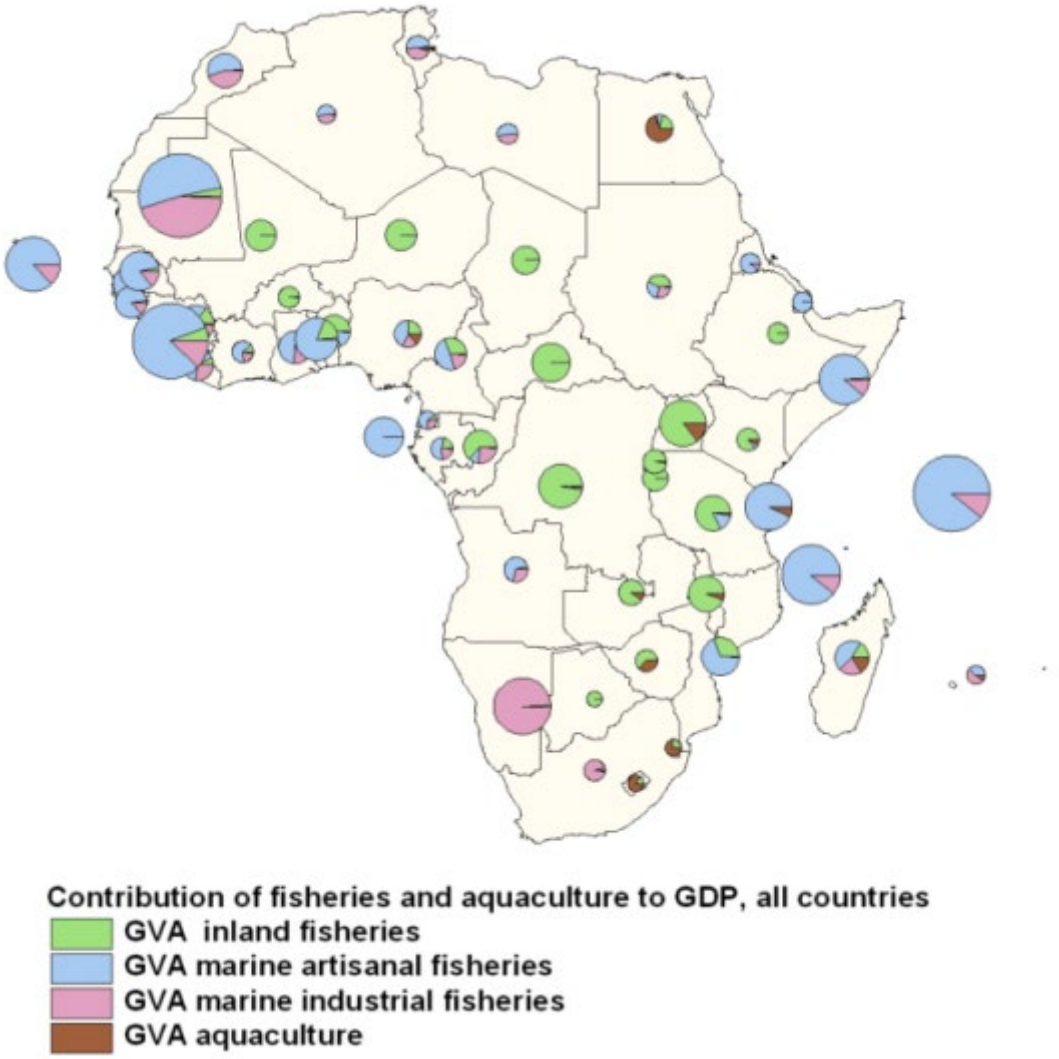



**Figure 14: Contribution to GDP by subsector (size of pie indicates total contribution to GDP) (de Graaf and Garibaldi 2014)**

Globally, small-scale fisheries account for more than 30 million tons of fish for human consumption. As small-scale fishery is especially encountered in developing countries it is very important for food and nutrient security as well as poverty alleviation in these countries. It is estimated that globally around 52 million jobs within the global fishery sector is dependent on small-scale fisheries (90% of the world's capture fishers and fish workers, about half of which are women) with regard to the whole value chain (small-scale fishers are estimated at 12-14 million worldwide), which plays an important role towards poverty reduction. In addition, seasonal or occasional fishing and related activities often provide vital supplements to other livelihood activities. There are also additional benefits of small-scale fisheries in comparison to large scale fisheries that positively contribute to marine conservation, as for example much less annual fuel oil consumption and very little discard of fish and other sea life due to very little bycatch (see figure 15) (FAO 2012; Jacquet and Pauly 2008; The World Bank 2010; WBGU 2013).

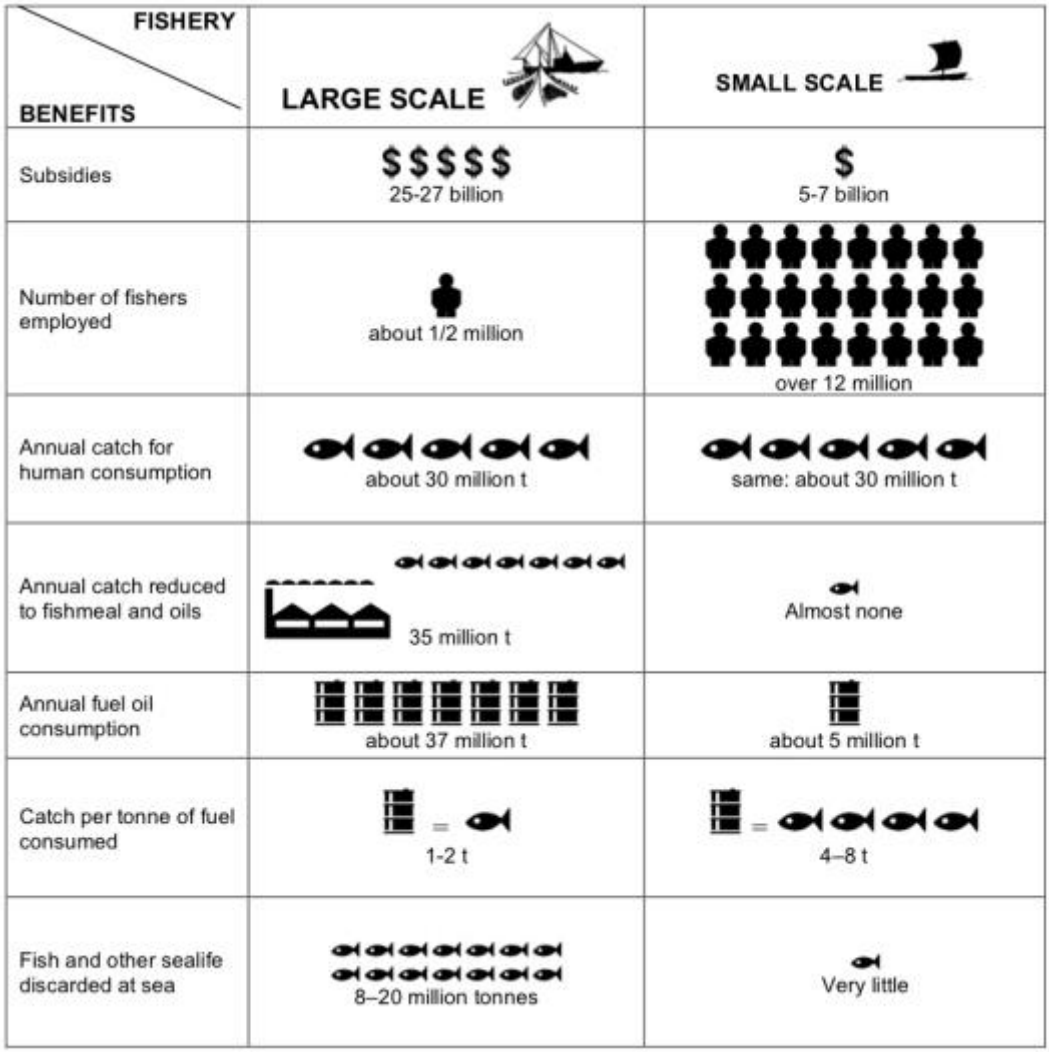



**Figure 15: Comparisons between large-scale (industrial) and small-scale (artisanal) fisheries (Jacquet and Pauly 2008)**

#### 4.2.1.2 Challenges of fisheries

Although aquaculture production becomes increasingly important in the global production of fish, global fisheries are at a critical point: Around 90% of the global fish stocks are said to be fully fished and even overexploited. This threatens the livelihoods of many people, in particular living in developing countries and the demand is ever rising due to global population growth. As the global fish stocks are already fully fished or overfished[15], it is necessary that at least around two-thirds of global fish stocks urgently need to recover. The major problems threatening fishery resources are illegal fishing and poaching, destructive fishing methods, solid waste, poor waste management and pollution (Bollmann et al. 2013; FAO 2014; UNEP 2012; WBGU 2013).

[15] According to their Maximum Sustainable Yield (MSY)) there is only around 10% of the global fish stocks left that could stand increased catching yield

Concerning unsustainable capture, small and large-scale fisheries do both heavily contribute to depletion of fish stocks. Besides the use of non-selective fishing gear, overfishing and destructive fishing methods which cause bycatch or destruction of spawning grounds, weak governance regulations in terms of reporting and monitoring pose a problem with regard to unregulated and unreported fishing. This highlights the importance to improve data collection, reporting as well as monitoring practices. Figure 16 shows very obviously that management effectiveness of EEZs, where the majority of fishery occurs, lacks even in industrialized countries, becoming more explicit in developing countries. Management effectiveness includes factors such as scientific robustness, policymaking transparency, implementation capability, fishing capacity, subsidies and access to foreign fishing. Hence, the biggest problems with overfishing are by far the lack of effective fisheries management as well as lack of data on fish stocks and lack of scientific capacity and governance to ensure adequate monitoring as well as to enforce regulatory frameworks (FAO 2014; Finegold 2010; Mora et al. 2009).

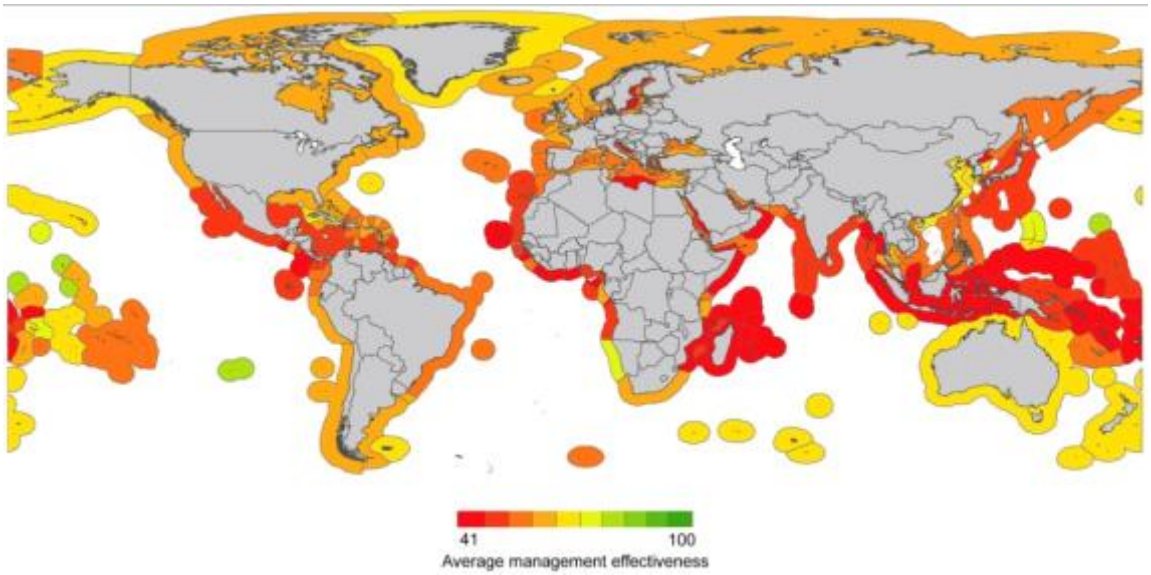



**Figure 16: Overall management effectiveness of the world's EEZs (Mora et al. 2009)**

#### 4.2.1.3 Opportunities and challenges of marine aquaculture

Fisheries and aquaculture are characterized by mutual interactions, as marine aquaculture of some species depends on fishery resources for feed and aquaculture is regarded as important supplement for capture production for facilitating recovery of wild stocks as well as to meet increased global demand for fish. Marine aquaculture has increased tremendously in the last 20 years making it one the fastest growing food production sectors, especially in Asia, and it is expected to continue growing. Excluding Asia[16], capture fisheries account for approximately 75 million tons per year whereas aquaculture produces

[16] Asia is the largest aquaculture producer and is therefore left out to not distort the figures.

approximately 30 million tons of food fish[17] per year (see figure 17) (FAO 2014; The World Bank 2010; WBGU 2013).

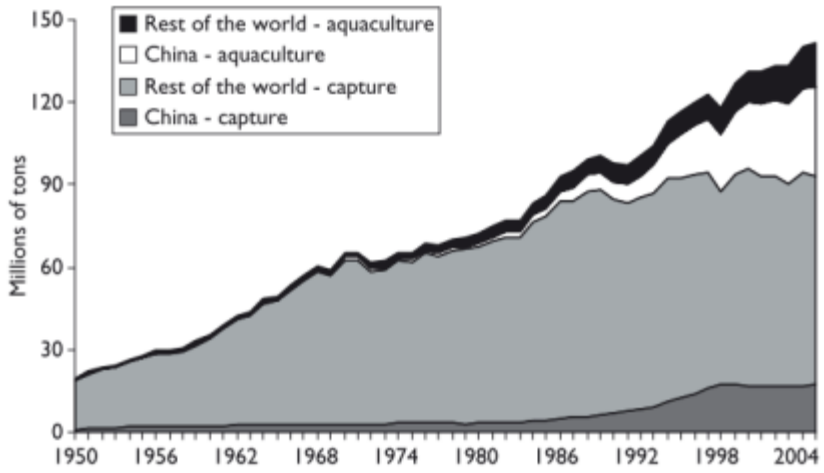



**Figure 17: World capture fisheries and aquaculture production (The World Bank 2010)**

Especially in developing countries aquaculture significantly contributes to food security and poverty reduction e.g. by consumption itself and job opportunities. With this, aquaculture has an important potential for economic diversification. This includes both, direct employment in production (feed and harvest) as well as job opportunities in supply, processing and marketing activities. This also provides business opportunities for women and in this way contributes to their empowerment. At the same time, responsible aquaculture can generate important environmental benefits, such as recovery of depleted wild stocks through supplementing capture production (Bollmann et al. 2013; Finegold 2010; HLPE 2014; UNEP 2012; WBGU 2013).

Apart from the fact that aquaculture is expected to support the recovery of wild stocks through supplementing capture production and is likely to enhance food security there are rarely any ecological and/or socio-economic data available to verify these assumptions, expect that aquaculture evidently contributes to employment, hence lower than fisheries, but is expected to continue to increase in the next decades and will increasingly contribute to the increasing demand for global fish consumption (Finegold 2010; HLPE 2014; UNEP 2012).

Nevertheless, without proper management and responsible practices, aquaculture may have negative environmental, social and economic consequences that can jeopardize these valuable contributions to global well-being in the future. Some types of aquaculture cause socio-economic conflicts because of adverse impacts on the livelihoods of adjacent communities due to water pollution, increased frequency of flooding and the degradation or impediment of access to common natural resources such as mangroves, grazing land, fresh

[17] Fishes, crustaceans, mollusks, amphibians, freshwater turtles and other aquatic animals, such as sea cucumbers, sea urchins, sea squirts and edible jellyfish

water aquifers and fishing grounds (Bollmann et al. 2013; HLPE 2014; UNEP 2012; WBGU 2013).

There are several types of aquaculture production with different intensity levels. Extractive species that naturally use available carbon and nutrients, e.g. filter feeders like mussels, sea cucumbers, sea squirts, algae and some types of shrimps, prawns and fish species such as silverhead and bighead carps, are raised with extensive production, which generally operates at low technology levels. These species are produced in natural bodies of water, with little or no additional feed. Semi-intensive production does include mainly finfish production within natural bodies of water and locally sourced feed. Intensive high technology production is mainly operated in artificial pond systems or cages in coastal areas and the fish are fed with artificial feed, mostly in pelletized form, made of grain, fishmeal and fish oil. Especially the latter can pollute entire bays with uneaten feed, fertilizer and fish waste. Furthermore, cage culture in coastal areas competes for space with small-scale fisheries, often restricting their access to the fishery (Bollmann et al. 2013; Finegold 2010).

Feed is key in aquaculture production and development and the growth of carnivorous high-value fish aquaculture has an explicit impact on wild fisheries. The shares of fishmeal and fish oil that are utilized in aquaculture production are 60% and 81%. If the dependency on fishmeal and fish oil were reduced, important gains could be made with regard to profitability, as fishmeal and fish oil are expensive commodities. This will require innovations in technologies, including those that produce feed sources, e.g. marine microalgae and bacteria using sunlight and available carbon, management, e.g. increased use of fish waste for producing fishmeal and increased use of other feed sources and/or a greater reliance on extractive species as well as promoting herbivorous and omnivorous species to consumers (Bollmann et al. 2013; FAO 2014; UNEP 2012).

Especially for introducing aquaculture in developing countries it seems feasible to pilot aquaculture production of extractive species, as this does not require high technology or feed and therefore only moderate investments. Many food species, e.g. algae and sea cucumber, are sold dried, which is also of advantage as no cooling or freezing capacity is required for further processing these products. Furthermore, those species contribute to natural filtering processes of the ocean. In sight of the aim to conserve marine resources by introducing MPAs, aquaculture is another business opportunity to diversify income sources and therefore become less dependent from fisheries. This is especially important when the MPA zoning excludes areas from extractive uses and therefore restricts community access to marine resources.

#### 4.2.1.4 Market-based incentives and awareness raising

Economic incentives play an important role in changing behaviour. When consumers start to demand products from sustainable and fair fisheries and aquaculture production, this will constitute a strong incentive for producers and other stakeholders to pay more attention to responsible practices. This development has already started and certification and eco-labelling schemes can provide a powerful market incentive for fisheries to comply with sustainability requirements. While the evidence on the correlation of labels and good management practices is still limited to some fisheries, the impact of consumer preference

is becoming a driving force for improving fisheries management in many countries (UNEP 2012).

While some internationally recognized labels, such as the Marine Stewardship Council (MSC) (through its Developing World Fisheries Programme), have put forth great efforts to facilitate the certification requirements of certain small-scale fisheries, the relatively high cost of these schemes continues to be an impediment for many small-scale fisheries of developing countries. Still, the expected positive outcomes of eco-labelling, including increased profit margins, better conservation and a shift of consumer preference towards sustainable fisheries should not be ignored (Bollmann et al. 2013; FAO 2012; MSC 2014; UNEP 2012). Figure 18 impressively depicts how increased demand for certified seafood increased the supply around the world and shows hence their strong economic case.

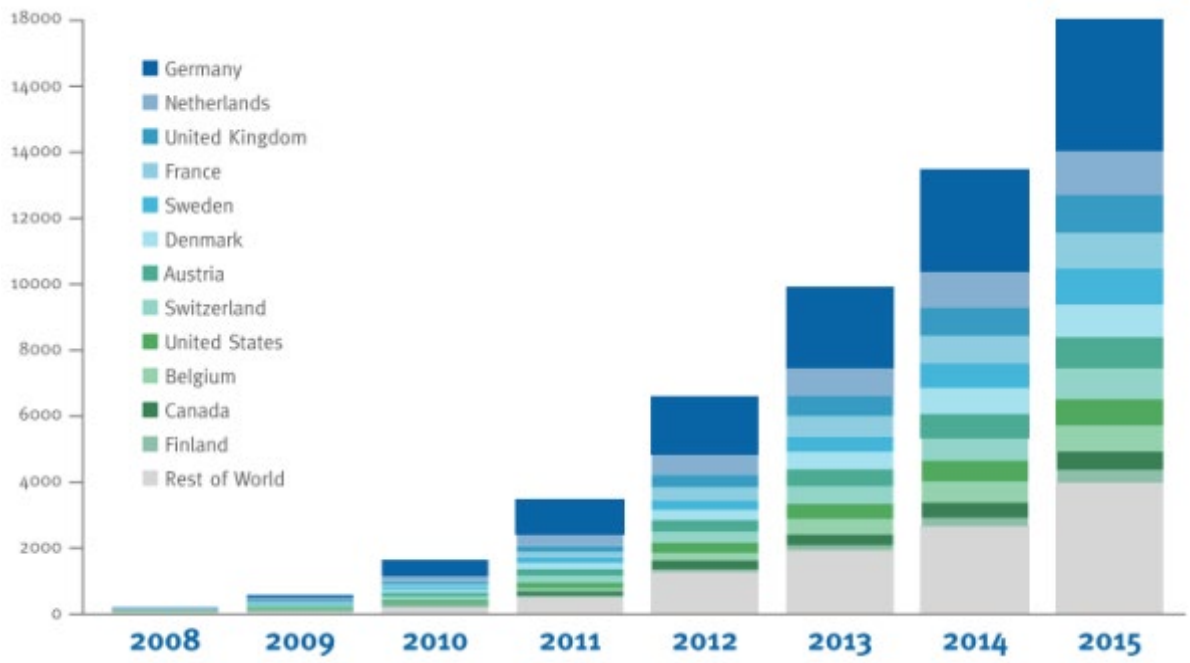



**Figure 18: Number of MSC eco-labelled products available around the world (MSC 2014)**

Awareness raising hence becomes an important component in the context of introducing economic incentives for sustainable growth. This is also related to the discussion above on increasing the recognition of the role and importance of small-scale fisheries and aquaculture for poverty alleviation and food and nutrition security and to ensure political commitment to the necessary reforms (HLPE 2014).

Payments for ecosystem services (PES) are another market-based measure that can promote sustainability. PES are voluntary transactions where a well-defined environmental service is purchased by a service buyer from a service provider, on condition that the provider ensures that the environmental service is maintained. The system attempts to specifically value the services that an ecosystem provides as well as the costs incurred by destruction of the ecosystem. With PES, households (or other ecosystem use decision makers) are paid to protect the resource, for example, payments to coastal communities to

preserve mangrove forests. The concept is being tested in other fields (e.g. oil extraction) and applications to fisheries and aquaculture could be tested (UNEP 2012).

### 4.2.2 Tourism

Tourism plays not yet a large role in developing countries in terms of alternative livelihoods, except for some PSIDS and the Maldives, which can be seen as an opportunity for other regions. For example, in the Caribbean and Latin America income from tourism is replacing fishery livelihoods for many communities and is recognized as viable alternative income source. Nevertheless, tourism is highly dependent on healthy marine ecosystems and therewith also income from tourism (Loper et al. 2008). Furthermore, the tourism industry is the largest sector supporting protected areas financially. Both foreign and domestic tourists make use of protected areas and these experiences can make tourists engage in conservation. Sustainable tourism has major potential to raise investments for conservation. The tourism industry also is the world's biggest service industry leading to increased job opportunities, which benefit local development and contribute to poverty reduction (UNEP 2012).

The tourism sector has a large economic case, which outlines the need for creating sustainable ecotourism that has low impact on marine environments. Ecotourism related to ecosystem-based marine recreational activities accounts for a total expenditure of tourists of around EUR 42.0 billion, of which EUR 35.0 billion is generated through recreational fishing, EUR 5 billion to diving and snorkelling and EUR 2.0 billion to whale watching. In total, these activities alone support around 1.0 billion jobs. To further provide these services, healthy marine environments are key assets for tourism (UNEP 2012).

A best practice example from the developed world is the Great Barrier Reef, which has by far the highest economic value as the world's largest continuous reef system. It has iconic status as a well-managed and valuable ecosystem. It is one of the world's most intact coral reef ecosystems globally and attracts a high number of tourists accounting for USD 5.7 billion each year in terms of direct and indirect economic activity and employs approximately 69,000 people (Hoegh-Guldberg et al. 2015). Nevertheless, the Great Barrier Reef is under serious threats from warming coastal waters, declining coastal water quality and mass coral bleaching, which have led to the loss of 50% of reef-building corals. These changes in addition to the threats of coastal industrialization emphasize the need for concerted and well-planned responses to the current problems faced by invaluable ecosystems such as the Great Barrier Reef. This highlights the economic potential of other regions possessing large reef systems, like for example the Mozambique Channel and South-East Asia/Indonesia, and also the need for adequate protection and sustainable eco-tourism development, as unsustainable tourism activities lead to severe damages of coastal resources, which in turn are the very resources on which coastal and marine tourism depends. Many regions have already starting to adopt ecotourism practices that seek to minimize negative impacts on key coastal resources (Hoegh-Guldberg et al. 2015; Walker and Moscardo 2014).

Nevertheless, there has also long been substantial criticism of what has been perceived as the negative impacts of tourism as a development strategy. There are many developing countries, and regions within them, which have only a limited opportunity to benefit from

tourism. Tourism has also been associated with substantial environmental change and degradation and negative impacts on traditions and cultures, while economic benefits may not be as great as expected because profits are paid by foreign investors, wages, especially to locals are relatively low and seasonal demand causes underemployment. The benefit of tourism to society is therefore highly complex and its contributions to poverty alleviation remain to be better supported within ecotourism planning and management (UNEP 2012; Walker and Moscardo 2014).

### 4.2.3 Transport, extraction of oil and gas and ocean mining

Besides fisheries, with fish being the most important living marine resource for the global population, oil production (crude oil, mineral oil) from deep-water zones is increasing, ocean mining for ores, manganese and cobalt is becoming more popular and transportation by the sea is the most significant industry for the global economy. All these industries put pressure on marine and coastal ecosystems as they can have significant negative impacts ecosystem health, especially through overexploitation and pollution (WBGU 2013).

The international shipping industry is essential to world trade. Ships accommodate more goods than any other mean of transport and trading routes through the open oceans are free of any tolls and fees that are generally payable for land-based transport. Nearly 95% of global long-distance freight with a value of around USD 4.5 billion alone in regular services of shipping companies is shipped by sea (Hoegh-Guldberg et al. 2015; UNEP 2014; WBGU 2013). Though, especially in terms of pollution, ship traffic is a serious harm for ocean health through the loss of oil, especially heavy fuel oil, polluted ballast water, noise pollution, as well as discharge of waste and wastewater from cruise ships. Also developments linked to transportation, e.g. the infrastructure for ports has increased in some regions, leaving its mark through dredging, oil spills, ship groundings and the dumping of dredge spoil (UNEP 2012; WBGU 2013). In many cases, these developments also involve exploration and extraction of oil and gas from below the seafloor. As society seeks fossil fuels from more challenging reserves and often deep-water areas, the risk of these types of accidents will only increase. In addition, seabed mining for the extraction of marine mineral resources in shallow coastal areas, on seamounts or in the deep ocean also represents potentially serious risks to important habitats and ecosystems (Hoegh-Guldberg et al. 2015).

Nevertheless, maritime transport has direct social impacts as it employs around 1.5 million seafarers, about two-thirds of whom reside in developing countries. Quite aside from the employment of seafarers, shipping also generates considerable opportunities ashore, be it within governmental departments (maritime administrations; port authorities etc.) or the private sector (shipping companies; ship, port and terminal operators; shipbuilding and ship repair yards etc.). These professions – too numerous to list – make important contributions to the world economy and to the economies of local communities. International shipping activity, therefore, has a significantly beneficial impact on the livelihoods of large numbers of people around the world (UNEP 2012).

## 4.3 Economic potential of sustainable ocean investment

The business sectors described in the previous chapter present the most important established industries that also contribute to pro-poor business development. Nevertheless, the ocean economy also hosts further emerging and new industries that have an economic case for sustainable ocean investments. Among those are marine-based renewable energy, technology and research and development, blue carbon, assimilation of nutrients and solid waste as well as deep seabed mining. However, due the continuous degrading of ocean ecosystems from human activities, the rush to new opportunities and their related risk of accelerating ocean degradation has led some to respond with calls to curtail, or even ban, new activities. But there may be an alternative path through the development of a sustainable, often referred to as “blue economy” (EIU 2015) or “green economy in a blue world” (UNEP 2012), where economic expansion in marine-related industries can take place in alignment with responsible and sustainable management of ocean ecosystems. Investment opportunities arise from the application of new technologies to sustainably harness the ocean as resource base. There are three opportunities for sustainable ocean investments (EIU 2015):

1. Investments in environmental, social and governance management: Awareness and increased exposure if companies to commercial, regulatory, ecosystem and reputational risks has led to increased consideration of investors of sound natural resource management for their ocean investments, which is both good for business and the environment and considers environmental, social and governance risks in the planning and executions of activities.
2. Investments where there is a strong economic business case as well as a side benefit to improving ocean health: Traditional industries require to adapt and mitigate the impact of their activities on and around the ocean, e.g. shipping fleets to meet sustainable standards according to the regulations from the International Maritime Organization and sustainable management of fisheries, recovery of wild fish stocks; emerging and new industries require research and development of sustainable technologies, e.g. sustainable aquaculture; dead seabed mining and marine renewable energy resources.
3. Investments that are explicitly focused on ocean health and ecosystems: New investment opportunities arise towards mitigation and adaption to climate change challenges; marine protection infrastructure and services; wastewater and ocean nutrient pollution management and ocean monitoring and surveillance. Furthermore, there are additional investment and financing mechanism around non-market assets and services, e.g. MPAs, special ecosystems such as mangroves, blue bonds etc.

Sustainable practices can improve the current and future economic, cultural and societal value of oceans and coasts and guarantee these values for the future. Sustainable ocean investments should aim to reduce the environmental footprint of economic activities on marine and coastal areas and improve the environmental, economic and social sustainability of traditional and emerging industries, which can foster job creation for our growing population. Investments to modify fisheries, tourism and maritime transport to

increased sustainability can mitigate their impact on the marine environment and contribute directly to the sustainability and productivity of other businesses and livelihoods which depend on healthy oceans and coasts leading to improved human well-being, sustainable jobs, lasting economic value and increased social equity (UNEP 2012).

# 5 MPAS – A TOOL TO COMBINE CONSERVATION AND SUSTAINABLE USE

The oceans still have capacity for resilience and through effective protection and spatial management of human use the current crisis can be reversed (McCauley et al. 2015). MPAs are seen as a key element for effective ocean protection and sustainable use (Gaines et al. 2010) but similar as on land MPAs could have the tendency to be located in remote areas unpromising to extractive activities and thus residual to commercial use (Devillers et al. 2015). Such a systematic bias in 'residual reserves' has to be avoided because it would mean that species and habitats most affected by extractive use continue to decline without effective protection.

Recent studies show that there is a strong economic case for protecting ocean assets through globally expanding MPAs (Brander et al. 2015). They are also considered to be an essential tool in the recovery and protection of our oceans and the fundamental ecological services they provide to humankind (Gell and Roberts 2003). Establishing or managing MPAs and sustainable artisanal fisheries has the largest potential of positive effects on human well-being of coastal communities (Fisher et al. 2015). However, currently only 3.4% of the ocean is protected on paper globally and only 24% of all protected areas are managed effectively (Thomas et al. 2014; Woodley, Bertzky, and Crawhall 2012).

MPAs should be regarded as one important tool to achieve ecosystem-based management in the oceans (Halpern, Lester, and McLeod 2010). They should ideally be complemented by other tools, such as marine spatial planning, which can especially help to address challenges faced by MPAs that are heavily impacted from their surroundings or where the mismatch between scales of wildlife habitat use and its protection is apparent (Agardy, di Sciara, and Christie 2011). The need for multisector planning increases as human demand for ocean space from fisheries, transport, mining, aquaculture and renewable energy increases and resolution of the arising conflicts needs to be ecosystem-based and including all relevant stakeholders (White, Halpern, and Kappel 2012).

## 5.1 International conservation targets – MPA expansion

Global concern regarding environmental degradation and human impacts on the ocean and coastal ecosystems has led to urgent calls to increase marine protection. A main focus in this endeavour has been the expansion of MPAs with the aim to preserve and recover remaining ecosystems and prevent further declines (O'Leary et al. 2016). The CBD currently commits governments to protect at least 10% of the ocean within ecologically representative MPA networks by 2020 (CBD 2010). Additionally, the recently adopted SDG 14 (Conserve and sustainably use the oceans, seas and marine resources) iterates the aim of 10% global MPA coverage (UN 2015).

Several scientific reviews of the evidence relating to how much of the ocean needs protection to effectively conserve biodiversity, preserve ecosystem services and ensure socio-economic priorities have consistently shown that even 10% is not enough and can only be seen as a first step in effective marine protection (O'Leary et al. 2016). In fact, the

World Parks Congress in 2014 called for at least 30% of each marine habitat to be included within highly protected MPAs (WPC 2014) and scientific evidence suggests a figure between 30-40% is needed to meet the multiple objectives of MPA networks (O'Leary et al. 2016). Simultaneously, improving management in the surrounding areas could however lower the target coverage and ease the performance burden for MPAs (O'Leary et al. 2016).

### 5.1.1 Current progress

Current estimates of global MPA coverage slightly vary according to which types of protected areas are included and the status of their designation. In early 2016 only 2.07% of the ocean was designated as protected area and only just over 1% can be considered as highly protected (no-take) (Marine Conservation Institute 2016). Including the currently proposed MPAs the figures increase to 5.7% coverage with 2.4% in no-take MPAs (Marine Conservation Institute 2016).

The current global MPA system does not yet cover representative examples of species and habitats found in coastal or pelagic waters (Juffe-Bignoli et al. 2014; Spalding et al. 2013). Only 34% of the marine ecoregions met the 10% MPA coverage target in 2014, and the marine realms of the Southern Ocean, Temperate South America, Western Indo Pacific and Temperate Southern Africa have especially low MPA coverage (Juffe-Bignoli et al. 2014).

Overall, the progress towards meeting international protection targets has been slow but in the last decade the protection of about 15 very large areas (>100,000 km²) strongly influenced the growth of MPAs (Boonzaier and Pauly 2015; Marine Conservation Institute 2016). However, with current growth rates sustained beyond 2020 the target of 10% global ocean protection will probably only be met in 2035 (Boonzaier and Pauly 2015). The utility of global percentage targets to influence conservation outcomes has been questioned, however, protected area extent as a simple metric is useful to encourage conservation action and generate political will (Boonzaier and Pauly 2015; O'Leary et al. 2016).

The mean size of MPAs has strongly increased in the last years to ~2,000 km², but half of the world's MPAs is still smaller than 4.5 km² and thus much smaller than the home range of many marine animals (McCauley et al. 2015). The increase in mean size is largely attributable to a few very large MPAs designated and proposed in recent years (Boonzaier and Pauly 2015). Currently there are about 20 MPAs worldwide larger than 100,000 km², and most of these have been designated in the last decade (Marine Conservation Institute 2016). Despite this trend, there still seems to be a disconnect between scales of wildlife use and scales of human management in the oceans (McCauley et al. 2015).

A variety of different MPA networks exist and are being established with different management aims – from conservation to social MPA networks emerging (Grorud-Colvert et al. 2014; UNEP-WCMC 2008). The most well-known MPA network is probably Australia's Great Barrier Reef Marine Park that consists of a number of interconnected MPAs. Also the Kimbe Bay MPA network in Papua New Guinea is often mentioned and regional network initiatives exist all over the world (UNEP-WCMC 2008).

## 5.2 The effects of MPAs on organisms and ecosystems

There is substantial and growing evidence of the positive effects of MPAs on populations of individual organisms and ecosystems. Through the establishment of MPAs anthropogenic pressures are reduced, which has a positive impact at every trophic level, from sea mammals and sharks to corals and kelp. In the case of species at higher trophic levels, marine mega fauna, conditions become more favourable for their survival by directly decreasing hazardous activities that take place and indirectly because prey populations become more abundant. In some cases, especially in MPAs over 10 years of age, fish abundance has been shown to be 14 times higher within an MPA (Brander et al. 2015; Sumaila et al. 2000).

MPAs can contribute to marine mega fauna protection by protecting sites where mega fauna species are the most vulnerable, e.g. spawning and nursery areas. However, conservation efforts are lost once the protected species migrates through waters that are subject to sources of anthropogenic stressors. Therefore, it is necessary to also address those stressors to reduce by-catch as well as noise pollution (Brander et al. 2015; Hooker and Gerber 2004).

At lower trophic levels (e.g. corals, seagrass) major stressors are overfishing, destructive fishing, siltation and pollution. With the establishment of MPAs coral cover increases in relation to non-protected areas as well as resilience as the ecosystems become more diverse because functional groups such as herbivores and predators become more abundant and reduce the mass of microalgae blooms that occur in unprotected areas. MPAs also recover faster from natural weather events, such as floods. Primary producers such as kelp, mangroves and seagrass can also be positively influenced by MPAs. They are especially important for ecosystem functioning as they control sedimentation and filter sediment runoff, which benefits e.g. coral reefs, and provide diverse habitats and nursery area for fish and invertebrates, which benefits their reproduction potential. MPAs therefore play an important role in preventing the decline of fish and invertebrate populations. A direct benefit is the reduction of fishing effort, but there are also indirect pathways by which fish and invertebrates can benefit from a MPA, e.g. the complete removal of fishing activities within a MPA helps to restore benthic community structures. Especially for the benthos it is important to create permanent reserves, as some species are slow growing and long-lived. Fish and invertebrates benefit through survival rates of juvenile fish, which use benthic structures as refuge (Brander et al. 2015; Edgar et al. 2014; Gell and Roberts 2003).

## 5.3 Good practice in MPA design

Today, the majority of MPAs are relatively small not placing the MPA in their wider context of linkage between land and adjoining sea as well as with high seas and migratory routes of marine megafauna. One key lesson learned is that MPAs will rarely succeed unless they are so large that they establish an integrated ecosystem management regime or are embedded in an integrated ecosystem management regime (Kelleher 1999, 2015).

The optimal approach may differ depending on the primary objective. If the primary aim is conservation of a particular species or ecosystem, a large no-take zone may be the best option, but if the main aim is sustainable management, a network of smaller sanctuaries may maximize recruitment of fish into surrounding areas. The latter accounts for MPA networks. However, a network of small areas can only achieve conservation goals if it is possible, in cooperation with other sectors, to address all key threats to the marine ecosystem. In practice, the necessary integration of management is often challenging. Thus, while small MPAs can be a useful start towards a more integrated system, on their own they may prove as inadequate response to conservation needs (Kelleher 2015). However, if the approach of a network of small MPAs is chosen, it has proven successful to establish them based on community involvement that is supported by legislation. In fact, many case study demonstrate that it is crucially important to involve local communities to ensure a successful MPA (Kelleher 1999, 2015).

### 5.3.1 Key success factors

The main priority for a MPA is conservation of biodiversity and at least part of it should restrict human extraction in a no-take zone (Costello and Ballantine 2015). The central benefit of MPAs is fish larvae and adult spillover to surrounding areas, generated by increasing fish biomass, reproduction and density within the MPA due to protection (Harrison et al. 2012; Lester et al. 2009). Delivery of spillover effects and simultaneous conservation outcomes in MPAs strongly depend on five key features: (1) degree of protection & (2) enforcement, (3) age, (4) size and (5) isolation (cf. figure 19). In their global study at nearly 90 different sites, Edgar *et al.* (2014) showed that MPAs with four or five key features (no-take area included, well enforced, age >10 years, size >100 km², isolated) had 210% or 350% more fish biomass respectively. Among these five key factors, isolation was the most influential one (Edgar et al. 2014; Rudd 2015) distinguishing between MPAs that protect a complete reef structure surrounded by deeper water or sand and MPAs where only a smaller part of the reef is protected and other parts are fished. Apart from design principles, compliance with regulations and enforcement is critical for the success (both spillover and conservation) of MPAs (Bergseth, Russ, and Cinner 2015).

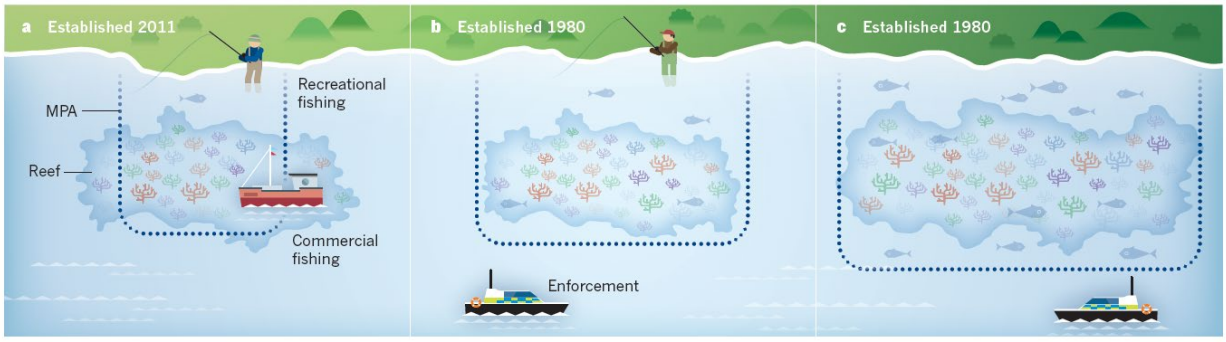



**Figure 19: Increasing MPA benefits with accumulation of five key features (a-c) (Halpern 2014)**

### 5.3.2 Management

Key success factors for MPA management are clear goals and local support through partnerships between stakeholders. Management needs financial sustainability and should not restrict more than necessary. Also, MPAs need a protocol for conflict resolution and self-enforcement should be practiced as much as possible. Important aspects of management, such as legal framework, governance, resources, monitoring, regulations, zoning and enforcement, should be formalized in a management plan that is regularly reviewed (Kelleher 1999).

Common protection measures by managing human activities are (Kelleher 1999):

- Defining/marking area boundaries
- Enforcing regulations (patrolling, establishing local “ownership”)
- Regulating fisheries by e.g. size limits
- Prohibiting destructive practices
- Issuing permits to control the number of users
- Limiting access by setting annual quotas/carrying capacity

The management system established for a MPA should be designed in a way that it can be adapted to changing biophysical (e.g. climate change) and human (e.g. population growth, economic development) circumstances (Orbach and Karrer 2010). This principle is known as adaptive management (cf. figure 20), where ongoing monitoring and evaluation follow after the planning and implementation stages. This contributes to an improved understanding, which is needed for adapting the existing management system.

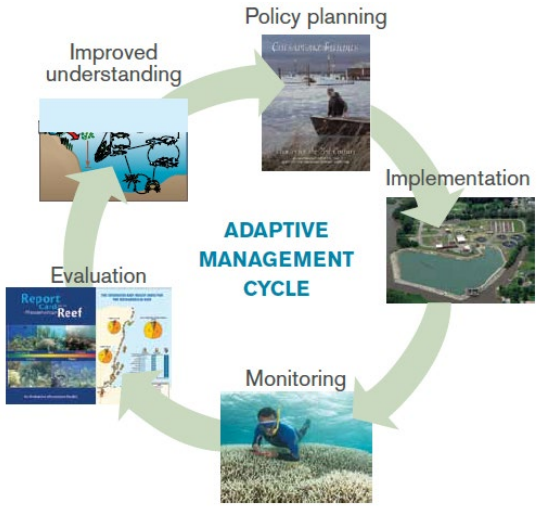



**Figure 20: The adaptive management cycle (Orbach and Karrer 2010)**

Management has to be carried out at a scale comparable to natural processes, therefore the ecosystem approach is vital to effective management of MPAs. Where ecosystems are large and connected beyond human borders a transboundary management is necessary to effectively protect and monitor marine ecosystems. A practical example for such a case is the trilateral management approach in the Wadden Sea, where a unique and vulnerable coastal ecosystem stretching from the Netherlands through Germany into Denmark is jointly

monitored and managed for over 30 years. Based on the understanding of shared responsibility for the ecosystem, the three countries establishes a governing board, supported for implementation through a common secretariat (http://www.waddensea-secretariat.org/). On regular conferences with political representatives from each country, also involving local stakeholders, decision-making and policy harmonization takes place. The individual administrations managing the coastal zone in each country can cooperate through this process to contribute towards protection of the whole Wadden Sea ecosystem.

### 5.3.3 Zoning

The term MPA is generally used for areas with differing protection status, design and management. Sites, which are fully protected and closed to all forms of extraction, are commonly referred to as 'no-take' MPAs (interchangeable with the term 'marine reserves'). Provided that biodiversity conservation is the primary goal, MPAs or parts of them can be subject to sustainable use (UNEP-WCMC 2008). The strength of protection in a MPA is defined in six categories ranging from I 'Strict Nature Reserve' to VI 'Protected area with sustainable use of natural resources' (www.iucn.org/pa_categories). Another important form of small, community-based approach is commonly referred to as 'locally managed marine area' (LMMA), managed mainly for sustainable use under local governance (Rocliffe et al. 2014; Toropova et al. 2010). These LMMAs are not always recognized as MPAs by national agencies and suffer from underdeveloped legal structures and enforcement mechanisms (Rocliffe et al. 2014).

No-take zones, where all extractive activities are prohibited, protect fish and other marine wildlife to support populations in other zones. Fishing and aquaculture are not permitted. Spawning aggregations and nursery grounds of marine species are often established as no-take areas. Certain non-extractive activities like diving or mooring can be allowed. Buffer zones are intended as transition between highly protected and multiple-use areas and commonly allow artisanal hook-and-line fisheries or limited aquaculture. Limited tourism activities are also allowed. In multiple-use zones all tourism activities, all fishing types from small-scale to commercial fishing and aquaculture can be permitted (cf. figure 21; (Orbach and Karrer 2010)).

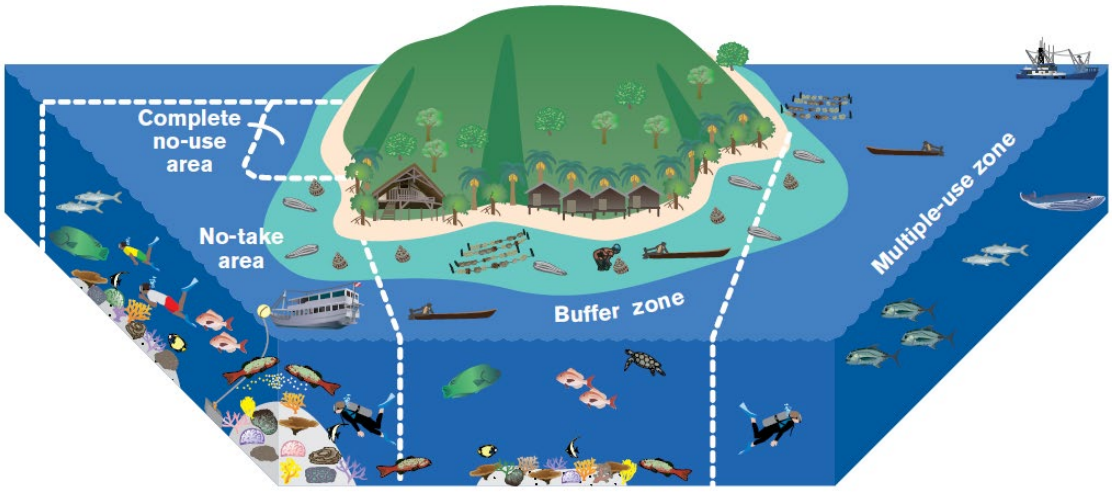



**Figure 21: MPA zoning approaches (Orbach and Karrer 2010)**

Selection of the optimal configuration of MPA zoning can be aided by spatial planning tools such as Marxan (Klein et al. 2010). Given adequate input data these tools use numerical optimization to select the best possible zonation to minimize conflict between different uses (e.g. fisheries, tourism) and biodiversity values (Grantham et al. 2013; Klein et al. 2010). In general, zoning should provide a balance between conservation and use and should be as simple as possible (IUCN 2004). Marking MPA boundaries and different zones clearly is essential but often difficult to achieve in deep waters or strong currents. Where possible, natural features, such as reefs, should be used for boundary definition aided by marker buoys. Appropriate signage of MPA zones on land is also important, as is the designation of MPA boundaries in regional shipping and marine use maps.

#### 5.3.4 No-take zones

It is generally anticipated that MPA establishment helps to both secure and increase fishing yields by protecting a portion of the population from the threat of extraction. The classic case of MPA spillover is seen with increased fish density, biomass, size and reproduction within no-take zones, leading to export of larvae and adult fish to neighbouring areas where they can be harvested. Therefore, MPA as a management area in which usage is regulated by zoning for different activities, including marine reserves, which are strictly no-take areas can be seen as a mitigating tool against overfishing and its negative impacts on marine ecosystems[18].

The logic behind this idea is that populations within a MPA recover and therefore grow in number, age and size. This will lead to density-dependent spillover into unprotected areas around the MPA and therefore lead to an increased number, average size, overall catch by weight and catch per unit effort of fish caught and therefore increased financial value.

However, the potential ecological and socio-economic impacts of no-take MPA designation (cf. figure 22) have to be fully evaluated with all relevant stakeholders. As mentioned above, designation of highly protected MPAs is commonly associated with the positive impact chains of creating spillover for adjacent small-scale fisheries and generating income through possibilities for ecotourism and marine wildlife watching. However, it could also be related to the negative impact chains of jeopardising local food security and creating tourism-conservation conflict (Bennett and Dearden 2014; Brander et al. 2015; Gurney et al. 2015).

[18] The alteration of predator-prey relationship, i.e. the decline of forage fish (biomass, distribution, encounter rate), has a negative impact on survival of marine mammals and breeding success of seabirds; The reduction of seabed complexity and removal of macro-benthic organisms through trawls and dredges modify or destroy habitat, which can lead to a complete change of overall community structure.

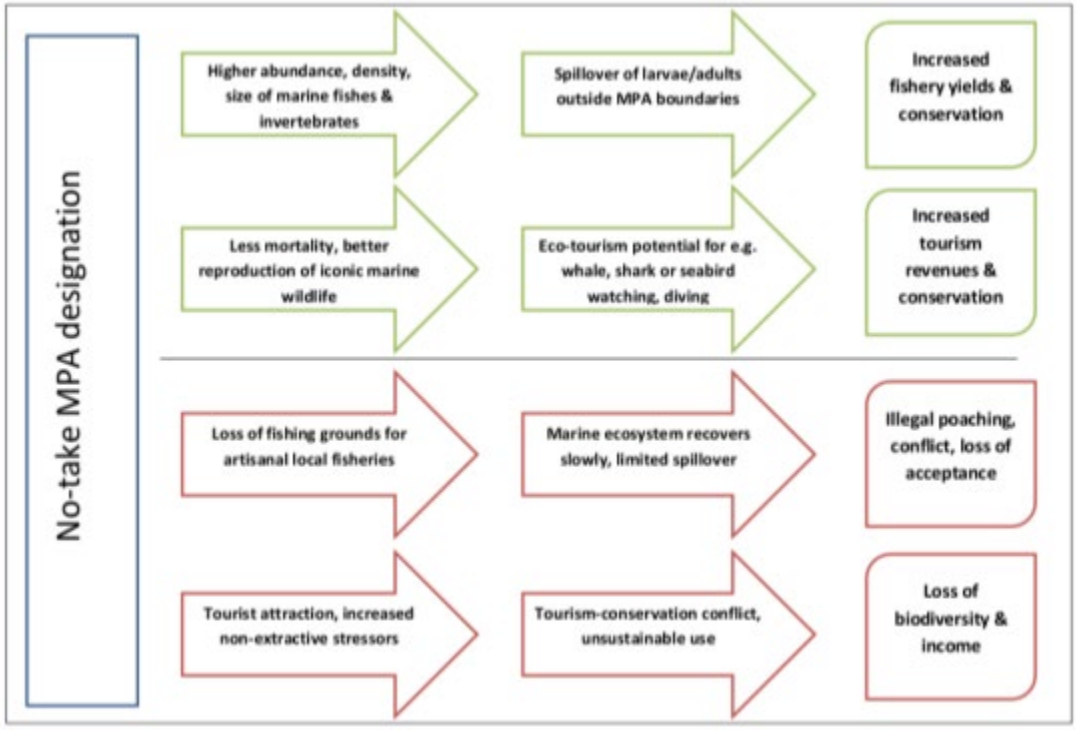



**Figure 22: Potential positive (green) and negative (red) impact chains following no-take MPA designation**

Nevertheless, there is evidence that no-take zones within MPAs have a positive effect of fish size, density, biomass and species richness inside the MPA (cf. table 5). However, there is a lack of consensus in the available evidence regarding the relationship between spillover and measurable changes in fishing yield.

**Table 5: Effects of spillover on fishery adjacent to reserve for target species (F = total fishing effort) (Halpern, Lester, and Kellner 2009)**

| *Reserve* | *Taxonomic group* | *Effect of spillover on fishery adjacent to reserve* | *Reduction in $\bar{F}$ for sustainability* | *Reference* |
|---|---|---|---|---|
| Torre Guaceto | *Diplodus* spp. | Fishery unsustainable without reserve | >50% | (Guidetti 2007) |
| Apo | Sedentary target spp. | Catch lower with reserve; 24% compensation | none | (Abesamis *et al.* 2006*a*) |
| Watamu | *Siganus sutor* | Fishery unsustainable without reserve | >75% | (Kaunda-Arara & Rose 2004) |
| | *Lethrinus miniatus* | Fishery unsustainable without reserve | >75% | |
| Malindi | *Lethrinus mahsena* | Fishery unsustainable without reserve | >75% | (Kaunda-Arara & Rose 2004) |
| | *Siganus sutor* | Fishery unsustainable without reserve | >25% | |
| Barbados | all target spp. | Catch higher with reserve; 135% compensation | none | (Rakitin & Kramer 1996) |
| Columbretes Islands | *Palinurus elephas* | Fishery unsustainable without reserve | >75% | (Goni *et al.* 2006) |
| Apo | *Nase vlamingii* | Fishery unsustainable without reserve | <25% | (Abesamis & Russ 2005) |
| Apo | Acanthuridae & Carangidae | Fishery unsustainable without reserve | >25% | (Russ *et al.* 2004) |
| South El Ghargana | Lethrinidae | Fishery unsustainable without reserve | >75% | (Ashworth & Ormond 2005) |
| | Serranidae | Fishery unsustainable without reserve | >25% | |
| | Scaridae | Fishery unsustainable without reserve | >75% | |
| Catalina MLR | *Semicossyphus pulcher* | Fishery unsustainable without reserve | >75% | (Kellner *et al.* 2007) |

The occurrence of spillover and its detection depend on a number of context related features of a given MPA. Spillover is predicted to increase with the size of no-take management zones within MPA. No-take effects may also increase with increasing reserve size and is also expected to increase with greater years of protection (Brander et al. 2015). Spillover distances may differ by species mobility, as high mobile species will naturally migrate into areas farther away from the MPA, whereas less mobile species remain near the MPA. It is also indicated, but not yet evidently proven, that larval dispersal from MPAs occurs over much larger areas due to the fact that they are carried by ocean currents (Brander et al. 2015; Sale et al. 2005).

### 5.3.5 Criteria for choosing sites

Selection of sites for conservation in the ocean should generally be driven by both ecological and socio-economic criteria. Due to the dynamic nature of the marine environment with wind and tide driven mixing of water masses and transport of sediments, nutrients, pollutants and organisms by currents over long distances, circumstances outside the area to be protected are critical to be considered as well. Clear objectives for the MPA to be established need to be defined beforehand. Important criteria are (Kelleher 1999):

**Table 6: Criteria for selecting MPAs (Kelleher 1999)**

| | |
|---|---|
| Ecological criteria | • Habitat diversity, presence of rare/endangered species<br>• Nursery/spawning areas<br>• Feeding/breeding/resting areas<br>• Integrity (self-reliance, completeness)<br>• Connectivity (e.g. larval transport)<br>• Naturalness (degree of human impact)<br>• Replication (multiple representation of all habitats) |
| Economic importance | • Existing/potential economic contribution due to protection (e.g. recreation, subsistence, biomass production) |
| Social importance | • Existing/potential value to local/national/international communities due to cultural, educational, recreational qualities |
| Scientific importance | • Value for research and monitoring |
| International/national significance | • Existence/potential of national/international recognition, designation, listing |
| Practicality | • Degree of isolation from external influences<br>• Social/political acceptability, community support<br>• Accessibility for education, tourism, recreation<br>• Compatibility with existing uses/management |

### 5.3.6 Monitoring and indicators

To assess the management effectiveness for biodiversity conservation in a MPA it is necessary to measure biophysical conditions with selected indicators and compare these to the MPA goals. This evaluation has to be carried out regularly in a monitoring process. The selected indicators have to match the MPA goals, which are commonly the protection of habitats, individual species or biological diversity but can also include sustainable resource use or restoration of degraded areas. Examples for biophysical indicators are: Focal species abundance and population structure, habitat distribution and complexity, recruitment success, biological community structure, type and level of fishing effort, water quality, area with no or reduced human impact, area showing signs of recovery (Pomeroy, Parks, and Watson 2004).

Understanding and communicating the overall value of the MPA to the community is needed for local support. Assessment of socio-economic indicators is therefore often necessary as well. Similarly, socio-economic indicators have to be compared to the respective MPA goals, which can for instance be food security, livelihood opportunities, equitable monetary and non-monetary benefits or environmental awareness. Some examples of socio-economic indicators are: Perceptions of local resource harvest and non-use value, level of understanding of human impact, local values and beliefs about marine resources, local patterns of resource use, quality of human health, household income or community infrastructure and business (Pomeroy, Parks, and Watson 2004).

### 5.3.7 Infrastructure & equipment

The local infrastructure is critical for managing and enforcing a MPA. The local partner in charge of governance and enforcement needs a strong network with sufficient staff and funds, irrespective of it being an administration, NGO or the local community. For measuring MPA performance, a variety of equipment is needed. Trained staff and/or volunteers are necessary to conduct the evaluation, management, monitoring and public relations. For example, for monitoring of biodiversity and biophysical indicators equipment such as SCUBA gear, GPS devices, transportation (boat, truck, fuel) and safety equipment is commonly needed. Survey tools such as binoculars, digital cameras and potentially advanced tagging or telemetry equipment are also important. For analysing and reporting on performance and management success, technical equipment such as computers and GIS software or even remote sensing products can be needed (Pomeroy, Parks, and Watson 2004).

### 5.3.8 Flagship species

To foster interest and generate funding, large and iconic species, often termed flagships, are an important tool in conservation (Veríssimo et al. 2014). In the oceans this is often applied to marine megafauna. These species are at the top of marine food-webs and serve as indicators for ecosystem health (Hooker and Gerber 2004). Because many marine megafauna species are wide-ranging (cf. figure 23), protection of their habitat provides an umbrella function for many other species in lower trophic levels (Wilkinson et al. 2003).

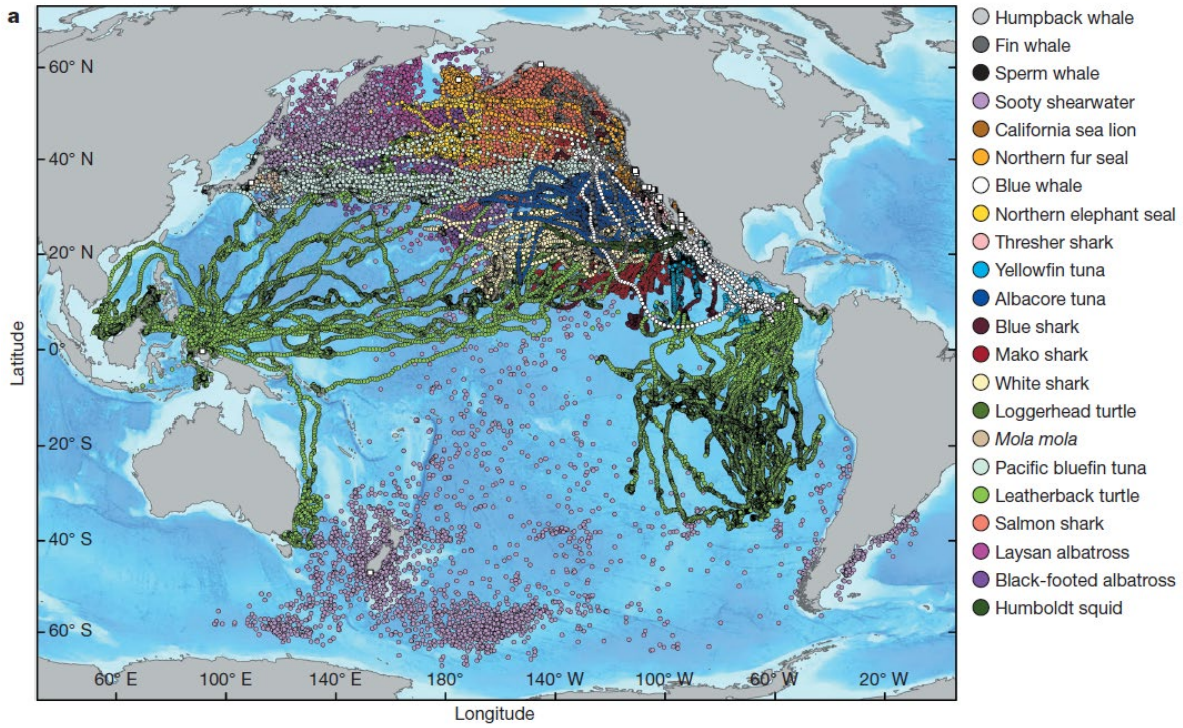



**Figure 23: Wide-ranging habitat use by marine megafauna species in the North Pacific (Block et al. 2011)**

### 5.3.9 MPA networks

Many scientific and management studies have shown that the optimal proportion of a marine ecosystem that should be included in no-take or highly protected MPAs or zones is about 30%. This proportion maximizes both biological productivity, including fish stocks, and biodiversity (Kelleher 2015).

Especially with regard to migratory species, no-take reserve size is having an impact. Most no-take reserves are small (median around 16 $km^2$) but several species are known to travel many kilometres annually to specific spawning areas, seasonally in response to temperature change or while undergoing habitat shifts. Prominent examples are sea turtles and seabirds but also many sharks and rays, cetaceans or tuna migrate over thousands of kilometres. But also smaller fish species, like groupers, are known to migrate over 100 km from their home reefs to reproduce at specific spawning sites. Also mobility of continental groundfish species is well known. It is estimated that the effectiveness of reserves for e.g. managing cod would crucially depend on reserve location that is relative to their seasonal movement pattern. For North Sea cod this would require a no-take area of over 60,000 $km^2$ for effective management Highly migratory species often congregate in especially sensitive areas for reproduction or feeding and it can be argued that protection of such critical habitat has the potential to dramatically lower mortality for these species and thus show a positive effect on population size, even though only a very small portion of the range may be under protection (Game et al. 2009; Sale et al. 2005).

An approach to cope with the above-sketched challenges is the development of MPA networks. Loosely defined, a network of MPAs is a collection of individual sites with a range of protection levels that cooperate and are designed to meet objectives, which a single reserves cannot achieve. Ecologically, a MPA network consists of *'multiple sites with replicates of all habitat types that are oceanographically connected; individually or in aggregate they are of sufficient size to sustain minimum viable populations of the largest species in a region (including those of seasonal migrants to the region) and their resident species can sustain their populations by recruitment from one MPA to another'* (Roff 2014). The whole network is thus expected to have properties greater than the sum of its parts.

In practice, this means that single MPAs may be smaller because they receive larvae input to sustain wildlife populations within their boundaries from other MPAs within the network (Gaines et al. 2010). This strategy intends to minimize no-take MPA size while simultaneously providing conservation and fisheries benefits from spillover. Such connectivity effects can be achieved both by increasing individual reserve size or by decreasing spacing of MPAs, allowing persistence for species with extensive movement (Moffitt, Wilson White, and Botsford 2011). As yet, evaluating the performance and output of MPA networks is still challenging (Roff 2014), but a recent study supports the existence of connectivity effects within MPA networks (Grorud-Colvert et al. 2014).

Figure 24 emphasizes the importance of size and spacing of no-take reserves with regard to conservation and fisheries enhancement:

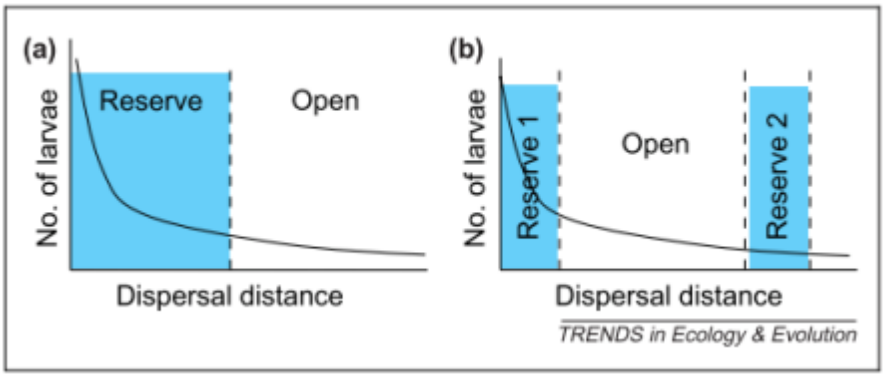



**Figure 24: The size and spacing of no-take reserves with respect to dispersal distances of the species of interest (Sale et al. 2005)**

Reserves intended for conservation (cf. graph (a)) should be large enough to retain a substantial portion of larval dispersal to ensure adequate self-recruitment. For fisheries enhancement (cf. graph (b)), they should be sized and spaced to enable a significant proportion of larvae to disperse to surrounding fishing areas (Sale et al. 2005). Which scenario to adapt depends on the region and country where the MPA should be implemented, as well as the conservation goals of the MPA. What works for one nation or group of nations must not necessarily be transposed unchanged to another ecological or socio-economic environment. For example, a few large MPAs may be the right approach in one region or country, but a network of many smaller ones, supported by integrated management of the surrounding areas, might be better in another (Kelleher 2015). Especially with regard to migratory species, relatively small MPAs will rarely succeed unless they are connected biologically in a network that constitutes an integrated ecosystem management regime.

## 5.4 Potential economic impact of MPAs

If MPAs are well designed and managed they allow for the protection and restoration of key habitats, the replenishment of fish stocks and the enhancement of marine ecosystem resilience (Mellin et al. 2016; Salm, Clark, and Siirila 2000; Toropova et al. 2010). These effects can increase ecosystem service provision for example by providing opportunities for recreation and tourism, coastal protection, carbon sequestration and sustainable fisheries (Brander et al. 2015). Secondary economic benefits may follow the establishment in the form of creating employment through non-consumptive activities like tourism and recreation and, in addition, MPAs may protect future jobs in the fishery sector by increasing the chances of managing fish stocks sustainably. The table below summarizes some of the most visible benefits:

**Table 7: Benefits from conservation measures (Brander et al. 2015; Lester et al. 2009; Reuchlin-Hugenholtz and McKenzie 2015; Rudd 2015)**

| Measure | Outcome | Benefit for people |
|---|---|---|
| Coastal protection (mangroves, coral reefs, seagrass beds, salt marshes etc.) | Buffer against the impacts of climate change<br>Mangroves can mitigate impacts of tropical storms<br>Coral reefs can prevent coastal erosion | Defend coastal property and infrastructure from impacts of natural disasters |
| | Important role in fighting climate change through storage and sequestration of carbon | Protection and restoration of coastal vegetation can provide economic opportunities for coastal and island communities on carbon offset market |
| Protection of critical habitats (migration routes, places of refuge against predators, spawning grounds, nursery areas) | Species survival and reproduction<br>Improvements in coral cover, reef ecology and structural integrity through limiting the effects of destructive fishing practices on reefs | Support reproduction and survival of species, including many (commercially) valuable fish stocks |
| No-take zones (especially species density increases with larger (no-take) reserve sizes in comparison to partially protected areas | Increase in fish size (28%), density (166%), biomass (446%) and species richness (21%) inside MPA | Spillover effect to larvae, juvenile and adult fish moving beyond MPA boundaries, which leads to stock replenishment, long-term food security and fishing-related livelihoods |
| Tourism and recreation | Growth of employment and commerce | Livelihood opportunities through jobs for managers, researchers and employment in the tourism sector as well as associated sectors at local, regional and national level |

## 5.5 Potential benefits of MPA expansion

A recent study commissioned by WWF (Brander et al, 2015) found that global expansion of MPAs with effective protection of critical habitats would have significant benefits that clearly outweigh the costs. Benefits are the maintained or enhances flows of ecosystem services that are provided by protected marine ecosystems, such as provision of food; tourism and

recreation; coastal protection, carbon sequestration and biodiversity[19]. Costs include establishment costs of expanding MPAs, operational costs of MPAs as well as opportunity costs of fisheries (Brander et al. 2015).

For example, figure 25 shows a conceptual representation of potential future pathways for fisheries production under the status quo (business as usual), MPA no-take area of 10% and 30%. Without further MPA designation global fisheries production may see continuing decline in production due to overfishing and stock declines. Under the 10% MPA scenario, there is a consequent decline in production. However, due to spillover impacts and reductions in overall fishing effort the residual rate of harvesting is more sustainable. Although production continues to decline it does so at a decreased rate with the consequence that production eventually exceeds that which would occur without MPA expansion. Under the 30% MPA scenarios there are potentially larger positive spillover effects outside the MPAs, increasing the possibility of more sustainable fisheries. Consequently, overall production might eventually exceed both the status quo and 10% scenarios (Brander et al. 2015).

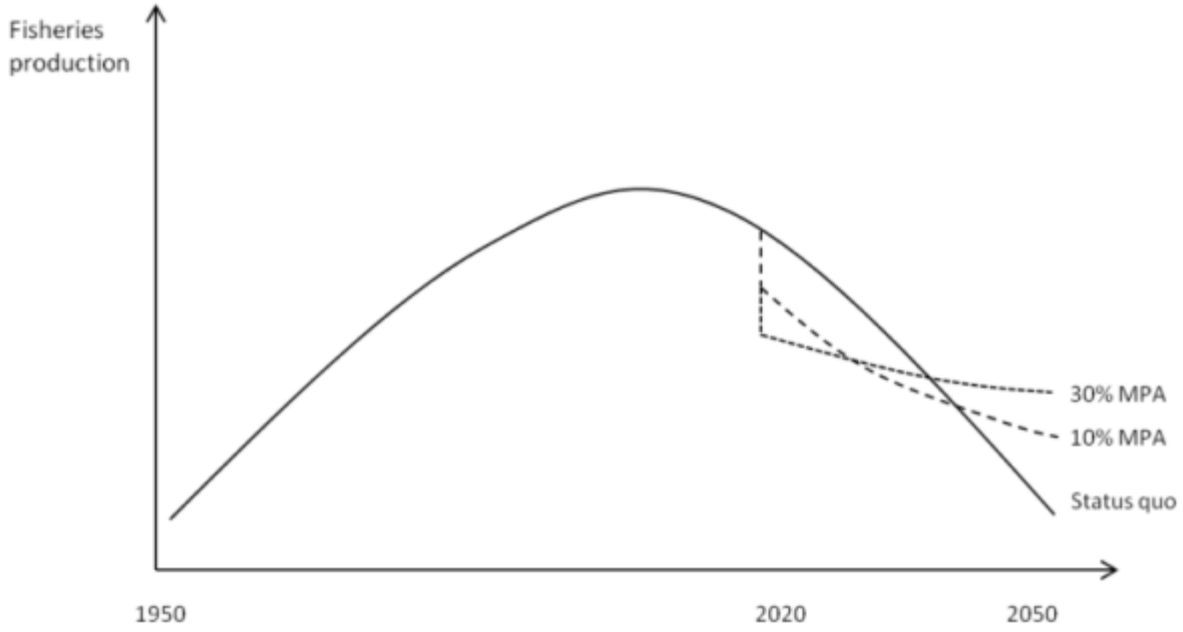



**Figure 25: Conceptual representation of the potential impact of no-take MPA expansion of fisheries production (Brander et al. 2015)**

In general, the study explored the benefits of no-take MPA expansion based on six explanatory scenarios (table 8) and examined if there is a global economic case for expanding no-take MPAs. The study concluded that across all scenarios economic benefits

[19] coral reef values including recreational diving, recreational snorkeling, recreational fishing, other tourism activities, commercial fisheries, coastal protection, research and non-use values for biodiversity; coastal wetland values include including flood protection, water supply, water quality, habitat and nursery for fauna, recreational hunting, recreational fishing, food and material provisioning, fuel wood provisioning, non-consumptive recreation, aesthetic enjoyment and biodiversity conservation; mangrove values include coastal protection, fisheries, fuel wood provisioning and water quality regulation as well as carbon storage

outweigh the costs ranging between 3:1 (expanding no-take MPAs by 10%) and, in the most positive scenarios, 20:1 (expanding no-take MPAs by 30%). In addition, employment directly related to MPA management increases with MPA expansion and there is a wide variety of jobs may be created indirectly in related sectors (e.g. tourism) that allows for diversified livelihoods and less dependency on marine resources.

**Table 8: Case study scenarios for MPA expansion** (Brander et al. 2015)

| # | Expanding MPA to cover… | …into areas of… (Leenhardt et al., 2013) |
|---|---|---|
| 1 | 10% | Low Biodiversity & Low Human Impact → Easy to Expand (mostly high seas) |
| 2 | 10% | High Biodiversity & Low Human Impact → Protect to Preserve (further away from shore or from cities) |
| 3 | 10% | High Biodiversity & High Human Impact → Protect to Mitigate (coastal areas) |
| 4 | 30% | Low Biodiversity & Low Human Impact → Easy to Expand (mostly high seas) |
| 5 | 30% | High Biodiversity & Low Human Impact → Protect to Preserve (further away from shore or from cities) |
| 6 | 30% | High Biodiversity & High Human Impact → Protect to Mitigate (coastal areas) |

Theory suggests that fishery value is enhanced easier in a network of small no-take reserves rather than in few, widely spaced large reserves, because the many small reserves supplement production over a greater proportion of the surrounding fished area. In addition, whereas establishing a few large reserves might have practical advantages in terms of designation and compliance, large marine reserves can be impractical because they disadvantage some local communities whose fishing grounds become closed for fishing, and benefit others whose fishing grounds remain open (Sale et al. 2005).

This also translates into a strong economic case for representative, ecologically coherent and well-managed networks of MPAs. These should be part of a broader framework that manages marine and coastal activities to minimize environmental impacts. This adds an important reason for governments, business, communities and financial institutions to increase investment in MPA implementation (Brander et al. 2015; Reuchlin-Hugenholtz and McKenzie 2015).

# 6 FOCUS OF BLUE ACTION FUND

## 6.1 Key problems and threats

The ocean is a major contributor to the global economy. Oceans account for much of the world's economic prosperity and globally around 350 million jobs are linked to the ocean (in fisheries, aquaculture, transport, research, tourism). Around 70% of global wealth is provided by ecosystem services deriving from oceans and coastal natural capital (Hoegh-Guldberg et al. 2013, 2015; Reuchlin-Hugenholtz and McKenzie 2015). The oceans protect us from the consequences of climate change because they absorb a large portion of $CO_2$ and heat induced through global warming.

More than two thirds of the partner countries of the BMZ are island or coastal states with a large and growing portion of the population living near the ocean. In these developing countries, oceans and coastal areas hugely contribute to food security and livelihoods due to their biodiversity, abundance in natural resources and productivity.

More than 90% of the population depending on fishery and aquaculture for their livelihoods do live in developing countries, where more than 90% of fishery occur in the EEZ. Globally, the primary sector of fisheries (small- and large-scale) and aquaculture employs around 60 million people of which 84% are in Asia, followed by Africa. Especially women find employment in fishery, processing and marketing. The small-scale fishery sector is crucial for securing livelihoods as it provides direct access to food and income. In addition, there is an important economic potential for income generation from marine-based ecotourism in regions possessing large reef systems, tropical, sandy beaches and islands.

However, due to their economic potential oceans and coastlines are heavily under pressure through habitat destruction by extractive and non-extractive use, overfishing and pollution as well as due to the effects of climate change. Today, no area in the ocean is without influence from human activities, with a large fraction of more than 40% being strongly affected (Halpern et al. 2008) and human pressure on marine ecosystems keeps on rising (Butchart et al. 2010; Halpern et al. 2015).

Globally, this entails loss of biodiversity with species extinctions and habitat destruction or degradation affecting marine ecosystems and the services they provide (Butchart et al. 2010; McCauley et al. 2015; UN 2016). The last century has seen an increasing defaunation of the oceans, with human depletion of marine animals from the smallest forage fish and invertebrates to the largest megafauna (McCauley et al. 2015). The population size of more than 1,200 marine animal species declined on average by 49% from 1970 to 2012 (WWF 2015). Marine habitat of high conservation value is dwindling: Mangroves are being lost at 1-2% per year globally and kelp forests and seagrass meadows are declining worldwide (UN 2016).

Marine biodiversity loss affects human well-being in numerous ways by imperilling food sustainability, increasing social conflict, impairing coastal protection and reducing flows of other ecosystem services (McCauley et al. 2015; UNEP 2006; Worm et al. 2006). Ecologically, the depletion of marine fauna has wide ranging effects on ecosystems by triggering trophic cascades and changes in food-web structure, which alter species

abundance and reproduction and ultimately decreasing ecosystem stability (Estes et al. 2011; McCauley et al. 2015). Additionally, current human exploitation leads to marine animals becoming smaller and less fecund by selective pressures and evolutionary change, but also to a decrease in genetic diversity and thus adaptive potential (McCauley et al. 2015). This loss of resilience in the marine environment is especially threatening for impoverished coastal nations (FAO 2014) that depend disproportionately high on fish protein in their diets and in particular populations of remote coastal areas in developing countries[20], as they do not have alternatives for income generation.

There are three driving key threats to this vicious cycle: (1) the destruction of critical coastal and marine habitats, (2) overfishing and (3) pollution. Furthermore, the oceans suffer from the aggregated effects and interlinkages with global warming and increased emissions of greenhouse gas like ocean warming, enhanced acidification and sea level rise. Selected root causes that lead to the three key threats are presented in the following figure.

[20] principally located in Southeast Asia, WIO, West Africa, Gulf of Mexico

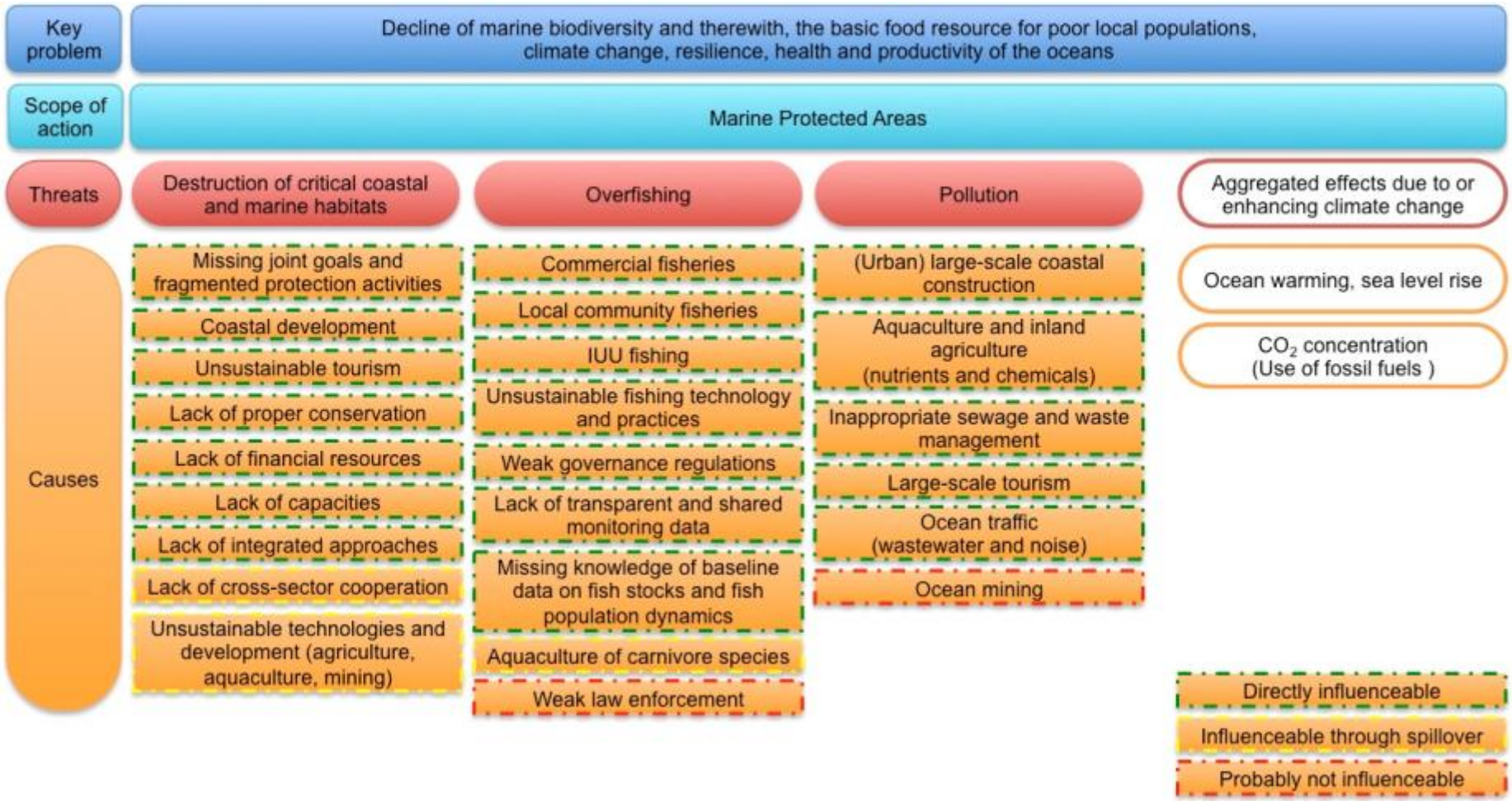



**Figure 26: Key problems, priority threats and dedicated causes** (Susanne Pecher Consulting)

The key drivers of anthropogenic pressures on biodiversity and ecosystem services are the size of the world's human population and its growing consumption of natural resources (Mora and Sale 2011). Global initiatives for conservation thus need to manage resource demands directly. Achieving sustainability and resolving biodiversity loss requires a concerted effort to reduce population growth and consumption while simultaneously increasing the Earth's biocapacity and decreasing our environmental footprint (Barnosky, Ehrlich, and Hadly 2016; Ehrlich and Ehrlich 2013; Mora and Sale 2011).

The drivers and threats do link through complex mutual interactions that amplify each other. As with all complex systems, the following principles are helpful to change the current trends:

1. A holistic and integrated approach across sectors, levels and nations.
2. Preventive action in order to promote the natural capacity of marine ecosystems to recover.
3. Linking local action to regional and global governance approaches.

Following the above three principles signifies a major paradigm shift, whereby it must be globally acknowledged that marine resources are not infinitively available and that it is a global responsibility of all sectors and levels to ensure the sustainability of marine resources for the sake of future generations and healthy ecosystems of our planet earth.

## 6.2 The potential of Marine Protected Areas

MPAs are increasingly used to manage human activities in the marine environment. They are important tools for biodiversity conservation and marine resource management and often intend to alleviate poverty and contribute to human well-being

MPAs can reduce habitat loss and marine wildlife mortality, thereby increasing populations and reproduction of marine species. They are therefore a valuable tool to reduce ongoing biodiversity loss (Edgar et al. 2014; Gaines et al. 2010; Game et al. 2009; Lester et al. 2009). They present a possibility to ameliorate negative effects of overfishing, oil and mineral extraction, mining and organic pollution (Brander et al. 2015). There are also positive examples of MPAs contributing to poverty alleviation and human well-being (Leisher, van Beukering, and Scherl 2007, Woodley, Bertzky, and Crawhall 2012). Another important goal that can be addressed with MPAs is adaptation to changes in climate and ocean chemistry and it is possible to address sustainable use, conservation and global change effects simultaneously with design principles of MPAs (Green et al. 2014). To achieve these impacts, MPAs need to address the factors habitat representation; risk spreading; protecting critical, special and unique areas; reserve size, spacing, location and duration; protecting climate resilient areas; and minimizing and avoiding threats (Green et al. 2014).

## 6.3 The challenge to establish a sufficient area of functioning MPAs

Without effective management MPAs are unlikely to achieve the twin goals of conserving biodiversity and alleviating poverty (Fox et al. 2014). MPAs are complex ecological, social and institutional systems that involve broad and diverse stakeholder groups from different countries as well as from various sectors and from the local up to the global level.

The marine realm, due to the fluidity of its key element – the ocean – has ecosystems functions that can unfold far-reaching impacts and are not limited by international boundaries. It is a large scale and highly dynamic environment with long-range transport of resources, biodiversity, organisms and pollutants. As many marine species are very wide ranging, with home ranges between hundreds to thousands of square kilometres (McCauley et al. 2015), MPAs often need to be large as well to afford effective protection.

Therefore, MPAs do face complexity and scale challenges. Consequently, they suffer from quantitative and qualitative weaknesses. The target of 10% MPA coverage is below the threshold of 20-30% that would be required for an effective marine ecosystems protection. Only 4% of the EEZ or 1.6% of the global oceans are currently enjoying a protection status. No-take zones only represent a tiny fragment of the current MPA area although they are one out of five critical success factors for a positive impact of marine protection on biodiversity.

Qualitatively, the majority of existing MPAs suffer from dysfunctionality due to lacking implementation of protection and use goals, lack of information and insufficient integration with management goals in other sectors (e.g. nutrient and sewage effluents from agriculture, industry and urban developments). Many existing MPAs are fragmented, too small and not representative. Many of them are isolated and lack connectivity with important habitat to sustain their key ecosystems functions.[21] If a protected area is too small the economic/degrading activity is just translocated to surrounding areas and therefore has no reproductive effect on fish stocks (Bergseth, Russ, and Cinner 2015; Brander et al. 2015; Halpern, Lester, and Kellner 2009).

Although a proven concept, it is therefore still not sufficiently demonstrated that MPAs do have benefits that do have the potential to outweigh costs in the medium term. However, MPAs are a cornerstone for a sustainable ocean management that balances conservation and use and is essential for healthy oceans that are the basis for sustainable livelihoods of future generations in the developed and developing world. The involvement of communities and protected areas that are managed through local and/or traditional rights has been successfully tested but is still not a recognized concept on international scale as an important contribution towards the achievement of the Aichi targets. Very often, coastal communities and local knowledge are insufficiently taken into consideration, with the result, those regulatory frameworks for MPAs are broadly disrespected.

[21] For example, more than 60% of the totally protected area in the marine realm is concentrated in only 11 out of more than 6,000 MPAs and more than 10% of the total protected coastal area is concentrating on 44 out of 102 coastal ecoregions. In addition, especially developing countries often do not have the means and capacities to effectively establish and implement MPAs.

The establishment of MPAs that are sufficiently large and do cover areas that are critical for ecosystems functions is a challenge for a number of reasons. MPAs that span large areas in EEZs and extent into the ABNJ are often conflicting with the use of space from transport and commercial fishing activities. It is therefore crucial to work with several relevant sectors affecting the coast and the sea from the earliest opportunity. This results in complex and multiple stakeholder governance systems negotiating conflicting use options in the marine realm. Often institutional connectivity between relevant sectors is lacking and a holistic approach on national or regional scale is difficult to achieve. Ocean protection is still a new area for many leaders and decision makers and yet it can only be achieved if there is a common, global understanding of the importance and implications.

Another challenge is funding, as it is fragmented, too short-sighted and insufficient. Government budgets for conservation are declining in many countries and protected area managers are having problems to secure funding for protected areas, once the initial grants run out.

In addition, MPAs do imply in one form or another the restricted use of fishery resources, with dire consequences, at least in the short term, for local communities and small enterprises. Especially in developing countries, a huge percentage of coastal livelihoods does depend on fishery and a tremendous amount of poor people move to the coast to have free access to fish as a source of protein and a basic earning. Community participation in general is a crucial issue. Experience shows that a lack of participation by local people is the most common cause of MPA failure. No government can manage an MPA effectively without community support. Continued community involvement in management (including monitoring and enforcement) increases this sense of ownership and greatly decreases the overall cost of management (Kelleher 2015).

Hence, the establishment of large MPAs represents a tremendous institutional effort of inter-sectoral cooperation and a scale problem of management and associated surveillance costs. This becomes even a bigger challenge as soon as ecosystem functions need to be included that go beyond international boundaries.

However, if a small MPA is connected to another small MPA that covers areas of critical ecosystems functions this effect might be mitigated. It is estimated that MPA networks that are ecologically coherent and protect 30% of each habitat in our oceans are expected to contribute significantly to the recovery of marine biodiversity and a productive ocean (Gell and Roberts 2003; O'Leary et al. 2016; Sanchirico, Cochran, and Emerson 2002). This in turn can contribute to the reduction of poverty, enhanced food security, creation of employment and protecting coastal communities (Brander et al. 2015; Leisher, van Beukering, and Scherl 2007).

National and regional MPA networks through transboundary conservation can contribute to a more holistic and wider context of conservation and therefore enable greater ecological integrity and contribute to the long-term survival of species. They enhance the connectivity of areas under conservation management, reduce the fragmentation of habitats and allow for increased dispersal opportunities for individual species. This in turn supports higher resilience within ecosystems and among species as mentioned earlier in chapter 2.3.2, as well as greater genetic exchange among the populations themselves (Kelleher 1999; Vasilijević et al. 2015). Through networks, which not only apply to neighbouring countries

they contribute to securing the survival of migratory species that are generally heavily dependent on transboundary conservation of critical habitats, especially critical breeding, feeding and resting areas, which are often disconnected and distributed throughout the whole sea (Corrigan et al. 2014; Vasilijević et al. 2015).

MPA networks represent an opportunity to enhance the connectivity of MPAs with each other as well as with sustainably managed fishery zones. In addition, area based protection measures can be easier combined with technology-based and user-related measures in order to enhance protection of migrating species, if there is a coordinated effort following jointly agreed management objectives across sectors and/or countries. In addition, MPA networks have the potential to enhance the availability and accessibility of information and knowledge that is relevant for management decision across sectors and/or countries.

Therefore, enhanced cooperation among MPAs through the creation of networks can result in multiple benefits for MPA management. For example, neighbouring MPAs could share heavy equipment to reduce costs and could organize joint patrols to enable better law enforcement. For all MPA network systems knowledge and best practice exchange, as well as exchange of data and research is another benefit that could contribute to improved management efficiency through cooperation (Kelleher 2015; Vasilijević et al. 2015).

Integration of LMMAs as part of a larger system/network of marine protected areas can help to achieve international recognition for community managed areas as part of a larger seascape

## 6.4 Blue Action Fund: Proposed approach

The BAF should be a globally acting financial instrument that promotes integrated and ecosystems oriented local action for the management and protection of marine resources, especially in countries where coastal communities heavily depend on marine biodiversity resources.

The intention is threefold:

- To provide planning frameworks, evidence and knowledge that feed into existing institutional and social networks to promote adoption of approaches and technologies in favour of sustainable management of marine biodiversity.
- To facilitate the generation of a critical mass of financial support from various sources in order to support ecosystems services and biodiversity protection across marine regions.
- To generate sub-regional clusters of successfully managed MPAs and their adjacent sustainable use zones that feed into a wider MPA network.

The ultimate goal of the BAF is to contribute to healthy ocean ecosystems and thereby secure the basis for sustainable livelihoods in developing countries.

The theory of change is, that by pulling forces, funding and knowledge together in sub-regions that critically depend on sustainable marine biodiversity protection and use, the BAF provides evidence for the benefit of MPA networks and generates knowledge to address on the ground challenges for their development and implementation.

Thereby stakeholders across existing networks jointly develop an enhanced understanding of priorities and approaches. Decision makers in public, private and non-governmental as well as civil society organizations start mainstreaming marine protection related issues into strategies, regulations and budgets.

In order to achieve this, the BAF shall finance on-the-ground measures to address real problems of real people managing marine biodiversity in areas of global significance. Through its grant programmes the BAF will generate evidence on priorities and implementation experience. It will disseminate such knowledge across existing institutional and social networks to facilitate joined strategic approaches that will leverage a critical mass for funding from public, private and non-governmental sources towards marine conservation and management approaches that contribute to a sustainable economic development.

The vision of such a financial platform would be as follows:

***Key actors protect and sustainably use marine biodiversity across a network of significant marine protected areas for the benefit of livelihoods and healthy ocean ecosystems.***

The mission describes, which contribution the BAF will make towards this desired value addition: ***The Blue Action Fund provides long-term funding for coordinated local action to promote MPA networks as a tool for conservation and sustainable use of marine biodiversity.***

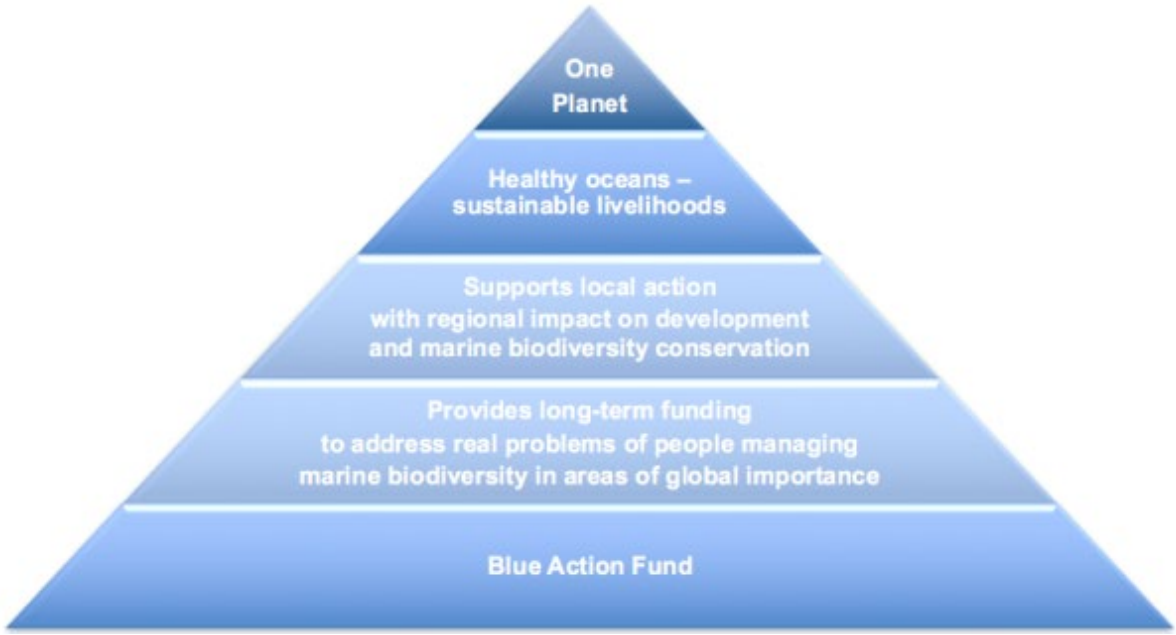



**Figure 27: Proposed vision and mission of the Blue Action Fund** (Susanne Pecher Consulting)

The BAF would have the following features[22]:

[22] According to an iied review study on conservation trust funds a clear profile is one of the major key success factors for a conservation trust fund. It is the basis for international recognition and the potential to raise additional funding as well as to attract high quality grant proposals.

- Provide flexible long-term funding to enhance capacities for innovation and adaptive management for marine biodiversity conservation and sustainable use in accordance with an ecosystems oriented approach
- Support local action but with a network and/or transboundary[23] and/or cross-sectoral scope in areas of significant importance[24]
- Promote transparency and knowledge exchange on the status of marine biodiversity and protected areas for key decision makers
- In addition to NGOs doing grant proposal preparation, the BAF will catalyse complementary funding to likeminded programmes

## 6.5 Role of the Blue Action Fund

The BAF is primarily a ***grant-maker*** that seeks to promote activities that align with its intervention areas by:

- A competitive allocation of grants through efficient and practice oriented criteria
- A well-designed strategic programming of grant calls that is regularly adapted to field level needs
- A rigorous monitoring and evaluation programme with an efficient and visualized reporting
- A powerful and efficient approach for sharing knowledge and good practice

In addition to its role as a grant maker, BAF's roles are to be:

- A ***fundraiser*** through the promotion of co-funding approaches with NGOs, beneficiaries and governments as well as through liaison with the private sector and recruitment of likeminded financial partners to engage with the BAF
- An ***information broker*** and a learning mechanism based on rigorous monitoring and effective knowledge communication

## 6.6 Strategic intervention areas

The BAF will promote grant programmes for the implementation of planning, development and management of MPAs and their adjacent sustainable use zones with the purpose to feed into a wider MPA network. Such network shall be composed of zones with different protection levels that are managed under governmental and traditional regulatory frameworks.

---

[23] Whereas "transboundary" or "regional" does not necessarily mean the implementation of simultaneous activities in two countries. It means the implementation of activities in one country by being aware of its potential impacts for another country and by promoting a positive impact respectively mitigating potentially negative impacts.

[24] I.e. areas that fulfill at least two out of the following three criteria: (1) important for biodiversity protection and/or productivity across a regional scale; (2) areas that might experience particular risk of overutilization at present or in the near future (e.g. through oil and gas production); (3) areas the biodiversity which considerably contribute to livelihoods and economic potential of a region

The BAF will accredit internationally and regionally operating NGOs with sufficient human resources and technical, institutional and financial capacities for the application and implementation of multi-year grant programmes. The expectation is that NGOs disseminate well-tested, feasible approaches across a wider network of MPAs by adjusting them to local challenges. The efficient cooperation with national NGOs and grass-root organizations is encouraged.

The BAF finances grants of approximately EUR 2 million with a duration of 2 – 3 years that are relevant to at least two out of four strategic business areas of the BAF and correspond to its funding criteria. Each grant programme should aim at delivering tangible results within a time scope of three years. However, extension of successfully ongoing programmes would be promoted.

The BAF specifically encourages co-funding from public, private and NGO sources in order to be able to build bigger programmes. It will provide a facility to fund the planning of such programmes in close coordination with relevant partners. Grant programmes can address one or more ODA countries, if there is a linkage in building MPA networks.

The proposed strategic intervention areas are described by: The ***BAF business areas***, the ***cost types and measures eligible for funding, the key performance indicators*** and the ***funding criteria***. The BAF will address four business areas:

- Contribute to the establishment and development of sustainably managed MPAs and sustainable use zones
- Support coastal livelihoods depending on marine resources through sustainable investments in value addition of marine biodiversity utilization
- Contribute to evidence based knowledge exchange on MPA development, community engagement, monitoring and surveillance at all levels
- Development of instruments, knowledge and cooperation to promote sustainable financing of marine protection from private, public and non-governmental sources

The following page contains a detailed list of potential eligible measures and approaches as well as their intended contribution to the assessed challenges


**Figure 28: Potential BAF measures** (Susanne Pecher Consulting)

## 6.7 Criteria for funding

The BAF will accept all grant proposals that are in line with the BAF objectives, policies and regulations as well as with the specific conditions of ongoing funding programmes, one of which will be the BMZ funded contribution to the BAF.

The BAF will undertake annual competitive grant calls and evaluate proposals concerning:

- The relevance of the proposed outcomes and outputs for the achievement of the proposed objective of the grant programme and its contribution to the BAF performance indicators
- The coherence of the described impact chain (theory of change) taking into account the initial situation, context and problem assessment with proposed measures, the related monitoring & evaluation system as well as the technical and economic feasibility of innovations
- The effectiveness and efficiency of proposed activities considering the likelihood of success, the time required to achieve it and the costs in relation to the expected benefits in relation to the overall BAF performance indicators
- The sustainability of proposed measures and the risk of failure
- The amount of co-funding available for the proposed grant programme

### 6.7.1 Key performance indicators for BAF

The intention is, that various donors can contribute to the BAF funding through direct financial contributions with a dedicated purpose or through the cooperation with likeminded programmes as long as they contribute to key performance indicators. The key performance indicators reflect the objective that is behind each of the business areas:

The objective of ***contributing to the establishment and development of sustainably managed MPAs and use zones*** is to promote seascapes of various protection and governance status that contribute to wider networks of MPAs. Through investments funded by BAF stakeholders engaged in the management of such areas (communities, local government structures, service providers, research institutions) are enabled to demarcate areas, generate access rights and restrictions, manage such rights and provide evidence to decision makers in order to promote a conducive development of framework conditions (e.g. coastal development, regulatory frameworks, strategies).

The objective of ***supporting coastal livelihoods depending on marine resources through sustainable investments in marine biodiversity utilization*** aims at the development of local economies based on the sustainable use of marine resources. Coastal communities need secure long-term access to govern marine resources as a backbone for their livelihoods. They also need to enhance value addition and diversification of such resources in order to renounce unsustainable and inefficient use. For this purpose, the cooperation with private sector enterprises to develop and operate marine biodiversity based enterprises (tourism, aquaculture, mariculture, small-scale fishing) will be encouraged if social and ecological sustainability criteria are met and proposed measures contribute to technically feasible and economically viable enterprises.

The objective of ***contributing to evidence based knowledge exchange on MPA development, community engagement, monitoring and surveillance at all levels*** emphasizes the importance to establish a rigorous monitoring at all levels of the BAF implementation of grant programmes with the purpose to generate evidence-based knowledge on MPA development. It includes the obligation for grantees to provide information on progress and result indicators in such a way that it can contribute to wider monitoring networks on national, regional and international scale. The intention of knowledge provision is to demonstrate the potential and necessity of marine protection and to mainstream approaches into relevant sectors through the promotion of data cooperation and sharing agreements.

The objective of ***developing instruments and cooperation to leverage financing of marine protection from private, public and non-governmental sources*** aims at using the success stories, investment frameworks and management plans developed through BAF funding with the intention to coordinate donor approaches, trigger private sector cooperation and get additional funding for the BAF.

The following page presents key performance indicators for the portfolio of programmes that the BAF will hopefully encompass under its roof.

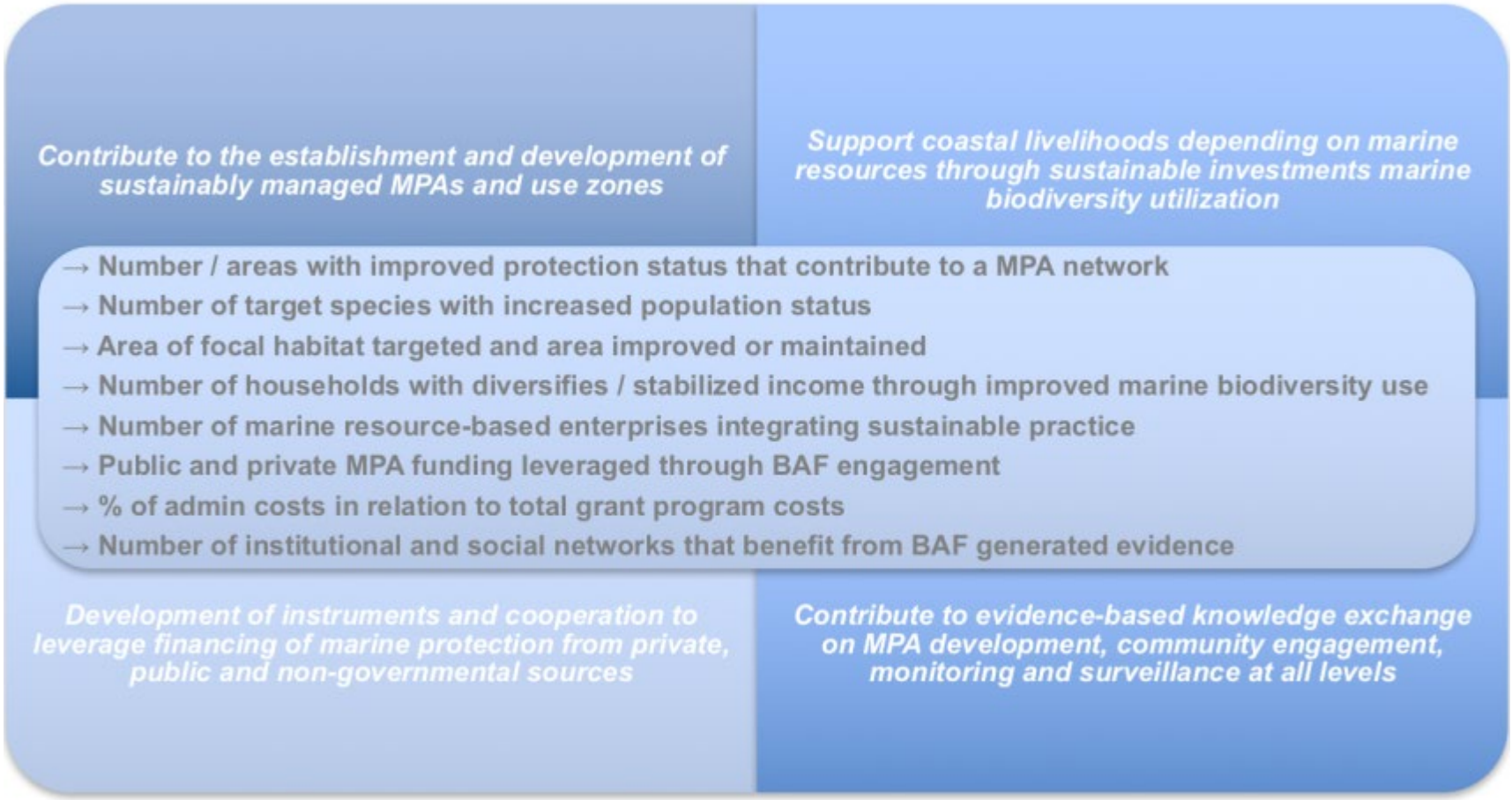



**Figure 29: BAF key performance indicators** (Susanne Pecher Consulting)

1. Area under effective management (ha) should be added
2. Number of target species can be misleading (how is that defined)
3. % of admin costs – is that BAF-internal or is it for grantees? In the latter case, this can be defined in the funding criteria

### 6.7.2 Eligibility of cost types and measures

The BAF will manage funding programmes that contribute to the above listed key performance areas. Each of the funding programmes will come along with its own detailed set of objective and result indicators that will feed into the overall performance of the BAF.

The BAF will monitor progress made on individual grant project, programme and portfolio level.

It will accept grant proposals for funding that will provide a relevant contribution to the objectives, approaches and indicators and that include the measures and cost types that are eligible for funding. The following figure contains eligible cost types and measures.

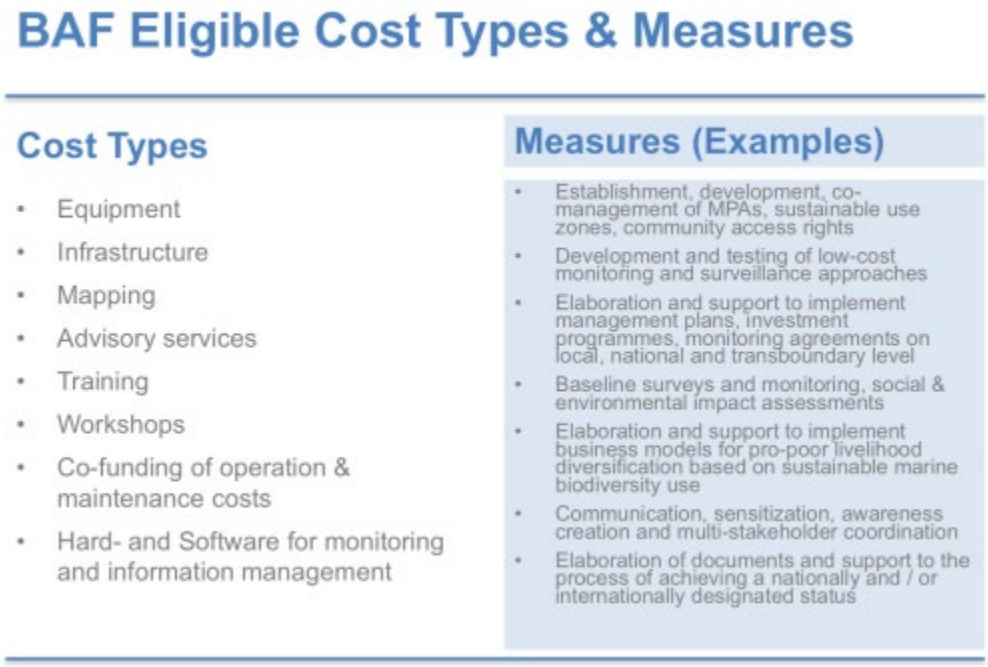



**Figure 30: BAF eligible cost types and measures** (Susanne Pecher Consulting)

The BAF ***will not provide funding*** for the following type of measures:

- Capacity development independent from infrastructure or equipment management or the implementation of MPAs and sustainable use zones, e.g. measures such as capacity building for national and regional coordinating structures
- Infrastructure, equipment and training for national and regional organizations unless there is a direct linkage with surveillance, protection, monitoring and establishment of MPAs
- Research other than for the establishment of baselines or pilots for innovation testing
- Education and acquisition of formal qualifications in marine protection and management
- Measures to mitigate and adapt to the effects of climate change and measures to reduce emission of greenhouse gas, respectively ocean acidification for the simple

reason that such measures are covered by other funding instruments, e.g. the International Climate Initiative (IKI), the Green Climate Fund, the NAMA Facility
- Measures for the promotion of commercial value chains based on marine biodiversity unless they directly contribute to improved protection of a specific MPA
- Measures for the development and protection of coastal zone habitats and inland water sheds because they should be funded through bilateral cooperation, respectively national programmes
- Transboundary interventions to protect specific habitats (e.g. mangroves) without reference to several specific MPAs and sustainable use zones
- Global/regional interventions on commercial and non-commercial trade barriers and quota to protect specific species through application of international conventions

### 6.7.3 Basic principles

Detailed eligibility criteria for funding will depend on the rules agreed with each of the potential donors that will cooperate with the BAF. However, as an instrument established through the German financial cooperation, some general criteria should apply to all upcoming grant programmes:

- Applicants must design grant programmes in such a way that they can achieve a tangible outcome on the ground in a delay of 3 – 5 years.
- Grant applicants can elaborate proposals in two stages: Stage 1 is a concept note. Stage 2 is the full proposal elaboration. The BAF will provide a limited amount of funding for stage 2 if applicants qualify in stage 1.
- Grant applicants must implement grant programmes through or in close cooperation with relevant governmental stakeholders and communities as well as implementation partners. A list of envisaged partners has to be included in the concept note (stage 1) and grantees must demonstrate full implementation arrangements in stage 2.
- Grant applicants should design projects and budgets around an “investment nucleus” for improved infrastructure, equipment and planning.
- Budgets should contain at least 70% of investment measures (e.g. infrastructure, equipment, mapping, management and business plans, training for the use of infrastructure and equipment, hard- and software, gazettment, demarcation, creation of access rights)
- If co-funding arrangements are agreed, the budget must include all funding sources and a confirmation of funding partners (stage 2).
- Grant proposals should build on national and/or regional strategies and will have to demonstrate synergies with existing and upcoming programmes. Applicants have to develop proposals in close cooperation with relevant community and private sector representatives and governmental institutions.
- Endorsement of the proposed grant project through relevant government structures has to be demonstrated in stage 2.

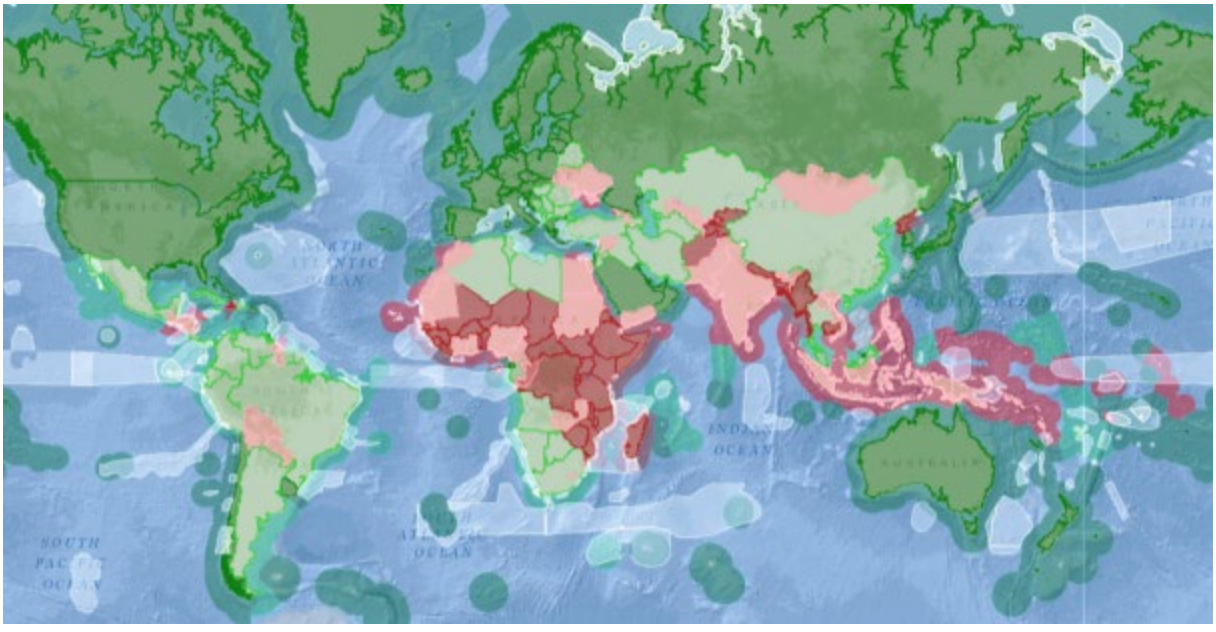
### 6.7.4 Geographic scope

The geographic scope of the BAF may shift over time and with various funding programmes. However, as a principle the BAF will engage in places that combine the following features:

- A biodiversity hot spot of global importance – to be determined according to one of the commonly accepted concepts, e.g. Hope Spots, EBSAs, international designation.
- A high level of poverty and dependency on marine biodiversity as a backbone for livelihood
- A regional importance for marine based economic and ecological processes
- Exposure to a specific current and/or future threat with the potential to significantly harm the integrity of marine ecosystem functions in a particular region
- Economic potential, if well protected
-

The figure below shows the countries of the world with their dedicated EEZs. The colour shadings show the country's income levels[25]. Income levels of low, low middle and high middle-income countries correspond to those countries eligible to receive overseas development assistance (ODA). The white shadings show areas of ecologically and biologically significance (EBSA; cf. chapter 2.4)

At coastal zones where red and light green shadings and EBSAs conglomerate and/or overlap, there are areas with high biodiversity and ecological value and usually high dependency of coastal populations on ocean resources for their livelihoods. This is especially true for the Western Indian Ocean (Mozambique Channel), the Western African region/East Atlantic Ocean, South-East Asia and Latin America and the Caribbean.



[25] dark red: low income countries; light red: low middle income countries; light green: high middle income countries; dark green: high income countries

**Figure 31: Map showing countries with dedicated EEZs and EBSAs**

# 7 PROPOSED SCOPE OF A BMZ PROGRAMME

## 7.1 Objective and indicators

The proposed BMZ programme shall have the purpose to establish the BAF and to start the first funding period. The programme contributes to ***conservation and sustainable management of marine biodiversity across a network of globally significant marine protected areas for the benefit of healthy oceans and sustainable livelihoods*** (overall programme objective). The programme links directly to the implementation of the Aichi 11 target of the Convention of Biological Diversity[26] and to the SGD 14 of Agenda 2030[27]. It also contributes to SDG 17, that is to foster global partnerships. The Programme is enshrined in the recently 10 Point Action Plan for marine protection and sustainable fishery, which BMZ announced in May 2016.

***The Blue Action Fund*** will be a ***co-funding mechanism for NGOs*** that ***pursues two objectives***:

(A) To support management bodies in establishing and managing marine and coastal protected areas and use zones[28] in close cooperation with relevant stakeholders.

(B) To support relevant governmental and non-governmental stakeholders to contribute to a regional coordination of funding for conservation and sustainable use of marine and coastal biodiversity.

The BAF will provide co-funding to NGOs with the purpose to support the establishment and management of pilot MPAs and sustainable use zones in areas that represent crucial stepping-stones for developing MPA networks across ocean sub-regions. With the co-funding, NGOs will apply for grant programmes to the BAF and will plan, implement as well as monitor local measures to address challenges in MPA establishment.

The BAF will establish a competitive grant mechanism with clear criteria that guide the priority setting of proposals. It will provide funding to applicants for the preparation of grant programme budgets in close cooperation with relevant partners. The elaboration of management plans and investment frameworks are amongst the measures eligible for funding through the BAF. Furthermore, based on progress reports and spot-checking, the

---

26 By 2020, at least 17% of terrestrial and inland water areas and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape.

27 Conserve and sustainably use the oceans, seas and marine resources with special emphasis on 2 targets: By 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information; Provide access for small-scale artisanal fishers to marine resources and markets; By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

28 See definition in the Glossary

BAF will rigorously monitor progress made. The BAF and NGOs will disseminate results to relevant governmental and non-governmental stakeholders. Thereby the BAF will contribute to a regional coordination of funding for conservation and sustainable use of marine and coastal biodiversity.

The BAF will report on progress made in the implementation of the BMZ programme by using the following indicators:

- By 2025, the BAF supports a specific number and size of marine protected areas and sustainable use zones[29] that contribute to a MPA network in acquiring a recognized protection status (national and/or international level).
- By 2025, the BAF in cooperation with NGOs have leveraged x% of the funding provided through the BAF as co-funding through direct contributions and likeminded parallel programmes.
- By 2017, the NGOs participating in the BAF will have agreed on a harmonized monitoring framework including data collection and analysis guidelines.
- By 2020, 100% of BAF supported MPAs and sustainable use zones do have a management plans, and by 2025 at least 80% of measures planned in existing management plans are in implementation status.
- By 2020, a specific number of innovative and low cost monitoring or surveillance techniques were tested and disseminated and 90% of the innovations were adopted in at least 50% of the countries benefitting from BAF co-funding.[30]
- By 2018, NGOs have engaged with 100% of the communities affected by MPAs supported through BAF co-funding and maintain this benchmark for all new grant programmes

The BAF will monitor progress made towards the overall programme objective through reporting on the following proxy indicators:

- The fish biomass of selected marine umbrella species (e.g. grazers/groupers and wrasses/cetaceans/sea turtles) in selected areas are maintained or improved until 2030
- 90% of the areas of selected habitats (mangroves, seagrass, coral reefs) under a protection status (marine protected area or sustainable use zones) are maintained or improved by 2030
- By 2020 at least 5 new provisions or measures to reduce key direct threats to marine biodiversity are integrated into relevant investment programmes, development strategies or regulations on national, regional and municipal level
- Livelihood conditions of beneficiaries of BAF grant programmes have improved by 2020 according to their self-evaluation (household survey)
- Equity of benefit distribution from sustainable biodiversity use is perceived as acceptable by different social strata of selected communities (household survey)

[29] Number hast to be specified during the inception phase of the Blue Action Fund and when total available funding through BMZ Programme is known

[30] See above plus: depends on grant proposals

- The development of fish biomass indicators (average length of selected target species) in sustainable use zones demonstrate that populations remain stable or recover after year 3 of the BAF intervention
- At least 80% of the households affected by a project funded through the BAF have a positive attitude towards protection of marine biodiversity 2 years after implementation of the BAF grant programme (household survey)

However, we propose to fine-tune these indicators during the inception phase once the initial project pipeline is known and the total amount that can be expected through BMZ will have been confirmed. Furthermore, BMZ Programme indicators need harmonization with the BAF performance indicators so that the BAF will be able to report on progress made across its entire portfolio.

The BAF will only provide grants for proposals that have received the endorsement of relevant government organizations and are aligned with national or regional strategies approved by governments.

Although the BAF will support MPAs and sustainable use zones that contribute to networks, the implementation of parallel activities in two or more countries is not a precondition for funding. On the contrary, it is expected that different measures are necessary at different times to bring all countries up to the same speed. However, a coordinated planning approach and aligned interventions that are reflected in joint intervention agreements would be highly desirable.

## 7.2 Beneficiary groups

The direct beneficiaries of the BAF co-funding are international NGOs that will have to undergo an accreditation process in order to prove their capacity in MPA and sustainable use zone development.

During the implementation of BAF co-funded grant programmes, these NGOs do cooperate with relevant intermediaries such as management bodies of MPAs, relevant governmental organizations, local NGOs, applied research organizations and the private sector in order to achieve the agreed objectives.

The indirect beneficiary group (“the target group”) are coastal communities in remote areas of countries that represent (1) significant marine biodiversity and ecological processes with relevance for MPA networks and (2) high dependency of coastal population on ocean resources for their livelihoods and (3) a potential for sustainable use of marine biodiversity for income diversification.[31] The total number of households benefitting through BAF co-funding will have to be assessed by the grant implementing NGOs before starting with grant implementation.

The majority of the target group will be economically dependent on small-scale fishery and working as fishers, processors and traders as well as owners of small aquaculture enterprises.

[31] This holds especially for the Western Indian Ocean (the Mozambique Channel), the Western African Region, the Caribbean, the Gulf of Mexico and South-East Asia

## 7.3 Cooperation with likeminded programmes

Co-funding and harmonization of investments to support MPA networks are key performance areas for the BAF. Therefore, an important area of activity for the BAF executive management will be the coordination with likeminded programmes, in particular of the German Development Cooperation as well as with relevant programmes for research and environmental protection (e.g. the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety).

Furthermore, through its cooperation with IUCN, which is an accredited organization for the implementation of GEF programmes as well as programmes of the Green Climate Fund, BAF can tailor its calls for grant proposals in such a way that they will be harmonized with interventions of these two funding instruments.

In addition, NGOs applying for BAF funding will have to present proposals that demonstrate synergy with relevant ongoing and upcoming programmes as well as prove co-funding leveraged through likeminded organizations, public budgets and donors.

## 7.4 Outputs and Measures funded

The detailed List of outputs and measures funded as well as the associated indicators is contained in the Draft Results Matrix (Annex 1 in electronic form).

Under the BMZ contribution the BAF through co-funding and monitoring of grant programmes, that international NGOs implement in cooperation with relevant governmental and non-governmental stakeholders, the BAF will achieve the following outputs:

- ***BAF is established and operational***. Under this output the staff of the BAF (executive director, employees, consultants) together with other organs will establish all elements that are crucial for its operations, such as by-laws, a grant implementation manual and implementation templates, financial management and data management applications, strategic business and communication plans. In addition, all necessary tax and legal matters for financial, grant and human resources management including appropriate contracting management procedures will have to be set up.
- ***BAF is internationally recognized as a transparent and efficient grant making organization.*** This output means that the staff of the BAF has to establish quality management procedures and a solid monitoring as well as reporting system for the tracking of progress made by grantees. In addition, the communication lines and strategies with grantees and other relevant stakeholders have to be established and a regular reporting system (technically and content wise) has to be elaborated.
- ***BAF contributes to the development of monitoring and surveillance frameworks for protected area networks and sustainable use of marine biodiversity.*** The BAF will make regular reporting on progress indicators – a condition for funding of grant programmes. In addition, the NGOs with co-funding of BAF will work towards harmonized approaches for species and habitat monitoring as well as low-cost surveillance approaches that can be applied in several countries sharing a specific ocean sub-region, an ecosystem function or habitat for migrating

species. NGOs will provide and implement grant proposals in cooperation with relevant management bodies for low-cost monitoring and surveillance methods that engage communities. With the advice of IUCN, they will also develop approaches for the sustainable collection, analysis and reporting of data across countries at a regional or international level.

- ***Coastal communities in rural areas use benefit from improved sustainability and economic value of the use of marine biodiversity resources.*** This output covers interventions to improve certainty and access rights to marine biodiversity resources for communities, the value addition of their use and the development of new community-oriented enterprises for the diversification of livelihoods. The focus for BAF funding will be on the support of low investment measures in new technologies and approaches that communities can easily produce and market, even in remote areas. The output also covers measures to establish socially and environmentally friendly concession arrangements, for e.g. eco lodges with the private sector as well as the business proposals for such investments.

The type of costs and measures funded coincide with the ones listed in section 6.7.2. In addition, under the BMZ contribution to the BAF, measures will be funded that are:

- Part of general management plans for MPAs, sustainable use zones and for community-oriented enterprises as well as for the development of such plans, their annual work plans and budgets
- Interventions to support local communities in sustainable use of marine and coastal biodiversity resources
- For environmental communication and monitoring based on purpose-driven communication strategies and intervention plans clearly specifying the target audience and expected impact of the communication
- For training in relation with the sustainable management of investments and equipment

# 8 BIBLIOGRAPHY

Agardy, Tundi, Giuseppe Notarbartolo di Sciara, and Patrick Christie. 2011. "Mind the Gap: Addressing the Shortcomings of Marine Protected Areas through Large Scale Marine Spatial Planning." *Marine Policy* 35(2): 226–32.

Barnosky, Anthony D., Paul R. Ehrlich, and Elizabeth A. Hadly. 2016. "Avoiding Collapse: Grand Challenges for Science and Society to Solve by 2050." *Elementa: Science of the Anthropocene* 4: 000094.

Bax, Nicholas J et al. 2015. "Results and Implications of the First Global Effort to Identify Ecologically or Biologically Significant Marine Areas." *Conservation Biology*: in press.

Bennett, Nathan James, and Philip Dearden. 2014. "Why Local People Do Not Support Conservation: Community Perceptions of Marine Protected Area Livelihood Impacts, Governance and Management in Thailand." *Marine Policy* 44: 107–16.

Bergseth, Brock J., Garry R. Russ, and Joshua E. Cinner. 2015. "Measuring and Monitoring Compliance in No-Take Marine Reserves." *Fish and Fisheries* 16(2): 240–58.

Block, B. A. et al. 2011. "Tracking Apex Marine Predator Movements in a Dynamic Ocean." *Nature* 475(7354): 86–90.

Böhnke-Henrichs, Anne et al. 2013. "Typology and Indicators of Ecosystem Services for Marine Spatial Planning and Management." *Journal of Environmental Management* 130: 135–45.

Bollmann, Moritz et al. 2010. *World Ocean Review 1*.

———. 2013. *World Ocean Review 2: The Future of Fish - The Fisheries of the Future*.

———. 2015. *World Ocean Review 4: Sustainable Use of Our Oceans - Making Ideas Work*.

Boonzaier, Lisa, and Daniel Pauly. 2015. "Marine Protection Targets: An Updated Assessment of Global Progress." *Oryx* 50(1): 27–35.

Brander, Luke et al. 2015. "The Benefits to People of Expanding Marine Protected Areas." (May): 1–190.

Briscoe, DK et al. 2016. "Are We Missing Important Areas in Pelagic Marine Conservation? Redefining Conservation Hotspots in the Ocean." *Endangered Species Research* 29(3): 229–37.

Brown, Katrina et al. 2008. *Ecosystem Services for Poverty Alleviation: Marine & Coastal Situational Analysis*. Norwich, England.

Butchart, Stuart H M et al. 2010. "Global Biodiversity: Indicators of Recent Declines." *Science* 328(5982): 1164–68.

CBD. 2005. *Handbook of the Convention on Biological Diversity*. 3rd ed. Montreal, Canada: Secretariat of the Convention on Biological Diversity.

———. 2010. "COP 10 Decision X/2. Strategic Plan for Biodiversity 2011–2020." *http://www.cbd.int/decision/cop/?id=12268*.

Corrigan, Colleen M. et al. 2014. "Developing Important Marine Mammal Area Criteria: Learning from Ecologically or Biologically Significant Areas and Key Biodiversity Areas." *Aquatic Conservation: Marine and Freshwater Ecosystems* 24(S2): 166–83.

Costello, Mark J., and Bill Ballantine. 2015. "Biodiversity Conservation Should Focus on No-Take Marine Reserves." *Trends in Ecology & Evolution* 30(9): 507–9.

Devillers, Rodolphe et al. 2015. "Reinventing Residual Reserves in the Sea: Are We Favouring Ease of Establishment over Need for Protection?" *Aquatic Conservation: Marine and Freshwater Ecosystems* 25(4): 480–504.

Dudley, Nigel. 2008. *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland.

Dunn, Daniel C. et al. 2014. "The Convention on Biological Diversity's Ecologically or Biologically Significant Areas: Origins, Development, and Current Status." *Marine Policy* 49: 137–45.

Edgar, Graham J et al. 2014. "Global Conservation Outcomes Depend on Marine Protected Areas with Five Key Features." *Nature* 506(7487): 216–20.

Ehrlich, P. R., and A H Ehrlich. 2013. "Can a Collapse of Global Civilization Be Avoided?" *Proceedings of the Royal Society B: Biological Sciences* 280(1754): 20122845.

EIU. 2015. "The Blue Economy: Growth, Opportunity and a Sustainable Ocean Economy." *The Economist Intelligence Unit*.

Estes, James A et al. 2011. "Trophic Downgrading of Planet Earth." *Science* 333(6040): 301–6.

FAO. 2012. *International Guidelines for Securing Sustainable Small-Scale Fisheries Zero Draft*. Rome.

———. 2014. *The State of World Fisheries and Aquaculture*. Rome.

Finegold, Cambria. 2010. "The Importance of Fisheries and Aquaculture to Development." *Fisheries, Sustainability and Development*: 353–64.

Fisher, Brendan et al. 2015. "Health, Wealth, and Education: The Socioeconomic Backdrop for Marine Conservation in the Developing World." *Marine Ecology Progress Series* 530: 233–42.

Fox, Helen E. et al. 2014. "How Are Our MPAs Doing? Challenges in Assessing Global Patterns in Marine Protected Area Performance." *Coastal Management* 42(3): 207–26.

Gaines, Steven D, Crow White, Mark H Carr, and Stephen R Palumbi. 2010. "Designing Marine Reserve Networks for Both Conservation and Fisheries Management." *Proceedings of the National Academy of Sciences of the United States of America* 107(43): 18286–93.

Game, Edward T. et al. 2009. "Pelagic Protected Areas: The Missing Dimension in Ocean Conservation." *Trends in Ecology and Evolution* 24(7): 360–69.

Gell, Fiona R., and Callum M. Roberts. 2003. "Benefits beyond Boundaries: The Fishery Effects of Marine Reserves." *Trends in Ecology and Evolution* 18(9): 448–55.

de Graaf, Gertjan, and Luca Garibaldi. 2014. *The Value of African Fisheries*. Rome, Italy.

Grantham, Hedley S. et al. 2013. "A Comparison of Zoning

Analyses to Inform the Planning of a Marine Protected Area Network in Raja Ampat, Indonesia." *Marine Policy* 38: 184–94.

Green, Alison L. et al. 2014. "Designing Marine Reserves for Fisheries Management, Biodiversity Conservation, and Climate Change Adaptation." *Coastal Management* 42(February): 143–59.

Grorud-Colvert, Kirsten et al. 2014. "Marine Protected Area Networks: Assessing Whether the Whole Is Greater than the Sum of Its Parts." *PLoS ONE* 9(8): 1–7.

Gurney, Georgina G. et al. 2015. "Efficient and Equitable Design of Marine Protected Areas in Fiji through Inclusion of Stakeholder-Specific Objectives in Conservation Planning." *Conservation Biology* 29(5): 1378–89.

Halpern, Benjamin S et al. 2008. "A Global Map of Human Impact on Marine Ecosystems." *Science* 319(5865): 948–52.

Halpern, Benjamin S. 2014. "Making Marine Protected Areas Work." *Nature* 506(7487): 167–68.

———. 2015. "Spatial and Temporal Changes in Cumulative Human Impacts on the World's Ocean." *Nature Communications* 6(May): 7615.

Halpern, Benjamin S., Sarah E. Lester, and Julie B. Kellner. 2009. "Spillover from Marine Reserves and the Replenishment of Fished Stocks." *Environmental Conservation* 36(04): 268–76.

Halpern, Benjamin S., Sarah E. Lester, and Karen L. McLeod. 2010. "Placing Marine Protected Areas onto the Ecosystem-Based Management Seascape." *Proceedings of the National Academy of Sciences* 107(43): 18312–17.

Halpern, Benjamin S., Kimberly A. Selkoe, Fiorenza Micheli, and Carrie V. Kappel. 2007. "Evaluating and Ranking the Vulnerability of Global Marine Ecosystems to Anthropogenic Threats." *Conservation Biology* 21(5): 1301–15.

Harrison, Hugo B. et al. 2012. "Larval Export from Marine Reserves and the Recruitment Benefit for Fish and Fisheries." *Current Biology* 22(11): 1023–28.

HLPE. 2014. *Sustainable Fisheries and Aquaculture for Food Security and Nutrition*. Rome, Italy.

Hoegh-Guldberg, Ove et al. 2013. *Indespensible Ocean: Aligning Ocean Health and Human Well-Being. Guidance from the Blue Ribbon Panel to the Global Partnership for Oceans*. Washinton DC, USA.

———. 2015. *Reviving the Ocean Economy: The Case for Action - 2015*. Geneva.

Hooker, SASCHA K., and LEAH R. Gerber. 2004. "Marine Reserves as a Tool for Ecosystem-Based Management: The Potential Importance of Megafauna." *BioScience* 54(1): 27.

IPCC. 2013. "Summary for Policymakers." *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*.

IUCN. 2004. *Managing Marine Protected Areas: A Toolkit for the Western Indian Ocean*. IUCN Eastern African Regional Programme, Nairobi, Kenya.

IUCN and UNEP-WCMC. 2016. "The World Database on Protected Areas (WDPA) Online Version March/2016." *available at: www.protectedplanet.net*.

IUCN GMPP. 2015. Marine News *Climare Change Adaptation Special*. Gland, Switzerland.

IUCN-WCPA. 2008. *Establishing Resilient Marine Protected Area Networks — Making It Happen*. Washington DC, USA.

Jacquet, Jennifer, and Daniel Pauly. 2008. "Funding Priorities: Big Barriers to Small-Scale Fisheries." *Conservation Biology* 22(4): 832–35.

Juffe-Bignoli, D et al. 2014. *Protected Planet Report 2014*. UNEP-WCMC: Cambridge, UK.

Kelleher, Graeme. 1999. Best Practice Protected Area Guidelines Series *Guidelines for Marine Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK.

———. 2015. *The Importance of Regional Networks of Marine Protected Areas and How to Achieve Them*.

Klein, Carissa Joy et al. 2010. "Spatial Marine Zoning for Fisheries and Conservation." *Frontiers in Ecology and the Environment* 8(7): 349–53.

Leisher, Craig, Pieter van Beukering, and Lea M. Scherl. 2007. *Nature's Investment Bank - How Marine Protected Areas Contribute to Poverty Reduction*.

Lester, Sarah E. et al. 2009. "Biological Effects within No-Take Marine Reserves: A Global Synthesis." *Marine Ecology Progress Series* 384: 33–46.

Lewison, Rebecca L et al. 2014. "Global Patterns of Marine Mammal, Seabird, and Sea Turtle Bycatch Reveal Taxa-Specific and Cumulative Megafauna Hotspots." *Proceedings of the National Academy of Sciences of the United States of America* 111(14): 5271–76.

Loper, C. et al. 2008. *Socioeconomic Conditions along the World's Tropical Coasts: 2008*. Washington DC, USA.

Marine Conservation Institute. 2016. "MPAtlas." *http://www.mpatlas.org/explore/ [07.04.2016]*.

Maxwell, Sara M. et al. 2015. "Dynamic Ocean Management: Defining and Conceptualizing Real-Time Management of the Ocean." *Marine Policy* 58: 42–50.

McCauley, D. J. et al. 2015. "Marine Defaunation: Animal Loss in the Global Ocean." *Science* 347(6219): 1255641–1255641.

McClenachan, Loren, Andrew B. Cooper, Kent E. Carpenter, and Nicholas K. Dulvy. 2012. "Extinction Risk and Bottlenecks in the Conservation of Charismatic Marine Species." *Conservation Letters* 5(1): 73–80.

McClenachan, Loren, Francesco Ferretti, and Julia K. Baum. 2012. "From Archives to Conservation: Why Historical Data Are Needed to Set Baselines for Marine Animals and Ecosystems." *Conservation Letters* 5(5): 349–59.

Mellin, Camille et al. 2016. "Marine Protected Areas Increase Resilience among Coral Reef Communities." *Ecology Letters*: in press.

Millenium Ecosystem Assessment. 2005a. *Ecosystems and Human Well-Being: Biodiverstiy Systhesis*. Washington DC, USA.

———. 2005b. *Ecosystems and Human Well-Being: Wetlands and Water Synthesis*. Washington DC, USA.

Mora, Camilo et al. 2009. "Management Effectiveness of the World's Marine Fisheries." *PLos Biology* 7(6).

Mora, Camilo, and Peter F. Sale. 2011. "Ongoing Global Biodiversity Loss and the Need to Move beyond Protected Areas: A Review of the Technical and Practical Shortcomings of Protected Areas on Land

and Sea." *Marine Ecology Progress Series* 434: 251–66.

MSC. 2014. *15 Years of Certified Sustainable Seafood - Annual Report 2014-15*.

Normile, Dennis. 2016. "Survey Confirms Worst-Ever Bleaching at Great Barrier Reef." *Science*. http://www.sciencemag.org/news/2016/04/survey-confirms-worst-ever-coral-bleaching-great-barrier-reef (June 6, 2016).

O'Leary, Bethan C. et al. 2016. "Effective Coverage Targets for Ocean Protection." *Conservation Letters*: in press.

OBIS. 2016. "IUCN Red List Species / Potentially Extinct Species." http://www.iobis.org/node/588 (June 3, 2016).

Olson, David M., and Eric Dinerstein. 2002. "The Global 200: Priority Ecoregions for Global Conservation." *Annals of the Missouri Botanical Garden* 89(2): 199–224.

Orbach, Michael, and Leah Bunce Karrer. 2010. *Marine Managed Areas: What, Why, and Where*. Arlington, Virginia, USA.

Pedersen, Carsten et al. 2014. *The Global Ocean Grab: A Primer*.

Pomeroy, Robert S, John E Parks, and Lani M Watson. 2004. *How Is Your MPA Doing?* IUCN, Gland.

Reuchlin-Hugenholtz, Emilie, and Emily McKenzie. 2015. *Marine Protected Areas: Smart Investments in Ocean Health*. Gland.

Rocliffe, Steve, Shawn Peabody, Melita Samoilys, and Julie P. Hawkins. 2014. "Towards a Network of Locally Managed Marine Areas (LMMAs) in the Western Indian Ocean." *PLoS ONE* 9(7).

Rudd, Murray A. 2015. "Pathways from Marine Protected Area Design and Management to Ecological Success." *PeerJ* 3: e1424.

Sale, Peter F. et al. 2005. "Critical Science Gaps Impede Use of No-Take Fishery Reserves." *Trends in Ecology and Evolution* 20(2): 74–80.

Salm, R.V., J.R. Clark, and E. Siirila. 2000. *Marine and Coastal Protected Areas: A Guide for Planners and Managers*. IUCN, Washington DC.

Sanchirico, James N., Kathryn a. Cochran, and Peter M. Emerson. 2002. *Marine Protected Areas: Economic and Social Implications*. Washington DC, USA.

Scales, Kylie L. et al. 2014. "On the Front Line: Frontal Zones as Priority at-Sea Conservation Areas for Mobile Marine Vertebrates." *Journal of Applied Ecology* 51(6): 1575–83.

Spalding, Mark D. et al. 2007. "Marine Ecoregions of the World: A Bioregionalization of Coastal and Shelf Areas." *BioScience* 57(7): 573.

———. 2013. "Protecting Marine Spaces: Global Targets and Changing Approaches." In *Ocean Yearbook*, , 213–48.

Sumaila, Ussif Rashid, Sylvie Guenette, Jackie Alder, and Ratana Chuenpagdee. 2000. "Addressing Ecosystem Effects of Fishing Using Marine Protected Areas." *ICES Journal of Marine Science* 57: 752–60.

The World Bank. 2010. *The Hidden Harvests - the Global Contribution of Capture Fisheries*. Washington DC, USA.

Thevenon, Florian, Chris Carroll, and Joao Sousa. 2014. *Plastic Debris in the Ocean*. Gland, Switzerland.

Thomas, Hannah L et al. 2014. "Evaluating Official Marine Protected Area Coverage for Aichi Target 11: Appraising the Data and Methods That Define Our Progress." *Aquatic Conservation: Marine and Freshwater Ecosystems* 24(S2): 8–23.

Toropova, C. et al. 2010. *Global Ocean Protection: Present Status and Future Possibilities*. Brest, France: Agence des aires marines protégées, Gland, Switzerland, Washington, DC and New York, USA: IUCN WCPA, Cambridge, UK : UNEP-WCMC, Arlington, USA: TNC, Tokyo, Japan: UNU, New York, USA: WCS.

UN. 2015. "Sustainable Development Goal 14." *http://www.un.org/sustainabledevelopment/oceans/*.

———. 2016. *First Global Integrated Marine Assessment*. Division for Ocean Affairs and the Law of the Sea, United Nations.

UNEP. 2006. *Marine and Coastal Ecosystems and Human Well-Being: A Synthesis Report Based on the Findings of the Millennium Ecosystem Assessment*.

———. 2012. *Green Economy in a Blue World*.

———. 2014. *Valuing Plastic: The Business Case for Measuring, Managing and Disclosing Plastic Use in the Consumer Goods Industry*.

UNEP-WCMC. 2008. *National and Regional Networks of Marine Protected Areas: A Review of Progress*. UNEP-WCMC, Cambridge.

Vasilijević, Maja et al. 2015. Report *Transboundary Conservation: A Systematic and Integrated Approach*.

Veríssimo, Diogo et al. 2014. "Evaluating Conservation Flagships and Flagship Fleets." *Conservation Letters* 7(3): 263–70.

Walker, Kaye, and G Moscardo. 2014. "Encouraging Sustainability beyond the Tourist Experience: Ecotourism, Interpretation and Values." *Journal of Sustainable Tourism* 22(8): 1175–96.

WBGU. 2013. *Menschheitserbe Meer*. Berlin.

Webb, Thomas J., and Beth L. Mindel. 2015. "Global Patterns of Extinction Risk in Marine and Non-Marine Systems." *Current Biology* 25(4): 506–11.

White, Crow, Benjamin S Halpern, and Carrie V Kappel. 2012. "Ecosystem Service Tradeoff Analysis Reveals the Value of Marine Spatial Planning for Multiple Ocean Uses." *Proceedings of the National Academy of Sciences* 109(12): 4696–4701.

Wilkinson, Tara et al. 2003. "Marine Species of Common Conservation Concern: Protecting Species at Risk across International Boundaries." In *Proceedings of the Fifth International SAMPAA (Science and Management of Protected Areas) Conference*, British Columbia, Victoria.

World Ocean Council. 2014. *International Ocean Governance: Policy Brief*.

Worm, Boris et al. 2006. "Impacts of Biodiversity Loss on Ocean Ecosystem Services." *Science* 314(5800): 787–90.

WPC. 2014. "A Strategy of Innovative Approaches and Recommendations to Enhance Implementation of Marine Conservation in the next Decade." *http://worldparkscongress.org/downloads/approaches/ThemeM.pdf*.

WWF. 2015. *Living Blue Planet Report. Species, Habitats and Human Well-Being*. Gland, Switzerland

# ANNEXES

Annex 1: Results Matrix

KfW Entwicklungsbank

# The Blue Action "Foundation"

## Feasibility study of the governance, financial and operational structure

Authors: Christina Kükenshöner, Dr. Karsten Timmer, Markus Kaistra

1st Version – 15.04.2016

joyn-coop GbR
Schneckenburgerstr. 20
81675 München, Germany
Fon +49(89) 925 88866
info@joyn-coop.com
www.joyn-coop.com

Partner:
Christina Kükenshöner
Dr. Christiane Ströh de Martínez

## Content

## List of Tables



## List of Boxes



## List of Figures

## Glossary of Technical Terms

| | |
|---|---|
| Board | Organ |
| Board of Directors | Vorstand |
| By-laws | Geschäftsordnung |
| Committee | Beirat |
| Endowment Fund | Stiftungsfonds / Kapitalfonds |
| Endowment grant | Zustiftung |
| Eternal Foundation | Ewigkeitsstiftung |
| Foundation Act | Stiftungsgeschäft |
| Foundation Authorities | Stiftungsaufsichtsbehörde |
| Foundation Purpose | Stiftungszweck |
| Foundation under Civil Law | Stiftung des Bürgerlichen Rechts |
| German Civil Law Code | Bürgerliches Gesetzbuch |
| German Tax Code | Abgabenordnung |
| Grant / Flow-Through Donation | Spende |
| Sinking Fund | Verbrauchsfonds |
| Spend-down Foundation | Verbrauchsstiftung |
| Statutes | Satzung |
| Supervisory Board | Kuratorium |
| Tax Office | Finanzamt |
| Trust | Unselbstständige Stiftung |

## List of Abbreviations

| | |
|---|---|
| AA | German Foreign Office |
| AO | Abgabenordnung |
| BAF | Blue Action Fund |
| BGB | Bürgerliches Gesetzbuch |
| BHO | Bundeshaushaltsordnung (Federal Budget Code) |
| BMF | Federal Ministry of Finance |
| BMJV | Federal Ministry of Justice and Consumer Protection |
| BMU | Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety |
| BMZ | Federal Ministry for Economic Cooperation and Development |
| CEO | Chief Executive Officer |
| CNF | Caucasus Nature Fund |
| CTF | Conservation Trust Fund |
| DZI | Deutsches Zentralinstitut für Soziale Fragen |
| EU | European Union |
| EUR | Euro |
| FC | Financial Cooperation |
| FZ-R | Finanzielle Zusammenarbeit mit Regionen [Budget Line for Financial Cooperation with Regions] |
| GEF | Global Environmental Facility |
| IKI | International Climate Initiative |
| IT | Information Technology |
| IUCN | International Union for the Conservation of Nature |
| KfW | Kreditanstalt für Wiederaufbau |
| MARFUND | Mesoamerican Reef Fund |
| NGO | Non-governmental organisation |
| ODA | Overseas Development Aid |
| PATRIP | Pakistan Afghanistan Tajikistan Regional Integration Program |
| PCGK | Public Corporate Governance Codex |
| PM | Project Manager |
| PONT | Prespa Ohrid Nature Trust |
| STC | Scientific and Technical Committee |
| UNDP | United Nations Development Program |
| USD | US Dollar |
| WWF | World Wildlife Foundation |

# 1 Introduction

In August 2015, BMZ drafted a Ten Point Plan for the management of coastal economic zones, fisheries and marine conservation. An important aspect of this plan is increased cooperation with international conservation NGOs to strengthen transnational marine conservation in Asia, Africa and Latin America within and beyond the 200-mile zone. A fund-based global structure – the "Blue Action Fund" (BAF) - shall facilitate this cooperation with NGOs and the financing of NGO projects specifically. KfW has been tasked by BMZ to create this fund as a German Foundation under Civil Law. In its draft Ten Point Plan, BMZ has pledged EUR 50 million in the long run.

In order to set up the BAF, a number of decisions regarding its vision, strategy, thematic orientation, structure and processes have to be made. To discuss upon these issues, KfW has set up a Steering Committee ("Panel") in cooperation with the International Union for the Conservation of Nature (IUCN). IUCN has a wealth of experience in marine conservation and has expressed interest to support the BAF on a strategic and operational level, while not aiming to take the role of an implementing partner.

This study aims to present all institutional aspects related to the BAF's founding process. The results of the discussions based on this paper will feed into foundation's statutes and shall also help to ensure a timely start of the BAF's operations. In parallel, a technical concept study is being conducted. The BAF's technical concept and its structure are being developed in an iterative process, which is why this report indicates the interlinkages.

The findings of the study are based on an analysis of relevant guidelines and laws. In addition, it draws on KfW's and IUCN's institutional knowledge on funds and foundations. Interviews served as a valuable basis for information (see annex 1 for a list of interview partners). We would like to thank all interview partners for their time and for sharing their thoughts and ideas.

The study summarizes the motives for the decision to establish BAF as a German foundation and provides a short overview of required steps to its creation (chapter 2). The remaining chapters (3-8) clarify institutional aspects, most of which are also pertinent to the statutes: foundation's purpose, legal and financial basis, governance structure, operational set-up as well as potential for pooling of resources with other German conservation funds. The last chapter summarizes the required next steps to ensure the founding of BAF in 2016.

The study is structured in a way that each chapter presents pros and cons of the suggested options and defines the decisions that need to be taken in order to move forward with founding BAF. It focuses on time-critical decisions that are immediately relevant for the statutes (marked under the heading "immediately"). At the same time, the study presents aspects of the BAF's future structure that are not as time-critical but equally important. These are listed under the heading "in the medium term".

# 2 The BAF founding process in context

## 2.1 The rationale for BAF as an independent body and a German foundation

After careful consideration, it was decided to set up the Blue Action Fund as an independent legal entity and to give it the legal form of a German foundation under Civil Law ("Stiftung des bürgerlichen Rechts"). We summarize the reasons below to reflect the BAF's idea and philosophy that will shape its structure.

Blue Action Fund as independent legal entity

- **Coastal and marine protection is a global topic and needs a "global player":** as ocean protection goes beyond country jurisdiction, a cross-regional player is needed that can implement projects in different countries at the same time. This is also necessary as the intended financial means (FZ-R[1]) require a cross-regional project-executing agency.
- **Fast action is necessary for coastal and marine protection**: after its establishment, the BAF can quickly disburse funds – without having to seek BMZ's approval with a formal project proposal for each NGO project. At the same time, the fund's qualified operational structure can ensure quality control of the project proposals. As BAF is an independent body based on civil law, the founders can define rules and procedures that are adequate for NGO-cooperation.
- **Coastal and marine protection needs stamina:** Creating and maintaining MPAs has a much longer time-horizon than a typical FC-project. A foundation offers a long-term and institutionally sustainable perspective for a topic that requires a long-term commitment.
- **A fund as potent partner to the NGOs**: a fund can build the required expertise for the topic and serve as 'sounding board' to the NGOs. While NGOs are strong in implementation, they do sometimes need support in developing project ideas to fundable projects.
- **A fund can mobilize funds**: different from an FC programme, an independent fund has the potential to acquire other donor funds and can hence leverage the BMZ funding into a much larger sum.
- **A fund sets an example:** the creation of an independent fund demonstrates Germany's commitment to coastal and marine protection with a long-term perspective. It has a much higher visibility than FC programmes.

Against the background of designing the BAF as an independent body, the decision for the legal form of a German foundation was based on the following criteria:

- **Quick founding process**: founding a German Foundation requires only a few months. In addition, KfW can capitalize on its experience in having already founded three other German Foundations.
- **Decision rights**: the founders can establish strong decision and control rights for

[1] Financial Cooperation with regions has specific requirements and guidelines from BMZ

themselves. German Foundation and Tax Laws allow for flexibility in terms of decision-making and supervisory structures and financing mechanisms.

- **Sound legal protection**: very high for the founders as the statues can generally not be changed after the foundation's establishment.
- **ODA-accountability**: is given, as the funds will flow into ODA-countries ("look-through-principle[2]").
- **Tax-exemption**: is given once tax offices have approved the Foundation's charitable status. Because of special expenses deduction for supplementary payments ("Sonderausgabenabzug für Zustiftungen") also private donors would enjoy tax privileges.
- **Positive image**: Foundations enjoy a very good reputation that can surely be helpful for acquiring additional funds.

It was a deliberate decision to establish the foundation in Germany. German foundation law offers a high degree of flexibility in shaping the structure and a sound legal protection for its operation. In addition, it offers potential of creating synergies with the other KfW funded German foundations (see chapter 8).

### 2.2 Brief overview of process to establish a German foundation

The defining trait of a foundation is that it "owns itself". Unlike every other entity, a foundation is an independent entity, which does not have owners, associates, shareholders or members. Foundations have to fulfil specific civil law requirements at federal level (§§ 80-88 BGB) and state level (in the case of the BAF, the Hessian Foundation Law). Foundations are controlled by the state foundation authorities in order to ensure that the will of the founder is respected.

As far as the non-profit status is concerned, a charitable foundation has to fulfil the same requirements as other types of non-profit organisations (§§ 51- 68 Abgabenordnung, AO).

Setting up a foundation includes:

- The founder declares his intention to establish the foundation (Foundation Act – "Stiftungsgeschäft"). The purpose, structure and guiding principles are laid down in the foundation statutes.
- The Foundation Authorities ("Stiftungsaufsichtsbehörde") examine the Foundation Act and the statutes. The approval process usually takes several weeks. With the approval of the Foundation Authorities, the entity attains legal capacity.
- During the process, the Foundation Authority will determine the minimum amount of the initial capital. An amount of EUR 100,000 is current practice. However, the Authority reserves the right to decide the minimum amount on a case-by-case basis.
- Simultaneously to the approval process at the Foundation Authorities, the Tax Office examines the statutes to assess their compliance with non-profit law. The Tax Office

[2] This statement is based on precedence with other KfW founded German foundations. For BAF, the verification of the ODA-accountability with KfW and BMZ is still work in process.

thus approves the charitable status of the organisation.

- In order to accelerate the process, it is common practise to request informal feedback from both, Foundation Authorities as well as Tax Office, prior to the official process.
- Within a 3-months-period after the formal approval the initial capital needs to be transferred.

An important step in the process of establishing the BAF as a foundation is the definition of the contents of the foundation's statues ("Satzung"). The statutes are the "constitution" of the foundation and lay down all fundamental provisions regarding its purpose, its governance structure and how its assets should be handled. Once established, changing or amending the statues is difficult (see annex 2 for the typical contents of the statutes).

In addition to the statutes, foundations may establish by-laws (e.g. "Geschäftsordnung") that typically define internal procedures (frequency of Board meetings, quorum for decisions, etc.) and sometimes also an operational manual that sets out the rules for applying to funds. Both documents are not necessary for the formal establishment and therefore not subject to this consultant's assignment. However, the study lays important groundwork for the by-laws.

### 2.3 Strategic orientation of BAF – decisive for its institutional set-up

The vision and strategic orientation for the BAF are crucially important for many aspects covered in this report. Pertinent questions are:

- Should the BAF be a mere financing mechanism for NGO projects (cost efficiency is decisive) or constitute a global strategic funding and knowledge partner (expertise, representativeness, legitimacy becomes relevant)?
- Does the BAF aim to increase significantly in its grant activities and hence funding volume (funding raising expertise and networks required) or remain constant in its funding partnerships and annual spending (initial endowment sufficiently sized)?
- Is the BAF going to be a viable funding partner for NGOs or does it aim to build grantees capacity by providing networking, consulting and research?

How these questions are answered has an immediate effect on the BAF's foundation's bodies, the financial endowment, the staffing structure and expertise but also practical questions such as choice of location. The recommendations made in this report are made in a way that the statutes allow for the different possibilities. However, the sooner decisions are made on these matters, the better they can be accommodated in the BAF's structure.

### 2.4 Guiding principles and good practises for developing our recommendations

For the recommendations of this report, the following guidelines and laws were taken into account:

**Foundation Law: Federal law and the law of the State of Hessen:** The basic legal framework for foundations is defined in the German Civil Law Code ("Bürgerliches Gesetzbuch"), paragraphs 80-88. However, in the federal setup of German law, foundations fall under the responsibility of the States ("Länder"). Since the BAF will be founded by KfW in Frankfurt, the relevant jurisdiction is the Hessian foundation law ("Hessisches Stiftungsgesetz").

**Financial Cooperation Guideline Capital Funds for Environmental and Nature Conservation:** The KfW-internal guideline lists aspects that need to be considered for appraising FC contributions into capital funds of Conservation Trust Funds (CTF). It defines best practices for CTF's governance structure, supervisory functions, legal foundations, operational and investment related aspects etc.[3] It has mostly been developed for green CTFs that focus on countries or subregions, often with a strong participation of the respective developing partner country. It is hence not completely applicable to the BAF but still serves as an important orientation.

The **Public Corporate Governance Codex** (PCGK) specifies rules for holdings of the German Federal Government ("Beteiligungen") in other entities (as defined by §65 of the Federal Budget Code (Bundeshaushaltsordnung - BHO). The PCGK sets specific guidelines for the governance structure and states detailed rules concerning reporting obligations (both internally and externally). However, the PCGK is not a law but a code. Deviations are allowed but must be explained (comply or explain-mechanism). The application of PCGK to the BAF is not mandatory, given that the BAF will not undertake commercial activities.

**Guiding Principles of Good Practice for Foundations** ("Grundsätze guter Stiftungspraxis"): The German national association of foundations ("Bundesverband Deutscher Stiftungen") has adopted the "Guiding Principles of Good Practice for Foundations" in 2006.[4] These principles put forward a set of propositions concerning basic good governance notions, such as transparency, conflict of interest, etc. Adherence is completely optional; there is no "comply or explain" mechanism.

**Federal Audit Office**: Currently, the Federal Audit Office (Bundesrechnungshof) is conducting a review of publicly funded foundations, including the KfW-established Carbon Market Foundation. The report will most likely be published during the next months. It is expected that the report will critically discuss that federal (parliamentary) control over foundations is limited. Therefore, it is advisable that the BAF takes up this recommendation.

In addition, the following good practices were taken into account:

- The four German foundations (co-)founded by KfW: Caucasus Nature Fund (CNF), Prespa Ohrid Nature Fund (PONT), Foundation Future of the Carbon Market (Carbon Market Foundation), the PATRIP-Foundation (for an introduction to these four foundations see annex 3)
- Some of the many Environmental Funds co-financed by Financial Cooperation and those recommended by the Panel

[3] KfW, 2015.
[4] Bundesverband Deutscher Stiftungen, 2015.

# 3 The foundation's purpose

The purpose enables the founders to set guidelines for future generations of trustees and directors of the BAF. It is defined in the statutes and usually consists of three paragraphs. The following discusses important considerations for defining the purpose and suggests a text for the statutes.

## 3.1 Definition of the purpose in the statutes

The first issue that has to be addressed in the statutes is the purpose of the entity. Typically, Paragraph 1 defines name and domicile of the foundation and Paragraph 2 the purpose.[5] The wording to be used in this paragraph is regulated and in parts standardized. As a main function, the paragraph enables the Tax and Foundation Authorities to judge whether or not the proposed purpose complies with the legal requirements governing non-profit foundations.

As the purpose cannot be changed at discretion once the foundation has been established, it is important to strike a good balance: on the one hand, the definition has to be sufficiently precise to ensure that the will of the founder is respected in perpetuity. On the other hand, it has to be sufficiently open to allow to adjust the activities to future challenges and circumstances.

The sample statutes provided by the Hessian foundation authority suggest a three-step approach (for the German translation of the purpose see annex 4)[6]:

Box 1: Foundation Purpose §2.1

*§ 2: Foundation Purpose and Charitable Status*

*2.1. The Foundation pursues exclusively and immediately charitable purposes.*

Paragraph 2.1. states that the foundation has a charitable ("gemeinnützig") purpose – as opposed to a benevolent ("mildtätig") or religious one.

The second paragraph has to define the foundation's particular purpose on the basis of the catalogue of charitable purposes that are officially recognized by the German Tax Office (§52.2 AO). The foundation is not obliged to pursue all purposes of the statutes simultaneously, but it must not pursue activities that are not covered by this paragraph.

Both, "environmental protection" as well as "coastal protection" figure in the list. Therefore, it is obvious to include those two and to define the geographical scope of this activity. Given that the foundation aims to promote the sustainable use of maritime resources by local fishermen and others, it is recommended to include "development cooperation". In order to be able to fund scientific research or congresses on the matter, "science and research" should also figure on the list.

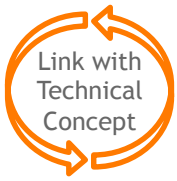
[5] See sample statutes provided by the Hessian foundation authority. Darmstadt Regional Council, 2014.
[6] The statutes will be written in German. A potential English translation will not have binding character. It is however, possible to elaborate bi-lingual statues (as is the case for PONT).

Box 2: Foundation Purpose §2.2

*The Foundation purposes*

- *The promotion of environmental protection, in particular the promotion of marine and costal protection in Africa, Asia and Latin America (§52.2.8 AO)*
- *The promotion of development cooperation, in particular related to the sustainable use of maritime resources (§52.2.15 AO)*
- *The promotion of science and research, as far as it concerns the above-mentioned purposes.*

In the third paragraph of this section the founder is asked to exemplify specific measures and activities, through which the foundation should fulfil its mission. This list is neither binding nor exclusive. Depending on the results of the technical study, this could for example state the following:




Box 3: Foundation Purpose §2.3

*The Foundation purposes may be particularly realized through the support of measures and projects in the areas:*

- *Transnational marine protection (marine protected areas, mangrove belts, coral reefs, seagrass beds, fishery control)*
- *Coastal protection (resilient coasts, sustainably acting coastal inhabitants, conservation of mangroves)*
- *Increasing income for fishermen (spill over, sustainable aquaculture on- and offshore)*

*The foundation can promote the mentioned measures by granting financial support, but also through advising, linking and strengthening the organisations active in the sector.*

It is possible to preface the statues with a **preamble** that explains the motives and expectations of the founder. This appears to be a good place to refer to the BMZ **Ten Point Plan** and to put forward the guiding principles that have led to the establishment of the BAF (cf. the preamble of the Carbon Market Foundation).

### 3.2 For decision and discussion

**Immediately:**

- Should we name the entity "Blue Action Foundation"?
- Is the list of purposes (paragraph 2.2.) accurate and exhaustive? Does it cover all activities that the BAF might want to undertake?
- Is the proposition for paragraph 2.3. suitable? Shall it include capacity building activities?
- Shall we include a preamble and who will draft it?

**In the medium term:**

- What is the underlying vision for BAF? Is it to be seen as a financing mechanism, or should it develop into a platform for knowledge and learning exchange? Is the goal to create and consolidate protected areas or also to facilitate their long-term operation and maintenance?

# 4 The foundation's endowment: eternal vs. spend-down capital

The decision to set up the BAF as a foundation under German law still gives leeway for the financial structuring of the entity. There are three different options that might be adopted by the BAF, two main alternatives and a hybrid model (for a description of the different types of financial envelopes see annex 5):

- 100% eternal foundation
- 100% spend-down foundation
- 20% eternal and 80% spend-down capital

## 4.1 Option 1: 100% eternal foundation

This is the traditional type of a foundation with a very simple yet successful business model: The foundation is obliged to preserve and safeguard its capital (real estate, money, shares, etc.) and is only allowed to use the revenues to fund its activities. In fact, the oldest German foundations of this type date back to the Middle Ages.

Pro

+ The establishment of an eternal foundation would send a very clear political message: this fund is a lasting and long-term endeavour spearhead by BMZ.
+ An eternal foundation is in a good position to attract additional donors, especially those who seek to make a long-term investment.

Con

- Given the current 'zero-interest' investment climate, even the pledged EUR 50 million will only generate moderate revenues which will not be enough to make a substantial and visible contribution to global marine conservation.
- In view of the time pressure to preserve marine environments, resources are rather needed on a short- to medium-term basis, not "in eternity".
- It is partially controversial whether or not funds put into an eternal foundation outside an ODA country are ODA eligible[7].

Conclusion

- The disadvantages outweigh the advantages which can be obtained with one of other options described below.
- The option 100% eternal foundation is not advisable for the BAF.

## 4.2 Option 2: 100% spend-down foundation

While spend-down foundations were never forbidden in Germany, they were explicitly recognized by law in 2013 ("Gesetz zur Stärkung des Ehrenamtes").[8] Today, it is possible to establish a foundation which is not eternal but has a fixed "expiration date". Provided that this date allows for a lifespan of at least ten years, the foundation can and must use the capital

[7] This is currently being clarified within KfW and later on with BMZ.
[8] In the past, Foundation authorities were reluctant to approve spend-down foundations (e.g. Carbon Market Foundation in 2011). With the new civil law regulation of 2013, this should not longer be a problem. However, it is advisable to contact the foundation authorities as soon as possible for a preliminary feedback, particularly in the case of a spend-down foundation.

to fund programs and will be dissolved once the capital has been spent in its entirety.

Until 2015, the Hessian Foundation Authorities used to accept spend-down foundations without a fixed duration. This model offered a lot of flexibility, as a foundation had the right to spend the capital but was not obliged to do so. Unfortunately, this hybrid model is no longer accepted. The statutes must state a fixed lifespan and must define broadly how much capital can/should be used annually.

In the light of the new regulation, the duration of a spend-down foundation is finite. A BAF structured along the lines of this model will cease to exist at a certain point in time.

Pro

+ A 100% spend-down foundation makes 100% use of the resources available. No funds are held back; all financial resources are invested directly to achieve the BAF's purpose.
+ A 100% spend-down foundation with a fixed duration offers a clear exit strategy to KfW.

Con

- An "expiration date" would have to be set in advance. Given that a lot of factors are unknown at present (additional funds of BMZ and others, context of marine protection, etc.), this might prove to be difficult. However, the lifespan could be extended if substantial additional funds are made available.
- As the lifespan is fixed in the statutes, receiving additional funds will require amending the statutes in order to prolong the foundation's lifetime. This is particularly true for additional funds committed at a later stage, while funds committed early (e.g. in 2017) are not strongly affected by the fixed expiration date.
- The BAF can accept endowment grants, but only spend-down ones (i.e. sinking funds). It is not possible to incorporate an eternal endowment in a spend-down foundation.
- A spend-down donation does not enjoy the same tax privileges as a donation to an eternal endowment fund. However, this disadvantage is only relevant when private donors should be brought on board for which tax privileges often play a role.

Conclusion

- Given that it is highly likely that BMZ will pledge funding even after 2017, the structure of the BAF must offer an easy and flexible way to accept those and other funds. The fact that the 100% spend-down foundation might be obliged to alter the statutes in order to accept additional funds is a strong argument against this option. Even if there are ways to bypass this requirement, e.g. by establishing a trust ("unselbstständige Stiftung") within the BAF, these ways have not yet been tested in KfW-led foundations (see annex 6, which explains mechanisms to accept additional funding).
- The finite and fixed duration of this model puts high time pressure on the BAF as all activities must be wound up before the expiration date of the foundation. If this model is chosen, it is advisable to stretch the initial lifespan to more than the minimum requirement of ten years. However, stretching the deadline would mean stretching the funds available and would thus lower the annual budget. The ideal lifespan might be around 15 years.

### 4.3 Option 3: Hybrid - 20% eternal and 80% spend-down capital

The authorities still approve hybrid models that contain a core endowment fund given "in perpetuity" and a sinking fund with spend-down money. This type of hybrid model (20/80[9]) would ensure both: a long term ("eternal") perspective on the one hand and short- or medium-term liquidity on the other hand.

Pro

+ The new policy regarding spend-down foundations would still require that a duration has to be fixed for the spend-down portion of the capital (sinking fund). However, it would not be necessary to change the statutes in order to accept additional funds. Thanks to the small endowment portion, the foundation at large has no expiration date and can accept all kinds of endowments (eternal endowment grants, sinking funds[10])
+ The spend-down portion of the capital could be stretched over only ten years and would thus make more resources available for the program activities.
+ Its long-term existence would make the BAF a reliable partner for the international NGOs. It would have the necessary breath to support the establishment of protected areas, which can take a very long time.
+ The CNF is structured along the lines of this model.[11] Its application to the BAF would thus not require formal consent of the BMZ.

Con

- The small endowment portion will create an organisation that is supposed to exist eternally. As long as marine protection is an issue, there will be no way to dissolve the foundation even if all parties have lost their interest. Even if KfW can delegate all obligations to third parties, someone will have to manage and administer the entity.[12]
- If the initial funding is depleted and if no additional co-funding can be acquired, the BAF may turn into an empty shell. Many German foundations have experienced this fate.
- In order to create an eternal foundation, funds must be permanently "parked" in the endowment. These funds will not be available to finance program activities.

Conclusion

• The eternal portion of the hybrid model allows for more flexibility and makes this model a reasonable way to structure the BAF. However, the very same eternal portion may turn into an unwelcome liability once the capital has been spent down. (see next chapter).

---

[9] The portioning of 20 to 80 is just exemplary and not meant literally.
[10] Could either be an endowment grant ("Zustiftung") to be maintained (eternal) or be spend down (sinking fund with min. 10 years lifetime and clear expiration date set in the declaration ("Zustiftungserklärung") or a spend-down trust ("unselbstständige Stiftung") (min. 10 years lifetime, no clear expiration date)
[11] CNF was founded with an initial endowment fund of EUR 5 million, later received a sinking fund of 7 million EUR over 30 years, currently stands at about EUR 14 million endowment and EUR 11 million sinking funds.
[12] Once the BAF is too small to afford a professional CEO, it still needs to maintain basic functions. It is the Supervisory Board's responsibility to find a director who ensures/oversees the few remaining tasks (making grants, report to foundation authorities, accounting, board meeting etc.).

### 4.4 Additional possibility: project financing

Project financing constitutes an additional possibility to finance the BAF in a simple way: KfW would commit a specific funding volume to BAF and disburse the funds to BAF depending on the progress of its grant activities and its respective funding needs. This is basically the normal mode of delivery of a typical FC project. Project financing is not an option in the short term because of the specific funding source for BAF: until 2019, regional funds (FZ-R) need to have clear payment schedules[13]. Even small deviations need to be reported to BMZ, deviations above 5% even need consent by the Ministry of Finance. As the concrete financing needs depend on the future NGO projects it is not possible to pre-define them to the extent needed. However, as this regulation expires in 2019, project financing could become an attractive option in the medium term.

### 4.5 For decision and discussion

**Immediately:**

- Do we agree that option 3 is the best way to go ahead?

**In the medium term:**

- If option 3 is chosen: What could be the long-term vision for BAF to legitimise its existence in "eternity"?


[13] These are much more detailed than the disbursement schedules required for spend-down capital.

# 5 The foundation's budget: financial basis

## 5.1 Size of 'eternal' endowment fund

If the decision is made to structure the BAF's endowment as a hybrid with a smaller endowment fund and a larger sinking fund, proportioning the ideal size of the two financial envelopes is critical: In view of the unclear ODA-eligibility[14] of endowment funds and in order to make as much money as possible available to the projects, the eternal endowment portion of the capital should be restricted to the absolute minimum. At the same time, the endowment portion has to be substantial enough to ensure minimum activities in case no other funding is available and the BAF has to live from the revenues.

The optimum value lies within the range of EUR 1 and 5 million. An endowment of EUR 1 million would generate annual returns of EUR 40,000 (assuming a return to investment of 4%) and suffice for administration and minimal activities. An endowment of 5 million EUR on the other hand, would raise EUR 200,000 annually and already allow for a small grants program.

The size of the endowment fund can be increased when additional endowment becomes available. The initial endowment fund from the first EUR 5.8 million should be small enough to be able to commence activities from the Sinking Fund. This endowment is subject to discussion with the Foundation Authorities.

## 5.2 Liquidity planning

As discussed above in chapter 4, for funds committed to be spend down a clear expiry date and a schedule for the disbursement over time needs to be specified in the statutes. This has consequences for the BAF's liquidity planning.

For the time being, the BAF can only count on the money actually pledged by BMZ. The initial capital of the BAF is EUR 5.8 million that BMZ will provide in 2016. Until end of 2017, the BAF will likely have around EUR 20 million, while BMZ has publically announced in its Ten Point Plan a total volume of EUR 50 million in the long term.

Based on the assumption that BAF will have a spend-down capital of about EUR 20 to 25 million, the basic liquidity planning is simple: Stretched over a ten-year period (minimum requirement), the BAF has an average annual budget of EUR 2 million. For a sound and safe planning, it is reasonable to build the basic liquidity planning on this assumption.

However, the BAF would be free to make bigger up-front investments (and thus use a bigger portion of the capital) in the first years. There is however a limitation to first investments:

- There needs to be at least one Euro left ten years after the establishment.
- Spending needs to adhere to the requirements set out in the financial spending plan in the statutes (see box below for the spending plan of the Carbon Market Foundation). It is still unclear if the same flexibility is still possible or whether spending requirements have been tightened

[14] In order for an endowment fund to become ODA eligible, the project proposal has to explain that the operative cost financed from the returns relate to project implementation and do not finance KfW's very own tasks. It is still under discussion if an (additional) operational office in an ODA-country would be required.

- If a too large proportion is pledged in the first few years, the BAF should have been equipped with project financing rather than a Sinking Fund. This will likely be critically remarked by the Tax Office.

Box 4: Spending Schedule: Carbon Market Foundation

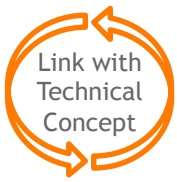
*"[For spending down capital], it must be ensured that*

*- at end of the third year after founding still at least 15%*
*- at end of the fifth year after founding still at least 10%*
*- at end of the seventh year after founding still at least 5%*
*- at end of the ninth year after founding still at least 1%*

*of the initial endowment be maintained."*

Source: Statutes Carbon Market Foundation

In addition to the funds provided by BMZ, the BAF will generate additional resources by investing the capital. The calculation has to take the decreasing investment capital into account. However, based on a hypothetical return rate of 4% per year, BAF would generate a total of EUR 3.8-4.5 million[15] out of the financial investment. This shows the need for a smart investment policy.




Spending scenarios largely depend on the outcomes of the technical concept study. They depend on how many rounds of project selection are made and on the question if large investment projects (quick wins), long-term capacity building or even operational cost should be financed. Based on this, one can distinguish two different hypothetical spending scenarios:

1) Quick disbursement: Three calls for proposal take place in 2017, 2019 and 2021. At each call, a total of EUR 8 million is pledged and equally spent over three years (column C3). The fund would need to acquire additional funding before the end of 2023 (see closing cash balance).[16] The right column (closing cash balance's share of total endowment) has to match the spending plan outlined in the statutes.

[15] This estimate is based on the two scenarios below.
[16] This assumes investment returns of 4% p.a., operative cost of EUR 200,000 and project-related cost of EUR 300,000 in years, where new projects have to be prepared (years with calls for proposal) and EUR 100,000 in all other years.

Table 1: Quick spending scenario in million EUR

| Year | A Opening Cash Balance | B Profits Investment | C Disbursement (C1+C2+C3) | C1 Operative cost | C2 project-related cost | C3 project cost | Closing Cash Balance (A+B-C) | % of total endowment |
|---|---|---|---|---|---|---|---|---|
| 2017 | 5.8 | 0.2 | 3.2 | 0.2 | 0.3 | 2.67 | 2.9 | |
| 2018 | 22.9 | 0.9 | 3.2 | 0.2 | 0.3 | 2.67 | 20.6 | 80% |
| 2019 | 20.6 | 0.8 | 5.8 | 0.2 | 0.3 | 5.33 | 15.6 | 60% |
| 2020 | 15.6 | 0.6 | 3.0 | 0.2 | 0.1 | 2.67 | 13.3 | 51% |
| 2021 | 13.3 | 0.5 | 5.6 | 0.2 | 0.1 | 5.33 | 8.2 | 32% |
| 2022 | 8.2 | 0.3 | 3.0 | 0.2 | 0.1 | 2.67 | 5.5 | 21% |
| 2023 | 5.5 | 0.2 | 3.0 | 0.2 | 0.1 | 2.67 | 2.8 | 11% |

2) Slow disbursement: Four calls for proposals take place in 2017, 2019, 2021 and 2023. At each call, a total of EUR 6 million is pledged. The BAF would need to acquire additional funds before the end of 2025 (see closing cash balance).

Table 2: Slow spending scenario in million EUR

| Year | A Opening Cash Balance | B Profits Investment | C Cash Disbursement (B1+B2) | C1 Operative Costs | C2 project-related cost | C3 Project Cost | Closing Cash Balance (A+B-C) | % of total endowment |
|---|---|---|---|---|---|---|---|---|
| 2017 | 5.8 | 0.2 | 2.5 | 0.2 | 0.3 | 2 | 3.5 | |
| 2018 | 23.5 | 0.9 | 2.3 | 0.2 | 0.1 | 2 | 22.2 | 86% |
| 2019 | 22.2 | 0.9 | 4.5 | 0.2 | 0.3 | 4 | 18.6 | 72% |
| 2020 | 18.6 | 0.7 | 2.3 | 0.2 | 0.1 | 2 | 17.0 | 66% |
| 2021 | 17.0 | 0.7 | 4.5 | 0.2 | 0.3 | 4 | 13.2 | 51% |
| 2022 | 13.2 | 0.5 | 2.3 | 0.2 | 0.1 | 2 | 11.4 | 44% |
| 2023 | 11.4 | 0.5 | 4.5 | 0.2 | 0.3 | 4 | 7.4 | 29% |
| 2024 | 7.4 | 0.3 | 2.3 | 0.2 | 0.1 | 2 | 5.4 | 21% |
| 2025 | 5.4 | 0.2 | 2.3 | 0.2 | 0.1 | 2 | 3.3 | 13% |

Naturally, if additional funds are committed (including the total of EUR 50 million publically announced by BMZ), the spending plan can be accelerated (see annex 6 for a detailed description of the different options to accept additional funding).

### 5.3 For decision and discussion

**Immediately:**

- If option 3 (hybrid endowment) is chosen: Which portion of the BMZ resources is to be allocated to the eternal fund? This will have to be defined in the Foundation Act.
- What should be the "expiry date" for the initial sinking fund and what kind of compulsory spending scenario is realistic?

**In the medium term:**

- Are the spending scenarios described above realistic?
- Should the BAF consider a fast or a slow spending scenario?

# 6 The foundation's governance structure

Designing the right governance structure for the BAF pertains to establishing bodies that make the foundation function effectively. It is guided by the question how to mobilize knowledge and how to gain legitimacy from a donor perspective but also in the eyes of cooperation partners and other stakeholders.

Legal requirements and guidelines as well as preferences from BMZ and the Panel set the boundaries for the governance structure. The remaining flexibility lies in a few design parameters, based on which three options with strengths and weaknesses can be derived. The preferred option can be complemented by committees that do not need to be specified in the statutes, but can be decided at a later stage.

## 6.1 Relevant requirements from laws and guidelines

### 6.1.1 Legal framework (§§ 80-88, BGB)

From a legal point of view, the minimum requirement for a governance structure of a German foundation is one Board ("Vorstand") with at least one Board member. However, the founder of a foundation is free to establish additional boards and to determine their respective roles and responsibilities. This offers a high degree of flexibility and allows finding tailor-made solutions that meet the founder's will.

- The Board of Directors is responsible to ensure the functioning of the Foundation. It especially has to organize asset management, accounting and use of funds. For this purpose, it can hire own staff or contract third parties. Members of the Board are traditionally not remunerated, but remuneration can be foreseen in the statutes.
- The statutes have to determine the responsibilities of every board. Moreover, the statues need to specify appointment and succession rules for every Board. Typical methods are cooptation (by the Board itself) or delegation by relevant stakeholders (e.g. by KfW).

The Board has the right to create additional committees ("Beiräte"), such as an investment committee. These permanent or non-permanent committees do not have to be described in the statutes.

Box 5: English translation of foundation bodies

Various English translations of the German terms are common. They allow to express the varying roles that the foundation's bodies might take. For the time being, the terms are used in the following way:

- "**Board of Directors**" refers to the Board which is legally responsible for the foundation ("Vorstand").
- "**Supervisory Board**" refers to the control body ("Kuratorium").
- "**Committees**" are groups entrusted with specific tasks. These groups are not mentioned in the statutes. ("Beiräte")

### 6.1.2 Financial Cooperation Requirements

According to the Guidelines for Capital Funds in Environmental and Nature Conservation, KfW should be part of supervisory bodies only in exceptional cases in order to prevent conflicts of interest between KfW's role as trustee of the German government and its role as representa-

tive of the fund. In this case, an exit strategy from the supervisory body needs to be established already at the appraisal stage. In case of regional funds (FZ-R) a more active management by the German Government on the boards is suggested[17]. If KfW is represented on the bodies, its function in project management and in representation on the committee should be clearly separated[18].

### 6.1.3 Public Corporate Governance Kodex (PCGK)

All companies, in which German Federal Government holds a share, are obliged to comply with the PCGK. This rule explicitly includes foundations. However, the Code is only applicable if the entity is engaged in a commercial activity. As this is not the case for the BAF, PCGK compliance is voluntary.

We recommend to structure the BAF in a way that is in accordance with the PCGK without aiming a formal compliance.

The recommendation is motivated by a set of reasons that suggest a fundamental accordance with PCGK:

- Advantages are that PCGK rules aim at increasing transparency and at strengthening corporate governance.
- Accordance with PCGK principles might make it easier to attract additional funding from public sources (German or international)
- For the most part, PCGK regulations are common sense rules that BAF would respect anyway.
- Annex 7 shows that most of the PCGK-rules can easily be adapted and adopted to the BAF.
- Application of PCGK would not take much time and effort.

However, formal compliance might prove to be inconvenient:

- It is difficult to apply a code that was made for companies to a foundation. This problem makes ensuring full compliance rather impossible.
- Some PCGK-regulations of minor importance are difficult to implement in the preferred governance model (see below).
- Full PCGK-compliance demands BMZ representation on the Supervisory Board.
- The presentation of a Corporate Governance Report is an extra-effort.
- As PCGK specifies a lot of details (age restrictions for board members, internal reporting requirements, etc.). In order to reach formal compliance, the statutes would have to take all these details into account. This would make the elaboration of the statutes more laborious.

We do thus recommend to take advantage of the reasonable PCGK-framework without assum-

[17] FZ-R Leitlinie: „In Abgrenzung zu Beiträgen an multilaterale oder supranationale Organisationen soll die Verwendung der Mittel aber eben nicht einem Finanzierungspartner überlassen werden, sondern die erhöhten Einflußmöglichkeiten der deutschen Seite sollen in der Vorbereitung während der Planungsphase bzw. bei der Umsetzung über entsprechende Gremien gewährleistet sein." KfW, 2013.
[18] Means to do so are separation of staff, disciplinary separation (staff from different departments), separation of interests (KfW staff on committee represents interest of Foundation) and separation of tasks (KfW staff on committee should not execute tasks that are KfW responsibilities).

ing the obligation to formally comply with the code. A desirable side effect of this middle course is that the BAF would be ready for compliance if regulations or policies are changed and compliance becomes mandatory.

### 6.2 Specifications for the BAF governance model

From the requirements from laws and guidelines discussed above, a set of specifications for the BAF's governance structure can already be derived. They are presented in the table below.

Table 3: BAF governance checklist: specifications derived from laws and guidelines

| Requirement | Consequence for the BAF |
|---|---|
| Should be in principle PCGK-compatible | • Two level Board structure (Board of Directors *and* Supervisory Board)<br>• BMZ has to be represented in the Supervisory Board<br>• Strong control rights for the Supervisory Board<br>• At least two persons in the Board of Directors |
| Financial Cooperation Requirements | • If KfW is represented on the bodies, its function in project management and in representation on the committee should be clearly separated<br>• KfW should reserve a right of consent for strategic decisions<br>• Two level Board structure (Board of Directors and Supervisory Board)<br>• Civil society should be represented in the Supervisory Board |
| Foundation Law | • Long-term viability (if the BAF is structured in the 80:20% model): the governance structure has to be functional during the spend-down phase, but also afterwards "in perpetuity" |

In addition to the good governance rules that the BAF will have to take into account, BMZ as well as the Panel have expressed a set of requests and preferences that should also be reflected in the governance structure. They are presented in the table below:

Table 4: BAF governance checklist continued: requirements from BMZ and Panel

| Requirement | Consequence for the BAF |
|---|---|
| Structure should be as lean as possible | • Statutes should only stipulate provisions for indispensable boards, all other tasks will be delegated to committees that do not have to be defined in the statutes. |
| Structure should offer the possibility to give a Board seat to important donors | • There has to be a Supervisory Board that is not involved in day-to-day activities. |
| Representation of international expertise | • The statutes should foresee the possibility to create an advisory committee. |
| Representation of IUCN in decision-making or supervisory body | • IUCN involved at Board-level |

| | |
|---|---|
| BMZ wishes to not be involved in the governance structure | • No or only minimum representation of BMZ<br>• KfW has to partially assume this responsibility in order to ensure public control over the entity. KfW must have a strong position in the structure. |
| Governance structure has to be similar to one of the other foundations established by KfW to avoid verification by BMZ. | • Governance structure should follow the model of CNF, or PONT. |
| Sufficient control and oversight by KfW | • Structure has to allow for strong control rights of KfW (policy setting) without an active involvement in day-to-day business |
| Clear exit strategy of KfW | • Statutes have to make arrangements for the organisation to become completely independent from KfW. |

It is obvious that the demands are not only complex but sometimes even conflicting. For instance, BMZ does not wish to be represented in the governance structure, whereas this would be PCGK compliant. At the same time, taking all of these requirements into account still leaves room for different governance structures. These can be influenced by three design parameters described in the following chapter.

### 6.3 Design parameters

Three relevant parameters allow to adjust the governance structure of a foundation in order to meet the demands of the founder:

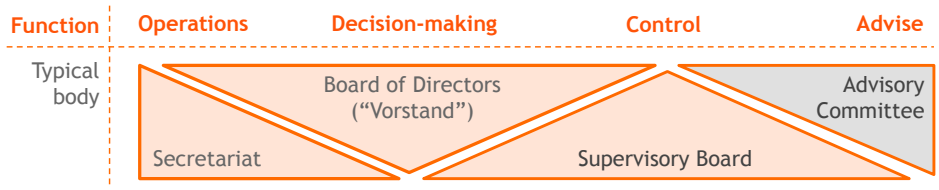
- Definition of the number of boards
- Definition of their respective roles and responsibilities
- Definition of the body/institution competent to appoint board members

These three design parameters are interwoven and can be combined in various ways. Having said that, the specifications cited above give clear guidelines for the future structure and limit the options to a manageable number. These options present different ways to spread the basic functions of a governance structure among the foundation's bodies:

- Control: provide checks and balances/ internal control
- Decision-making: allow for timely and well-informed decisions
- Operations: ensure smooth and effective day-to-day management
- Advise: inform and guide decisions

As demonstrated in the figure below, it is possible to divide functions among the bodies in various ways (see annex 8 for typical tasks corresponding to the different functions).

Figure 1: Typical bodies and their functions




Source: based on Epkenhans & Then (2015)

### 6.4 Options for the BAF

Taking the requirements into consideration, three distinctive options seem feasible.

Table 5: Three Governance Options

| Function | Option 1 | Option 2 | Option 3 |
|---|---|---|---|
| **BMZ precedence** | CNF | - | PONT |
| **Control** | Board of Directors (non-remunerated) | Supervisory Board | Supervisory Board |
| **Decision-making** | | Board of Directors (non-remunerated) | Director-CEO (remunerated) |
| **Operations** | CEO & staff | Staff | Staff |

#### 6.4.1 Option 1: one-tier model with a board of directors only

This model has a Board of Directors as single Board (1-tier foundation). There is no internal control mechanism at Board level. The Board delegates most responsibilities to a professional CEO, but supervises him and is involved in a number of decisions. The CEO in turn would hire staff or contract a service provider. As legally prescribed, the Board of Directors would remain legally responsible and accountable. Precedence for this governance structure with BMZ is given through Caucasus Nature Fund (CNF).

Table 6: Governance Option 1

| Body | Responsabilities | Members |
|---|---|---|
| Board of Directors | - Strategic Guidance<br>- Policy setting<br>- Instruction and supervision of CEO | Delegated by KfW & BMZ (not necessarily KfW or BMZ personnel) |
| Secretariat | - Management | CEO & Staff / Service Provider |

Pro:

+ Very lean
+ The Board is free to establish committees or working groups in order to have access to specific know-how (investment committee, scientific and technical committee)

Con:

- The existence of a control organ is a basic prerequisite of PCGK and KfW-policy regarding conservations funds.
- A two-level governance structure is current good governance practice for bigger foundations in Germany.
- A Supervisory Board gives credibility and reputation to the organisation, which is important for fundraising and campaigns.
- A Supervisory Board allows to give important players and/or donors a reputable place but limited responsibility (as the government of Luxemburg in the case of PATRIP).

Conclusion

- This model is not an option for the BAF.

### 6.4.2 Option 2: two-tier model with two non-remunerated boards

Just like Option 1, **Option 2** has a Board of Directors that controls and supervises a secretariat that is responsible for the day-to-day fund management. In addition, the BAF would have a Supervisory Board as second-tier board. IUCN and other international experts could be represented on this Board to increase the international legitimacy. Both, the Board of Directors and the Supervisory Board would be volunteer boards. Only the personnel at management level is remunerated.

Precedence for option 2 is given through the Carbon Market Foundation and PATRIP. However, none of these two foundations were established with BMZ funding so that they might not be applicable as precedence.

Table 7: Governance Option 2

| Body | Responsabilities | Members |
|---|---|---|
| Supervisory Board | - Control of the Board of Directors<br>- Strategic guidance | BMZ, IUCN, Academia, UN, etc. |
| Board of Directors | - Policy setting<br>- Instruction and supervision of CEO | 3 persons named by KfW / BMZ (not necessarily KfW or BMZ personnel) |
| Secretariat | - Management | Staff / Service provider |

Pro:

+ This model is PCGK-compatible.
+ Internal control and legitimacy through a Supervisory Board with control rights.
+ Within a two-tier structure, the Supervisory Board has a relatively weak influence on the organisation. This makes it easy to offer seats to additional third party institutions or donors.
+ The two-tier structure offers a clear exit-strategy for KfW: KfW can pass the right to name the Directors to the Supervisory Board (example of PATRIP[19]) so that KfW is no longer involved.

Con:

- Governance structure is more complex.
- A higher number of Boards entail a higher number of board members who have to be named, managed, informed, etc.
- Liability risks lie with the persons delegated by KfW.
- There is no precedence with BMZ.
- This model would imply a very strong involvement of KfW. As the example of the Car-

[19] PATRIP, statutes, page 3: „Die Vorstandsmitglieder werden von der KfW im Einvernehmen mit dem Kuratorium entsandt. Soweit die KfW nach Aufforderung durch das Kuratorium von ihren Entsenderecht kein Gebrauch macht, können die Vorstandsmitglieder von dem Kuratorium gewählt werden."

bon Market Foundation shows, the supervision of the secretariat is quite a task for a volunteer Board. In fact, the KfW-member in the "Carbon-Board" is seconded by 25%.

Conclusion

- Given that KfW wants to have control rights but does not wish to be involved in business activities, this model does not present an ideal way to structure the organisation.
- Moreover, there is no precedence with BMZ.
- This model is not an option.

### 6.4.3 Option 3: two-tier model with a remunerated Director at board level

Only at first glance, model 3 looks similar to option 2. The important difference is that the seat in the Board of Directors in this model is filled with a remunerated professional. While option 2 proposed a voluntary Board of Directors overseeing a professional staff, model 3 merges these two functions in one single board. This model gives the Director a very strong position within the foundation. Consequently, the Supervisory Board has to have strong rights to control und supervise this person. As founders and in order to be able to control the funds committed by the German government in an appropriate way, BMZ and KfW should reserve the right to appoint the members of the Supervisory Board (which in turn would name the Board of Directors). These persons might but must not be BMZ/KfW employees. Members from other institutions such as IUCN can be appointed to the Supervisory Board. As an exit strategy for BMZ and KfW, the statutes would grant them the possibility to pass this right to the Supervisory Board itself that would henceforth be responsible for its own succession (cooptation).

Precedence for this governance structure with BMZ exists through PONT.

The statutes would grant the right to appoint the Board of Directors to the Supervisory Board and specifically allow a professional remunerated person on the Board. The details of the division of roles and responsibilities between the Supervisory Board and the Board of Directors can be elaborated in by-laws which are not required for the founding procedure.

Table 8: Governance Option 3

| Bodies | Responsabilities | Members |
|---|---|---|
| Supervisory Board | - Recruitment and supervision of Director<br>- Strategic guidance | 3 members appointed by KfW/ BMZ (BMZ could appoint KfW employee, KfW could appoint IUCN staff) |
| Director/ CEO | - Policy setting<br>- Management | Professional CEO<br>Optional: additional members |
| Staff | - Management | Staff or service provider |

Pro:

+ Strong CEO with Board function allows for effective decision-making and smooth operations.
+ Statutes would grant strong control rights to Supervisory Board. KfW would thus have control, but would not be involved in operations.

+ All liability risks lie with the remunerated director.
+ The model can be designed in a way that is PCGK-compatible. For this reason, the statutes should foresee the possibility to name additional Directors.
+ In order to comply with PCGK, BMZ representation is mandatory. This representation can be achieved by granting BMZ the right to name one member of the Supervisory Board. This can be a BMZ employee or an independent expert.
+ The named members of the Supervisory Board can elect additional members at their discretion. This offers a good way to involve IUCN and other institutions as long as this involvement is desirable, while minimizing a potential conflict of interest.

Con:

- This is a very efficient governance model for the first ten or twenty years during which operations are funded by the spend-down capital. The statutes will have to foresee the possibility to scale the structure down, once that the foundation has spend the money and can no longer afford a remunerated CEO.

Conclusion

- In light of the BAF governance checklist presented above (5.2.), this model seems to offer a way to accommodate most of the specifications. We thus recommend this governance structure for BAF.

### 6.5 Committees

In addition to establishing Boards (i.e. bodies mentioned in the statutes), it is also possible to establish committees. Committees can be set up on a permanent or ad-hoc basis. In the statutes it suffices to mention the possibility to establish them.[20]

Creating an **Investment Committee** has become common practise and is recommended by the FC Guideline for Capital Funds. An Investment Committee assembles important specialized expertise and typically establishes the Investment Strategy and supervises Investment Consultants. Therefore, it is also advisable for BAF.

Representing technical expertise in the governance structure can be an important means to mobilize expertise and raise the legitimacy of the BAF towards potential future donors and other actors. This could be done through a **Scientific and Technical Committee** (STC) that could be involved in the review of proposals. Statutes commonly do not specify the creation of such an advisory committee, but could foresee the possibility to create it. The Total Foundation is an interesting example in this respect. For its project work in marine conservation, it has created an *Environmental and Biodiversity Committee* on which twelve renowned scientific experts are represented. The Committee makes recommendations to the Foundation's decision-making body. For this purpose, it meets twice a year to review proposals after the Secretariat has established their eligibility. By allowing to submit standardized evaluation grids digitally, the committee maintains functionality even if members are not able to attend the review meetings (see annex 9). Corresponding to its purpose, BAF's STC should consist of

[20] The Investment Climate Facility, which is co-financed by FC, has for instance an Audit and Finance Committee, an Investment Subcommittee as well as a Technical Advisory Committee. PCGK specifically recommends the establishment of an Audit committee.

members with biodiversity and development backgrounds.[21]

Due to the global nature of the BAF, it would be practically impossible to represent national interests through inclusion in the governance structure. Instead, national support could be ensured on the level of the individual projects, for instance through an endorsement requirement. A further possibility to raise legitimacy vis-à-vis national governments would be to set up a group of regional experts (one for each ocean) that could meet virtually or be consulted on a case-by-case basis.

As mentioned, the decision regarding the establishment of committees can be taken later. At this point, it is only important to be aware of the possibility to assign specific tasks to committees in order to unburden the formal boards.

### 6.6 For decision and discussion

**Immediately:**

- Does the list of specifications (5.2.) cover all relevant demands regarding the governance structure? Is it feasible and desirable to involve BMZ in the Supervisory Board?
- Do we agree that option 3 presents the best way to incorporate the BAF?
- Do we agree that for PCGK, the middle course (PCGK-accordance but not compliance) is appropriate?

**In the medium term:**

- Should IUCN be elected member of the Supervisory Board right from the beginning or should IUCN's strengths rather be used at the secretariat level for a smooth kick-start of BAF's operations (see next chapter)?

[21] Experts could include representatives from the German government (Ministry of Environment), the German research community, experts with an international organisation background, such as from IOC-UNESCO, FAO, World Maritime Organisation.

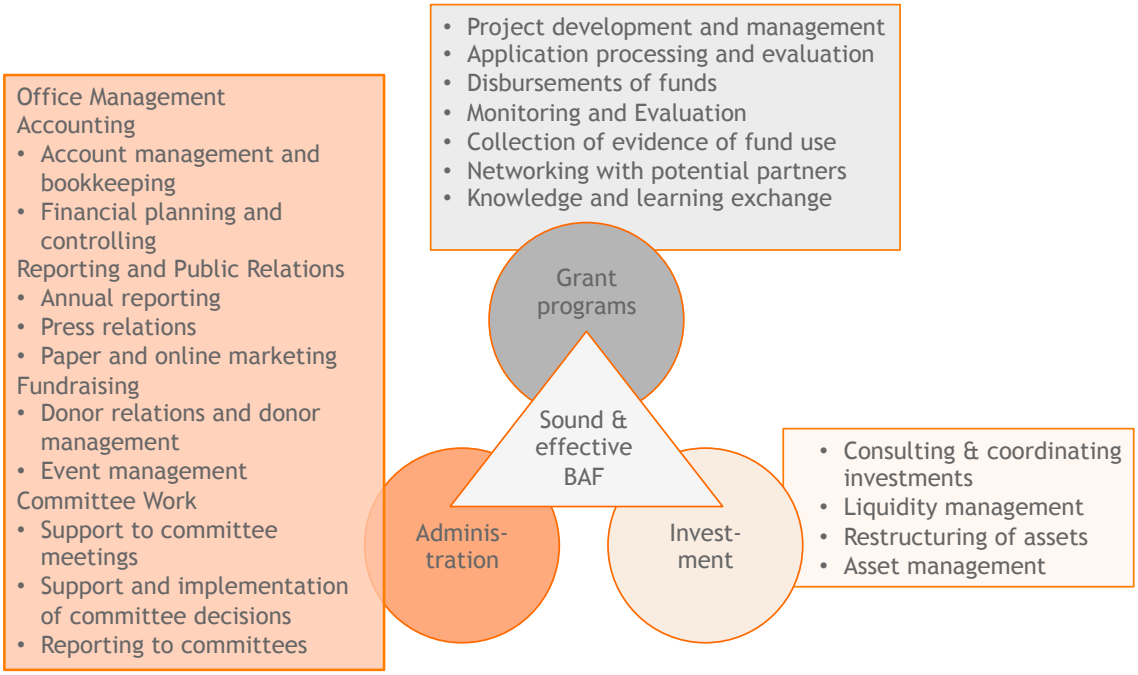
# 7 The foundation's operative structure


The BAF's operative structure should be lean, but simultaneously effective to master diverse tasks. At the current stage, it is difficult to estimate the precise size. It largely depends on decisions regarding BAFs strategic orientation as well as the findings of the Technical Concept Study. However, it is important to consider this topic at an early stage and make some initial decisions, such as which role IUCN could and should play here. Independent of where it is anchored in the BAF's governance and of the actors, the operative structure is referred to as a Secretariat.

## 7.1 Tasks of Secretariat

In order to have a sound and effectively operating BAF, tasks in three main areas have to be fulfilled with own staff and/or by help of external service providers: **grant program** involving all interaction with NGOs regarding coastal and marine protection measures, **administration** involving internal requirements as well as interaction with donors and other stakeholders, and **investment**-related tasks. The following figure provides an overview over tasks that need to be fulfilled in the three areas.

Figure 2: Operational Tasks for a Foundation Secretariat




Source: joyn-coop based on Phineo (2012)

In summary, managing a foundation requires very diverse types of expertise. The administrative tasks require knowledge of German foundations and accounting principles. For the investment tasks, it is possible to mobilize support from an Investment Consultant. However, it is necessary to manage the consultant well. Grant programs is another area that requires specific expertise; essential tasks are the generation, examination and selection of project ideas of the implementing NGOs, possibly separately accreditation of NGOs (for an evaluation of possible partner and project selection mechanisms see annex 10). For this set of tasks, a

contribution by IUCN appears reasonable (see box below for an overview of IUCN).

Box 6: IUCN short profile

Established in 1948 with the mission "to influence, encourage and assist societies throughout the world to conserve nature and to ensure that any use of natural resources is equitable and ecologically sustainable", IUCN has assembled a wealth of experience in coast and marine conservation. Through involvement in transnational funding mechanisms and projects, IUCN is experienced in project management, monitoring, and public relations. As an international organisation, it is well placed to attract qualified staff possessing a diversity of language skills. From its nine regional offices, the organisation is able to support projects in diverse localities. Through its member-based nature (1,200 governmental and non-governmental organisations are members), it has a large network of potential implementing partners. Its good reputation enables IUCN to engage various donors and raise legitimacy with all partners. With 11,000 scientific experts in thematic Commissions, IUCN is able to mobilize specific expertise.

Source: based on IUCN website and interviews

### 7.2 Structuring options for Secretariat

There seem to be four options for the BAF's operative structure. (1) KfW could take up the Secretariat function, (2) BAF could be managed by own staff, (3) an external service provider could manage the BAF, (4) a combination of own staff and external service provider. In all options, the Secretariat can call in the support of consultants for specific tasks.

#### 7.2.1 Option 1: KfW-Secretariat

KfW constitutes the Secretariat internally through one or several project managers working from within KfW premises (e.g. PATRIP, Carbon Market Foundation). As main advantages, this option offers strong supervision by KfW and seemingly low administrative cost[22]. KfW receives a margin to compensate for the cost incurred. Having the Secretariat managed by KfW internally does, however, not appear to be a feasible option for BAF. Situating the fund management within KfW would be a horizontal in-house contract award. A position of KfW at Board level practically excludes an in-house management of the BAF. In this case, KfW would be the founder of a foundation which is not only governed but also managed by KfW. Even if this model might be legally acceptable, it does not comply with basic good governance principles.

#### 7.2.2 Option 2: BAF-staff

An employed CEO with possibly additional staff manages all aspects of work (e.g. CNF, PONT); for case-related knowledge, consultants are called in (studies, monitoring of projects). The Secretariat acts in its own premises. As an estimate, this could require a CEO and two project managers. In this option, IUCN could be involved by delegating staff to the BAF.

[22] Cost appear higher for a solution external to KfW, as own premises are required and a team is recruited, etc. These costs exist also for the KfW-internal solution, but are less visible, as they are partially integrated in KfW cost or budget is not made transparent (office including utilities, full cost for project manager etc.).

Pro:

+ BAF possesses high autonomy and is able to develop its own business culture
+ BAF can develop into a strong player and can more easily shape its strategy (compared to relying on an external service provider)
+ BAF could have its own representative office (optionally to be shared with PONT/CNF)
+ Possible to utilise IUCN resources (delegated staff) without conflict of interest should IUCN be on the Supervisory Board.

Con:

- Quality depends on the recruitment of quality staff
- Risk of lacking continuity (if staff leaves, this could jeopardize the fund, a problem that occurred in the case of CNF)
- Inflexibility through long-term commitment to specific staff: if fund resources run out, no staff is required

### 7.2.3 Option 3: External service provider

A qualified contractor manages the fund. This could for instance be a service provider with experience in foundation management or in project management of biodiversity projects (e.g. Frankfurt Zoological Society). Precedence with BMZ only exists for dependent funds such as the Integrated Tiger Habitat Conservation Programme ("Tiger Fund") and in the future with the "Partnership for Prospects fund[23]" in the Middle East. The Fund works from the premises of the service provider. To involve IUCN proactively, it could itself take the function as service provider.

Pro:

+ With a competent service provider, continuity does not depend on recruited individuals, but the whole organisation is responsible
+ Little supervision by KfW is required.

Con:

- Potentially little visibility as an independent fund (e.g. no own premises).
- Finding a service provider that combines both grant-making and reporting knowledge to German authorities might be difficult.
- Would practically exclude IUCN from the Supervisory Board should they be chosen as service provider (assuming governance option 3).

### 7.2.4 Option 4: Shared responsibilities between BAF staff and service provider

Possible is also a mixture between option 2 and 3: a CEO who is responsible for the overall representation of BAF and focuses in addition on the foundation work in Germany. He/she is supported by few administrative staff and engages e.g. IUCN as a service provider mainly for the grant program tasks[24]. The CEO would conclude a service contract with IUCN and super-

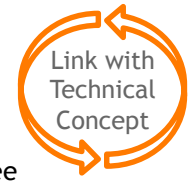
[23] Commonly referred to as the „refugee fund".
[24] The BAF will principally need to adhere to the EU procurement law for contracts above EUR 207,000.

vise IUCN's progress. One possibility would be to start out with a limited package of responsibilities for IUCN with the option to subsequently enlarge it. The following table describes how the tasks could be divided among the different actors and thus displays areas where IUCN could be involved.

Table 9: Division of tasks in shared responsibilities model

| What? | Who? |
|---|---|
| **Administration** | |
| Office management | BAF-staff |
| Accounting | BAF-staff & Tax firm |
| Committee Work | BAF-staff |
| Fundraising | BAF-staff |
| Reporting | BAF-staff |
| Public Relations | IUCN & BAF-staff |
| **Grant program** | |
| Project Development and management | IUCN & Consultant |
| Processing and evaluation of proposals | IUCN |
| Disbursement of Funds | IUCN & BAF-staff |
| Monitoring and Evaluation | IUCN & Consultant |
| Collection of Fund use evidence | IUCN |
| Networking with potential partners | IUCN & BAF-staff |
| Knowledge and learning exchange | IUCN & BAF-staff |
| **Investment** | |
| Consulting and coordinating investments | BAF-staff (possibly with PONT/CNF) |
| Liquidity management | BAF-staff (possibly with PONT/CNF) |
| Restructuring of assets | BAF-staff (possibly with PONT/CNF) |
| Asset management | BAF-staff (possibly with PONT/CNF) |

Source: own presentation based on Phineo (2012)




Based on the experience of CNF's start-up phase and PONT, it is estimated that at least a full CEO position and a part-time assistant are required for representing the BAF and managing the non-grant related tasks. Staff required for the grant program depends largely on the BAF's technical concept, including the question how much support NGOs need during project development (see annex 10).

Pro:

+ IUCNs large experience in project management in the area of coastal and marine protections could be leveraged
+ Possibly quicker in kick-starting the grant activities (no learning curve required)
+ BAF could still have its own representative office (optionally to be shared with PONT/CNF)

---

Only if the provider has a unique feature ("Alleinstellungsmerkmal") a tender could be waived. It would need to be clarified if IUCN can be seen as a quasi monopolist in the area of coastal and marine protection services.

Con:

- Possibly difficult for the CEO to supervise IUCN
- Risk that technical competencies remain remotely with IUCN preventing BAF from evolving into a strong knowledge partner (if this is a strategic goal)
- Potential conflict of interest should KfW want to elect IUCN into the Supervisory Board as well

### 7.3 Operative cost

Independent of the preferred option, operations should have a reasonable cost compared to project funding (grant activities). It is important to understand that not every Euro spend on salaries is automatically considered as administrative cost. The current accounting practice as defined by the German Central Institute for Social Issues ("Zentralinstitut für soziale Fragen") considers time and efforts spend on the preparation, selection, visiting, controlling, evaluation and communication of programs as program-related costs.[25] On the other hand, expenses for book-keeping, general Public Relations, recruitment and management of personnel, asset management and other activities that are not related to specific programs are considered as administrative costs.


The following estimates operative cost for the BAF. The cost of project management staff depends on the outcome of the technical concept study on questions such as how much support to NGOs is required.

Table 10: Overhead Cost

| | Total | Operative Cost | Program Cost |
|---|---|---|---|
| **Staff Cost** | | | |
| 100% CEO | 120,000 | 90,000 | 30,000 |
| 50% Assistant | 25,000 | 25,000 | 0 |
| Project management staff | Depends on operational structure | | |
| **Support Cost** | | | |
| Office rent | 6,000 | 6,000[26] | 0 |
| Accounting, legal & similar Consultants | 40,000 | 40,000 | 0 |
| Travel | 20,000 | 15,000 | 5,000 |
| Supplies & office costs | 15,000 | 15,000 | 0 |
| Communication & fundraising | 9,000 | 9,000 | 0 |
| **Total** | | **200,000** | |

Source: joyn-coop based on draft PONT budget (feasibility study)

One benchmark (international best practise) to define the amount of operating cost is 15% of spent annual total cost. This indicator can be achieved as long as BAF spends more than EUR

[25] DZI, 2015.
[26] Sharing an office with CNF and PONT might lower office cost (see chapter 6)

1.3 million in a given year. Both spending scenarios discussed above fulfil this requirement.

Financial cooperation guidelines offer a second benchmark: indirect and direct operative costs of a spend-down foundation should be reasonable and not surpass 20% of the gross returns for a sufficiently large fund (EUR 50 million). Given that BAF is significantly smaller than the EUR 50 million set out in the document and returns to investment are comparatively low, it is unrealistic that this figure is reached. Assuming operative cost of EUR 200,000 p.a. and an annual return of 4%, the share of operative cost would already surpass 20% once the fund's capital reserves are lower than EUR 25 million (never according to both spending scenarios discussed in chapter 5).

### 7.4 For decision and discussion

**Immediately:**

- Should the BAF's operations be managed by BAF-staff, an external-service provider or by sharing responsibilities with IUCN?
- Is Option 4 feasible with another service provider should the Panel prefer to have IUCN on the Supervisory Board?

# 8 The foundation's operative partnerships: pooling of resources

In order to increase the operational effectiveness and cost-efficiency, the BAF has the potential to pool resources with two other Conservation Trust Funds (CTFs) established by KfW. This topic will become relevant in the medium-term future. However, as efforts of the two CTFs to pool resources are ongoing, it is sensible to consider the potential already at the current stage.

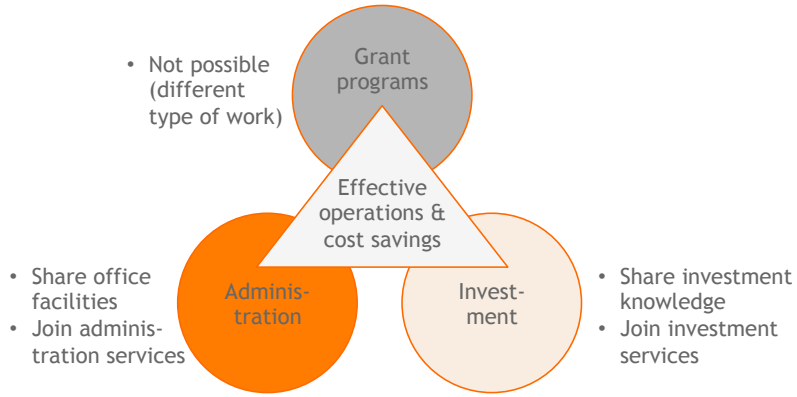
## 8.1 The idea of pooling resources

Pooling of resources has been discussed among CTFs over the last five years. Just recently the Conservation Finance Alliance has commissioned a study among various CTFs to explore related opportunities. The many conservation trust funds that have been established around the world in the last 20 years are all relatively small charities. Each is managed separately, and many struggle to organize their operations effectively. Because of the separate structures, functions are duplicated in the many different organisations. Pooling of resources provides the possibility that two or more CTFs utilize certain services or assets jointly. This is based on the business concept of "Shared Services" where companies rationalize certain cost centres, such as bookkeeping and operational procedures and may hence better focus on their core work.

PONT and CNF, the two other KfW-funded CTFs that were established as German foundations under civil law, are among the first CTFs that are putting the idea of pooling resources into practice. They just initiated the process of pooling of resources in several areas. As part of this process, they plan to form a shared back-office that could in principal perform certain administrative and investment-related services for other German based CTFs. It is intended to have core staff in place in the end of this year. While the process is still ongoing, it is a concrete option for BAF to join CNF's and PONT's direct efforts to pool resources. This option would need to be mentioned in the statutes.

In general, pooling of resources is possible with regards to 1) administrative services, 2) investment related services and 3) grant programs. As BAF will finance measures vastly different from CNF and PONT's measures, pooling grant program-related resources seems not suitable. The other two areas (administrative and investment), however, do offer potential.

Figure 3: Areas for pooling of resources




Source: own illustration based on joyn-coop (2015)

### 8.2 Pooling investment resources

Pooling investment resources is based on the suggestion to combine the assets (i.e. funds) of several CTFs. It is possible to pool assets, but keep them under separate contracts and in separate accounts. Investment is an area where CNF has particular strengths, given its constant high investment returns (on average 6% over last seven years) and its highly professional investment committee. Pooling resources could potentially enable BAF to have similar investment results. CNF and PONT will move forward with the following two investment pooling options.

**1) Joint appointment of investment professionals that consult on and manage pooled funds** (see annex 11 for description of typical tasks): CNF and PONT just selected a new joint Investment Consultant/ Manager (Finad). The combined funds reach a scale that can lower investment cost. Larger funds typically lead to reduced fees charged by Investment professionals (see annex 12 for an example calculation). In addition, larger funds potentially attract investment professionals of higher quality (the "A-team within a bank"). The full potential of pooling investment resources can be realized if funds are invested over approximately the same time span.

Should the decision be made to establish a combination of endowment and sinking fund, BAF could relatively easily join this initiative.[27] The following should be taken into consideration

Pro:

+ No need to assign an "own" Investment Manager/Consultant who would potentially offer lower returns and higher cost
+ Higher returns result in more financial resources available to fund projects
+ Facilitates KfW's (particularly of its investment branch) oversight obligations regarding BAF, CNF and PONT's asset management as all funds would then lie with the same investment manager

Con:

- In order to maximize the potential for efficiency gains, it is necessary that BAF commits to the same investment strategy as PONT and CNF. This reduces hence flexibility.

Conclusion: It seems advisable for BAF to try to join the sharing of the Investment Manager. In order to reach tangible efficiency gains, it is necessary to share the investment strategy and it would in addition become easier if the same investment committee were used (see next).

**2) Sharing the investment committee**: PONT basically joined CNF's investment committee that includes highly experienced professionals as advisors[28]. Formal decisions by the respective boards are still to be taken. In practice, PONT will delegate one person to the existing CNF investment committee that typically meets 3 to 4 times a year. While the committee is

[27] Based on interview with project manager PONT and CNF and CEO CNF/interim CEO PONT. However, BAF will principally need to adhere to the EU procurement law for contracts above EUR 207,000. Depending on the contract volume, a tender process is required. Finad would probably have chances to win if they can offer more attractive fees due to the pooling. However, this outcome is not guaranteed.
[28] For example, former Managing Director at Goldman Sachs and Morgan Stanley (Ronald Kent).

formally composed of both Fund's representatives, decisions are usually taken by consensus. KfW will support the committee through its investment department (FM). The combined investment committee discusses and makes decisions on behalf of both CTFs, proposes one guiding investment policy to the boards of CNF and PONT and for KfW approval and controls the joint investment consultant.

BAF could join this scheme as well, with the following pros and cons.

Pro:

+ Reduced transaction cost for KfW in its oversight role: no additional support and oversight for a separate BAF investment committee
+ No need to recruit investment professionals for own investment committee
+ Potentially higher returns due to highly professional experts on current investment committee and hence better monitoring of investment consultant

Con:

- This scheme requires that BAF adopts the same investment strategy as CNF and PONT. This may severely reduce BAF's flexibility. As long as KfW is the only donor this does not seem to constitute an issue. However, when additional donors come on board it will not be possible or more difficult to cater to their investment needs.
- Required board cooperation which may be complicated depending on people.

Conclusion: it seems that BAF could relatively easily join the investment committee as well. In addition, CNF's and PONT's investment strategies conform to KfW and BMZ requirements. Therefore, there seems to be no reason why BAF – through the joint investment committee – could not rely on the same investment strategy. There is, however, a loss of flexibility in catering to potential future donor policies regarding investments. This has to be weighed against the potential of likely high savings in transaction cost and gains in professionalization of investment decisions and monitoring.

### 8.3 Pooling administrative services

Pooling of administrative services is possible in a range of areas such as joint purchase of professional services (e.g. IT, accountant, audit), sharing of staff or performing administrative functions for one another, joint use of office space or even joint use of administrative systems (e.g. book-keeping). In general, it offers potential for cost savings and likely offers a more motivating surrounding for staff: combined CTFs represent larger organisations that may be more attractive to job seekers. As non-for-profit organisations, CTFs typically cannot pay high wages; therefore, this might be an important factor to recruit highly qualified people.

PONT and CNF intend to establish a common back office to pool administrative services. The nature of this set up is currently being prepared and still needs to be decided by the Boards of both funds. For BAF, it seems too early to decide if this scheme is advisable to join. It should only be considered once the cooperation between CNF and PONT has proved successful.

The decision to locate both CTFs in Frankfurt in order to make sharing an office and/or even staff and systems feasible has already been made. Should the decision be made to locate the BAF in Frankfurt, sharing an office with CNF and PONT is an advisable option.

Pro:

+ Cost savings with a view to rent and utilities
+ Opportunity for daily exchange of experience between staff that potentially have similar administrative tasks on a range of topics: reporting to foundation authorities, contract management, marketing, social media, payments and grant disbursements, management of funding sources, etc.
+ Paves the way to consider future staff sharing and resulting further efficiency gains.

Con:

- Other criteria for the choice of location for BAF could be important (proximity to marine research centres, proximity to IUCN).

This option for pooling of resources should only be considered once an agreement has been reached that Frankfurt is indeed a good location for BAF.

### 8.4 For decision and discussion

This decision is less time-critical. It is possible to create the pre-conditions for pooling resources in the statutes[29] and to decide during summer if this idea should indeed be pursued. Latest, it would need to be communicated in the project proposal to BMZ (September). Like this, the still early efforts of pooling resources of PONT and CNF could be observed for a little bit longer. Still, if PONT and CNF know early that BAF would like to join forces, it is likely easier to accommodate, e.g. when searching for office space.

**In the medium term:**

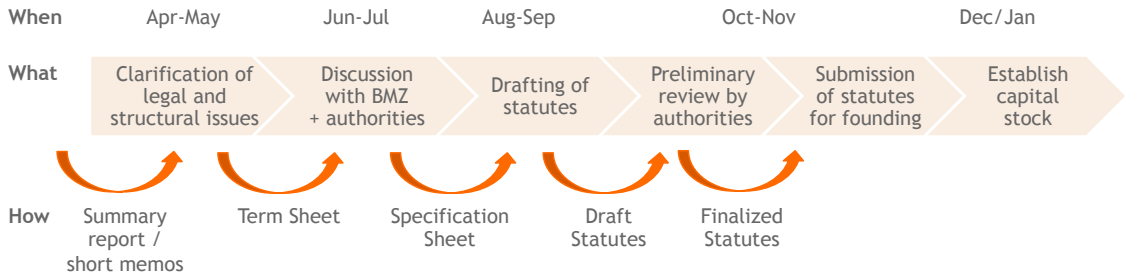
- Should BAF pursue the idea of pooling investment resources with CNF and PONT: a) hire same investment manager b) join same investment committee?
- How should the discussion for office location be pursued given that PONT and CNF will start searching office space in the coming months.

[29] The statutes would simply need to state „Die Stiftung kann zur Verwirklichung des Stiftungszwecks Zweckbetriebe unterhalten sowie treuhänderisch Stiftungen und andere Zweckvermögen (Stiftungsfonds) verwalten und kann die Verwaltung von rechtsfähigen Stiftungen mit gleichem oder ähnlichem Zweck übernehmen"

# 9 Next steps

In order to ensure ownership among all relevant stakeholders - especially KfW management, BMZ and IUCN, but also the Foundations Authorities - the following process is recommended (see figure below).

Figure 4: Suggested steps for founding BAF

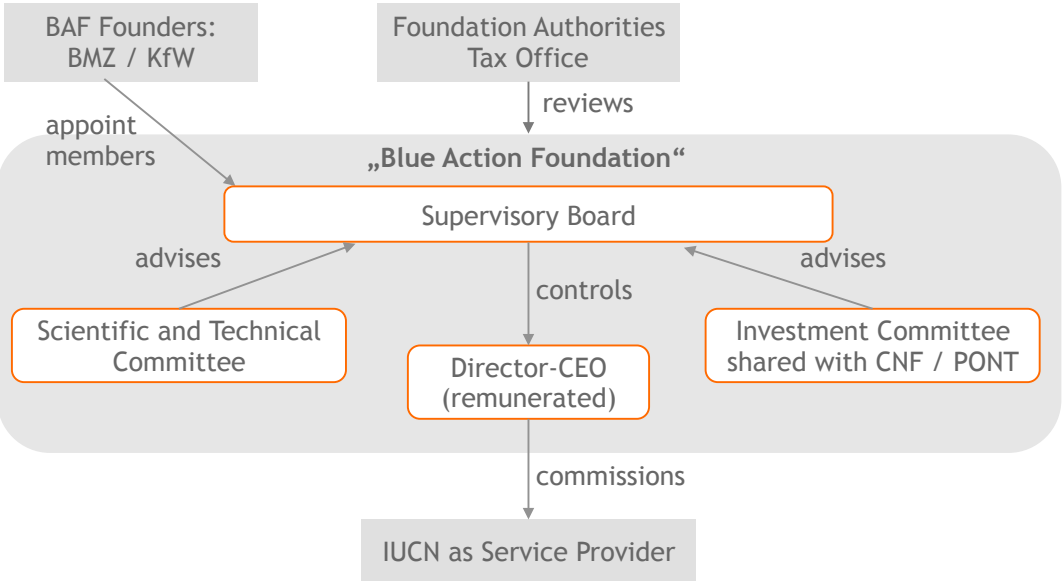



Source: joyn-coop

The findings of this report and the decisions made based on it will be synthesized in a term-sheet. This term-sheet will define all necessary structural aspects of the BAF and will be used to reach a binding understanding between KfW, BMZ and IUCN of how to set up the BAF. Based on this understanding, a specialized lawyer will draft the statutes and seek preliminary feedback of the Foundation authorities. Subsequently, the formal founding process can be initiated.

As a summary of the recommendations made in this report, the following figure presents an overview over the recommended structure for BAF.

Figure 5: Recommended BAF Structure




Source: joyn-coop

# Bibliography

BMJV (2014): Abgabenordnung (AO)Gesetze im Internet. Available at: <http://www.gesetze-im-internet.de/ao_1977/BJNR006130976.html>.

Bundesverband Deutscher Stiftungen (2015): Grundsätze guter Stiftungspraxis. Available at: https://shop.stiftungen.org/media/mconnect_uploadfiles/b/v/bvds_grunds_tze_2015_06.pdf. [Accessed 5 April 2016].

Darmstadt Regional Council (2014): Hessische Mustersatzung für rechtsfähige Stiftungen des Bürgerlichen Rechts, Darmstadt, Germany. Available at: https://rp-darmstadt.hessen.de/irj/servlet/prt/portal/prtroot/slimp.CMReader/HMdI_15/RPDA_Internet/med/b9d/b9d530e2-c71b-441f-012f-312b417c0cf4,22222222-2222-2222-2222-222222222222,true. [Accessed 30 March 2016].

DZI (2015): Werbe- und Verwaltungsausgaben Spenden sammelnder Organisationen, Berlin. Available at: http://www.dzi.de/wp-content/pdfs_DZI/Verwaltungskostenkonzept.pdf. [Accessed 1 April 2016].

Epkenhans, I. & Then, V. (2010): Ratgeber Stiften, Band 3, Verlag Bertelsmann Stiftung: Gütersloh.

joyn-coop (2015): Trust Fund Shared Services - Pooling of Resources. Feasibility Study, München.

KfW (2013): BMZ-Handreichung für Vorhaben FZ mit Regionen. FI 165.

KfW (2015): FZ-Leitfaden Kapitalfonds für Umwelt- und Naturschutz. FI037759.

Phineo (2012): Stiftung sucht Verwalter. Ratgeber zur Wahl des passenden Stiftungsverwalters, Phineo gAG, Berlin.

Total Foundation (2016): Gouvernance de la Fondation. Available at: http://www.fondation.total.com/presentation/organisation. [Accessed 8 April 2016].

**KfW internal Project Documents**

- PATRIP:
  - KfW: Programmvorschlag: Pakistan, Afghanistan, Tajikistan Regional Integration Programme (PATRIP), Nr.: AS-AFG-PAK-230.00/41 AFG (2010)
  - KfW: PATRIP Stiftungskonzept, 2011
  - Satzung
- Stiftung Zukunft das Kohlenstoffmarktes
  - Satzung
  - Steuerrechtliches Gutachten zur Gründung der gemeinnützigen Stiftung „Zukunft des Kohlenstoffmarktes", S. 9 ff, Version 25.01.2011
  - Geschäftsordnung des Vorstands
  - Vergaberichtlinien
  - Berichte zur Erfüllung des Stiftungszwecks 2011-2014
- PONT
  - Charter
  - KfW: Grenzüberschreitendes Biosphärenreservat Prespa (PONT) BMZ Nr.: 2014 36

518 und 2015 36 549 (2015)

- CNF
  - Charter (2010)
  - KfW: PV, Erste Phase: Caucasus Nature Fund III: BMZ-Nr. 2012.3657.9 (2013)
  - By-laws
  - PwC (2014): Vermerk. Caucasus Nature Fund I, II, III

# Annexes

## Annex 1: List of Interviews with Contact Details of Interview Partners

| Name | Institution | Position & Department | Topic | Contact Information | Date of Conversation |
|---|---|---|---|---|---|
| Fleckenstein, Bernd | Regional Council Darmstadt | Dezernat I 13 - Justiziariat | Administrative practice: spend-down foundations | bernd.fleckenstein@rpda.hessen.de<br>+49 6151 12 3719 | 4 April 2016 |
| Giacomini, Geof | CNF | CEO | Options Pooling of Resources | dmorrison@caucasus-naturefund.org | 29 March 2016 |
| Hedrich, Diana (via e-mail) | KfW | Senior Project Manager | PATRIP | Diana.hedrich@kfw.de | Several times |
| von Jago, Sophie | KfW | Lawyer, Legal Department (BR) | Applicability PcGK, further legal issues | Sophie.von-Jagow@kfw.de | Several times |
| Lundin, Carl Gustaf | IUCN | Director, Global Marine and Polar Programme | Best Practise Structures of other Funds | Carl.lundin@iucn.org | 24 March 2016 |
| Medenbach, Nils | KfW | Senior Economist, Competence Centre Environment & Climate | Lessons learnt from Carbon Market Foundation | nils.medenbach@kfw.de<br>+49 69 7431-1017 | 31 March 2016 |
| Morrison, David | CNF / PONT | CEO | Options Pooling of Resources | Ggiacomini@caucasus-naturefund.org | 29 March 2016 |
| Pecher, Dr Susanne | Susanne Pecher Consulting | Founder | BAF Technical Study | sp@susanne-pecher-consulting.de | 8 April 2016 |
| Petersen, Zsófia | KfW | Legal Department (BR) | Contract awards | Zsofia.petersen@kfw.de | 6 April 2016 |
| Remé, Moritz | KfW | Project Manager Natural Resources and Climate - Asia | Tiger Fund | moritz.reme@kfw.de<br>+49 69 7431-4189 | 3 November 2015 |
| Rödel, Mirjam | | Consultant | BAF Technical Study | mirjam.roedl@mac.com<br>+49 40 4600 9856 | 8 April 2016 |
| Schön, Bruno | OECD | Senior Advisor | ODA eligibility | bruno.schoen@oecd.org | 18 March 2016 |
| Weitzel, Andreas | KfW | Project Manager, Eastern Europe/ Caucasus/ Central Asia: Energy and Natural Resources | Current State PONT Pooling of Resources; PONT as best practice | Andreas.weitzel@kfw.de<br>+49 69 7431-2256 | Several times |

## Annex 2: Fact Sheet Foundation Statutes

The foundation statutes are the most important document of a foundation. In this "constitution", all relevant decisions regarding purpose and governance are laid out.

### 1 Purpose

Requirements: Foundation and tax authorities have to be able to check if the foundation fulfils its purpose.

As the purposes cannot be changed subsequently, the provisions in the statutes have to strike a good balance: they have to be sufficiently precise to give the foundation a clear orientation. Simultaneously, they have to be sufficiently broad to allow the executive board room to maneuver so that they are able to react to new developments. Typically, they are defined in very broad terms. In addition, the purpose has to be aligned with a catalogue, specified by AO.

It is possible to formulate some principles at this point (e.g. dual use: projects should especially align protection and use). In principle it is recommendable to make further precisions in a mission statement or manual, as it is possible to change these if necessary.

### 2 Organisation of the Foundation

The statutes have to define the number of boards, their responsibilities and the way in which board members are appointed.

- Minimum legal requirement: Board of directors, which may consist of only one person
- The founder is free to foresee any number of boards in the statutes.

The management structure of the foundation does not need to be specified in the statutes.

### 3 Assets

The size of the assets does not have to be defined in the statutes. This is part of the act of formation ("Stiftungsgeschäft"), by which the founder declares his will to establish a foundation. However, the statutes need to define how the foundation has to handle the assets:

- Does the foundation have to maintain its assets (if yes, in nominal or real terms)?
- Is the foundation allowed to use assets to finance its project?
- During what period of time can the foundation use up its assets?

## Annex 3: Overview over relevant FC financed German Foundations according to Civil Law

| | PATRIP Foundation | Caucasus Nature Fund | Carbon Market Foundation | PONT |
|---|---|---|---|---|
| **Summary** | The PATRIP Foundation finances small projects implemented by local NGOs in the border areas of Pakistan, Afghanistan and Tajikistan. Equipped with a small endowment to manage operative costs, it disburses the funds provided by AA and the government of Luxemburg yearly. | The Caucasus Nature Fund (CNF) supports environmental protection by supporting the management of protected areas in Georgia, Azerbaijan and Armenia. After having been established with an initial endowment, it has received an additional Sinking Fund to continue operations in face of the current low-interest climate. | The Foundation "Future of the Carbon Market" aims to support the implementation of innovative carbon market mechanisms. For this purpose, it supports programs that are selected by the Management Board. With its two-tier governance structure, it conforms to the Public corporate Governance Codex. | The Prespa Ohrid Nature Fund (PONT) was founded by MAVA Foundation and is still in the process of rolling out operations. BMZ funds will support protected areas in Macedonia and Albania as well as implementing partners including NGOs. |
| **KfW Contact Person** | Diana Hedrich | Andreas Weitzel | Matthias Börner / Nils Medenbach | Andreas Weitzel |
| **Donors** | Foreign Office (AA), Luxemburg | BMZ, GEF/UNDP | BMU | BMZ, MAVA Foundation |
| **Bodies** | Board of Directors (3 KfW staff, of which one full time PM position)<br>Second-tier board („Kuratorium") (4members- 3x AA, 1x Luxemburg) | Board of Directors (BMZ delegated to KfW, WWF, CI);<br>Optional Scientific and Technical Committee for representative purposes (9 public figures) | Management Board („Vorstand" 2xBMU delegated to Federal Environmental Agency and policy advisors, 1xKfW),<br>Board of Trustees ("Kuratorium") (2xBMU, 1xBMF) | Management Board ("Vorstand", 1-4 members, Supervisory Board appoints CEO)<br>Supervisory Board ("Kuratorium" 1xMAVA Foundation, 1xKfW, 1xWWF Greece) |
| **Fund Management** | KfW in-house (1.5 PM position) supported by consulting company for technical M&E | Professional employed CEO supported by staff | KfW in-house (1 PM position) | Professional CEO supported by staff |
| **Operative Cost** | 2013: ca. EUR 90.000 plus cost of one PM position financed from margins (7.5%), (EUR 412,000)<br>Monitoring-Consultant: EUR 660,000 (financed directly by AA) | 2016: estimated ca. EUR 322,000, financed from capital returns | 2014: administrative cost ca. EUR 40,000 (uncertain if KfW in-house fund management included) | Estimated 2016: EUR 205,0000 |
| **Financial endowment (only by KfW)** | Endowment Fund: EUR 1.5 million<br>Yearly Contributions / Project Financing | Endowment Fund: EUR 5 million<br>Sinking Fund (until 2030): EUR 12 million | Spend-down foundation:<br>Sinking Fund: 10 million EUR with 10-year spend-down requirement | Endowment Fund: EUR 4.6 million<br>Sinking Fund: EUR 6 million with spend-down requirement until |

| | | | | |
|---|---|---|---|---|
| | | | | 2030 |
| **Budget Item** | AA | FZ-R | IKI | FZ-R |
| **Project Selection** | Yearly by second-tier board | No project financing, Board of Directors decides yearly budget | | |
| **PCGK applied** | No | No | Yes | No |
| **ODA eligible** | Not relevant (no BMZ funding) | For Endowment Funds partially problematic: CNF solved issue through local office (Georgia) | (no BMZ funding) | Yes, means are used only for ODA-countries Macedonia and Albania |
| **Assumption of liability by Fund** | Not relevant (no BMZ funding) | No – Exemption from liability granted by BMZ | (no BMZ funding) | No – Exemption from liability granted by BMZ |
| **Selection of NGOs** | NGO-Assessment Tool; project identification through common workshop | | Continuous application via Foundation website possible, yearly evaluation rounds | Discussion with potential partners: Grant program funds different environmental actors including NGOs |
| **Project size** | EUR 5-10 million (tbc) | No project financing | Unknown | Unknown |
| **Intergovernmental Agreement** | No | No | No | No |
| **Involvement of partner countries** | District administration for project selection and implementation as well as handover. For project selection, responsibility for operation and maintenance has to be agreed. | Via framework agreement between CNF and government (Ministries of Environment) | | Activities correspond to national and/or regional sector strategies. Ministries of Environment can apply for co-financing from PONT |

## Annex 4: Draft Purpose for the Statutes in German

As the legally binding version of the statutes will be written in German, the purposes stated in English in the text are translated here:

§ 2: Stiftungszweck und Gemeinnützigkeit

*2.1.: Die Stiftung verfolgt ausschließlich und unmittelbar gemeinnützige Zwecke.*

2.2: *Die Stiftung bezweckt*

- *die Förderung des Umweltschutzes, insbesondere des Meeres- und Küstenschutzes in Afrika, Asien und Lateinamerika (§52.2.8 AO)*
- *die Förderung der Entwicklungszusammenarbeit, namentlich bezogen auf die nachhaltige Nutzung maritimer Ressourcen (§52.2.15 AO)*
- *die Förderung von Wissenschaft und Forschung, soweit sie die vorgenannten Zwecke betrifft. (§52.2.1 AO)"*

*2.3. Die Stiftungszwecke werden insbesondere verwirklicht durch die Förderung von Maßnahmen und Projekten in den Bereichen:*

- *Transnationaler Meeresschutz (Marine Schutzgebiete, Mangrovengürtel, Korallenriffe, Seegraswiesen, Fischereiüberwachung)*
- *Küstenschutz (Resilientere Küsten, nachhaltig agierende Küstenbewohner, Erhalt der Mangrove)*
- *Einkommenssteigerung für Fischer (Spill over, nachhaltige Aquakultur, landseitig und im Meer)*

*Die Stiftung kann die Förderung der genannten Maßnahmen durch finanzielle Unterstützung leisten, aber auch durch die Beratung, Vernetzung und Stärkung der in dem Sektor tätigen Organisationen.*

## Annex 5: Types of Financial Envelopes

Three forms of financing sources can be distinguished from the perspective of the foundation.[30] (see Annex 6 for different mechanisms to accept additional funding that can be offered to donors)

1. *Endowment fund:* A permanent capital stock is created, which cannot be touched. Only generated revenues can cover operating costs of the foundation and/or project financing expenses. Financing the foundation is maintained for eternity. Smart investments are necessary.

Examples: CNF, PATRIP (for administrative cost)

2. *Sinking fund*: An initially created capital stock is used up over time in order to finance measures (e.g. for CNF over 30 years). The sinking fund is not set up for eternity, but it could be refilled through additional donations. It enables the fund to plan for long term about the available capital resources; contrary to an endowment fund, it can also finance projects if there is low return on investment, as the funds can be used up. Similarly, smart investments are necessary.

Examples: CNF, "Future of the Carbon Market" Foundation

3. *Project Financing (donations)*: The foundation receives funds for a defined project or program (donations). According to the German tax code, the foundation is required to ensure the application of funds in a timely manner (Zeitnahe Mittelverwertung). Donations (contrary to co-funing to a sinking or endowment fund) have to be spent within two years' time.[31] Project financing offers only little planning security over the available means that have to be regularly pledged in order to not endanger the application of funds in a timely manner.

Example: PATRIP

It is possible to combine these alternatives. PATRIP for instance has a small endowment fund to cover operative cost and receives in addition yearly donations that are used to finance projects. The application of funds in a timely manner is not endangered, as PATRIP – typical for a post-conflict project – aims for quick implementation. CNF holds an Endowment Fund (EUR 5 million) as well as a Sinking Fund (EUR 12 million).

[30] In addition, the biodiversity sector also knows revolving funds (income e.g. from tourism feeds the fund) and hybrid funds (enables also in times of below average returns constant yearly pay-outs to the "foundation" by taking resources from the endowment that are returned when returns are above average).
[31] Zeitnahe Mittelverwendung §55.1(5) Abgabenordnung (AO): „Die Körperschaft muss ihre Mittel vorbehaltlich des § 62 grundsätzlich zeitnah für ihre steuerbegünstigten satzungsmäßigen Zwecke verwenden. (…) Eine zeitnahe Mittelverwendung ist gegeben, wenn die Mittel spätestens in den auf den Zufluss folgenden zwei Kalender- oder Wirtschaftsjahren für die steuerbegünstigten satzungsmäßigen Zwecke verwendet werden." BMJV, 2014.

## Annex 6: Mechanisms to accept additional funding

There is hope and reason to believe that the BAF will succeed to raise additional funds if it provides the proof of concept. These additional funds might come from different sources, such as the BMZ, international public agencies or private donors (foundations, individuals) who wish to invest in the protection of marine ecosystems.

In order to channel additional funds, the BAF can offer donors different funding mechanisms (annex 5 shows different financing sources from the perspective of the foundation):

**Flow through donations ("Spenden")**

The BAF can accept flow-through donations which have to be spend within two years after reception. Donors might indicate a specific program they wish to support or leave it at the discretion of the foundation how to use the money. This funding mechanism is also known as "project financing". However, there is no legal obligation to indicate a specific program to be financed. This is at the discretion of the donor. For larger programs and/or donations, the foundation can stretch the two-year time limit by establishing a program-related reserve out which a specific program is financed over a longer period.

This mechanism is particularly instrumental in handling smaller or medium sized donations that are meant to be used directly for programs and/or earmarked for specific programs or program areas.

**Donations into the foundation's capital stock ("Zustiftungen")**

As a foundation with a proper foundation capital, the BAF can accept donations into the foundation's endowment. These donations would thus strengthen the foundation's asset base.

Just as BMZ/KfW are free to find a tailor-made solution regarding the initial capital and its structure (eternal, spend-down, hybrid models), every other donor has the right to attach strings to his or her donation. It is the responsibility of the foundation's Board to determine whether or not the foundation is prepared to accept the donor's obligations.

As a foundation, the BAF can accept …

- endowment donations that are to be preserved in perpetuity.
- donations that are meant to be spend-down within a certain time span.
- donations into the capital that are earmarked for certain types of activities (e.g. mangroves) or specific regions ("Stiftungsfonds")

**Trust ("treuhänderische Stiftungen")**

A trust, also called a "donor advised fund", is a kind of foundation inside a foundation. It is a fund that has statutes of its own as well as a proper name, purpose, board and investment policy. As these funds are regulated and supervised by the tax office but not by the foundation authorities, a trust offers a high degree of flexibility and can either be an eternal or a sinking fund. A trust is managed by the umbrella foundation, thus the BAF, and is set up by a contract between the two parties. The establishment of a trust is particularly interesting for donors who are willing to invest a substantial amount of money and seek high visibility and/or have a very specific area of interest.

## Annex 7: Implications of applying PCGK

Der Public Corporate Governance Kodex ist verpflichtend für Beteiligungen des Bundes im Sinne der Bundeshaushaltsordnung. Er enthält Empfehlungen und Anregungen um eine verantwortungsvolle Unternehmensführung und -überwachung bei den Beteiligungsfirmen sicherzustellen und die Unternehmenstransparenz zu erhöhen.

Als solcher ist er in seinen Inhalten auf Unternehmen ausgelegt und nur bedingt auf Stiftungen übertragbar. Die folgende Aufstellung listet diejenigen Aspekte des PCGK auf, die nicht ohnehin selbstverständlich für eine Governance-Struktur sind. Spalten 2 und 3 stellen dar, ob und wie diese für den BAF als Stiftung umgesetzt werden können.

| Vorgabe PCGK | Umsetzung im BAF | Anwendbar |
|---|---|---|
| **Governance** | | |
| Dreigliedrige Organstruktur aus<br>• Anteilseignerversammlung (Hauptvers.)<br>• Geschäftsleitung (Vorstand)<br>• Überwachungsorgan (Aufsichtsrat) | Da eine Stiftung keine Eigentümer hat, entfällt die Anteilseignerversammlung. Ihre Funktion kann jedoch im Überwachungsorgan (Kuratorium) mit angesiedelt werden. Der PCGK sieht solche Ausnahmen ausdrücklich vor. | Bedingt |
| Bund nimmt seine Rechte in der **Anteilseignerversammlung** wahr. | Vertretung des BMZ (ggfls. KfW) im Kuratorium. | Ja |
| Die **Anteilseignerversammlung** hat starke Kontroll- und Mitwirkungsrechte (Zustimmungsvorbehalte, Bestimmung des Vorstandes, Strategie, Zustimmung zu größeren Projektvorhaben, etc.) | In der Satzung können dem Kuratorium starke Kontroll- und Mitwirkungsrechte eingeräumt werden, deren Ausgestaltung in einer GO präzisiert wird. | Ja |
| Die **Geschäftsleitung** trägt die Verantwortung für die Leitung des Unternehmens. | Diese Aufgabe (=Geschäftsführer einer GmbH) entspricht der Funktion des Stiftungsvorstandes. | Ja |
| Die **Geschäftsleitung** besteht aus mind. zwei Personen. Die zweite Person kann neben- oder ehrenamtlich tätig sein. Sofern das Vier-Augen-Prinzip sichergestellt ist, lässt der PCGK den Ausnahmefall (nur eine Person) zu. | Bei einem hauptamtlichen Vorstand ist diese Regelung umständlich, grds. aber darstellbar (zweiter ehrenamtlicher Vorstand oder Vier-Augen-Prinzip durch Mitglied des Kuratoriums). | Bedingt |
| Ein **Überwachungsorgan** berät und überwacht die Geschäftsleitung. | Das Kuratorium ist zuständig für die Bestellung und Kontrolle des Stiftungsvorstandes. | Ja |
| Mitglieder des **Überwachungsorgans** dürfen keine Beraterverträge mit dem Unternehmen schließen. | Interessenskonflikt wenn bei Kuratoriumssitz und Geschäftsbesorgung durch eine Institution. | Bedingt, ggf. IUCN in Kuratorium und Service- |

| | | Provider |
|---|---|---|
| **Reporting / Transparenz** | | |
| Das Unternehmen erstellt jährlich einen **Corporate Governance Bericht** („comply or explain"). | Auch die Kohlenstoff-Stiftung erstellt jährlich einen solchen Bericht | Ja (Mehraufwand) |
| Die **Gehälter** der Geschäftsleitung sind offenzulegen. | Bei nur einem hauptamtlichen Vorstand ist das Gehalt publik. | Ja |
| **Jahresabschluss** erfolgt gemäß HBG für große Kapitalgesellschaften „soweit nicht (…) Zweckmäßigkeitserwägungen entgegenstehen." | Rechnungslegung gemäß Standards des Instituts der Wirtschaftsprüfer (IDW) für Stiftungen | Ja |

## Annex 8: Typical Board Tasks according to their Function

The following presents a non-exhaustive list of typical tasks according to Board functions.

**Implementation Function:**

- Implementation of measures to fulfil the purpose
- Assurance of compliance, corruption prevention, risk management
- Reporting

**Decision-making Function:**

- Strategic decisions, such as grant-making strategy, manual, criteria
- Decision about creation and dissolution of reserves
- Hiring of CEO and decision on their remuneration
- Establishment of budget plan
- Contract Signing

**Supervisory Function:**

- Support and control decision-making body
- Commissioning of Annual Audit
- Support raising additional funds
- Definition of by-laws for decision-making and supervisory bodies
- Review and approval of annual financial statement
- Control award of fund means and fulfilment of fund purpose
- Review of annual report
- Change of statutes, dissolution of Foundation

**Advisory Function:**

- Advise regarding investment strategy
- Advise regarding grant-making strategy
- Advise on feasibility of specific projects

## Annex 9: Total Foundation's Governance Structure

The Total Foundation is a globally active foundation and the largest foundation of the Total corporation. It was created in 1992 to support marine biodiversity and the protection of the ocean. Since 2008, it has shifted its focus and works increasingly on the topics of solidarity, culture and health. In 2014, it supported 220 projects with a total of more than EUR 11 million.[32]

The Total Foundation's governance structure places great emphasis on exchange and partnership. For this purpose, many stakeholders are included in its governance structure. It consists of three levels: the Permanent Team (équipe permanente) responsible for project development, Committee of Experts (comité d'experts) responsible for reviewing proposed projects, and the administrative council (conseil d'administration) that holds final decision-making power.

**The Permanent Team**

The Foundation's day-to-day work is conducted by twelve people who work close with the implementing partners. They receive the requests of the partners, review them and forward them to the Committee of Experts. Once accepted, they ensure that projects are implemented and follow up on the results regularly and rigorously. The foundation expects precise and systematic reporting from its partners. In addition, the Permanent Team deliberates on new orientation for the foundation and submits them to the Administrative Council.

**Committee of Experts**

In order to make good judgement, the foundation relies on specific committees for each thematic area. Committees include members of the company Total as well as external experts. The Committee for Environment and Biodiversity (that is responsible for marine conservation) is for instance composed of 12 members, of which 9 are external (biologists, geologists, academics). Together, they examine the documentation identified by the Permanent Team and select the projects that will be presented to the Administrative Council.

**The Administrative Council**

The Administrative Council is the last instance for the projects selected by the committees. It approves the budget, assesses the initiatives and validates the strategic orientation proposed by the Permanent Team. It is composed of ten members: six are representatives of the Total Group including the current president Yves-Louis Darricarrère; four are renowned external experts in their respective fields including professors, IUCN and the French national library. The Administrative Council meets twice a year.

[32] Total Foundation, 2016.

## Annex 11: Potential cost savings from pooling investment resources

Pooling of resources has a significant cost saving potential for Conservation Trust Funds. The following calculations are a hypothetical example, but investment fees are realistic.

Table 11: Potential cost savings from pooling investment resources

| | Portfolio size | | | Function | Fees | Cost |
|---|---|---|---|---|---|---|
| **CTF 1** | Total portfolio value | 27.500.000 | | Inv. Mg. Cons. | 0,15% | 41.250 |
| | Under discretionary mgt 1 | 5.500.000 | 20% | Inv. Manager 1 | 0,30% | 30.000 |
| | Under discretionary mgt 2 | 9.625.000 | 35% | Inv. Manager 2 | 0,40% | 38.500 |
| | | | | Custodial | 0,075% | 20.625 |
| | | | | Brokerage | 0,02% | 5.500 |
| | | | | **Total** | | **135.875** |
| **CTF 2** | Total portfolio value | 22.500.000 | | Inv. Mg. Cons. | 0,15% | 33.750 |
| | Under discretionary mgt 1 | 4.500.000 | 20% | Inv. Manager 1 | 0,30% | 30.000 |
| | Under discretionary mgt 2 | 7.875.000 | 35% | Inv. Manager 2 | 0,40% | 31.500 |
| | | | | Custodial | 0,075% | 16.875 |
| | | | | Brokerage | 0,02% | 4.500 |
| | | | | **Total** | | **116.625** |
| **Combined** | Total portfolio value | 50.000.000 | | Inv. Mg. Cons. | 0,12% | 60.000 |
| | Under discretionary mgt 1 | 10.000.000 | 20% | Inv. Manager 1 | 0,25% | 30.000 |
| | Under discretionary mgt 2 | 17.500.000 | 35% | Inv. Manager 2 | 0,30% | 52.500 |
| | | | | Custodial | 0,075% | 37.500 |
| | | | | Brokerage | 0,02% | 3.150 |
| | | | | **Total** | | **183.150** |
| | | | | **Cost savings** | | **69.350** |

Source: own calculations

- Fees would decrease if funds are pooled
- Not yet accounted for: potentially higher return because of higher quality of investment manager
- Depending on level of fee improvement, cost savings from EUR 70,000 to EUR 90,000 annually for both CTFs together

## Annex 12: Tasks of Investment Actors

A conservation trust fund typically engages a number of different actors to manage their investment. Their roles are detailed here.

**1 Investment Committee**

- Propose an investment policy for the Board to adopt;
- Review and recommend potential outside investment advisors and asset managers for the Board to hire;
- Oversee the performance of any outside asset managers hired by the Board
- Implement investment decisions taken by the Board

**2 Investment Consultant**

- Advisor to the board;
- Assistance with the investment policy and custodial and reporting arrangements;
- Tasks related to the work of Investment Manager: assistance with engagement, advising the board on allocations to investments, conducting reviews, providing "Due Diligence", monitoring the performance and compliance with Investment Management Policy

**3 Investment Manager**

- Customized investment
- Full discretion to make all investment decisions for the assets placed under its direct management;
- Informs the board of changes to economic outlook, investment strategy, or any other factors that affect achievement of such Manager's investment objectives for the CTF

**4 Custodian**

- Maintains possession of securities owned by the CTF, collects dividend and interest payments, redeems maturing securities, and effects receipt and delivery following purchases and sales.
- Perform regular accounting of all assets owned, purchased, or sold, as well as movement of assets into and out of the CTF's accounts.

## Annex 13: Project Selection and Development

One of the BAF's tasks will be to manage the project development process. Depending on the scope of the process, both the fund's committees as well as the administrative unit can play a role in developing projects. This annex discusses basic elements of project development, while the specifics of this process can be established at a later stage (operational manual). The processes for selected funds are discussed in annex 14.

Important criteria for the project development process are:

- Openness of the process
- Transparency and fairness
- Sufficient speed
- Project feasibility and partner quality
- Manageable operational costs
- Ensure interest on the side of the implementing partners

**Optional: Pre-selection of partners:** Pre-selecting partners can help to create communication channels as well as to accelerate the project development process. Options to select partners range from a simple partnership request to a much more detailed assessment or prequalification process.

A very common and familiar method for NGOs is a call for proposal modality.

**1) Two-stage:** Responding to a call, NGOs provide a brief overview through a short concept note. The concept note is evaluated to ensure that project ideas fall under the scope of the BAF (e.g. duration, size, thematic focus). Based on a preliminary approval, NGOs develop full-fledged proposals that detail all aspects of project design. A two-stage process allows the BAF to provide feedback at an early stage.

**2) One-stage:** if NGOs are expected to have the required expertise and are familiar with the project modalities and specific requirements, a one-stage process would suffice. For this, NGOs would respond to a call for proposal by submitting a full-fledged proposal. If a one-stage process is chosen, NGOs can only be supported to develop projects if there is a mechanism of pre-selection in place.

**Optional: support partners during proposal development**

If project modalities are new and partners cannot build on previous cooperation experience, it might be necessary to support partners during the development of project ideas. This can be done by providing basic feedback on an initial project idea or by making available financial or staff resources. It requires either a two-stage proposal development process or a pre-selection of partners. A larger support requires to establish a higher likelihood of funding and hence a larger initial basis of information.

## Annex 14: Evaluation of Project Cycles

| Fund | Partner pre-selection | Project selection process | Duration |
|---|---|---|---|
| PATRIP | - Initially only with four known NGOs<br>- later: use NGO assessment tool | - NGOs consult with local government<br>- Financing proposals by NGOs, supported by consultant<br>- KfW collects and appraises projects<br>final decision by AA | relatively quick |
| NAMA Facility | - Implementing partner endorses national government OR<br>- national government endorses implementing partner | Step 1:<br>- National government / implementing partner submit Outline<br>- Mgt. verifies in two steps (eligibility criteria and ambition and feasibility criteria)<br>- pre-selection by board for appraisal<br>Step 2:<br>- Evaluation against ambition and feasibility criteria<br>- Final approval by board | up to 3 years |
| MARFUND | 6th round small grants program: organisations need to be member of Society for Conservation Biology's marine section | - 3 programs: community fisheries, small grants, conservation of marine resources in C.A. Project<br>- small grant program: 6 rounds of calls for proposal (USD 500-700)<br>- yearly competitive selection process according to criteria<br>- access criteria and proposal documents online | |
| Carbon Market Foundation | none | - grants seed funding for particularly suitable projects (max. EUR 2 million)<br>- funding criteria available online<br>- Selection for detailed appraisal (2014: 6 out of 44 projects)<br>- template available online 10-20 pages (detailed description of social + environ impacts, tech transfer, embeddedness in national strategy, business plan, risks)<br>- Management board decides | 1 to 2 years |
| TAHIL | prequalification of NGOs with extensive template | consultant develops proposal on a case by case basis whenever funding from BMZ becomes available | 6 months |
| Tigerfonds | None | - competition process, at least 2 calls for proposal<br>- prequalification on the basis of short concept notes<br>- can request EUR 50,000 to prepare project (workshops, stakeholder and target group consultation, feasibility studies, development of project concepts)<br>- secretariat reviews projects; proposes measures to program council (EUR 0.7-2 million) | |

www.joyn-coop.com

# Administrative Expenses and Conservation Trust Funds

A Desk Study of Administrative Cost Ratios and Coding of Cost Categories financed by KfW to support the Blue Action Fund

**July 2018**


Christina Kükenshöner
Dr. Karsten Timmer
Lina Ghosh
Corinna Müller
Ariane Schoen


joyn coop

# Starting point for this study were the experiences of the Caucasus Nature Fund (CNF)

"After looking at different practices [of defining administrative costs] seven or eight years ago, at CNF we decided that there was no 'correct' way of doing this. The important thing was to be clear and transparent about what you are doing"

(David Morrison, Blue Action Management Board & former ED of CNF)

CAUCASUS NATURE FUND

**The joyn-coop team wants to thank David Morrison for the continuous support throughout the study!**

# It has lead to an assessment of different definitions of admin cost and corresponding recommendations

## Context

Administrative expense ratios have been viewed by donors to CTFs and boards as important tools to track operating efficiency. On the occasion of the foundation of the Blue Action Fund, joyn-coop was mandated to do a desk study on best practices for defining an adequate administrative ratio. The objective was to develop a decision basis for the future financial statement presentation and underlying cost category coding system of Blue Action, which would strengthen reporting and facilitate cost control.

The cost items of Blue Action Fund were the following:

- Executive Director
- Service Provider (Grant selection and monitoring)
- NTA (Support functions)
- Professional Services (Audit, Accountant, etc.)
- Infrastructure (Office, Insurance etc.)

## Recommendations

The study shows that there are many ways of calculating admin ratios and recommends:

1) A one-size-fits-all “ideal admin ratio” does not exist; the target admin ratio should reflect a CTF’s character.
2) Admin ratios serve various purposes.
3) Monitoring several ratios seems helpful.
4) An organization-wide admin ratio seems more helpful than a project-based admin ratio.
5) A common cost coding system for related organizations is useful.
6) To encourage meaningful spending for a fund’s purpose, all purpose-related spending should be excluded from admin cost.

# Table of contents

Joyn coop

## Chapter 1 Introduction

?

**What are the guiding questions of the study?**

## Chapter 2 Legal Frameworks

§

What are legal requirements according to US and German tax codes?

## Chapter 3 Other Guidelines

DZI Deutsches Zentralinstitut für soziale Fragen

KFW Bank aus Verantwortung

CFA

CHARITY NAVIGATOR

What are the provisions made by policy guidelines?

## Chapter 4 Applications

CNF Caucasus Nature Fund

MAVA Fondation pour la Nature

FUNBIO

MAR FUND 10 years protecting the Mesoamerican Reef

WWF

bielefelder bürgerstiftung

How do other funds structure their costs?

## Chapter 5 Recommendations

How should a fund report to its donors?

# Transparent administration cost can help to better evaluate efficiency of Conservation Trust Funds (CTF)

**Administrative cost ratio is a typical donor benchmark for organizational efficiency…**

- It is an important evaluation criterion for public and private donors
- It is assumed that all expenses that are not spent on administration directly reach the beneficiaries
- Small ratio implies an effective achievement of the core mission

**…but it lacks one common definition and calculation standard**

- Strong differences in the classification of administration and program cost both in policy and practice
- Especially true for (staff) cost related to managing grants which are sometimes included in admin and sometimes in program cost

**What could be an adequate approach to the administrative cost ratio?**

**Please note that administrative costs are important to ensure preparation and monitoring of projects and therefore a low ratio is not a measure for good results of an organization !**

# The study aims at lessons how to elaborate a clear and consistent attribution of administrative costs

Joyn coop

## Desk study with variety of sources

The study is based on literature review of applicable rules, donor guidelines and other CTFs and interviews with experts, and Finance Managers from international and German funds. A list of interview partners is provided in Annex 1.

## Analysis of common practices

The study contains the analysis of standards of 2 different legal frameworks, 4 policies and 6 practice examples. It arrives at recommendations for defining an income statement presentation, the administrative cost ratio and cost coding structure of a CTF.

*The study does not look at investment-related cost. These are typically directly deducted from investment income. Separate maximum ratios exist for these cost.

## Exemplary application

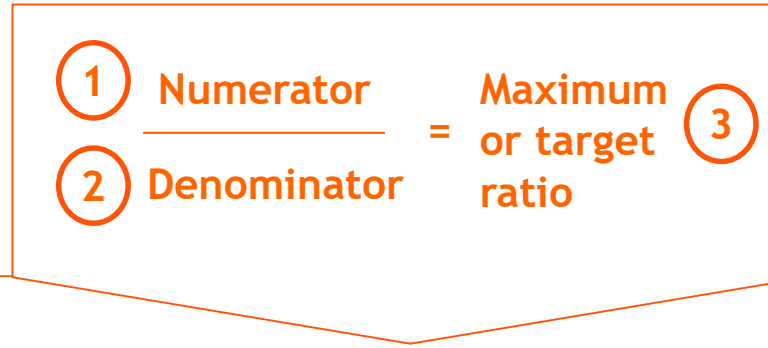
All analysed approaches were applied to the Blue Action Fund**

- Conservation Trust Fund (CTF)
- Together with CNF and PONT part of Nature Trust Alliance (NTA)
- Charitable German foundation established under Civil Law
- Promotes safeguarding and sustainable use of marine biodiversity in most sensitive coastal waters
- Provides grants to marine or coastal conservation projects of NGOs

Resulted in wide range of admin ratios → 4-10%

**Preliminary Budget 2017-2020 of the Blue Action Fund

# The study analyzed all three elements of the computation for the administrative cost ratio




**1 Numerator**

- Which costs are defined as **administrative costs versus program cost**?
- Which expenses* belong to a **"grey area"** that can be allocated to either one of them?

**2 Denominator**

- What **values are used in relation to the administrative costs**, in the denominator of the calculation? How does it effect the resulting ratio?

**3 Maximum or target ratio**

- What maximum or target **ratio of administrative costs** is deemed appropriate by donors?
- Which minimum ratio seems to be necessary to carry out effective programs?

Note: throughout the study, the words costs and expenses are used interchangeably.

# The study seeks to make costs definitions of the analyzed approaches more transparent using three cost categories

| Category | Explanation | Example |
|---|---|---|
| Grant activities  | **Program level**<br>Funding towards the mission of the CTF: 3rd party grants or long-term financial support to Protected Areas | Funding park administration buildings or rehabilitation of mangrove forest |
| Program development & management  | **Program level**<br>Expenses that are directly related to delivering the grant activities | Preparatory costs for grants, monitoring of projects |
| Support functions  | **Institutional level**<br>All expenses that are clearly supportive and cannot be assigned to the program | Office supply, electric bills, costs for financial mgt |

Running cost of a CTF

**Category of program development is most differently defined by CTFs and donors, hence decisive for determining whether the admin ratio is high or low**

# Table of contents

Joyn coop

## Chapter 1 Introduction

?

What are the guiding questions of the study?

## Chapter 2 Legal Frameworks

§

**What are the legal requirements according to the US and German tax codes?**

## Chapter 3 Other Guidelines

DZI Deutsches Zentralinstitut für soziale Fragen

KFW Bank aus Verantwortung

CFA

CHARITY NAVIGATOR

What are the provisions made by policy guidelines?

## Chapter 4 Applications

CNF Caucasus Nature Fund

MAVA Fondation pour la Nature

FUNBIO

MAR FUND 10 years protecting the Mesoamerican Reef

WWF

bielefelder bürgerstiftung

How do other funds structure their costs?

## Chapter 5 Recommendations

How should a fund report to its donors?

# According to the US tax law charitable organizations have to state clearly their administrative expenses

Joyn coop

## According to US law, charitable organizations have to use their funds for purposes beneficial to the public interest

§ The Internal Revenue Code defines charitable organizations under section 501(c)(3) as "organized and operated exclusively for exempt purposes and none of its earnings may inure to any private shareholder or individual". Political/ legislative organizations are excluded.

## It provides a specific tax form and instructions that differentiate three categories of expenses

Charitable organizations are required to fill out the tax form 990 where every functional cost item has to be classified in one of the following categories (part IX): 1) Program Services, 2) Management and General and 3) Fundraising.

Direct fundraising expenses are directly deducted from the related revenue in the previous section.

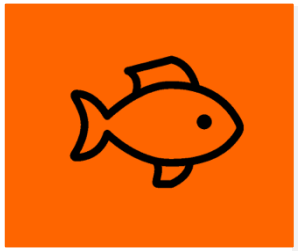
It contains instructions with examples for the allocation of expenses and additionally also defines the allcoation of indirect expenses.

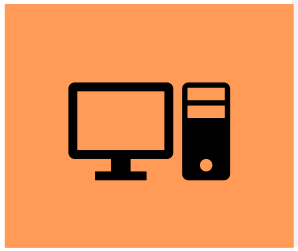
## Still, NPO report their costs in a very different ways

The instructions are not detailed enough and a study of over 220,000 NPOs found that 75% to 85% of these NPOs were improperly allocating their expenses.

Source: Internal Revenue Code, https://www.nolo.com/legal-encyclopedia/reporting-nonprofit-operating-expenses.html

# However, the US tax law does not differentiate program cost types and does not have a maximum level for administrative costs





Program costs

Management and general costs

Fundraising costs

Direct fulfillment of (exempt) purpose, e.g. provision of health care, teaching, food delivery etc. Can include unrelated business activities and grant securing

Operations and management activities, e.g. CEO salary, management of investments, board/ staff meetings, legal services, accounting, HR etc.

Fundraising activities incl. allocable overhead costs and excl. direct expenses of fundraising events

1 **Numerator**

- n.a.

2 **Denominator**

- n.a.

3 **Maximum ratio**

No requirements or recommendations on the share of administrative and fundraising costs of charitable organizations

$$\frac{\text{Management \& general costs + Fundraising costs}}{\text{Total expenses}}$$

Blue Action 6.4*%

*Based on interpretation by joyn-coop. Studies show that interpretation varies significantly

# For any German Foundation, the German tax code is binding - allowing for quite a large share of administrative cost

## According to law Non-Profit Organizations shall use their funds only for purposes specified in the charter

§

According to **German *Abgabenordnung (NPO tax code)***, a CTF is only allowed to use its financial means for purposes specified in its charter. However, since administrative costs are unavoidable, the tax authority has defined a framework allowing for these costs, defined in the ***Anwendungserlass zur Abgabenordnung* (AEAO) / tax code application decree**.

## The tax code does not define program and admin costs

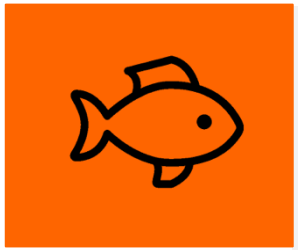
The AEAO does not define how program costs are to be differentiated from administrative costs. In principle, **every** expenditure that is **not** directly **serving the specified purposes** is to **be classified as administrative costs**. It also states that administrative costs must be appropriate, i.e. Charitable Organizations must not predominantly use their financial means for administration (<50%).

## Example Blue Action

- Blue Action may take out of the admin ratio all cost items originating from achieving purposes as specified in the charter, e.g. environ. protection, promotion of development cooperation and promotion of sciences and research
- This mostly relates to grant activities, but also e.g. to organizing a conference to promote research
- As the Blue Action is allowed to fulfill its mission by passing on funds to other non-profit organizations, all grant-making activities count as program-related costs including e.g. selecting and monitoring projects

Source: Abgabenordnung, interviews

# The German tax code only differentiates program and administrative costs and has a very high maximum ratio

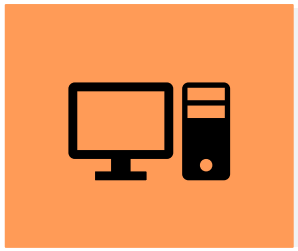


Program costs

Direct fulfillment of purpose, e.g. grants to NGOs, conference for knowledge exchange

Indirect fulfillment of purpose, e.g. project selection by service provider, salary share ED

Salary share of ED not directly related to the program



Administrative costs

Other expenses, e.g. office rent, equipment, NTA unless program-related, the salary of the ED unless task directly for the purpose

1 **Numerator**

- All costs that are **not** directly related to the specified purpose.

2 **Denominator**

- Total annual expenses

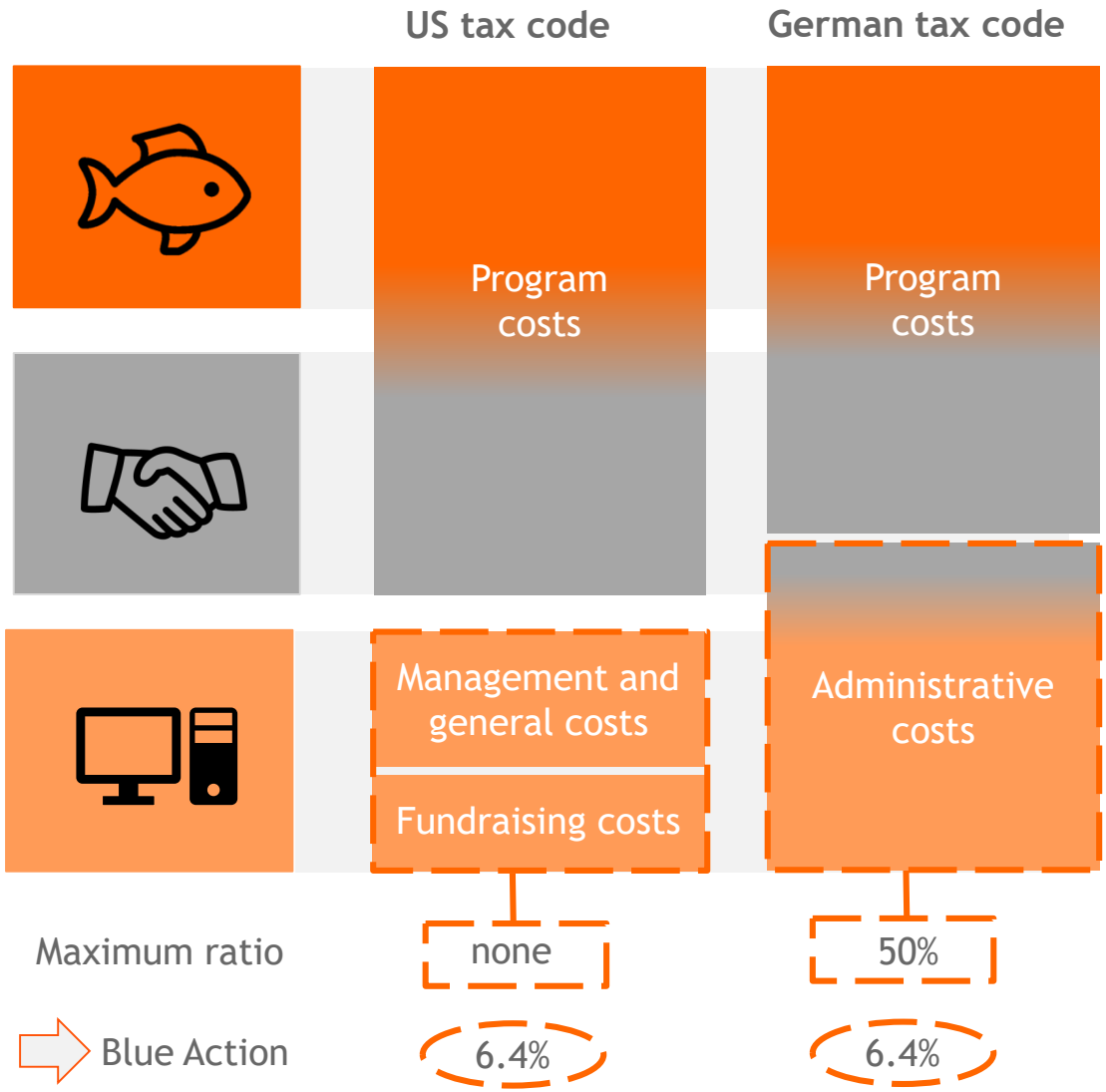
3 **Maximum ratio**

- 50%
- Higher in first years

Administrative costs / Total expenses → Blue Action 6.4%*

*Based on strict interpretation of NPO tax code. May be lower when interpreted more flexibly.

# Overview of tax codes



# Table of contents

## Chapter 1 Introduction

?

What are the guiding questions of the study?

## Chapter 2 Legal Frameworks

§

What are the legal requirements according to the US and German tax codes?

## Chapter 3 Other Guidelines

DZI Deutsches Zentralinstitut für soziale Fragen

KFW Bank aus Verantwortung

CFA

CHARITY NAVIGATOR

**What are the provisions made by policy guidelines?**

## Chapter 4 Applications

CNF CAUCASUS NATURE FUND

MAVA FONDATION POUR LA NATURE

FUNBIO

MAR FUND 10 years protecting the Mesoamerican Reef

WWF

bielefelder bürgerstiftung

How do other funds structure their costs?

## Chapter 5 Recommendations

How should a fund report to its donors?

# The study analyzes expense guidelines by four relevant institutions

| | | Short description | ✚ | ⊖ |
|---|---|---|---|---|
| a | CHARITY NAVIGATOR | Scores for administrative expense ratios depending on type of charity organization | Biggest and most well-known US charity watchdog | Strong focus on financial ratios only based on official tax form, only rates US-based organizations |
| b | CFA | Practice standards for Conservation Trust Funds defining Management Expenses | Standard within the conservation finance community | Lack of clear provisions |
| c | DZI Spenden-Siegel | The DZI 'administrative cost concept' defines acceptable size of administrative cost of charitable organizations | Most widely applied German standard for NGOs | Not used by international development cooperation / int. donors |
| d | kfw ENTWICKLUNGSBANK | Guideline for capital funds (target size EUR 50m) including rules for operating expenses | Standard of an important financing partner | Not fully applicable to funds with small endowments |

# Charity Navigator is an important rating agency for American NPOs

## Charity Navigator is an important decision-maker

Charity Navigator is the largest American charity watchdog and thus is able to influence donor decisions. It was founded in 2001 as an independent non-profit organization and so far has rated more than 9.000 publicly supported, well-established, US-based charities with more than USD 1 million of annual revenue.

## Charity Navigator rates NPOs according to their financial health and accountability & transparency

- Rating system is based on two broad areas of financial health and accountability and transparency which are both rated individually based on a variety of metrics (incl. admin cost ratio)
- It attributes up to four stars based on a scoring system that includes amongst others the admin cost ratio.

## Charity Navigator emphasizes importance of administrative expenses

- Charity Navigator only rates organizations that report at least 1% administrative and 1% fundraising costs as it considers these fees indispensable for the operation of a charity
- It has launched The Overhead Myth campaign to prevent donors to overvalue financial ratios of NPOs

Sources: Charity Navigator Website, www.overheadmyth.com

# Charity Navigator attributes scores for low admin. expenses

## Classification of expenses based on official tax form

C. Navigator calculates expenses for the 3 most recent fiscal years as declared in the form 990. It only adjusts few cost allocations to make them clearer for donors:

1) Joint-costs: If intransparent presentation, some program costs are transferred to fundraising costs
2) Indirect costs: If insufficient documentation to determine allocation indirect costs are factored out

## Attribution 7 financial performance metrics:

1) Program Expense Percentage (see box)
2) Administrative Expense Percentage (see box)
3) Fundraising Expense Percentage (see box)
4) Fundraising Efficiency
5) Program Expenses Growth
6) Working Capital Ratio
7) Liabilities to Assets Ratio

## Scoring system for grant-making organizations

**1) Scores for program expenses:**

10*(Raw Score -0.5)/0.35

Program expenses are less than 1/3, it is considered that the charity is not „living up to its mission“, if it is less than 1/2, it receives 0 points for this metric.

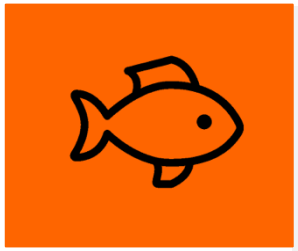
**2) Scores for admin expenses:**

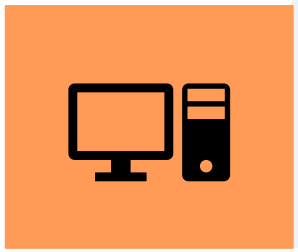
| Score | 10 | 7.5 | 5 | 2.5 | 0 |
|---|---|---|---|---|---|
| Admin cost* | 0-15% | 15-20% | 20-25% | 25-30% | >30% |
| Fundr. cost | 0-10% | 10-15% | 15-20% | 20-25% | >25% |

*without fundraising

**It also has adjusted scores for organizations within uniquely-functioning cause areas**

# The Charity Navigator classification is based on the US tax law and it suggests clear ratios





Program costs

Costs related to programs and services the charity exists to deliver

Management and general costs

E.g. general legal services, accounting, office management, and human resources, infrastructure

Fundraising costs

Activities related to soliciting donations from the general public

1 **Numerator**

- Average Admin. Cost

2 **Denominator**

- Average Total Cost

**Maximum ratio (for full rating)**

- Admin cost ratio: 15%*
- Admin. Expense percentage (without fundraising): 15%
- Fundraising Expense percentage: 10%

3

$$\frac{\text{Management \& general costs + Fundraising costs}}{\text{Total expenses}}$$

Blue Action 6.4%

*Charity Navigator prescribes a minimum of 85% of program expenses for the full score of 10

# Conservation Finance Alliance recommends against the introduction of a cost ceiling to ensure a CTF is sufficiently resourced

In its Practice Standards for Conservation Trust Funds, CFA **differentiates between grants, direct costs and indirect costs, management expenses** being a part of the two last ones.

The practice standards **recommend a practical approach** regarding the share of administrative cost:

*"A reasonable allocation of the available budget between management expenses and a grant program seeks to maximize funding for the grant program, but also recognizes the importance of achieving the institutional strategic objectives of the CTF."*

The underlying reason is that **institutions** that manage or administer grant programs **will be more effective if they are appropriately resourced** and their institutional goals are supported.

Therefore, the Practice Standards **do not recommend the introduction of a cost ceiling**.

*"Existing and potential donors often focus on a 'cost ceiling' that limits the allocation to management expenses in the hopes of maximizing monies that will be available to finance the grant program. A CTF should be able to demonstrate through analysis and use of common performance indicators what its own 'reasonable' management expense allocation is."*

*The share of management expenses as a percentage of total expenses will be higher when CTFs have execution responsibility.*

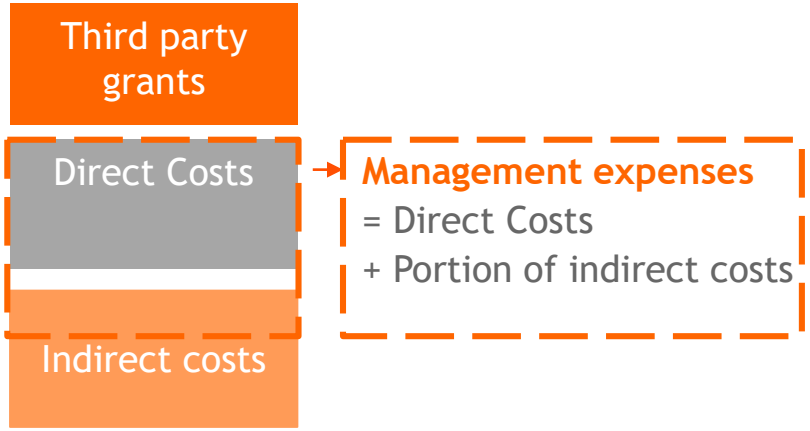
Moreover, from Operations Standard 8 it can be inferred that supporting grantees in preparing proposals is a program-related activity that can be funded from the internal budget – whether implemented by own staff or by consultants.

Source: Website CFA, interviews

# CFA has developed the concept of management expenses, but this has not yet been accepted internationally

**Management expenses** represent all expenses incurred by a CTF to carry out a specific grant program. This includes all direct costs – the costs identified with managing a program, e.g. review, technical assistance and oversight of the program - plus a portion of the indirect costs for the general operation of the organization.

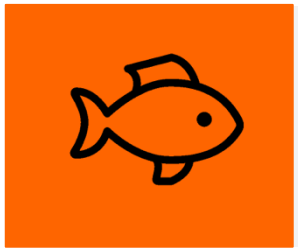
Each donor bears the cost arising of its specific program as well as a defined share of the indirect costs. The remaining part of indirect costs is covered by other donors.




- Acknowledges the fact that CTFs do indeed have cost for developing and monitoring good projects
- Prevents arbitrary allocation of costs for managing a program between administrative and program cost

- Ratio becomes a moving target, as each additional donor would require a recalculation and new allocation of the indirect costs
- Looks at the cost of managing specific donor funds instead of measuring overall efficiency of the CTF, introducing accounting and reporting complexity.

# The CFA includes many cost items into the ratio but does not suggest a maximum level



Grants

Grants awarded

Direct Costs

Costs for managing the grants, e.g. staff cost for project selection and monitoring

Indirect costs

Donor-specific costs associated with the general operation of the organization, e.g. fundraising, staff development

Management Expenses / Grants + Mgt Exp.

Blue Action 8.8%

1 **Numerator**

- Management expenses

2 **Denominator**

- Total costs of a specific donor program = management costs and disbursed grants of the specific donor program

3 **Maximum ratio**

- none

# DZI Spendensiegel is the most widely acknowledged donation seal for efficient use of funds among German charitable organizations

The ***Deutsches Zentralinstitut für soziale Fragen*** **(DZI)** is an independent foundation that informs the public since 1992 about the integrity of charitable organizations by conferring the most important chartitable best practices certification – the "Spendensiegel". Receiving the "Spendensiegel" requires proof of efficient, effective and frugal use of funds according to its charter's purposes. The annual evaluation is based on the "Verwaltungskosten-konzept" (link) detailing all cost items into five main categories.

**Project expenses**

1) Project promotion: expenses for statutory purposes, e.g. project grants, project offices

2) Project support & assistance: preparation and selection of suitable projects, reviewing of applications, controlling, audit, evaluation

3) Campaign & educational work: creation of public interest and awareness

**Marketing and administrative expenses**

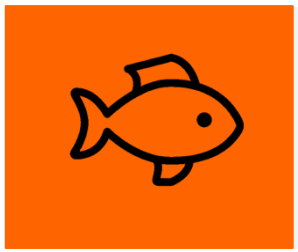
4) Marketing: project reporting, mailings, web-presence, public relation measures

5) Administration: headquarter office and staff cost, equipment, controlling, audit, board expenses

*"In smaller organizations (max. 20 employees), the expenses of the management level can be proportionally assigned as project expenses if the management level is performing these operational tasks in the context of project promotion or campaign, education and awareness-raising work."*

Source: Website DZI

# According to DZI, the internal project development cost are not included into the admin ratio



Project promotion

Campaign & education

Project expenses, including grants and awareness raising

Project support & assistance

Valid for small organizations: Personnel costs for developing and monitoring grant programs

Marketing

Marketing expenses, e.g. fundraising and mailings

Administrative costs

Other expenses, e.g. HQ office rent, equipment

Administrative + marketing costs / Total expenses

Blue Action 5.1%

1 **Numerator**

- Administration and marketing cost (only in organizations with 20+ people: personnel cost for program development)

2 **Denominator**

- Total annual expenses

3 **Maximum ratio**

- 30%

# The KfW guidelines do suggest a maximum level and relate the expenses to the net investment income of a CTF

In its **Financial Cooperation guidelines for capital funds for environment and protection**, KfW follows in principal the „Practice Standards for Conservation Trust Funds“ with regards to the cost categories.

Different from CFA, the admin ratio's numerator reflect the full direct and indirect cost instead of the management expenses.

It specifies that “the indirect and direct operative costs should be appropriate depending on the range of tasks of the fund management, but **should not exceed 20% of the net investment income**”.

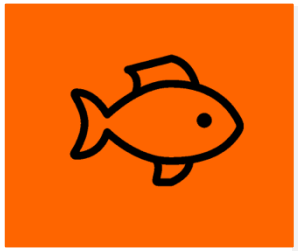
The Fund examples in the next chapter will show that in practice, different ratios are agreed with the CTFs.

KfW
Bank aus Verantwortung

- Even though KfW as the founder of Blue Action is currently its most important "donor", the official KfW guideline is difficult to apply to Blue Action
- The guideline was established for CTFs with large endowment funds and in exceptional cases with sinking funds (target value EUR 50m);
- Blue Action capital structure consists to 80% of a project reserve, that does not allow for important investment returns

Source: Documentation KfW

# The KfW guidelines define a ratio that includes most cost items of all analyzed policies

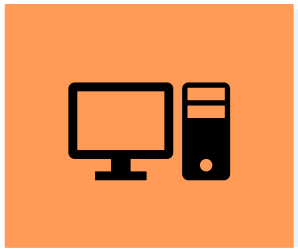


Program costs

Grants awarded

Direct Operational Costs

Costs for managing the grants, e.g. staff cost for project selection and monitoring



Indirect costs

Costs associated with the general operation of the organization, e.g. fundraising, outreach, staff development and partnering

Indirect + direct op. costs / Net investment income

Blue Action 9.7%

1 **Numerator**

- Indirect and direct operational cost

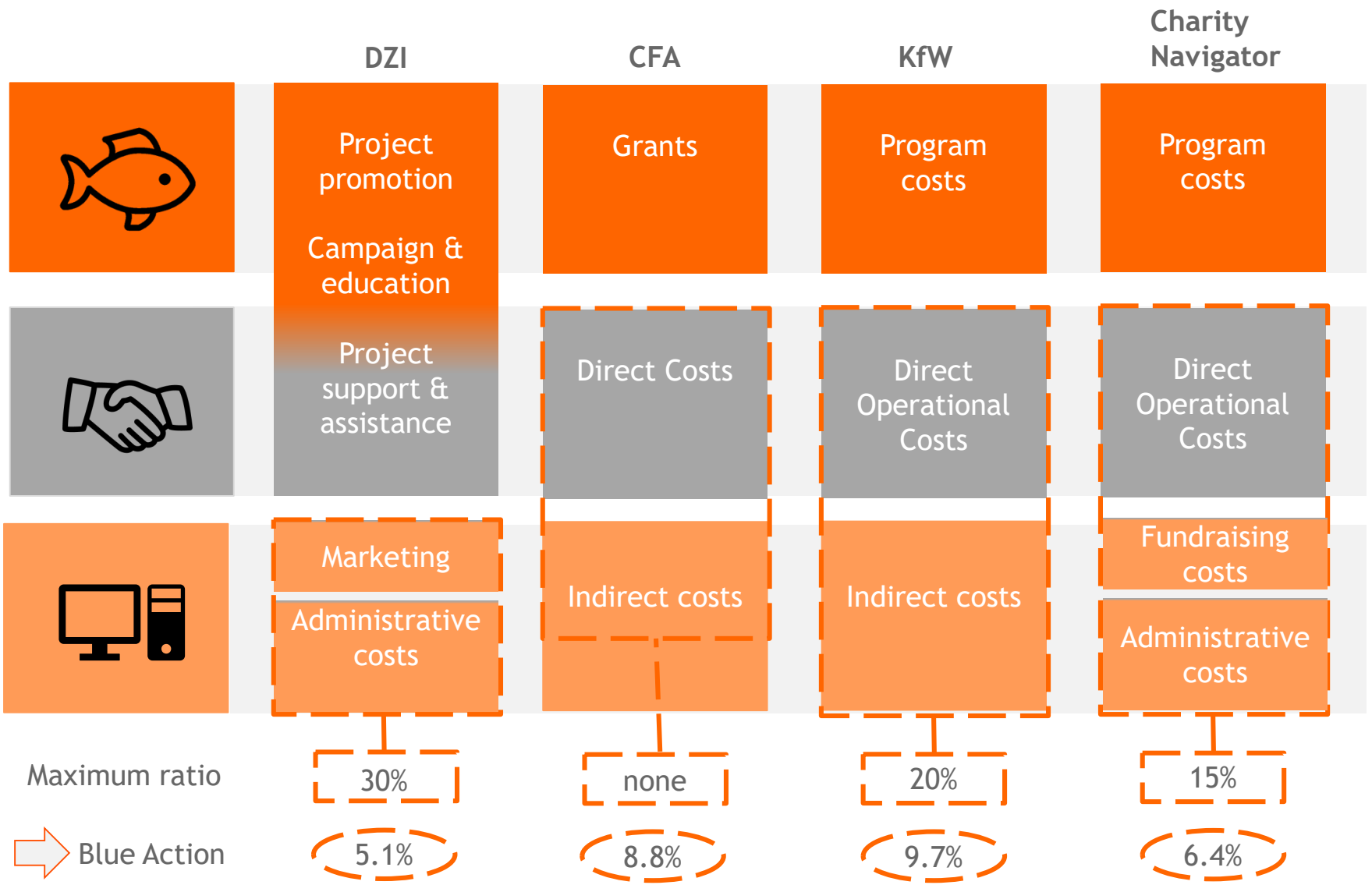
2 **Denominator**

- Net investment income ("gross return"); donations are excluded from the ratio

3 **Maximum ratio**

- 20%

# Overview of policies



# Table of contents

## Chapter 1 Introduction

?

What are the guiding questions of the study?

## Chapter 2 Legal Frameworks

§

What are the legal requirements according to the US and German tax codes?

## Chapter 3 Other Guidelines

DZI Deutsches Zentralinstitut für soziale Fragen

KFW Bank aus Verantwortung

CFA

CHARITY NAVIGATOR

What are the provisions made by policy guidelines?

## Chapter 4 Applications

CNF

MAVA FONDATION POUR LA NATURE

FUNBIO

MAR FUND 10 years protecting the Mesoamerican Reef

WWF

bielefelder bürgerstiftung

**How do other funds structure their costs?**

## Chapter 5 Recommendations

How should a fund report to its donors?

# CNF calculates its administrative expense ratio in 2 ways: with and without fundraising - both methods exclude program-related costs

Joyn coop

## Quick facts

- **Purpose**: Providing long-term support and management assistance for the protected areas of Armenia, Azerbaijan and Georgia
- **Involvement**: Funding and operating (management assistance to parks)
- **Number of staff**: 4
- **Annual Budget**: EUR 1.27 m
- **Funds under Mgt**: EUR 27 m
- **Legal form**: German foundation under civil law
- **Local offices**: yes

CNF
CAUCASUS NATURE FUND

## Communication of expenses 2015

| | |
|---|---|
| **Total Program Grants & Expenses (EUR)** | **- 1,408,488** |
| Grants | -1,150,149 |
| Program Development and Technical Services | -126,828 |
| Project Management | -131,510 |
| **Administrative, Fundraising & similar expenses** | **-327,312** |
| Administrative Expenses | -224,317 |
| Fundraising & Communication Expenses | -81,327 |
| Other Operating Expenses (exchange rate losses) | -21,668 |
| **Total grant and other expenses** | **-1,735,800** |

## Actual ratios 2015

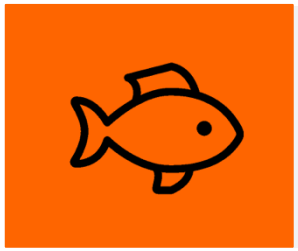
$$\frac{\text{Administrative expenses}}{\text{Total expenses}} = 12.9\%$$

$$\frac{\text{Admin. + Fundraising expenses}}{\text{Total expenses}} = 17.6\%$$

Source: Website CNF, interview

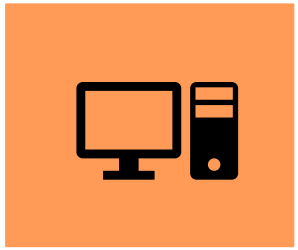
# CNF's admin cost ratio is transparent - the main ratio show fund-raising expense as a separate category measured by its own ratio

Joyn coop



Grants — Financial support for protected areas

Program Dev. & Technical Serv.
Project Mgt
— Local staff cost, local office rent incl. running cost fully allocated, share of ED cost & NTA cost



Fundraising & similar exp. — Fundraising, events, staff cost, potentially share of NTA cost

Administrative expenses — Share of ED cost, share of NTA cost, HQ rent & running cost

Admin exp. / Total expenses (-fundraising) → Blue Action 4.3%

**Main Methodology**

1. **Numerator**
   - Administrative cost
2. **Denominator**
   - Total expenses (-fundraising expenses)
3. **Maximum ratio**
   - 15% (defined in bylaws)

# MAVA Foundation follows a pragmatic approach of including all non-grant expenses - and still has a very low admin cost ratio

Joyn coop

## Quick facts

- **Purpose:** Promote protection and sustainable management of nature, biodiversity and natural resources in the Mediterranean, West Africa and the Alps
- **Involvement:** Funding of mainly of larger grants
- **Number of staff:** 20
- **Annual Budget:** CHF 70 m
- **Funds under Mgt:** n/a
- **Legal form:** private foundation under Swiss law
- **Local offices:** one in Dakar

MAVA FONDATION POUR LA NATURE

## Communication of expenses (exemplary)

| | |
|---|---|
| **Grant commitments (CHF)** | **- 65,000,000** |
| **Total operating expenses** | **- 4,500,000** |
| Project related costs: Workshops and related costs, consultancy costs) | -1,000,000 |
| Salaries and social charges for all MAVA staff (admin and program staff; DG) | -2,500,000 |
| Other operating expenses: communication, travel, phone, rental, IT, printer, etc… | -1,000,000 |
| **Commitments* and expenses** | **-70,000,000** |

*Commitments are undertakings to commit expenditures at a future date.

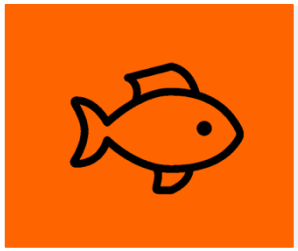
## Administrative ratio

$$\frac{\text{Total operating expenses}}{\text{Commitments* and expenses}} = \frac{4{,}500{,}000}{70{,}000{,}000} = 6.4\%$$

Source: Website MAVA Foundation, interview

# MAVA Foundation relates cost to total commitments - this keeps ratio low when commitments grow

Joyn coop



Grants

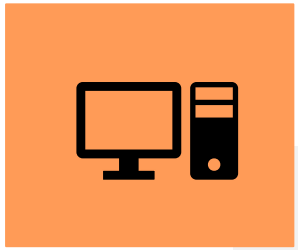
Funding mainly of larger grants (ca. 80 grants averaging CHF 0.7 mio)

Project related costs

Workshops, consultancies for project proposal and evaluation

Salaries

Salaries and social charges for all MAVA staff (admin and program staff, DG)



Other op. expenses

Communication, travel, phone, rental, IT, printer, etc.

Total non-grant expenses / Total commitments + total non-grant expenses

Blue Action 7.3%

1 **Numerator**

- Project-related costs + salaries + other op. expenses)

2 **Denominator**

- Total commitments + total non-grant exp.

3 **Maximum ratio**

- 7%

# KfW funded 2 endowments at MAR Fund with different objectives and consequently very different target ratios

Joyn coop

## Quick facts

- **Purpose:** Providing long-term financial support and reef management advice in the Mesoamerican reef
- **Involvement:** Funding MPAs and small grants
- **Number of staff:** 13
- **Annual Budget:** USD 4.5 m
- **Funds under Mgt:** USD 25.1 m
- **Legal form:** private fund, registered in the US
- **Local offices:** no (HQ in Guatemala, and staff in 4 countries)

MAR FUND
10 years protecting the Mesoamerican Reef

### Endowment fund 1

**Objective:** generating funds for the sustainability of MAR Fund functions (proceeds to be used almost exclusively for operating expenses) - and co-financing of small grants program

**Allowed ratio:** based on historical annual approval of projection matrix (37-64% of operating cost)

### Endowment fund 2

**Objective:** generating funds to support reef reforestation – proceeds to be used almost exclusively for program expenses

**Allowed ratio:** based on annual approval (around 3% of project specific expenses); program-related staff is not included in admin ratio!

### Administrative ratio

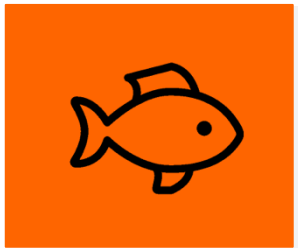
$$\frac{\text{Operating expenses}}{\text{Total operating expenses}} = 37\text{-}64\%$$

$$\frac{\text{Project spec. op. expenses}}{\text{Project spec. total expenses}} = 3\%$$

Source: Website MAR Fund, interviews

# Internally, MAR Fund measures performance by help of the program expense ratio - trying to maximize spending for specified purposes

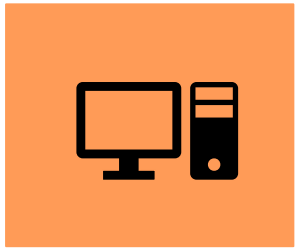
Joyn coop



Grants and program-matic work

Financial support for protected areas and small grants and other grants

Program related staff and committee meetings, e.g. coordinator of sub-account



Admin. expenses

HQ running cost (ED, technical and Admin staff, committee meetings, consultancies, fundraising, travel, staff training, accounting and audits, office expenses and rent)

1 **Numerator**
- Admin expenses

2 **Denominator**
- Total expenses

3 **Ratio**
- 15% (2016)

Admin expenses / Total expenses

Blue Action 10%

# KfW-funded FUNBIO has a ceiling of 14% for its operating expenses in relation to the KfW contract value

joyn coop

## Quick facts

- **Purpose:** Provide strategic resources for biodiversity conservation
- **Involvement:** Funding grants and protected areas
- **Number of staff:** ca. 80
- **Annual Operating Budget:** R$ 16.1 m
- **Funds under Mgt:** R$ 788 m
- **Legal form:** non-profit civil association
- **Local offices:** no

FUNBIO

## Agreement with KfW

| | |
|---|---|
| **Total Operating Expenses (EUR)** | **392,243** |
| Implementation costs | 125,000 |
| Annual costs for the preparation of operational plans | 96,574 |
| Management Team | 128,444 |
| Financial Team | 41,425 |
| Procurement costs | variable |
| Travel Costs | variable |
| **KfW Contract Value** | ? |

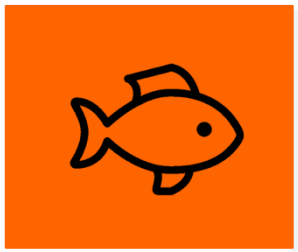
## Target administrative ratio

$$\frac{\text{Operating expenses}}{\text{KfW contract value}} = 14\%$$

14% is the ceiling established by KfW to Funbio; the actual ratio is not known to joyn-coop

Source: Website Funbio, KfW documentation

# FUNBIO includes all expenses resulting from managing the KfW grant - this is hence a project- not an organization-based approach

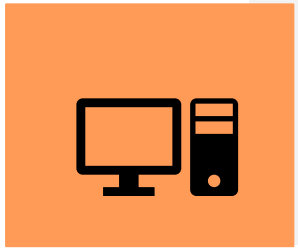


Grants

Financial support for protected areas and grants

Total operating expenses

Salaries and charges, third-party services, rental and maintenance, travel expenses, general expenses resulting from KfW grant



1 **Numerator**

- Total operating expenses

2 **Denominator**

- KfW contract value

3 **Maximum ratio**

- 14%

Operating expenses / KfW contract value

Blue Action 6.3%

# WWF Germany's calculation of the admin cost ratio is similar to CNF's

## Quick facts

- **Purpose:** Supporting projects of conservation of biodiversity
- **Involvement:** Funding and operating
- **Number of staff:** 252
- **Annual Budget:** EUR 64.9 m
- **Funds under Mgt:** n/a
- **Legal form:** German foundation under civil law
- **Local offices:** 9

## Communication of expenses 2015/16

| | |
|---|---|
| **Program, campaign and educational work, including support to WWF international (EUR)** | **-54,481,000** |
| **Administrative costs** | **-2,963,000** |
| **Support of the sponsors** | **-7,475,000** |
| **Total expenses** | **-64,919,000** |

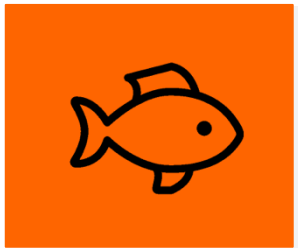
## Administrative ratio 2015/16

$$\frac{\text{Administrative costs}}{\text{Total expenses}} = \frac{2{,}963{,}000}{64{,}919{,}000} = 4.56\%$$

Source: Website WWF, interviews

# WWF Germany reports a very limited admin cost ratio to the public - however, donor reporting can contain different cost categories

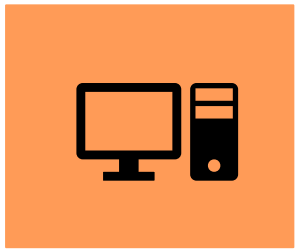
Joyn coop



Project, campaign and educational work

Direct fulfillment of the statutory purpose, main regions and topics, support of WWF international (including administrative costs of country offices as these are treated as grantees)

Staff cost, consultancies etc. for project preparation, management and project administration



Donors support ("Fundraising")

Measures for the acquisition of new donors ("Fundraising")

Administrative expenses

Mainly personnel costs (IT, HR & finance)

Administrative expenses / Total expenses

Blue Action 4.3%

1 **Numerator**
- Administrative expenses

2 **Denominator**
- Total expenses

3 **Maximum ratio**
- 5 %

# Bielefelder Bürgerstiftung is not involved with conservation topics but comparable in location, legal form and staff to Blue Action Fund

## Quick facts

- **Purpose:** connect civil society actors in Bielefeld and support projects of social relevance
- **Involvement:** funding of social projects
- **Number of staff:** 2
- **Annual Budget:** EUR 235,000
- **Funds under Mgt:** EUR 3.6 Mio
- **Legal form:** German foundation under civil law
- **Local offices:** no


## Communication of expenses 2016

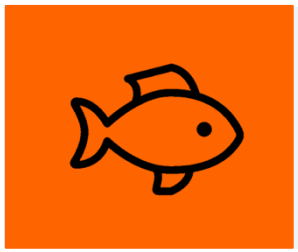
| | |
|---|---|
| **Project funding and support (EUR)** | **-190,501** |
| Project funding (grants) | -179,318 |
| Program Management (personnel costs) | -11,183 |
| **Administrative Expenses** | **-44,371** |
| Material expenses | -14,698 |
| Personnel costs | -29,673 |
| **Depreciation** | **1,878** |
| **Total expenses** | **-236,750** |

## Administrative ratio 2106

$$\frac{\text{Administrative expenses}}{\text{Total expenses}} = \frac{44{,}371}{236{,}750} = 18.7\%$$

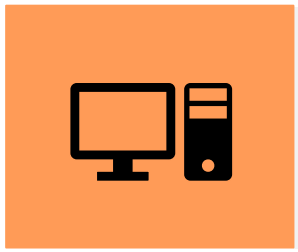
Source: Website Bielefelder Bürgerstiftung

# Bielefelder Bürgerstiftung (BBS) presents admin cost ratio according to DZI-principles



Project promotion — Project funding

Project support & assistance — Share of personnel costs



Depreciation — Fixed asset investments

Administrative expenses — Material costs and share of personnel costs

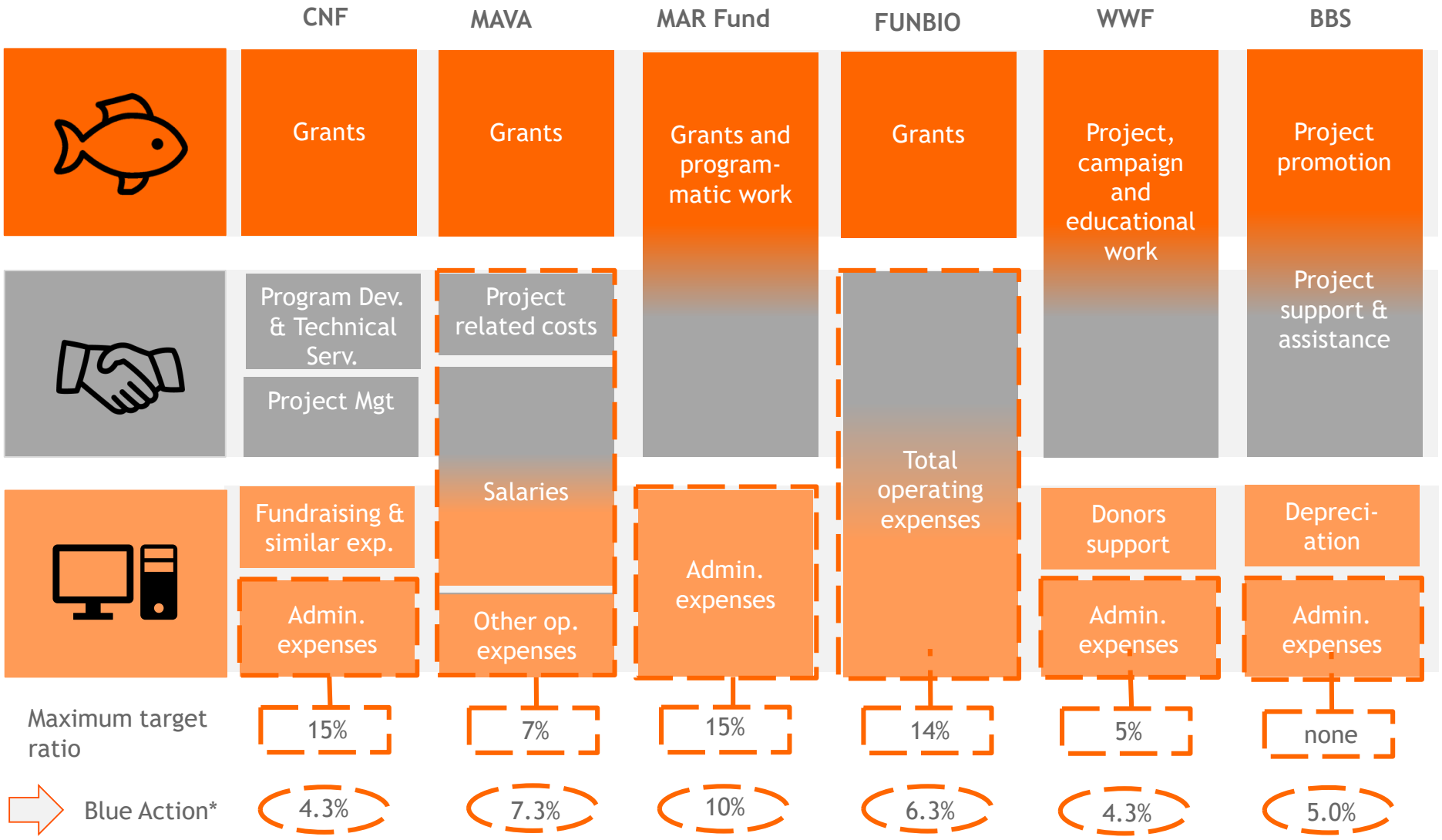
Administrative expenses / Total expenses → Blue Action 5.0%

1 **Numerator**
- Administrative expenses

2 **Denominator**
- Total expenses

3 **Maximum ratio**
- none (<50% as required by tax law)

# Overview of practice examples and application to Blue Action




* Values calculated based on Blue Action draft budget applying respective definition of cost categories

# Table of contents

Joyn coop

## Chapter 1 Introduction

?

What are the guiding questions of the study?

## Chapter 2 Legal Frameworks

§

What are the legal requirements according to the US and German tax codes?

## Chapter 3 Other Guidelines

DZI Deutsches Zentralinstitut für soziale Fragen

KFW Bank aus Verantwortung

CFA

CHARITY NAVIGATOR

What are the provisions made by policy guidelines?

## Chapter 4 Applications

CNF Caucasus Nature Fund

MAVA Fondation pour la Nature

MAR FUND 10 years protecting the Mesoamerican Reef

WWF

bielefelder bürgerstiftung

How do other funds structure their costs?

## Chapter 5 Recommendations

**How should a fund report to its donors?**

# The numerator should comprise all support functions plus a share of program development

1 Numerator / 2 Denominator = Maximum ratio 3

| | Option 1: "All in" | Option 2: "Middle way" | Option 3: "Lean" |
|---|---|---|---|
| **Description** | Program development & Support Functions | Share of program development & Support Functions | Support Functions only |
| Blue Action cost items | Service provider, ED, NTA, infra, prof. services | At least 50% of ED, NTA, infra, prof. services | Small part of ED, part of NTA, infra, prof. services |
| ⊕ | • In line with typical KfW understanding of operating expenses<br>• Stricter than required for tax authority<br>• Simple calculation (no coding required) | • Coding in line with tax authorities<br>• Idea of CFA-management expenses reflected (mgt. of grants need sufficient int. resources) | • In line with DZI/ Spendensiegel<br>• Following the WWF example<br>• Very low ratio |
| ⊖ | • High ratio sends wrong message to public | • Coding required<br>• Basic time allocation for ED needed | • Potentially not acceptable to donors<br>• Coding required<br>• Basic time allocations for ED and NTA staff needed |
| | | **Recommendation** | |

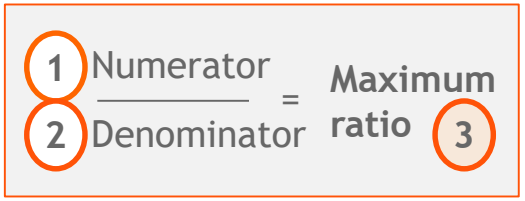
# The denominator should show total expenses

1 Numerator / 2 Denominator = Maximum ratio 3

Joyn coop

| | Option 1: "Commitments" | Option 2: "Expenses" | Option 3: "Investments" | Option 4: "Contract value" |
|---|---|---|---|---|
| **Description** | Grant commitments + total non-grant expenses | Total expenses | Net investment income | Financial cooperation contract volume |
|  | • If Fund expected to grow, higher denominator and smaller ratio | • Most commonly used and expected | • Less disbursement pressure (value independent from usage of money) | • Less disbursement pressure<br>• Applicable for Blue Action Fund |
|  | • Does not measure ability to disburse grants | • Ratio increases in case of disbursement issues | • Difficult to apply to Blue Action due to its capital structure<br>• Does not measure ability to make effective use of income | • "Moving target" - ratio would need to be adapted with each new FC commitment |
| | | **Recommendation** | | |

# The maximum ratio should be defined according to specific needs of each CTF




Joyn coop

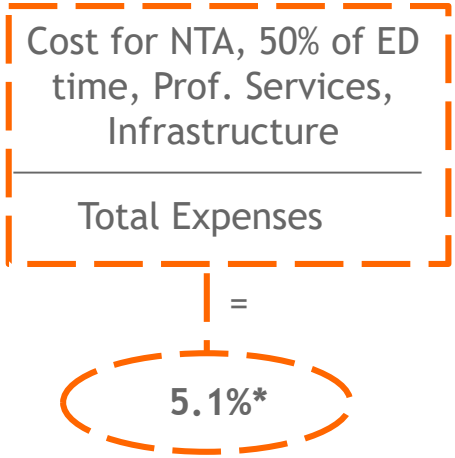
## What maximum ratio of administrative costs is deemed appropriate by donors?

- Internationally, donors typically limit cost to 20% (e.g. World Bank)
- If ratio is specifically related to support cost (institutional indirect) only, typically 5-12.5%

## Which minimum ratio seems to be necessary to carry out effective programs?

- "If a donor wants good projects, he cannot save on project development and M&E"
- The implementation modus matters: The more a CTF is directly involved in projects (e.g. with capacity building for grantees) - instead of "only" funding" grants - the higher the needs for resources and the higher the ratio; also more internal funds needed when managing many small funds instead a few large funds
- A Value for Money-Analysis of biodiversity grant programs showed the following relatively high ratios:
  GEF Small Grants Program – 31%; Save Out Species Program – 29%; Forest and Farm Facility – 30%; Global Greengrants fund – 28%

**Blue Action Fund**




* Four year average 2017-2020

# Conclusions (1/2)

**The study shows that there are many ways of calculating admin ratios**. Even among the KfW co-funded CTFs various approaches are used. It is hence safe to say, a fund can choose its own way of defining an admin ratio. There are, however, a few general points to consider:

**1) A one-size-fits-all "ideal admin ratio" does not exist; the target admin ratio should reflect a CTF's character.** The efficiency of an organization varies and depends for instance a) on the marketing needs: a fundraising organization like the WWF apparently excludes fundraising from its admin ratio; b) the size of individual grants: an organization managing more and larger grants like MAVA needs less internal resources to handle the grantees resulting in a lower ratio, and c) the partners' capacities: an organization that works with grantees with lower capacities, like CNF or PONT, requires more internal resources for Technical Assistance. Other crucial aspects include the overall size of the grant program (economies of scale) and the office structure.

While Blue Action seems to be able to achieve a ratio below 10% due to its set-up, the other CTFs in the NTA-partnership, CNF and PONT, rightfully require a higher ratio given their direct management support to protected areas.

**2) Admin ratios serve various purposes.** it can help a) to manage the foundation: it indicates need for cost reduction if the ratio is judged to be too high, b) to serve as a basis for communication: show the efficiency of the organization, c) to comply with tax rules: it guarantees to fulfill the foundation's purposes. The ratio that is chosen should cater to all three purposes.

**3) Monitoring several ratios seems helpful:** a) a fundraising ratio helps to understand how much a fund spends to raise money, b) a program delivery ratio helps to monitor how much a fund spends to deliver the program, c) a non-grant expense ratio helps to see how much of a fund funding actually reaches the grantees.

# Conclusions (2/2)

**4) An organization-wide admin ratio seems more helpful than a project-based admin ratio.** KfW approaches funding to FUNBIO as one of several of FUNBIO's projects and evaluates how much of the contribution FUNBIO uses to cover its administrative costs. This does not reflect the overall organization-wide ratio. For a fund like Blue Action and its founding donors, the fund's overall efficiency as measured by the organization-wide admin ratio, i.e. how much does the organization spend overall on running itself – seems more telling.

**5) A common cost coding system for related organizations is useful.** For related organizations like the Blue Action, PONT, CNF and NTA (where the financial reporting will be outsourced to NTA), it is important to find a common solution to coding cost categories. This is more effective as the standardization can save costs for the NTA system. Still, it would potentially be possible to use different ratios.

**6) To encourage meaningful expenditures for the furtherance of a fund's purpose, they should be excluded from admin cost.** The Blue Action Fund is a case in point, whose purposes include the promotion of science and research in its charter. If this purpose is however included in the admin ratio, KfW would disincentive Blue Action from holding events such as the Ocean Expert Talk. Counting personnel cost that are required for program development and management as admin cost is neither in line with the tax code nor with relevant policies, such as the Spendensiegel or the CFA Practice Standards. Many of the practice examples reflect this.

## Grateful for your attention

Christina Kükenshöner
c.kuekenshoener@joyn-coop.com

www.joyn-coop.com

# Financial Statement presentation and coding of cost categories should be similar for Blue Action, CNF and PONT - as Financial Management is jointly supported by NTA

Joyn coop

Purpose-related Expenses

| | Blue Action | PONT | CNF |
|---|---|---|---|
| Grant Activities | • Funding NGO projects<br>• Science & research events | • Funding NGOs and Protected Areas | • Funding Protected Areas |
| Program Dev. & Mgt | • Cost for project selection by Service Provider<br>• ED time for call for proposal, M&E and preparation of events | • Staff time for call for proposal<br>• Staff time for working with PAs<br>• Local office rent | • Staff time for working with PAs<br>• Local office rent |
| Support Cost | • Prof. Services<br>• Office rent<br>• NTA-cost<br>• Allocated ED time (admin & fundraising separately) | • Prof. Services<br>• NTA-cost<br>• Allocated ED time (admin & fundraising separately) | • Prof. Services<br>• NTA-cost<br>• Allocated ED-time (admin & fundraising separately) |

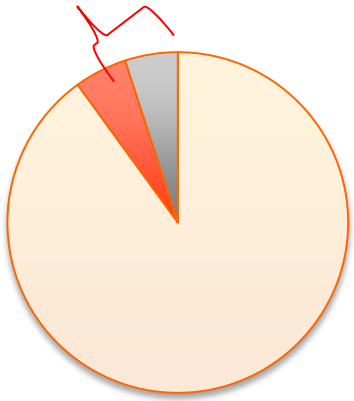
Appropriate minimum ratio may be lower for Blue Action than for PONT and CNF that are – at least currently - more directly involved in and working with the grantees and have smaller average project sizes

# Nonetheless, ratios can be defined individually and allocations could be different depending on the organizations purpose and needs

Joyn coop

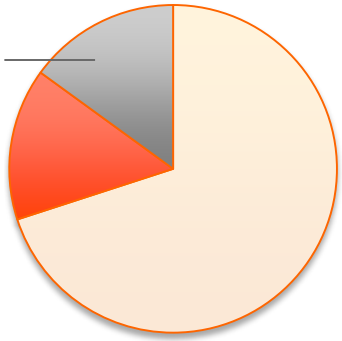
**Blue Action**

Support + part of Program Dev. / Total Exp. = **10%**



**CNF/ PONT**

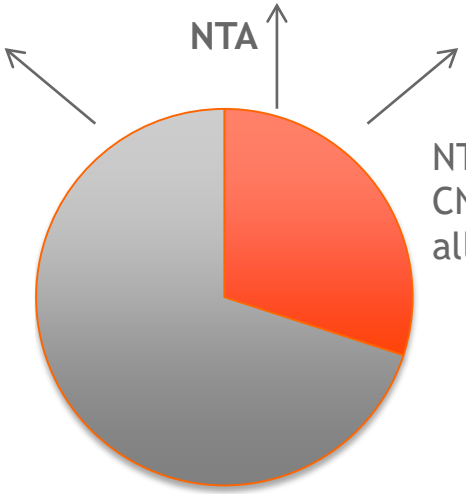
Support / Total Exp. = **15%**



only exemplary!

- Grant activitities
- Program Development
- Support

**NTA**



NTA cost are fully borne by PONT, CNF, and Blue Action based on allocated time.

# Blue Action also must decide whether to use total-cost or cost-of-sales method for its Financial Reporting

## Total cost-method

| | Revenue/Turnover | Sales of the period |
|---|---|---|
| +/- | Inventory change in finished goods and work in progress | +: Production > Sales<br>-: Production < Sales |
| + | Goods or services on own account (activated) | |
| + | Other operating income | |
| - | Material costs | Production of goods and services of the period |
| - | Staff costs | |
| - | Depreciation and amortizations | |
| - | Other operation expense | |
| = | **Operating result** | |

## Cost of sales-method

| | Revenue from sales | Sales of the period |
|---|---|---|
| - | *Production cost* of goods sold (cost of sales) | Valuation at (full) *production costs* |
| = | **Gross profit from sales** | |
| - | Sales and marketing expenses | Period costs |
| - | General and administrative expenses | |
| + | Other operating income | |
| - | Other operation expense | |
| = | **Operating result** | |

Source: IGC-Controller-Wörterbuch, International Group of Controlling (Hrsg.), 4. Auflage, Schäffer-Poeschel, Stuttgart, 2010

- Transparent about real cost categories
- Facilitates allocation of relevant cost categories to admin cost
- Correct allocation to admin cost more difficult
- Total cost for personnel or other operating expenses not fully transparent

# Both methods applied to a typical CTF Financial Statement

Joyn coop

## Total cost method

1. Income
   a) Income from donations and grants
   b) Interest and similar income
   c) Other operating income
2. Expenses for achieving the Foundation's purpose
   a) Direct promotional measures
   b) Other purposeful measures
3. Personnel expenses
   a) Wages and salaries
   b) Social security and pension expenses
4. Amortization of intangible assets, depreciation of tangible fixed assets and amortization of start-up and business expansion expenses
5. Other operating expenses
6. Net income for the year (2007: net loss for the year)
7. Funds brought forward from the previous year
8. Transfer to earnings reserves
   Free reserves in accordance with Section 58, No. 7 of the German Tax Code (AO)
9. Funds carried forward

corresponding expenses

## Cost-of-sales method

1. Investment income and other revenue
   a) Investment income
      aa) Dividend income
      ab) Interest and similar income
      ac) Realized capital gains
      ad) Other investment income
   b) Expenses for assets
   Net investment income
   c) Revenue from donations and grants
   Net revenue
2. Grant and other expenses
   a) Grants and project expenses
      aa) Grants
      ab) Project development and technical services
      ac) Project management
   b) Administrative and similar expenses
      ba) Administrative expenses
      bb) Fundraising and communication expenses
      bc) Other operating expenses
   Total project and other expenses
3. Net income for the year
4. Transfers from reserves pursuant to section 58 (11b) AO
5. Transfers to net capital gains
6. Transfer to free reserve pursuant to section 58 (7a) AO
7. Funds carried forward from prior year
8. Funds carried forward

# Excursus: qualitative decision making criteria can be used to distinguish between purpose-related and administrative tasks

The consulting company „Impact Plus“ has developed criteria for analyzing the „grey area“ which can neither be assigned to administrative nor to statutory tasks. A differentiation based on the criteria presented in the below table is recommended:

| Criteria of differentiation | Tasks as specified in charter | Administrative Tasks |
|---|---|---|
| Purpose of the activity | Directed towards impact/ changes | Targeted towards the compliance with rules and administrative procedures |
| Room for decision making of the activity | Room for content decision making | Little room for content decision making |
| Control of deviation | Jointly evaluating and learning | Stronger supervising |
| Direction of the communication | Dialogue and exchange | Rule setting from the fund to the local partners |
| Consultation of partners | For a strengthening of partner organizations | For a factually correct execution of projects |

Source: Gohl & Ströh (2005): Analyse des Verwaltungsaufwandes bei der OED Projektbegleitung. Impact Plus.

# Project Report

## 'Measuring Success of Investments in Protected Areas'

August 2016

## Content

## Background

KfW Development Bank is one of the world's largest donors in biodiversity preservation. The bank currently supports about 170 biodiversity projects in over 40 countries with around EUR 1.6 billion. Roughly 60 percent of its biodiversity funds is spent on the designation and improvement of Protected Areas (PAs). Its interventions aim to achieve sustainably managed and financed PAs. However, all of its actions are guided by its overarching goal of reducing poverty.

PA projects supported by KfW have a life span of three to over 20 years, including follow-on from initial KfW grants. The projects are very varied in terms of geographic scope, conducted activities and context. Whereas one project might be about combatting poaching in a certain PA, another project might look to improve the collaboration of a number of PAs working across country borders. KfW interventions for projects range between ca. EUR 3 million and EUR 30 million.

Investments of such magnitude are only worthwhile if tangible outcomes for biodiversity protection are achieved. To this end, Logical Frameworks are developed for many projects that KfW supports, guiding project planning and activities and outlining the intented goals of the interventions. Most of these projects measure to what extend the goals are being reached, but evaluations differ in terms of approach and quality. Some KfW projects use the 'Management Effectiveness Tracking Tool' (METT) to provide a quick overview of management effectiveness development in individual PAs. However, the METT is too limited to allow a detailed evaluation of conservation outcomes[1].

**KfW seeks to effect a more streamlined and fit-for-purpose way of measuring success of investments in its increasing portfolio of terrestrial and marine PAs** and has commissioned a project to analyse existing evaluation tools[2]. **In the context of this project, 'success' is usually not meant to be expressed in terms of changes to conservation value conditions** (such as changes to key species population sizes), **but via proxies** (such as reduction of threats to key species). The reason for this is that the life span of KfW projects is too short in most cases to result in these kinds of changes, which normally take longer to materialise and are often very costly to measure.

The project was led by a consultant and supported by a group of ten reputable PA experts. **The aim of the project was twofold:**

1. **Identify a tool or a number of tools that fit KfW's needs and principles and can be adopted or, where necessary, adapted for use by all KfW projects.**
2. **Ensure that the identified tool/s correspond to internationally accepted practice**

[1] WWF / The World Bank (2007). Management Effectiveness Tracking Tool. Reporting Progress at Protected Area Sites: Second Edition.
[2] In the context of this project report, the term "tool" refers to systems, approaches, methods and methodologies.

**standards and to available capacities in partner countries.**

## Scope of the project

The **project was divided into four phases**:

1. **Define principles for measuring success** of investments in PAs: This was done via interviews with relevant KfW staff.
2. Based on the principles, **shortlist a number of existing tools for measuring conservation achievements** that could be adopted by KfW: A group of ten experts from the network of IUCN (International Union for the Conservation of Nature) worked with the consultant to select potentially suitable tools from the universe of about 90 existing ones.
3. **Analyse the strengths and weaknesses of the shortlisted tools** and recommend those to adopt by KfW: The consultant studied the tools in detail and discussed their findings with the experts in one-on-one conversations to **seek consensus on which tools to recommend to KfW and its PA partners.**
4. **Gather feedback from global KfW biodiversity staff on the suggested tools** and their implementation **and identify potential PAs to test the viability of the suggested tool/s**.

All four phases and their outcomes are described in more detail in the following paragraphs.

## Principles for measuring success of investments in PAs

The consultant conducted initial interviews with 11 KfW staff that manage biodiversity projects to understand the challenges they face in the regions where they operate, the purposes that should be served when measuring success, how success is currently measured, and which factors hinder success measurement.

A summary of the insights gained from the interviews can be found in the annex.

Based on the interviews, **the following principles were defined for potential measuring tools to adopt by KfW:**

1. The tool/s need to **strike a good balance between effort to put in / capacity of the PA on the one hand and meaningfulness of the evaluation** on the other hand
2. **The tool/s have to be flexible to cater for the varying scopes of projects** that are financed by KfW

3. **The tool/s have to be easy to use**, so that PAs and / or implementing partners can conduct the evaluations and do not need the support of consultants

Aside from these principles, a number of recommendations are made to address the issues regarding continuity and obligation of measuring success, as well as indicators that are excessive in numbers and not related to the scope of the project. These recommendations are listed further below.

## Shortlisted tools

Discussions with the expert group about KfW's principles and about measuring tools in general gave further direction for the shortlist of tools: Instead of settling on a single tool, **a toolbox should be defined to provide the flexibility needed for the large variety of KfW projects**. The toolbox should contain a number of different tools, with KfW staff and their PA partners choosing the most suitable tool for their respective project.

**In case a partner PA already uses a specific evaluation tool**, KfW should not push them to adopt a different tool. Instead, **they should seek to complement the used tool with important elements if needed.** These elements are to be taken from the tools in the toolbox to make sure that the evaluated aspects and indicators are streamlined as much as possible.

The **toolbox should take account of all six elements of the IUCN 'Framework for Evaluating Protected Area Management Effectiveness'** to provide an adequate basis for adaptive management. The term 'management effectiveness' refers to three main aspects of PA management:

1. Design issues relating to both individual sites and PA systems
2. Adequacy and appropriateness of management systems and processes
3. Delivery of PA objectives including conservation of values

In recent years, about 90 tools for assessing management effectiveness of PAs have been developed and are used to varying degrees around the world. Most of the 90 tools are based on the IUCN Framework. The Framework defines six evaluation elements that, altogether, provide a full understanding of management effectiveness.

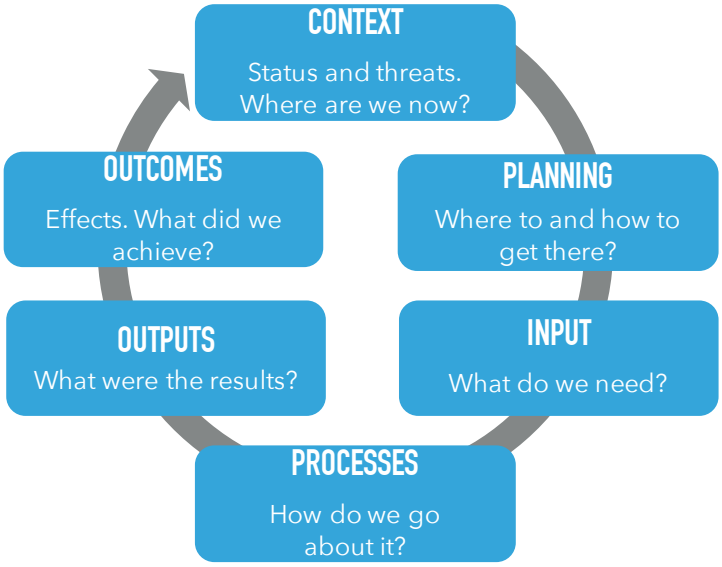



Figure 1: The six elements of the IUCN Framework for evaluating PA management effectiveness[3]

Based on KfW's principles and the direction given by the experts, the following tools were selected for detailed analysis:

1. Enhancing our Heritage (EoH)
2. From Understanding to Action
3. Green List of Protected and Conserved Areas (GLPCA)
4. Management Effectiveness Tracking Tool (METT)
5. Protected Area Benefits Assessment Tool (PA-BAT)
6. Social Assessment for PAs (SAPA)
7. State of the Parks (SoP)
8. World Heritage Outlook (WHO)

## Analysis of shortlisted tools

It should be noted that there is only one published study analysing the available tools[4] and that hardly any literature is available describing user experiences with the tools. In the following

[3] Based on a figure in Hockings, M., Leverington, F. and Cook, C. (2015). Protected area management e ectiveness, in G. L. Worboys, M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds) Protected Area Governance and Management, pp. 889–928, ANU Press, Canberra.

[4] Fiona Leverington, Katia Lemos Costa, Jose Courrau, Helena Pavese, Christoph Nolte, Melitta Marr, Lauren Coad, Neil Burgess, Bastian Bomhard, Marc Hockings (2010): Management effectiveness evaluation in protected areas – a global study. Second edition – 2010

paragraphs, **judgements about the tools and their suitablity for KfW are based on interviews with members of the expert group. References to costs should be seen as rough estimates only since they will differ from PA to PA and from context to context**. They have been extracted from available literature and from interviews with tool users. **The mentioned costs only comprise expenses for activities conducted to carry out the assessments using the respective tools**. They do not comprise costs for monitoring activities (such as counting the number of species individuals) unless indicated otherwise.

## Enhancing our Heritage (EoH)

***EoH description***

EoH was developed over the course of seven years in close cooperation with nine very diverse sites in Africa, Asia and Latin America. It was officially launched in 2008 and used by at least 27 sites[5]. While EoH has been designed for natural World Heritage sites, it can easily be used by other types of sites. **The scale and detail of the assessment can vary** depending on time and funds available to the site and other PA management effectiveness evaluation tools can be fed into it. **EoH covers all six elements of the IUCN Framework and focuses on conservation outcomes**, which is crucial for successful PAs.

EoH helps assess current activities, identify gaps and discuss how problems might be addressed. The **EoH workbook includes 12 tools with worksheets that are based on best practice in PA assessment**. The tools centre on identifying the main values (biodiversity, social, economic and cultural) which the World Heritage site was set up to protect, ensuring that appropriate objectives based on these values have been set, and then assessing the effectiveness of management in achieving these objectives.

The EoH process comprises the following steps:

1. Training for PA managers
2. Desktop literature surveys, data collection and review
3. Workshops with staff
4. Workshops with stakeholders
5. Compilation of existing monitoring results
6. Development of values-based monitoring programme

**Most of the EoH assessment tools should be applied every three to five years**, with some tools suggested for annual use.

The EoH process usually results in recommendations to management and it is important that the PA

[5] Pers. comms Prof Marc Hockings, 08 June 2016

follows up on these recommendations, so that tangible progress can be made.[6]

***EoH appraisal***

While EoH covers the entire IUCN Framework, it is not overly extensive on the social dimension and on governance aspects. These might be better covered by other tools.

**Of all the eight evaluation tools analysed, the EoH workbook is the most user-friendly**. It is written in a straightforward way and its guidance explains why the evaluated aspects are relevant. This will help create awareness with PA partners about the importance of monitoring and evaluation for adaptive management and – ultimately – for the achievement of conservation outcomes. The guidance also describes how the various aspects should be assessed. Still, there is a need to build capacity at PAs for applying EoH. Some of the pilot sites have agreed to assist other PAs in using EoH – an offer that should be considered if EoH is to be applied by KfW-supported PAs.

Compared to other evaluation tools, **EoH is quite time-consuming if done properly**. The 12 worksheets can be filled in using little time. However, for EoH to be really meaningful, the assessment should be conducted with stakeholders in dedicated workshops[7]. Done this way, initial EoH assessments take between three and five days while subsequent assessments take two to three days. This includes the time it needs to collect necessary information[8]. It is recommended to have an implementing partner on the ground to help prepare and conduct the EoH assessment.[9] For KfW-funded projects, this should not present an issue.

While stakeholder engagement for EoH purposes requires time and effort, it is highly valued by the PAs, local communities and other stakeholders[10]. Stakeholder engagement helps give the full picture of the PA in question and makes stakeholders, especially local communities, feel appreciated and involved – aspects that are enablers for successful conservation[11].

Monitoring and adaptive management systems also need to be in place at PAs for EoH to unfold its full potential.

**Expenses for EoH assessments** incur mostly for organising and running stakeholder workshops and **are in the region of USD 15,000**. While the costs seem manageable, some PAs might find it difficult to put aside budget for the EoH process. Compared to other management effectiveness evaluation tools, EoH is quite expensive and its implementation requires continued resourcing and

[6] Pers. comms by Youssouph Diedhiou, 20 June 2016
[7] Pers. comms by Prof. Marc Hockings, 08 June 2016
[8] Pers. comms by Youssouph Diedhiou, 20 June 2016
[9] Pers. comms by Prof. Marc Hockings, 08 June 2016
[10] Pers. comms by Youssouph Diedhiou, 20 June 2016
[11] Natalia Buta *et al.* (2014). Local communities and protected areas: The mediating role of place attachment for pro-environmental civic engagement. Journal of Outdoor Recreation and Tourism. Volumes 5–6, April 2014, Pages 1–10

some training and assistance. Some of the pilot sites still conduct EoH assessments while others have stopped it due to a lack of money[12].

Two of the nine EoH pilot sites were on the 'List of World Heritage in Danger' at the outset of the development of the EoH workbook. By the time the workbook had been completed, both had been removed from the Danger list. Though other factors were involved, the EoH process helped the PAs effectively deal with some of their major management challenges. It is evident that EoH can bring about important insights for PAs and their partners that help improve performance.

***Conclusion on EoH***

**EoH's focus on outcomes and the user-friendliness of the workbook make it stand out** from other tools that have been analysed. **However, due to its relative complexity and costliness, EoH is considered suitable for mature PAs only that have a lot of information, knowledge and data available.**

## Framework 'From Understanding to Action'

***Framework description***

'From Understanding to Action' is an indicative IUCN **framework for governance analysis** that comprises historical, socio-cultural, legal and spatial elements. It was launched in 2013. The objective of the framework is to improve governance through effective action. Applying the framework can help establish which governance arrangements will for example:

- Best fit the local history, culture and society, and deliver effective conservation of the PA and sustainable livelihoods for people living in or near them
- Ensure best use of available resources and capacities, and lead to decisions that are likely to be widely understood, appreciated and respected
- Make the current distribution of the costs and benefits of conservation more equitable and thus more acceptable
- Be the most flexible, resilient and capable of responding to uncertainties and emerging threats, such as global financial crises and climate change.

Application of the framework consists of **4 phases that – in summary – foresee a preparatory workshop**, the **analysis of information and communication** with rightsholders and stakeholders, a **"core workshop"** to assess and evaluate governance and plan actions on the basis of the results, as well as **taking action according to the plan.**

The framework states that a proper governance assessment takes time. **The ideal core workshop**

[12] Pers. comms by Youssouph Diedhiou, 20 June 2016

**alone is estimated to take between 5 to 10 days**. A well-run core workshop should generate a number of initiatives to improve governance. Most of these will have a time span of one to three years, accompanied by on-going monitoring and evaluation of results. The ideal time and resources will not always be available to PAs and shorter and simpler assessments can still yield valuable results[13].

***Framework appraisal***

The **framework is relatively new and would need to be broken down and adapted to be applicable in practice by KfW-supported PAs**. A number of countries now use the framework[14] and their experiences could help with this task.

However, a **governance assessment according to the framework is a relatively complex process** and PAs might need to commission consultants to carry out desk studies, e.g. on historical and cultural traits affecting conservation, to develop digital maps which are crucial for the process[15]. This **could become quite costly quite easily**. However, no figures are available to substantiate this.

In addition, the framework would have to be complemented by other tools to make sure that all six elements of the IUCN Framework for Management Effectiveness are addressed.

***Conclusion on Framework***

**There are other tools out there that measure governance success and that have been modelled around the IUCN principles of good governance**, for example the 'Green List for Protected and Conserved Areas' or the 'Social Assessment for Protected Areas', which will see the addition of the 'Participatory Governance Assessment' for PAs (see below for further details on both). It is therefore recommended to look to these other tools to cover governance aspects.

## Green List of Protected and Conserved Areas (GLPCA)

***GLPCA description***

The IUCN 'Green List for Protected and Conserved Areas' (GLPCA) is a **global programme to improve the performance of PAs, help conserve nature and deliver benefits for people**. The heart of the GLPCA programme is the GLPCA Standard. It is **organized into four components: 'Good Governance', 'Sound design and planning', and 'Effective Management'**. These support

[13] Borrini-Feyerabend, G., N. Dudley, T. Jaeger, B. Lassen, N. Pathak Broome, A. Phillips and T. Sandwith (2013). Governance of Protected Areas: From understanding to action. Best Practice Protected Area Guidelines Series No. 20, Gland, Switzerland: IUCN. xvi + 124pp. P. 70

[14] Pers. comms by Grazia Borrini-Feyerabend, 14 June 2016

[15] Borrini-Feyerabend, G., N. Dudley, T. Jaeger, B. Lassen, N. Pathak Broome, A. Phillips and T. Sandwith (2013). Governance of Protected Areas: From understanding to action. Best Practice Protected Area Guidelines Series No. 20, Gland, Switzerland: IUCN. xvi + 124pp. P. 70



Author: Marnie Bammert, Consultant, marnie.bammert@gmail.com

the component 'Successful Conservation Outcomes', which attests to the successful achievement of a PA's goals and objectives.

Each component consists of a number of Criteria. These are globally consistent requirements that collectively describe the efforts needed by a PA to fully achieve the GLPCA Standard. Each Criterion is broken down into a set of Indicators and associated Means of Verification that are used in the field to demonstrate conformance with the requirements of the GLPCA Standard. The Indicators are divided into three sets that correspond with the three phases of the Green List process (see below).

**PAs applying for Green Listing have to undergo an assessment using a predefined assurance procedure** that is laid out in the GLPCA User Manual. The procedure describes what needs to happen during the various phases of the assessment, it defines who needs to be involved in the assessment and at what point in time, and determines the required competence levels for assessors, reviewers and the panel, being the decision-making body of the GLPCA Programme.

**The GLPCA process is divided into 3 phases:**

1. **Application**
2. **Candidate**
3. **Green List**

**During the first two phases, a PA has to demonstrate that it meets the requirements of the corresponding set of indicators.** Once the site deems that is meets all the requirements, it is evaluated by an independent group of experts. The process of evaluation is verified by a third-party reviewer. PAs recommended for addition to the Green List by the experts and the reviewer are brought to the GLPCA panel for the final decision on Green Listing.

Green List status is awarded for 5 years and marks the third phase of the process. **At half-term and before the expiration of the 5 years, the PA needs to undergo a simpler review to confirm continued conformance with the requirements of the GLPCA Standard.**

The GLPCA Standard and assurance procedure were piloted in 2014 by over 30 sites globally with 24 of them having been put on the Green List. The pilot phase suggests that **assessment against the requirements of the GLPCA Standard cost between EUR 5,000 and 7,000**. The Standard and the assurance procedure are now in a development stage that will last until the end of 2017 and will be followed by a review that will result in the launch of version 2 of the Standard and the procedure. In the meantime, new PAs can apply for addition to the Green List. There is tremendous interest in the Green List and about 20 countries have already announced that they intend to register some of their PAs for inscription on the Green List.

***GLPCA appraisal***

The **GLCA Standard is very comprehensive and - in parts – aspirational**. It covers all six elements of the IUCN Framework for Management Effectiveness, includes a governance component and focuses on conservation outcomes.

The requirements of the GLPCA Standard can be adapted to the regional context, but expert knowledge is needed to do so.

The **assurance procedure of the Green List is very strong**. It lends credibility to the process and to any claims by Green Listed PAs about the achievement of conservation outcomes. On the other hand, the assurance procedure also means that the **assessment process is complex and time-consuming**. It can take up to five years and even more.

There is currently no guidance similar to EoH that assists PAs in conducting a self-assessment of their performance against the requirements of the GLPCA Standard.

***Conclusion on GLPCA***

KfW should **ask mature and sophisticated PA partners to apply for addition to the Green List and thus give an incentive for state-of-the-art performance**. The Green List has been developed to help achieve the quality elements of Aichi Target 11 of the Convention on Biological Diversity, which ask for 'effectively and equitably managed, ecologically representative and well-connected systems of PAs'. Advising to become part of the Green List would send a strong signal to PAs globally, coming from one of the biggest players in funding conservation efforts. Being part of the Green List gives international public recognition to PAs for their successful conservation efforts via the Green List brand (in development) and communication efforts. This should help convince PAs to work to achieve Green List status.

In addition, KfW should **advise PAs that are in no position to apply for the Green List to use the GLPCA Standard and its associated Indicators to identify areas with potential for improvement** and to compare their performance with the GLPCA benchmark.

## Management Effectiveness Tracking Tool (METT)

***METT description***

The METT is a **questionnaire-based tool to monitor progress of management effectiveness**. It is the most widely used evaluation tool of its kind and has been applied by over 2,000 PAs in more than 85 countries globally. A number of METT iterations have been developed over the years to better suit regional or thematic needs.

The METT includes all six elements of the IUCN Framework, but **emphasizes context, planning,**

**inputs and processes**. It enables PA managers and donors to identify needs and constraints and prioritise actions to improve the effectiveness of management. While not a direct measure of conservation outcomes, improvements in management effectiveness are considered to be a proxy for a PA's potential to deliver desired conservation outcomes.

A METT **assessment can be done within 3 days**, including 2 days for collecting data and 1 day for a workshop with PA or PA agency staff and external stakeholders and experts. There are no published figures on the costs of a METT assessment.

***METT appraisal***

The METT offers a quick way of management assessment and is easy to understand, even by non-specialists. No additional research should be needed to fill in the METT questionnaire, keeping the costs for an assessment low. However, the guidance coming with the METT is limited and some questions are phrased in a very generic way, so **there is a risk that assessments carried out by different people will produce different results.**

**METT assessments are relatively superficial and not extensive on outputs and outcomes**. They can reveal trends, strengths and weaknesses in individual PAs, but a high METT score does not necessarily mean that strong conservation outcomes have been achieved, so the value of the METT is limited in that regard.

***Conclusion on METT***

The **METT should be used by small PAs and those that are not well established** to monitor performance and progress. **However, it should include additional questions on outputs and outcomes and should contain more extensive guidance for users**. These additional questions could be taken from EoH to ensure the used tools are harmonised to a certain degree. The assessors should add comprehensive notes on how the evaluation was carried out to ensure consistency of considered aspects and of results over time, even if there is a change in assessor. METT results can also feed into the Green List.

## Protected Area Benefits Assessment Tool (PA-BAT)

***PA-BAT description***

The PA-BAT is a **qualitative assessment of best available knowledge on current and potential benefits of individual PAs**. The results can be aggregated to provide an overview of a portfolio of PAs. The PA-BAT can be used as a planning tool at system level or as an advocacy tool to support PAs. It can also help identify key areas for future monitoring and assessment.

The assessment is usually carried out by PA managers working with stakeholders to identify important values and benefits. This can be done in group discussions during which the PA-BAT

assessment forms are completed. The PA-BAT can also be used by local communities or PA advocates, such as NGOs, to promote the benefits a PA can bring.

The PA-BAT has been used by at least 58 PAs in 8 countries (in the Dinaric Arc in south-eastern Europe) and seems to have been pushed mainly by WWF. It is unclear whether the PA-BAT has found more wide-spread application. The **costs for a PA-BAT assessment are roughly EUR 1,100**.[16]

***PA-BAT appraisal***

**One of the challenges in designing a benefit assessment system is that there are big gaps in our understanding of PA benefits**, particularly when it comes to their quantification. According to users the tool is easy to apply and the process of engaging stakeholders is seen as being of great value. However, some stated that it is sometimes difficult to assess whether the benefit was of minor or major importance.

While the PA-BAT collects information about benefits that occur in PAs, it does not produce a score of how well the PA is performing in this regard. Summing up all the results will lead to a bias towards multi-purpose reserves, which would be expected to score higher than other types of reserves such as strict nature reserves, wilderness areas and national parks.

The PA-BAT assesses legal resource use and the benefits that can come from it. It does not assess overall resource use, which would include illegal use.

***Conclusion on PA-BAT***

It is important to demonstrate the benefits that PAs bring to the environment, to local communities and other stakeholders as it helps increase support for PAs. However, **there are other tools that look at benefits and cover other aspects as well, so that it seems appropriate to consider these other,** more comprehensive tools.

## Social Assessment for Protected Areas (SAPA)

***SAPA description***

**SAPA assesses the social impacts of a PA on communities living within and around it. It looks at intended and unintended positive and negative impacts.** The primary objective of SAPA is not to calculate the contribution of a PA to local wellbeing, but to generate information that will help PA managers and other stakeholders increase and more fairly share the positive social impacts of conservation and reduce the negative social impacts.

[16] WWF Protected Areas Benefit Assessment in the Dinaric Arc (2014)

SAPA relies to a great extend on perceptions and opinions by local people and other stakeholders and the methodology builds on experience of pilots in five African countries. It **can be used with any kind of PA that has been in existence and with operational management and governance systems for at least two years.** SAPA is still relatively new and has not yet been used by many sites. However, there are plans for further roll-out in about 100 PAs in Africa and Asia over the next years.

**The methodology uses a combination of**

- **community workshops** to identify significant social impacts
- **a short household survey** to explore these impacts and related governance issues in more depth, and
- **stakeholder workshops to validate the survey results**, explore other key issues and generate recommendations for action.

**SAPA is designed to be a one-off process**. However, some SAPA pilot sites found the exercise so useful that they intend to repeat it after three to five years to measure progress. Guidance for this repeated, lighter process will be developed.

The actual assessment takes three to four months of part-time work but can take as little as six weeks for a small PA with all the activities planned to take place back to back.

The **cost of conducting SAPA is estimated to range from USD 5,000 to USD 15,000 per site**, excluding the time members of the SAPA Facilitation Team will have to put in, which is assumed to be an in-kind contribution by key stakeholders.

***SAPA appraisal***

SAPA offers a simple, standardised and relatively rapid, low cost approach to assessing the social impacts of PAs. However, compared to the management effectiveness evaluation tools considered for this project, it is **still quite time-consuming**. This should not present a bigger issue though as SAPA is meant as a on-off process. In addition, the stakeholder analysis that needs to be done for SAPA can be used for other tools as well and the SAPA workshops can potentially be combined with workshops for other purposes, e.g. EoH.

SAPA uses a multi-stakeholder approach to ensure that key stakeholders are fully engaged in the design of the assessment, interpretation of the results and development of recommendations. This approach also increases the accuracy, credibility and legitimacy of the results.

Although SAPA is not a governance assessment methodology, it **provides some basic information on three key governance parameters**: awareness of relevant information, participation, and relationships between key stakeholders. **It is intended to add a governance**

**supplement to SAPA that is build on the 'Participatory Governance Assessment' tool** (PGA). This supplement would further increase the value of SAPA for KfW.

The SAPA **Manual is written in a very accessible way** and describes the approach in great detail.

Still, in most cases there will be a need for technical support from an organisation with social research expertise – for example an NGO, university or consultancy – especially for the household survey.

***Conclusion on SAPA***

**It is important to have a tool that measures contribution to KfW's overarching aim of reducing poverty.** For this purpose, **SAPA should be added to the toolbox, for use by large and well-established PAs** since it seems overly ambitious for small and less mature ones. **SAPA should not be used as a stand-alone tool**, however, since it does not consider conservation outcomes. The adoption of SAPA by KfW could contribute to creating equitably managed PAs that disctribute their benefits in a fair way. SAPA results could also feed into the Green List.

## State of the Parks (SoP)

***SoP description***

**SoP originated as a systematic evaluation of the entire PA system of New South Wales in Australia** and is based on the METT, RAPPAM (Rapid Assessment and Prioritization of Protected Area Management), and EoH. It covers all six elements of the IUCN Framework for Management Effectiveness. Since its creation it has been adopted by other regions around the world. The information below has been obtained from the New South Wales Department of Environment and Conservation.

SoP aims to:

- Improve the understanding of the condition of and pressures on the PA system
- Evaluate the effectiveness of management activities against objectives and planned outcomes
- Inform planning and decision-making at all levels of management from statewide to the PA level
- Assist in the allocation of funding and resources
- Support effective communication of management performance

The **SoP survey consists of three parts with both quantitative and qualitative assessment items**. Staff rate performance of PA management against a four level ordinal scale for each assessment item and feed the information into a database. Depending on the complexity of the PA it takes a ranger between two and seven hours to fill in the survey. It is advised to repeat the

assessment annually or every two to three years. Cost indications for carrying out an SoP evaluation are not available.

Different mechanisms ensure the quality of the survey data. These include training and guidelines, pre-population of the database with existing information, quality control checks throughout the survey by experts and managers and post-survey auditing of results for consistency and completeness. None of this seems publically available, but the tool may be used with the approval of the NSW Department of Environment and Conservation[17].

***SoP appraisal***

SoP is a best practice example of a management effectiveness evaluation tool. It is relatively rapid and comprehensive and the accompanying guidelines are extensive and easy to understand. SoP supports adaptive management, planning and decision-making at the site level, across regional groups of PAs or across an entire system of PAs.

However, SoP has been developed for particular PA agencies and how they work and it **would require some effort to adapt it for other regions and other types of PAs.**

***Conclusion on SoP***

**SoP could be used to upgrade the METT** since its requirements for evidence are stronger. It will not be recommended for use by KfW because of the effort it would take to adapt it to other circumstances.

## World Heritage Outlook (WHO)

***WHO description***

WHO was launched by IUCN in 2014. It is an **assessment of the conservation prospects for natural World Heritage sites** and covers all six elements of the IUCN Framework for management effectiveness. Based on expert knowledge, WHO tracks the state of conservation over time. WHO aims to overcome existing and potential knowledge gaps through a methodical approach and uses data from a wide range of sources and consultation with stakeholders.

WHO **also examines the benefits that World Heritage sites provide to people** and helps raise awareness of these with the public and local communities. WHO offers an early warning system for identifying threats and taking the necessary actions to achieve excellence in the conservation of sites.

The tool was developed through a consultative process with an expert advisory group and tested in a pilot with the Arab States in 2011. It is applied every three years to all 229 sites that are currently

[17] Pers. Comms by Adam Gietzelt, 05 May 2016

inscribed on the World Heritage List. For mixed sites (natural and cultural), only the natural values are taken into consideration.

**WHO comprises nine assessment steps with corresponding worksheets**. Information gathered through the IUCN network and knowledge holders such as State Parties, management authorities and researchers is assessed by IUCN specialists. Where assessors are familiar with the respective site, the **worksheets can be completed in about two to three days**. The worksheets are revised by regional review groups. Final approval of the assessments is given by the IUCN World Heritage Panel before being published.

The **costs for WHO are limited to the daily fees of the assessors** which will differ depending on the involved assessors and definite figures are not available. The peer review is considered to be a pro bono input.

***WHO appraisal***

WHO assesses the conservation status and prospect of the world's most iconic places and communicates the results to the public. It plays an important role in raising awareness for conservation issues. The tool considers governance factors and benefits – aspects that some other evaluation tools touch only superficially.

The **WHO guidelines are well-written and easy to understand**. They help complete the assessment and point to aspects that need to be considered in the assessment.

WHO has been designed for natural WH sites. It can be adapted for non-World Heritage sites, but this has never been done before. The WHO process foresees reviews by independent experts - a validation that would be missing for sites that are not added to the World Heritage list.

***Conclusion on WHO***

**Due to the need for adaptation of the tool for non-World Heritage sites and the external component of the assessment, WHO is not suggested for inclusion in the KfW toolbox**.

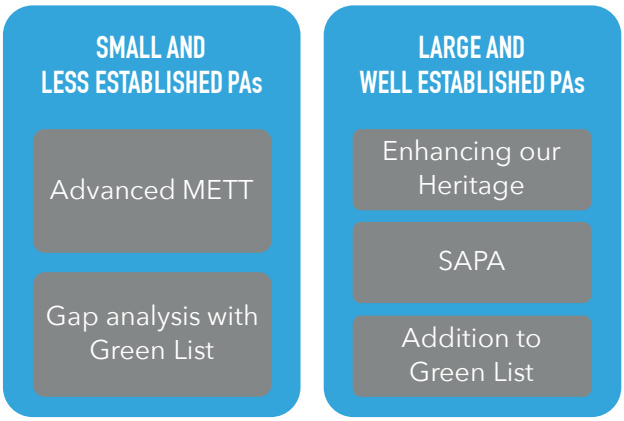
However, KfW already works with some World Heritage sites and it is recommended that KfW informs IUCN about inscribed sites it works with. WHO assessments identify the needs of sites and KfW could respond to these needs by gearing interventions towards addressing them. Changes in WHO results could also be reflected in KfW monitoring. Following these recommendations would support implementation of the Cooperation Agreement between KfW and IUCN.

## Suggested toolbox ingredients

Interviews and discussions with KfW staff and the experts had resulted in the following direction for tools to adopt by KfW:

- The tool/s need to strike a good balance between effort to put in / capacity of the PA on the one hand and meaningfulness of the evaluation on the other hand
- The tool/s have to be flexible to cater for the varying scopes of projects that are financed by KfW. To this end, a toolbox containing a number of different tools should be defined, with KfW staff and their PA partners choosing the most suitable tool for their respective project
- The tool/s have to be easy to use, so that PAs and / or implementing partners can conduct the evaluations and do not need the support of consultants
- In case a PA partner already uses a specific evaluation tool, KfW should not push them to adopt a different tool. Instead, they should seek to complement the used tool with important elements if needed. These elements are to be taken from the tools in the toolbox to make sure that the evaluated aspects and indicators are streamlined as much as possible.

**From the analysis of the tools it became obvious that none of them meets the entirety of KfW's needs for all kinds of supported projects.** With this in mind and taking account of the above considerations, **it is suggested that the toolbox differentiates between PAs of differing sizes and levels of maturity to ensure applicability and flexiblity.** The recommended toolbox should consist of the following:




**Small and less established PAs should use an extended version of the METT that includes some questions on outputs and outcomes** taken from EoH. The assessment should be complemented by extensive notes to ensure subsequent assessments consider the same aspects and results are as objective as possible. **In addition, small and less established PAs should be asked to conduct a one-time gap analysis with the requirements of the Green List Standard to understand where they stand and have a long-term aspirational goal to work towards.**

**Large and well established PAs should use EoH and SAPA to evaluate conservation success and social impacts of the PA.** Preparatory analysis and stakeholder workshops that are needed for both tools could be conducted at the same time to keep effort to a minimum. **Really sophisticated PAs should be asked by KfW to apply for addition to the Green List** to gain public global recognition for excellence in performance. This would, again, help implement the Cooperation Agreement between KfW and IUCN.

In reality, not all PAs will easily fit into one of the two categories mentioned above. For PAs that are small but well established and those that are large but show a lower level of maturity, the decision for applying a certain tool will have to be a case-by-case decision, depending on the resources available on the ground.

The toolbox will potentially require bigger effort from PA partners in measuring their achievements. It should be kept in mind though that all eight tools that have been analysed and the four that are recommended for inclusion in the KfW toolbox are still relatively simple as they do not rely on science-based systems, but are expert opinion backed by evidence.

## KfW feedback

At KfW's annual 'Green Sector Seminar', about 40 biodiversity staff from around the world discussed the recommended toolbox and how it could be implemented. Overall, the KfW attendees were supportive of the toolbox and a few of them registered their **interest in participating in a pilot project to test its viability:**

- Lydia von Krosigk, Governance, Agriculture and Natural Resources, **Namibia and SADC**
- Nils Meyer, Governance and Natural Resources, **Southern Africa** ('volunteered' the KAZA - Kavango-Zambesi Conservation Area)
- Ralph Kadel, Sector and Policy Division (via the BAF (**Blue Action Fund**) that is currently set up)
- Uwe Klug, Governance, Food Security and Natural Resources ('volunteered' the Serengeti, **Tanzania**)
- (Potentially) Citlali Cortés Montano, Biodiversity and Fortestry, **Mexiko**
- (Potentially) Karim ould Chih, Agriculture and Natural Resources, **Latin America and Caribbean** (Marine Protected Areas)

The seminar participants raised a few important questions and issues that are summarised as recommendations below. More detailed minutes of the seminar discussion can be found in the Annex.

# Recommendations

Various recommendations have been framed for the **toolbox to become applicable in practice, to gain acceptance internally and with PA partners, and to ensure continuity and stress the binding character of measuring success**. The recommendations are based on discussions with KfW staff and the expert group.

## Developing the toolbox

- **Draft guidance on how to review evaluation tools that are already in use at PA level** to be able to identify and add missing elements
- **Produce a handbook** that:
    - Helps users determine the appropriate tool for their project
    - Provides step-by-step guidance on how to apply the respective tools
    - Gives guidance to PA partners on conducting a gap analysis with the requirements of the Green List standard
    - Comprises additional questions for the METT to better cover outputs and outcomes
    - Explains how the METT can feed into EoH and the Green List and how the SAPA can feed into the Green List
    - Outlines how EoH and SAPA efforts can be streamlined to keep the evaluation effort as low as possible
    - Contains practical examples on how to monitor evaluation aspects
    - Points to implementation support in the form of technical expertise and financial resources
    - Outlines a set of core indicators that should be adopted
- All analysed and recommended tools are site-level tools. **Develop adaptations for the use at system or group-level** and invest in capacity building for site managers to ensure a fair approach to system-level assessments. **Ensure that adjacent areas are considered in the evaluations** as well since their influence on PAs is considerable
- **Conduct a pilot to ensure applicability of the toolbox**. It is suggested that the toolbox be tested with different kinds of PAs in different settings. Criteria for the selection of suitable sites need to be defined. Experience from the pilot should be used to inform the guidance and the handbook that need to be developed. Specific attention should be paid to the effort needed for conducting an EoH and a SAPA assessment to ensure PAs are not overwhelmed

- **Carry out activities to build trust and develop a sense of ownership at PA partner level**. This will help strengthen understanding for the importance of monitoring and evaluation and for creating a 'safe environment' for providing objective information for the evaluation
- Ponder whether monitoring should be carried out at PA level and evaluation should be done externally. This would help create objective assessments of high quality and reduce the effort for PAs. However, separating monitoring and evaluation would counter the KfW requirement of not relying on external sources for measuring success. Alternatively, consider developing an assurance process for KfW to ensure assessments are of high quality
- To reduce the burden on PA partners, consider including tablet computers, cloud-based tools and user training in financing plans. **Technological support** of such kind would make data collection, analysis and storage simpler and more effective

## Securing support and acceptance

- **Organise workshops for KfW** project managers, technical experts and other relevant staff in regional KfW offices to brief them on the most important evaluation tools and the developed toolbox. Training on evaluation tools in general and on the toolbox will help KfW staff in negotiations with partners and will generate KfW buy-in to the toolbox
- **Conduct a training day** where relevant KfW staff apply the toolbox to real-life PA examples to understand how the tools work and gain insight into the effort required from PAs and the challenges that PAs potentially face in using the tools
- **Review KfW's guidelines** for evaluating project feasibility (Prüfungsleitfaden) and for drafting programme proposals (Programmvorschläge) to reflect the toolbox and the need for setting aside time and money for implementation and for follow-up actions on evaluation results
- **Invest in buy-in by important partners like ZGF, WWF, IUCN and GIZ** to ensure their support in toolbox implementation (via accompanying measures, 'Begleitmaßnahmen')
- **Brief BMZ on the toolbox** to seek their support and work with them on amending guidance for negotiations with partner countries with the aim of ensuring that agreed goals better match project realities and what can be measured
- Liaise internally with the ex-post evaluation department (FZE) to **ensure indicators are adequate in numbers and strongly related to the scopes of the projects**

## Generating wider positive influence

- **Ensure that data captured by PAs on the status of conservation is made more widely available** to help build better knowledge on PAs globally. This could happen via the WDPA (World Database on Protected Areas) and its online interface ProtectedPlanet.net. This way, KfW and its partners would contribute to reporting on progress on achieving the Aichi Targets,

etc.

- **Where PAs have exceptionally strong monitoring capacity, KfW could look to copy highly scientific evaluation systems** such as the one used by 'Parks Canada'. This would lead to highly credible and reliable data that focuses less on expert opinion which will always be somewhat subjective
- Investments in PAs and adjacent areas are important for protecting biodiversity. KfW and other organisations dedicate large amounts of money and time for the same purpose, sometimes in the same areas. Investment effects can be magnified where different actors work together, create a common understanding, shared vision and strategy, jointly agree on ways forward and cooperate on their implementation. **When defining interventions, KfW should pay attention to the potential need for greater coordination to achieve even greater outcomes for biodiversity.** This should also be reflected in the LogFrames that are developed for the supported projects.
- Lobby for the **inclusion of monitoring and evaluation tools in relevant curricula of universities and other educational institutions** to contribute to raising awareness and building capacity with future conservationists. One example of such an initiative is the Frankfurt summer school 2017, financed by KfW, that will educate about 50 students from all over the world on PA management, including Monitoring & Evaluation, and other conservation-related topics.

# Annexes

## Expert groups members

| Name | Affiliation |
|---|---|
| Marc Hockings | University of Queensland (now retired) |
| Stephen Woodley | WCPA / SSC Joint Task Force on Biodiversity and PAs |
| Béatrice Chataigner | IUCN Kenya |
| Sue Wells | Consultant |
| Kate Schreckenberg | University of Southampton |
| Gracia Borrini-Feyerabend | ICCA Consortium |
| John Morrison | WWF US |
| Tim Badman | IUCN World Heritage |
| Elena Osipova | IUCN World Heritage |

## Summary of interviews with KfW staff

| | |
|---|---|
| PAs that KfW works with often lack: | The financial means to cover running costs |
| | Technical knowledge |
| | Workforce |
| | Awareness of the value of stakeholder engagement |
| | Awareness of the importance of conservation |
| | Awareness of the value of measuring success |
| | Strong governance structures |
| Internal limitations regarding measuring success: | Learnings are sometimes not reflected in future projects |
| | Number of indicators for KfW projects is often excessive |
| | Indicators are often too complex and therefore difficult to measure |
| | Indicators do not always take account of what is actually financed and can therefore be influenced |
| Currently, project success is measured: | Using the Management Effectiveness Tracking Tool (METT) in many cases |
| | Not continuously in some cases due to changes in staff managing projects and/or the PA partner not delivering |
| | Sometimes not at all, pointing to a lack of perceived obligation |
| Measuring success should serve various purposes: | Satisfy reporting obligations to KfW's constituent BMZ |
| | Enable reporting against stated goals |
| | Facilitate sharing of experiences and best practice between PAs and partner organisations and also internally |
| Indicators for measuring | Jointly agreed with PA partners |

| | |
|---|---|
| success have to be: | Easy to measure |
| | Inexpensive to measure |
| | Tailored to the respective project |
| | Practicable |
| | Limited to an acceptable number |
| | Adaptable if project changes |
| | Objective |
| Overarching requirements for measuring success: | Do not try to reinvent the wheel, but build on existing tools |
| | Make sure that data collection and evaluation does not depend on external consultants but can be conducted by the PAs |
| | PA partners need to see value in measuring success and not only answer to KfW requests |
| | Ensure continuity of evaluations at PA level, even after KfW exit |

## Minutes of KfW 'Green Sector Seminar', June 2016

***What is success in PAs?***

General remarks:
- Success depends on your goals
- Indicators of success should be tied to objectives
- Smart solutions needed

Management-related success factors:
- Management Effectiveness / PAMETT evaluation carried out (e.g. Green List (comment from KfW Mexico)
- Management plan is implemented
- PA has participatory management
- Land use plan developed and implemented

Money-related success factors:
- Costs are covered / PA has achieved financial sustainability
- PA has autonomy in budget planning

Other success factors:
- Illegal activities are reduced

Indicators to consider:
- No. of key species individuals
- No. of indicator species individuals
- Animal population

- Vegetation (forest) cover
- Support zones to be included in management plan
- Land cover by targeted vegetation type
- Compliance of staff
- Quantified investments
- Household income
- Living conditions of people
- Community attitudes towards PA / community acceptance of PA
- Comprehensive set of indicators compiled in IUCN Green List

Methods for measuring success:
- Remote sensing
- Inventories
- Fragmentation indices
- No. of tourists
- No. of rangers

***World Café on key questions:***

1. *How do we convince PA partners that monitoring & evaluation are not merely paperwork, but crucial for sound management decisions and ultimately for conservation success?*

- Enables benchmarking with other PAs
- Outcome reporting needed to raise funds
- Is needed for SWOT analysis (SWOP?) and labelling (e.g. UNESCO)
- Possibility to become a pilot (in KfW project?)
- Get evidence of stakeholder commitment
- M&E enhances effectiveness of park
- Use it for marketing purposes (e.g. tourism)

2. *What makes a good toolbox and can you point to toolbox examples that KfW can look to when developing its own?*

- Can be adapted
- Includes practical examples on how to monitor
- Contains step by step guidance
- Includes a handbook
- Covers the most essential aspects of the existing schemes
- Provides implementation assistance (e.g. money, people)
- Outlines core set of indicators which can be adopted (progress, circumstances)
- Contains guidance on how to assess the existing schemes
- Makes our lives easier and not more complicated (contradiction with the following point)
- Is transparent and science-based

3. *Apart from the tools themselves, what supporting materials / activities / resources are needed for PA partners to enable them to do a high quality job when measuring success?*

- Workshops for KfW PMs and other relevant staff in regional offices needed (not only on toolbox but on M&E as such, so that KfW is more knowledgeable when negotiating with other stakeholders)
- Need to set aside time and money (ca. 10% of annual PA budget) for implementation of toolbox and follow-up actions of M&E results
- Build trust so that PAs feel comfortable about stating negative things and about use of data
- Invest in ownership building for tool
- Invest in staff capability to run database / cloud-based tools, tablets (would be ideal)
- Consider different processes for internal monitoring and external evaluation
- Consider stratification of process / groups (e.g. not everyone is needed for gender issues, only women)
- Ensure GIZ are on board and able to implement toolbox (via Begleitmaßnahmen)
- Develop guidance on how to assess existing systems at PAs (minimum criteria)
- Add toolbox to curriculum of relevant unis and other profession-building institutions
- Define criteria for choosing pilot site(s). Need not just one trial but various trials in PAs of different kinds. There is interest from Nils Meyer (KAZA), Lydia von Krosigk, Citlali Cortés Montano (Potentially), Karim ould Chih (Potentially. Leads maritime projects with 8 Caribbean countries), Ralph Kadel (via BAF), Uwe Klug (Serengeti)

*Questions / issues that were raised:*

- How do you define 'small PA'?
- What is the time effort for establishing and implementing a new tool?
- Important that partners are not asked to replace their running systems
- KfW cannot provide technical assistance to establish tools, so what are the target groups of the toolbox?
- How do we get from the tools to specific indicators? Usually KfW projects only have 3 to 4 indicators
- Which indicators are we to use for which projects?

## Overview of 'Enhancing our Heritage' (EoH)

| | |
|---|---|
| Brief description of tool | EoH was developed to help natural World Heritage (WH) site managers and stakeholders assess current activities, identify gaps and discuss how problems might be addressed. The EoH Toolkit includes 12 Tools that are based on best practice in PA assessment. The Tools center on identifying the main values (biodiversity, social, economic and cultural) which the WH site was set up to protect, ensuring that appropriate objectives have been set, and then assessing the effectiveness of management in achieving these objectives |
| Objectives of the tool? | • Focusing on most important values and objectives of the site<br>• Addressing key threats to values and objectives<br>• Being flexible and enabling incorporation of existing M&E systems<br>• Providing for in-depth participatory assessment of important management aspects |
| Adaptable to local needs and available resources? | Yes |
| Does tool accept already existing means of evaluation? | Yes |
| What steps / phases does the application of the tool comprise? | • Training for PA managers<br>• Desktop literature review, data collection and review<br>• Workshops with staff<br>• Workshops with stakeholders<br>• Compilation of existing monitoring results<br>• Development of values-based monitoring program |
| Where and how often has tool been applied? | Developed and tested with 9 very diverse WH sites in Africa, Asia, Latin America and later applied to at least 18 more natural WH sites. The Toolkit has been adapted and applied in other kinds of PAs as well |
| At what level is the tool applied? | Site-level |
| What is the recommended frequency of application? | Some Tools should be applied annually and others every 3-5 years |
| What are the approx. costs of application? | Ca. USD 15,000 |
| How much time does the application require? | Compiling all the information needed for the assessment might take 3-4 months part-time. Establishing the first baseline assessment (i.e. filling in the 12 worksheets) takes 3-4 days. A repeat evaluation takes 2-3 days |
| Which capacity usually applies the tool / is consulted? | Site managers and / or PA agency staff, also NGOs or donors supporting the site apply the Tools. Stakeholders need to be engaged |
| What skill-set is needed to apply the tool? | The issues are complex and it is recommended that - wherever possible - they are introduced e.g. via a workshop. Some of the EoH pilot sites have agreed to serve as mentors for sites wishing |

| | |
|---|---|
| | to apply the Toolkit |
| Elements of the IUCN Framework considered? | All |
| (1) Context | Yes |
| (2) Planning | Yes |
| (3) Inputs | Yes |
| (4) Processes | Yes |
| (5) Outputs | Yes |
| (6) Outcomes | Yes |
| What are the strengths of the tool? | • Scale and detail of assessment can vary depending on time and funds available<br>• Existing means of evaluating context, inputs and processes can be integrated<br>• Puts emphasis on measuring management outcomes<br>• Assists in reporting of monitoring activities<br>• Assists in developing monitoring priorities and procedures<br>• Tools and their importance are very well explained, supportive guidance is comprehensive and easy to understand |
| What are the constraints of the tool? | • System as a whole is relatively time-consuming and expensive<br>• Its implementation requires continued resourcing and, at least initially, some training and assistance |
| What do users say about the tool? | Sites in West and Central Africa found the process involving stakeholders very valuable. However, due to lack of funding, some have stopped using EoH (pers. comms. by Youssouph Diedhiou). Some sites consider EoH to be too complex and have applied a slimmed-down version of the Toolkit (pers. comms. by Fanny Douvere)<br><br>From experience so far, PAs are most challenged with applying the following EoH Tools:<br>• 7b (Assessing funding needs against actual budgets): Since sites are usually underfunded or funding is not secure. Also, if a site has a single source of inputs, the assessment is relatively straightforward. However, many sites receive inputs from several sources, sometimes on multi-year cycles, making the assessment more complex, particularly if some inputs are in the form of funding and others are in-kind<br>• 11b (Assessing the effectiveness of a site in achieving its management objectives and conserving the major values of the site): This worksheet is especially challenging with regards to the conservation state of species and habitats since up-to-date information is often not available due to a lack of funding for monitoring purposes |

| | |
|---|---|
| Other comments | From http://whc.unesco.org/en/series/23/:<br>Two of the nine pilot sites were on the 'List of World Heritage in Danger' at the outset of the development of the EoH Toolkit. By the time the project had been completed, both had been removed from the Danger List. Though other factors are involved, the application of the EoH Tools in these sites clearly helped managers effectively deal with some of their major management challenges.<br><br>From 'Management effectiveness evaluation in protected areas – A global study. Supplementary report No. 1: Overview of approaches and methodologies', page 25 ff):<br>The toolkit was developed over a period of seven years through active cooperation of researches, staff at PA agencies as well as other World Heritage and PA specialists from a range of disciplines (conservation planning experts, social scientists, etc.). The cooperation allowed immediate feedback on whether the suggested Tools worked or not. As a result, the Toolkit has gone through three previous drafts as approaches were improved over time.<br><br>Pers. comms. by Marc Hockings:<br>EoH copyright is probably shared by UNESCO and IUCN and both would certainly be encouraging wider use of EoH. Experts involved in the development of the system would certainly support maintenance of EoH. |

**Sources:**

Introductory slide set available at:
http://slideplayer.com/slide/7331116/# (cannot be downloaded, only watched online)

Methodology available at:
http://whc.unesco.org/en/series/23/

## Overview of 'From Understanding to Action'

| | |
|---|---|
| Brief description of tool | 'From Understanding to Action' is a Framework for governance analysis comprising historical, socio-cultural, legal and spatial elements. It helps understand, analyze and improve the exercise of authority, responsibility and accountability and draw conclusions and recommendations from this, which is important for PAs to become efficient and equitable. The Framework is indicative rather than definitive or prescriptive. |
| Objectives of the tool | The tool aims to establish which governance arrangements will:<br>• Best fit the local history, culture and society, and deliver conservation of the PA and sustainable livelihoods for people<br>• Best promote the full use of available resources and capacities, and deliver decisions likely to be widely understood and respected<br>• Make the current distribution of the costs and benefits of conservation more equitable<br>• Best affirm rights, also of indigenous peoples and local communities<br>• More strongly engage rights holders and stakeholders<br>• Be the most flexible, resilient and capable of responding to uncertainties and emerging threats |
| Adaptable to local needs and available resources? | Yes. In fact, the process and methodology should be adapted to different contexts, conditions and aims |
| Does tool accept already existing means of evaluation? | Yes. Outputs of the process are mainly maps. If they already exist, they can be fed into the assessment |
| What steps / phases does the application of the tool comprise? | 4 Phases:<br>• Phase 1: A preparatory workshop<br>• Phase 2: A period of gathering and analyzing information, identifying technical expertise and support, communicating with rights holders and stakeholders, and - as necessary - helping them get organized<br>• Phase 3: A main 'core workshop' dedicated to assessing and evaluating governance, and developing a plan for action on the basis of the results<br>• Phase 4: Taking action according to the plan<br>Evaluations of PA systems comprise 13 steps in these 4 phases, those of single PAs 7 steps |
| Where and how often has tool been applied? | The guidelines of the Framework are now applied in a variety of countries, e.g. Iran, Philippines, Indonesia, Madagascar (pers. comms. by Grazia Borrini-Feyerabend) |
| At what level is the tool applied? | System-level / site-level. All geographical scopes possible (whole countries, specific regions, all kinds of PAs) |
| What is the recommended frequency of application? | Governance assessment is a one-time-off exercise that can be repeated as needed and wished |
| What are the approx. costs of application? | Not known. However, since a number of maps might have to be developed and studies to be commissioned, the process can become quiet costly quite easily |

| | |
|---|---|
| How much time does the application require? | Not known. However, assessing governance properly takes time, and the framework describes an ideal. The ideal workshop in Phase 3 alone is estimated to take between 5 to 10 days and should generate a number of initiatives to improve governance. Most of these will have a time span of one to three years, accompanied by on-going monitoring and evaluation of results. The ideal time and resources will not always be available and shorter and simpler assessments can still yield valuable results |
| Which capacity usually applies the tool / is consulted? | The evaluation process can be initiated and driven by many actors, including individuals, NGOs, academics, communities, PA management bodies or other agencies of government. None of them, however, will be effective if working in isolation. A variety of rights holders and stakeholders need to be involved, at a minimum through consultation, but ideally through more interactive processes. A small governance team of 3 to 7 people is recommended to guide the process. It should include people drawn from both government and civil society backgrounds. |
| What skill-set is needed to apply the tool? | Not known |
| Elements of the IUCN Framework considered | Framework looks at governance and is not meant to cover the 6 elements |
| (1) Context | N/a |
| (2) Planning | N/a |
| (3) Inputs | N/a |
| (4) Processes | N/a |
| (5) Outputs | N/a |
| (6) Outcomes | N/a |
| What are the strengths of the tool? | • Other tools sometimes do not consider governance aspects in great detail. The Framework offers a way for addressing this issue<br>• The Framework helps deal with some of the challenges of the CBD's Program of Work on PA, whose component 2 (Governance, participation, equity and benefit sharing) remains largely unimplemented<br>• The Framework comes with various annexes that give good pointers for indicators to monitor governance quality |
| What are the constraints of the tool? | • Developing an evaluation tool from the Framework would require quite some effort and would have to be repeated for each PA / PA system<br>• Any tool based on the Framework would have to be complemented by another tool to meet the KfW needs and cover the 6 management cycle elements |
| What do users say about the tool? | Not known |
| Other comments | N/a |

**Sources:**

Methodology available at:
http://cmsdata.iucn.org/downloads/governance_of_protected_areas___from_understanding_to_action.pdf and http://cmsdata.iucn.org/downloads/annexes_to_governance_of_pa.pdf

## Overview of 'Green List for Protected and Conserved Areas' (GLPCA)

| | |
|---|---|
| Brief description of tool | The IUCN Green List for Protected and Conserved Areas (GLPCA) is a relatively new global program to improve the performance of Protected and Conserved Areas, help conserve nature and deliver benefits for people.<br><br>The heart of the GLPCA program is the GLPCA Standard. It is organized into four Components:<br>• Good Governance<br>• Sound design and Planning<br>• Effective Management<br>• Successful Conservation Outcomes<br><br>Each Component consists of a number of Criteria. Each Criterion is broken down into a set of Indicators and associated Means of Verification that are used in the field to demonstrate conformance with the requirements of the GLPCA Standard.<br><br>PAs that meet the GLPCA Standard are highlighted and recognized via inscription on the 'Green List for Protected and Conserved Areas'. The Green List is still in a development phase and will be promoted via its own brand and communication efforts |
| Objectives of the tool | The GLPCA aims to encourage PAs to measure, improve and maintain their performance through globally consistent Criteria that benchmark Good Governance, Sound Design and Planning, Effective Management, and Successful Conservation Outcomes. |
| Adaptable to local needs and available resources? | The generic Indicators of the GLPCA Standard and their Means of Verification may be adapted by PA experts to the context of a specific region or situation. The guidance and rules for this process are detailed in the GLPCA Manual |
| Does the tool accept already existing means of evaluation? | Yes |

| | |
|---|---|
| What steps / phases does the application of the tool comprise? | The GLPCA process is divided into 3 phases:<br><br>1. Commitment<br>2. Candidate<br>3. Nomination<br>In summary, in each phase PAs have to provide evidence that they meet the Indicators of that respective phase.<br><br>In the Nomination Phase and once the sites are confident that they meet all the Criteria, they are visited and evaluated by independent groups of Experts and consult with stakeholders. The process of evaluation and consultation is verified by third-party Reviewers.<br><br>PAs recommended for addition to the Green List by the Experts and the Reviewers are brought to the GLPCA Panel for the final decision on Green Listing.<br><br>Green List status is awarded for 5 years. After half-term and after 5 years, the PA needs to undergo a simpler review to confirm continued conformance with the GLPCA Standard.<br><br>Sites that do not wish to be added to the Green List can still use the Standard and its associated Indicators and Means of Verification to identify areas with potential for improvement and compare their performance with the GLPCA benchmark for exemplary PA Governance, Design, Planning, Management and Conservation Outcomes |
| Where and how often has the tool been applied? | So far, 24 PAs in 8 countries have piloted the draft GLPCA Standard. The final version of the Standard and its Manual will be launched in summer / autumn 2016 |
| At what level is the tool applied? | Site-level |
| What is the recommended frequency of application? | Every 5 years, plus a check-up after 2.5 years of being on the Green List |
| What are the approx. costs of application? | Experience from France suggests that the GLPCA process including potentially needed improvements costs between 5,000 and 7,000 Euros. The work of the Experts and the Panel are pro bono, the Reviewers are paid by the assurance provider, so there are no additional costs for the PAs |
| How much time does the application require? | This depends on how close a PA is to meeting all the Indicators. It could take up to five years and more |
| Which capacity usually applies the tool / is consulted? | PA management or PA agency staff. The GLPCA emphasizes and requires stakeholder engagement. Recommendations on Green Listing are made by the Experts and Reviewers. The |

| | |
|---|---|
| | recommendations are approved or declined by the independent Panel |
| What skill-set is needed to apply the tool? | PA Manager-level or responsible PA Agency staff. There are clear Terms of Reference for the Expert assessors and the Panel members who need to have at least 10 respectively 15 years of experience in PA-related fields. IUCN staff are available for support where they have capacity on the ground |
| Elements of the IUCN Framework considered | All |
| (1) Context | Yes |
| (2) Planning | Yes |
| (3) Inputs | Yes |
| (4) Processes | Yes |
| (5) Outputs | Yes |
| (6) Outcomes | Yes |
| What are the strengths of the tool? | • Most evaluation tools are weak on governance and outcomes. The GLPCA includes both<br>• If a PA applies for Green Listing, the ensuing assurance procedure is exceptionally strong compared to all other tools out there. This lends credibility to the process and any claims made by Green Listed PAs<br>• The GLPCA procedure is conducted via an online portal (called COMPASS), meaning that a wealth of information will be gathered on PAs, helping the PA community and its stakeholders share best practice and expand their knowledge<br>• Being part of the Green List will give international recognition to PAs for the outstanding work they do<br>• There will be a suite of supportive tools for PAs and all other actors involved in the GLPCA process. However, since the GLPCA is still relatively new, the tools are not available yet |
| What are the constraints of the tool? | • It is a complex and time-consuming process<br>• Due to the GLPCA still being in development, there are not a lot of support tools available yet |
| What do users say about the tool? | The French IUCN carried out a survey following the pilot assessments. While there were recommendations for improvement, the respondents stated that the Green List process was credible and the Standard was clear. Participants valued the visibility the Green List brought to their PAs and the innovative approach of the tool |

| | |
|---|---|
| Other comments | IUCN is running a project to implement the GLPCA more widely in PAs around the world. Initially, they will work in Vietnam, Kenya, Peru and Columbia. In addition, PAs from Australia, Benin, China, Croatia, France, Georgia, Italy, Japan, Jordan, Korea, Malaysia, Mexico, Micronesia / Hawaii, South Africa, Spain, UAE are interested in joining the Green List.<br><br>The IUCN project will mean that substantial support will be available to PAs to work towards achieving the GLPCA Standard.<br><br>In addition, IUCN has / will engage in partnerships to streamline the GLPCA and other similar initiatives and to help promote the Green List.<br><br>There are also initial thoughts on linking the Green List with SAPA (see separate overview sheet).<br><br>The EU has recently committed to conducting a feasibility study on developing a Green List process specifically for Natura 2000 sites in Europe, a network comprising 18 percent of land in the EU countries. If successful, this could result in a huge boost for the Green List |

**Sources:**

Draft GLPCA Standard available at:
https://www.iucn.org/theme/protected-areas/our-work/green-list

Draft GLPCA User Manual available at:
https://www.iucn.org/theme/protected-areas/our-work/green-list/consultation-iucn-green-list-user-manual

## Overview of 'Management Effectiveness Tracking Tool' (METT)

| | |
|---|---|
| Brief description of tool | The METT is a questionnaire-based tool. It provides a simple mechanism for monitoring progress towards more effective management over time. The METT enables PA managers and donors to identify needs and constraints and prioritize actions to improve the effectiveness of management.<br><br>While not a direct measure of conservation outcomes, improvements in management effectiveness are hoped to be a proxy for a PA's potential to deliver desired conservation outcomes |
| Objectives of the tool | Providing a harmonized reporting system for PA assessment<br>Being suitable for replication<br>Allowing tracking of progress over time<br>Not being reliant on high levels of funding or other resources<br>Being easy to understand by non-specialists<br>Being nested within existing reporting systems to avoid duplication of effort |
| Adaptable to local needs and available resources? | Yes |
| Does tool accept already existing means of evaluation? | Yes |
| What steps / phases does application of the tool comprise? | Introductory questions followed by 30 site-specific questions on management elements ranging from legal status, equipment and quality of management plans to outreach programs and tourist facilities. Collects information on:<br><br>1. Objectives<br>2. Threats<br>3. Budgets<br>4. Staffing<br>5. Size<br>6. Designations of PAs<br><br>A score (1-4) is given for each question, depending on the status of the specific management element |
| Where and how often has tool been applied? | > 85 countries, > 2,000 Pas |
| At what level is the tool applied? | Site-level |
| What is the recommended frequency of application? | GEF-funded projects carry out three METT evaluations: at the start, after mid-term and at the end of each project. Other PAs usually repeat the evaluation annually |
| What are the approx. costs of application? | No research should be needed to conduct the evaluation. The METT assessment should ideally be carried out during a workshop of PA staff together with stakeholders that are involved in PA management, |

| | |
|---|---|
| | so the costs should be limited to staff time, and potentially travel and meeting costs. Stakeholder involvement is expected to be pro bono. The METT questionnaire can be answered in 2 hours, but the quality and meaning of the assessment will be low. A proper and comprehensive workshop will yield much more valuable results |
| How much time does the application require? | A METT assessment can be done within 3 days, including 2 days for collecting data and 1 day for the workshop. The duration mainly depends on the availability of relevant documents and on the time needed to gather the different stakeholders and agree on the information to add to the questionnaire |
| Which capacity usually applies the tool / is consulted? | A group of PA staff, project staff or agency staff should fill in the questionnaire. External experts, community leaders and/or others with knowledge of the PA should be involved |
| What skill-set is needed to apply the tool? | The METT can be understood and applied by non-experts. However, the more expertise one has the better and more meaningful the assessment will be |
| Elements of the IUCN Framework considered | All, but focus on 1-4 |
| (1) Context | Yes |
| (2) Planning | Yes |
| (3) Inputs | Yes |
| (4) Processes | Yes |
| (5) Outputs | Somewhat |
| (6) Outcomes | Somewhat |
| What are the strengths of the tool? | • Can reveal trends, strengths and weaknesses of PAs<br>• Easy and quick to use, even by non-specialists, at low cost<br>• Is by far the tool used most often for assessing management effectiveness of PAs |
| What are the constraints of the tool? | • METT assessments are relatively superficial and do not cover all aspects of management<br>• Outcomes are not evaluated in detail and there is not necessarily a correlation between METT scores and outcomes. I.e. an increased METT score does not necessarily mean that better outcomes have been achieved<br>• Assessments carried out by different people can produce different results<br>• Guidance for users is not sufficient. Some questions are phrased in a very generic way, so that different users might consider different aspects when allocating scores |
| What do users say about the tool? | • Some users feel that the METT is stronger if questions relevant to the area and situation are added<br>• Lack of guidance can lead to subjective answers. Training should be provided to ensure the tool is adequately applied and to ensure subsequent assessors work with the same level of knowledge |

| | |
|---|---|
| Other comments | The METT will be updated to include some outcome measures (pers. comms by Sue Stolton). Its use is obligatory for all GEF-funded projects.<br><br>The METT cannot be used to compare PAs since the baseline for answers will be different from one PA to another. However, if PAs are working together as a group when filling in the questionnaire and are making sure that they are using common baselines, then the results of each PA's assessment can be compared to the other PAs of that group. |

**Sources:**

Summary pdf:
http://www.europarc.org/wp-content/uploads/2015/05/2009-Management-Effectiveness-Tracking-Tool.pdf

Methodology available at:
assets.panda.org/downloads/mett2_final_version_july_2007.pdf

## Overview of 'Protected Area Benefit Assessment Tool' (PA-BAT)

| | |
|---|---|
| Brief description of tool | The PA-BAT is a questionnaire-based tool aimed at collating information on current and potential benefits of individual PAs by means of a standard typology of values and benefits. It is a qualitative assessment of best available knowledge.<br><br>The PA-BAT can be used as a planning tool at system level (e.g. developing policies for specific resource uses) or as an advocacy tool for supporting PAs. It may also help identify key areas for future monitoring and assessment.<br><br>The results can be aggregated to provide an overview of a portfolio of PAs (e.g. regional groups, national systems, biome groups, etc.) |
| Objectives of the tool | Assist with:<br>• Management and business planning<br>• System-level policies<br>• Sector dialogues<br>• Ecosystem services assessments<br>• Communication strategies<br>• Interpretation and education<br>• Rural development projects<br>• Mobilizing and generating funding options |
| Adaptable to local needs and available resources? | Yes |
| Does the tool accept already existing means of evaluation? | Not known |
| What steps / phases does the application of the tool comprise? | • Working with stakeholders<br>• Filling in the PA-BAT tool ('background information' datasheet and 'benefits to PA stakeholders' datasheet)<br>• Taking account of PA zones and boundaries<br><br>There are currently two options for completing the PA-BAT:<br>1. A facilitator completes the assessment forms during group discussions with - for example - PA managers, NGO staff, etc.<br>2. A facilitator works with individuals or small groups to complete a simplified version of the PA-BAT in their local language, and then summarizes the results onto the English version of the PA-BAT |
| Where and how often has the tool been applied? | Implemented in at least 58 PAs in 8 countries with 1,300 local stakeholders (in the Dinaric Arc in south-eastern Europe) |
| At what level is the tool applied? | Site-level / aggregation of information to system-level possible |

| | |
|---|---|
| What is the recommended frequency of application? | Not known |
| What are the approx. costs of application? | The total cost for implementing the process over 3 years for the 58 PAs was Euro 65,000 (= 1,120 Euro per PA), excluding staff time (calculated by WWF) |
| How much time does the application require? | Not known |
| Which capacity usually applies the tool / is consulted? | PA managers working with stakeholders to identify important values and benefits. The PA-BAT can also be used by local communities and by PA advocates such as NGOs to help promote the range of benefits a PA can bring |
| What skill-set is needed to apply the tool? | Not known |
| Elements of the IUCN Framework considered | The PA-BAT was not designed to cover the 6 management elements |
| (1) Context | N/a |
| (2) Planning | N/a |
| (3) Inputs | N/a |
| (4) Processes | N/a |
| (5) Outputs | N/a |
| (6) Outcomes | N/a |
| What are the strengths of the tool? | Comprehensively considers the benefits of PAs<br>Also looks at PA contributions to well-being |
| What are the constraints of the tool? | • Assesses legal resource use and the benefits that could accrue from that use, and is thus not a tool for the assessment of overall resource use, which would include illegal use<br>• The tool is meant to collect information about a wide range of benefits. It is not designed to produce a 'score' of how well the PA is performing in this regard. Summing up all the results will produce a bias towards multi-purpose reserves, so that the IUCN Category V and VI reserves would be expected to routinely 'score' higher than those from Category I and II<br>• One of the challenges in designing a benefit assessment system is that there are still huge gaps in our understanding of PA benefits, particularly when it comes to their quantification<br>• It is sometimes difficult to assess whether the benefit was of minor or major importance |
| What do users say about the tool? | Feedback collected by WWF in the Dinaric Arc (which might reflect positive responses only):<br>• PA-BAT is a simple tool for the assessment of resources and values of existing and proposed PAs<br>• Received data is useful as a means for lobbying in other sectors |

| | |
|---|---|
| | • Gives a chance to stakeholders to inform the PA of their expectations<br><br>From 'Parks and Benefits':<br>The PA-BAT is considered to be too complicated to be used on a regular basis. Therefore, the 'Benefit Monitor' has been developed |
| Other comments | N/a |

**Sources:**

Summary pdf:
http://www.parksdinarides.org/files/file/introduction-to-the-protected-areas-benefit-assessment-1364559108.pdf

Methodology:
http://d2ouvy59p0dg6k.cloudfront.net/downloads/pa_bat_final_english.pdf

Feedback on PA-BAT:
https://www.bfn.de/fileadmin/MDB/documents/service/skript260.pdf

## Overview of 'Social Assessment for Protected Areas' (SAPA)

| | |
|---|---|
| Brief description of tool | Social impact assessment is the process of analyzing and managing the intended and unintended social consequences, both positive and negative, of interventions.<br><br>The SAPA initiative was launched in 2008, responding to the need for a relatively simple, rapid, standardized and low cost approach for assessing the social impacts of PAs.<br><br>SAPA can be used with PAs of any kind. However, it is advised that SAPA should only be applied by PAs that have been in existence and with operational management and governance systems for at least two years. SAPA relies to a great extent on perceptions and opinions by local people and other stakeholders |
| Objectives of the tool | The primary objective of SAPA is not to calculate the contribution of PAs to local well-being, but to generate information that will help PA managers and other site-level stakeholders to increase, and more fairly share, the positive social impacts of conservation and reduce the negative social impacts |
| Adaptable to local needs and available resources? | The SAPA methodology adopts a question-based approach, with all sites using a set of standard assessment questions. In addition, the methodology includes a process of developing site-specific questions that respond to specific information needs of key stakeholders.<br><br>The combination of standard and site-specific questions enables comparison and aggregation across sites, while also enabling the assessment to be tailored to the needs of a specific site |
| Does the tool accept already existing means of evaluation? | It is advised that the SAPA builds upon existing information that is relevant to the design and implementation of the assessment |
| What steps / phases does application of the tool comprise? | The SAPA process has four phases (preparation, scoping, assessment, action) with a total of 12 main activities.<br><br>The methodology uses a combination of:<br>• Community workshops to identify significant social impacts<br>• A short household survey to explore these impacts and related governance issues in more depth<br>• Stakeholder workshops to validate the survey results, explore other key issues and generate recommendations for action.<br><br>Depending on the size of the PA, the number of community workshops can vary, e.g. for small PAs only 2 will be needed, for big ones up to 6.<br><br>Experience to date suggests that the sample size for the household |

| | |
|---|---|
| | survey should be a minimum of 100 (e.g. for populations of 1,000 households or less with relatively low variability) and up to 250 for larger populations and/or high levels of variability. Interviews will take about 45 minutes at the start, but may reduce to around 30 minutes once the interviewers get more experience |
| Where and how often has tool been applied? | The SAPA methodology builds on pilots in five countries (Kenya, Uganda, Ethiopia, Gabon and Zambia) |
| At what level is the tool applied? | Site-level / comparison and aggregation across sites possible |
| What is the recommended frequency of application? | SAPA is designed to be a one-off process. A few SAPA pilot sites found the exercise so useful that they intend to repeat it after 3-5 years to measure progress. Guidance for this repeated, lighter process will be developed |
| What are the approx. costs of application? | The cost of conducting SAPA is estimated to range from USD 5,000 to USD 15,000 per site, excluding the time of the SAPA Facilitation Team which is assumed to be an in-kind contribution by key stakeholders |
| How much time does the application require? | The actual assessment takes places in Phase I, II and III. This usually takes 3-4 months of part- time work but can take as little as six weeks for a small PA with all the activities planned to take place back to back |
| Which capacity usually applies the tool / is consulted? | It is a multi-stakeholder assessment for use by PA managers, communities living in and around the PA, other local level stakeholders, and supporting organizations at national level. The assessment will usually be proposed, planned and facilitated by these site-level users and the methodology Manual is written for these users.<br><br>In most cases there will be a need for technical support from an organization at national or state level with social research expertise – for example an NGO, university or consultancy – especially for the household survey, but there should be no need for international consultants |

| | |
|---|---|
| What skill-set is needed to apply the tool? | The SAPA process is organized and guided by a SAPA Facilitation Team. Normally, a SAPA Facilitation Team is composed of 3-6 people.<br><br>The team should have a balance of people from state actors (e.g. conservation authority, local government) and from non-state actors (e.g. NGOs, community-based organizations, research organizations). This balance should provide the necessary range of technical expertise and enable the team as a whole to gain and maintain the respect and trust of key stakeholder groups. Detailed Terms of Reference for the SAPA Facilitation Team are contained in Annex 1 of the SAPA Manual.<br><br>The Facilitation Team will usually be supported by an external expert from an organization at national or state level who has relevant social research expertise, but there should be no need for international consultants. The external expert may have been trained at a SAPA Train-the-Trainers course, or - if they are experienced in social assessment - they should be able to conduct the SAPA training based on the Manual |
| Elements of the IUCN Framework considered | The SAPA has not been designed to cover the six elements |
| (1) Context | N/a |
| (2) Planning | N/a |
| (3) Inputs | N/a |
| (4) Processes | N/a |
| (5) Outputs | N/a |
| (6) Outcomes | N/a |
| What are the strengths of the tool? | • Some other tools consider social aspects not at all or on a superficial level only. SAPA addresses this<br>• There has been a substantial amount published on assessing the social impacts of PAs in the academic literature. But most of these studies use complex and costly research methodologies which are not a practical option for most PA managers. SAPA is relatively quick and cost-effective<br>• The SAPA methodology is based on a standardized process and set of methods that can be replicated across PAs while still giving enough flexibility to be tailored to the local context and information needs<br>• Although the SAPA is not a governance assessment methodology per se, it provides some basic information on three key governance parameters: Awareness of relevant information, participation, and the relationships between key stakeholders. |

| | |
|---|---|
| What are the constraints of the tool? | • The SAPA is about social and governance aspects and does therefore not consider the conservation of natural values<br>• While the SAPA is simple and cost-effective when compared to other methodologies in the social field, it is more time-consuming than the management effectiveness tools considered for this project |
| What do users say about the tool? | Informally, users say that the multi-stakeholder approach of the SAPA is a strength and in some cases the SAPA stakeholder meetings were the first time that key stakeholders from the PA, local government, communities and civil society jointly discussed social issues. The multi-stakeholder approach promotes credibility and ownership. Arguably, the SAPA results are also more accurate in the sense that there is a process where communities and other key stakeholders discuss and agree whether the results truly reflect the situation on the ground.<br><br>Two challenges are that the process must be led by a Facilitation Team that stakeholders feel is balanced, i.e. not PA staff alone. Also, the non-PA staff may need some payment for their time which has cost implications. The other is technical capacity. Most of the process can be led by anyone with good facilitation skills based on reading the Manual and ideally a bit of training. The exception is the household survey where some experience in conducting surveys is needed. Local level stakeholders may not have this experience and may have to contract a university or national NGO to help. But the SAPA is working with Open Data Kit technology, standardized templates, etc. to try to get to the point where previous survey experience is not essential.<br><br>There is also increasing evidence that recognition is key. A lot of the negative feelings about PAs are based on local peoples' frustrations that no-one seems to care about the problems they face and makes any effort to deal with them |

| | |
|---|---|
| Other comments | The SAPA Manual describes the process for the first use of SAPA at a given site. The SAPA has been designed primarily as a tool for PA managers to help them make PA management more equitable and effective. Use as a tracking/impact evaluation tool was not the primary objective. This should be kept in mind when SAPA is applied.<br><br>Grant applications to support SAPA roll-out is under way and will (if successful) comprise:<br>• 4-5 countries: Indonesia (ca. 10 PA sites), Kenya, Uganda, Ethiopia and Zambia (5 PA sites in each)<br>• Other countries in Africa or Asia: Small grants and remote technical support for a total of 50-75 PAs over 5 years. This support facility could be aligned with KfW priorities<br><br>GEF is apparently interested in SAPA.<br><br>Working in partnership with GIZ, the governance side of SAPA will be strengthened. As a minimum, a participatory governance assessment tool from Nepal will be adapted (Participatory Governance Assessment, PGA), and a tool that will be used at the second stakeholder workshop in the SAPA process will be developed. These will be written up as optional add-ons to the SAPA methodology |

**Sources:**

Methodology available at:
http://pubs.iied.org/14659IIED.html

Case studies from Africa:
http://pubs.iied.org/14661IIED.html

## Overview of 'State of the Parks' (SoP)

| | |
|---|---|
| Brief description of tool | SoP originated as a systematic evaluation of the entire Australian New South Wales PA system. It is based on the METT, RAPPAM, and EoH. Since its creation it has been adopted by other regions around the world. The information below has been obtained from the New South Wales Department of Environment and Conservation.<br><br>SoP is designed to provide an overview of management effectiveness in PAs and to identify factors that influence conservation outcomes. The SoP survey consists of three parts, incorporating both quantitative and qualitative assessment items:<br>• Attributes section: PA descriptors and categorizations for management<br>• Context section: Plans, values, threats, stakeholders and commercial activities<br>• Management section: Information sufficiency, management effectiveness, value condition and proposed actions<br><br>The assessment items require staff to rate performance of PA management on a four-level ordinal scale |
| Objectives of the tool | • Improving the understanding of the condition of and pressures on the PA system<br>• Evaluating the effectiveness of management activities against objectives and planned outcomes<br>• Informing planning and decision-making at all levels of management from state to PA level, leading to more effective management<br>• Assisting in the allocation of funding and resources<br>• Supporting effective communication of management performance |
| Adaptable to local needs and available resources? | Yes. However, the original methodology has been developed with the specific threats of NSW in mind (weed, fire, pest animals, aborigines, etc.). It is not clear how easy it would be to adapt it to other circumstances |
| Does the tool accept already existing means of evaluation? | Yes |
| What steps / phases does application of the tool comprise? | The following method is recommended for adaptation of the method to another PA system:<br>1. Workshop with staff to ensure that the methodology covers the most important aspects of management for the system being assessed and that the indicators reflect appropriate performance standards for the agency<br>Revise indicators and guidance notes (if necessary) based |

| | |
|---|---|
| | on the results of the workshop(s)<br>2. Train staff in application of the methodology<br>3. Assemble relevant information for each site in preparation for the assessment<br>4. Conduct assessments for each PA during a meeting of key staff and other knowledgeable people<br>5. Compile and analyse results across the system of PAs<br>6. Feedback results to the PA agency staff<br>7. Periodically prepare report (perhaps every 5-6 years) |
| Where and how often has the tool been applied? | 867 PAs of the NSW reserve system in Australia. Apparently, the US has also adopted the methodology. The number of other SoP applications is not clear |
| At what level is the tool applied? | System-level, but results can be used to track progress of individual sites as well |
| What is the recommended frequency of application? | Annually, or every 2 to 3 years |
| What are the approx. costs of application? | Not known |
| How much time does the application require? | Depending on the complexity of the PA it takes between 2 and 7 hours to fill in the survey. So, on average about 4 hours. The online SoP system allows data from former assessments to be pulled up, which speeds up the process if not much has changed in the meantime |
| Which capacity usually applies the tool / is consulted? | On-ground staff familiar with the PA contribute their expertise and experience to the surveys, including rangers, field officers, pest management specialists and Aboriginal co-management coordinators.<br><br>PA agency senior managers are responsible for the completion of assessments, drawing together relevant evidence to underpin their determinations.<br><br>Sometimes the surveys are done in a team approach, which is recognized as the best way of doing it, as it becomes a valuable discussion and knowledge-building forum for the people involved. But it is not always practical to do the survey in this way (e.g. individual staff time commitments, not easy to get together at the same location) and often it gets done individually at different times, or the specialists sometimes review and add to the assessments initially done by a PA ranger.<br><br>PA Managers must approve each section of the assessment. Regional Managers are responsible for reviewing and endorsing all the assessments. |

| | |
|---|---|
| | Data to support the SoP surveys is sourced from research, monitoring, specialist opinion, staff experience and observation, corporate data sets and community opinion |
| What skill-set is needed to apply the tool? | Assessors need to be trained in completion of an assessment, on the intent of key questions, and need to be able to consult with staff |
| Elements of the IUCN Framework considered | All |
| (1) Context | Yes |
| (2) Planning | Yes |
| (3) Inputs | Yes |
| (4) Processes | Yes |
| (5) Outputs | Yes |
| (6) Outcomes | Yes |
| What are the strengths of the tool? | • International best practice example of a Management Effectiveness Evaluation system for PAs<br>• Relatively rapid and comprehensive methodology for assessing management effectiveness for large numbers of PAs<br>• Fills a gap left by most monitoring and assessment systems, which capture info at a sub-PA level but do not provide a considered, whole-of-PA-snapshot<br>• Opt-out sections allow question sets to be applied only when relevant<br>• Supports adaptive management, planning and decision making at the site level, across regional groups of reserves or across an entire system of PAs<br>• Consistent assessment across a system of PAs in which individual PAs may have very different levels of underlying monitoring data<br>• Data can be analysed across the PA system to identify key factors influencing management effectiveness<br>• The accompanying guidelines are extensive and easy to understand<br>• The Word doc is a simple tick-box list with a comments column |
| What are the constraints of the tool? | • The qualitative assessment items may vary in reliability depending on the knowledge and training of staff completing the assessment<br>• SoP has originally been developed with a specific context in mind and for specific agencies working in specific ways<br><br>From article 'Challenges and experiences in implementing a management effectiveness evaluation program in a protected area system': Although not an exhaustive list, some of the challenges include: |

| | |
|---|---|
| | • Building ownership for the program<br>• Ensuring that the results are reliable<br>• Developing a system for information sharing<br>• Recognizing and accepting that not all results will be positive<br>• Integrating science and management. |
| What do users say about the tool? | The SoP program has adapted the IUCN Framework by including a policy element and ensuring that context setting is considered for each step of the program. This enables the agency to increasingly 'link and align' existing and developing programs |
| Other comments | Different mechanisms ensure the quality of survey data. This includes training and guidelines, pre-population of the database with existing information, quality control checks throughout the survey by experts and managers and post-survey auditing of results for consistency and completeness. None of this seems publically available, but the methodology is adaptable to other PA systems and can be used with the approval of the NSW Department of Environment and Conservation.<br><br>The SoP of New South Wales will be reviewed in 2016 to:<br>• Ensure it still reflects best practice<br>• Strengthen the evidence base for assessments<br>• Link management effectiveness assessments to plans of management<br>• Improve the use of SoP data to better inform adaptive management<br>• Improve integration with the latest corporate data and reporting systems<br>• Improve efficiency and user friendliness<br>• Increase transparency and public access to SoP information |

**Sources:**

Introduction on:
http://www.environment.nsw.gov.au/sop/

State of the Parks Guidelines and Proforma do not seem to be publically available, but were kindly provided by NSW National Parks & Wildlife Service

## Overview of 'World Heritage Outlook' (WHO)

| | |
|---|---|
| Brief description of tool | WHO provides an assessment of the conservation prospects of natural World Heritage (WH) sites. Based on expert knowledge, WHO tracks the state of conservation over time and provides information on the present situation and outlook of natural WH sites.<br><br>WHO aims to overcome existing and potential knowledge gaps through a methodological approach and uses data from a wide range of sources and consultation with stakeholders.<br><br>The WHO also examines the benefits that WH sites provide to people and offers an early warning system helping to identify threats and take actions to achieve excellence in the conservation of sites |
| Objectives of the tool | • Recognizing well-managed sites for their conservation efforts and encourage the transfer of good management practices between sites<br>• Tracking the state of conservation of all natural WH sites over time and raise public awareness of their importance for biodiversity conservation<br>• Understanding and communicating the benefits of these sites for local communities and other stakeholders, for example livelihoods and ecosystem services<br>• Identifying the most pressing conservation issues affecting natural WH sites and supporting sites in addressing these |
| Adaptable to local needs and available resources? | Yes. While WHO has been designed to evaluate sites inscribed on the WH List for their natural Outstanding Universal Value, the methodology could be adapted to apply more widely to PAs |
| Does the tool accept already existing means of evaluation? | Site assessors are asked to fill out the provided worksheets. However, as part of the process they use already existing and relevant evaluations and reports and these are referenced in the assessments |
| What steps / phases does application of the tool comprise? | WHO is a desk-based assessment of three elements:<br>1. The current state and trend of the sites' natural WH values<br>2. The threats affecting those values<br>3. The effectiveness of protection and management<br><br>There are nine assessment steps with corresponding worksheets. Information gathered through the IUCN network and knowledge holders is assessed by IUCN specialists and revised by regional review groups. Assessments are given final approval by the IUCN World Heritage Panel before they are published |
| Where and how often has the tool been applied? | Assessments have been done for all 229 sites that have been inscribed on the World Heritage List under natural criteria. In cases of mixed sites (natural and cultural), only the natural values are taken into consideration |
| At what level is the tool applied? | Site-level |

| | |
|---|---|
| What is the recommended frequency of application? | Every 3 years |
| What are the approx. costs of application? | Payment for 2-3 days of assessor time is needed. The filled in worksheets are peer reviewed pro bono |
| How much time does the application require? | When assessors are familiar with the site they are supposed to assess, the worksheets can be completed in about 2-3 days |
| Which capacity usually applies the tool / is consulted? | The assessments are compiled by IUCN experts, including members of IUCN's World Commission on Protected Areas (WCPA). They draw on published information and knowledge provided by State Parties, management authorities, site managers, researchers, community groups, IUCN WCPA members and other IUCN Commission members, non-governmental organizations and development agencies |
| What skill-set is needed to apply the tool? | The site assessors are PA specialists familiar with WH. Expert-level is needed for reviewing the assessments |
| Elements of the IUCN Framework considered | All |
| (1) Context | Yes |
| (2) Planning | Yes |
| (3) Inputs | Yes |
| (4) Processes | Yes |
| (5) Outputs | Yes |
| (6) Outcomes | Yes |
| What are the strengths of the tool? | • Looks at governance aspects<br>• Considers threats outside the site<br>• Considers integration of site in regional/national planning<br>• Compiles information on benefits provided by sites<br>• Guidelines help complete the assessment and list aspects to consider |
| What are the constraints of the tool? | • The information available for some sites might not be sufficient to carry out the assessment. Information gaps are usually filled through consultation with local experts, IUCN regional offices or WCPA members<br>• The effort needed to adapt the tool to other types of sites is not known and there is no experience in doing so |
| What do users say about the tool? | N/a |
| Other comments | All assessments are issued around the same time, together with a World Heritage Outlook report. If needed, however, assessments can be revised at any time. New sites are inscribed on the WH List every year and their assessments are produced once they are inscribed.<br><br>The WHO website includes the functionality of compiling assessments online. More and more WHO assessments will be done using this functionality in the future |

**Sources:**

Overview of methodology available at:
http://www.worldheritageoutlook.iucn.org

Worksheets available at:
http://www.worldheritageoutlook.iucn.org/publications

Received from IUCN, unpublished:

IUCN Conservation Outlook Assessments - Guidelines for their application to natural World Heritage Sites

Benefits worksheet

Benefits_EXAMPLE (adapted from PA-BAT)

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

Please note that the GLPCA has been used as an inventory for the table below. As such, the GLPCA indicators appear only once in the table and in the order of their appearance in the GLPCA Standard, whereas the EoH indicators and the METT indicators might be mentioned more than once since there is no exact fit of the GLPCA, EoH and METT indicators and the EoH and METT indicators might relate to various GLPCA indicators.

- GLPCA indicators: taken from the GLPCA Standard and including 4 Components, with Criteria (e.g. 1.1) and Indicators (e.g. 1.1.1)
- EoH indicators: taken from the worksheets and their questions and abbreviated as e.g. W1 Q1 = worksheet 1, question 1
- METT indicators: taken from the questions, abbreviated as e.g. Q1 =question 1

The order of the indicators does not reflect a hierarchy or level of importance.
SAPA is covered in a separate table since its focus is different from GLPCA, EOH and METT.

| GLPCA | EoH | METT |
|---|---|---|
| | | |
| **Component 1: Good Governance** | | |
| **1.1 GUARANTEE LEGITIMACY AND VOICE** | | |
| 1.1.1 The site's governance structure is clearly defined and documented and in accordance with relevant national or regional government, jurisdiction or recognised authority | W6 Q3a: Do problems or uncertainties over legal status or tenure affect capacity to manage? | Q1: Legal status of PA |
| 1.1.2 The site's and local governance structures and mechanisms provide civil society, stakeholders and rightsholders with appropriate opportunities to participate in management planning, processes and actions | W5b Q12: Does the plan take account of the needs and interests of other stakeholders involved in the World Heritage site?<br>W8a Q3: Are the planning systems appropriate, i.e. participation, consultation, review and updating? | Q7a: Does the planning process allow adequate opportunity for key stakeholders to influence the management plan? |
| 1.1.3 The area's and local governance structures and mechanisms recognize the legitimate rights of Indigenous Peoples and local communities | W5b Q11: Does the plan take account of the needs and interests of local and indigenous communities living in or around the World Heritage site?<br>W8a Q26: Do indigenous and traditional peoples resident in or regularly using the site have input to management decisions? | Q23: Do indigenous and traditional peoples resident or regularly using the protected area have input to management decisions? |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| 1.1.4 Rights-holders and stakeholders are effectively involved in decision-making and the adaptive management of the site | W5b Q10: Where local and indigenous communities living in or around the World Heritage site involved in developing the management plan and setting direction for the management of the World Heritage site?<br>W8a Q25: Do local communities resident in or near the site have input to management decisions?<br>W8a Q26: Do indigenous and traditional peoples resident in or regularly using the site have input to management decisions?<br>W8a Q28: Is there cooperation with neighbouring land/sea owners and users?<br>W8a Q29: If conflicts between the site and stakeholders arise, are mechanisms in place to help find solutions? | Q24: Do local communities resident in or near the protected area have input to management decisions?<br>Q24a: Is there is open communication and trust between local and/or indigenous peoples, stakeholders and protected area managers?<br>Q24c: Do local and/or indigenous people actively support the protected area? |
| 1.1.5 The defined governance structures and mechanisms are accepted by major constituents, reflecting the governance category of the site | | |
| | | |
| **1.2 ACHIEVE TRANSPARENCY AND ACCOUNTABILITY** | | |
| 1.2.1 The governance structures and key documents on management are readily accessible to civil society in an easily understandable format. Key documents include the area's management plan or equivalent, relevant subsidiary plans and other key direction documents | | |
| 1.2.2 Where a formal decision-making body exists, the current membership of the body is publically available and procedures for establishment and membership of the body are publically accessible | | |
| 1.2.3 Where there is no decision making body appointed, the names and contact details of formal | | |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| decision makers such as a Minister or Agency Director are publically accessible | | |
| 1.2.4 The outcomes of discussions by decision-making bodies or decision makers in relation to issues raised by civil society, stakeholders or rightsholders are publically available | | |
| 1.2.5 A readily accessible process to identify, hear and resolve complaints, disputes, or grievances related to the governance or management of the area | | |
| | | |
| **1.3 ENABLE GOVERNANCE VITALITY AND CAPACITY TO RESPOND ADAPTIVELY** | | |
| 1.3.1 Procedures are in place to ensure that results from monitoring, evaluation and consultation are used to inform management and planning processes including the establishment of goals and objectives | W5b Q3: Does the plan provide for a process of monitoring, review and adjustment during the life of the plan?<br>W8a Q3: Are the planning systems appropriate, i.e. participation, consultation, review and updating? | Q7c: Are the results of monitoring, research and evaluation routinely incorporated into planning? |
| 1.3.2 Planning and decision-making recognises relevant conditions, issues and goals at national and regional scales that impact the protected area | | |
| 1.3.3 Planning and management processes draw on multiple knowledge sources (scientific, experiential, local and traditional) | | |
| 1.3.4 The area has, where relevant, considered historical changes and future projections in social, ecological and climate conditions | | |
| | | |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| Component 2: Sound Design and Planning | | |
|---|---|---|
| **2.1 IDENTIFY MAJOR SITE VALUES** | | |
| 2.1.1 The site meets the IUCN definition of a Protected Area, and/or is recognised as a 'Conserved Area' | | |
| 2.1.2 The site has been listed and assigned correctly to one of the six IUCN Protected Area management categories, or as an Other Effective Area-based Conservation Measure - and one of the four governance types - in the United Nations Environment Program / World Conservation Monitoring Centre World Database on Protected Areas (WDPA) | | Data sheet 1 gathers this information |
| 2.1.3 The site has a current management plan or equivalent that is used to guide management priorities and activities | W5a: identify available management plan or equivalent | Q7: Is there a management plan and is it being implemented? |
| 2.1.4 The major natural values and associated ecosystem service and cultural values of the site are clearly identified | W1a: Identify major site values<br>W8a Q1: Have values been identified and are these linked to management objectives? | |
| | | |
| **2.2 DESIGN FOR LONG-TERM CONSERVATION OF MAJOR VALUES** | | |
| 2.2.1 The designated area is large enough and sufficiently connected to other habitats or ecosystems to achieve the goals and objectives for the site's major values | W6 Q1&2: Considers if the design (in terms of key habitats, size, external interactions, connectivity) of the PA ensures ecological integrity of the site and community well-being | Q5: Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern? |
| 2.2.2 The site is part of an identified conservation network which is designed to meet goals of representation, replication, connectivity and resilience | | |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| 2.2.3 Integrity of major site values | W6 Q1&2: Considers if the design (in terms of key habitats, size, external interactions, connectivity) of the PA ensures ecological integrity of the site and community well-being | Q5: Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern?<br>Q21a: Does the planning and management in the catchment or landscape containing the protected area incorporate provision for adequate environmental conditions (e.g. volume, quality and timing of water flow, air pollution levels, etc.) to sustain relevant habitats?<br>Q21b: Does the management of corridors linking the protected area provide for wildlife passage to key habitats outside the protected area (e.g. to allow migratory fish to travel between freshwater spawning sites and the sea, or to allow animal migration)?<br>Q21c: Does the planning address ecosystem-specific needs and/or the needs of particular species of concern at an ecosystem scale (e.g. volume, quality and timing of freshwater flow to sustain particular species, fire management to maintain savannah habitats, etc.)? |
| | | |
| **2.3 UNDERSTAND THREATS AND CHALLENGES TO MAJOR SITE VALUES** | | |
| 2.3.1 Significant current and potential threats to major natural values and associated ecosystem services and cultural values of the site are identified and their location, extent and severity described in the management plan or equivalent | W2: Identify most important current threats and link them to major site values. Optionally, add most important potential threats. Specify causes, extent, severity of threats, planned management actions to address them and their urgency. | Data sheet 2: Threats are categrorised for the whole protected area<br>Q21: Are adjacent land and water use planning taken into account the long term needs of the protected area? |
| 2.3.2 The likely impact of climate change on the major site values has been assessed and documented | | Data sheet 2: Climate change threats are categorised for the whole protected areas |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| **2.4 UNDERSTAND THE SOCIAL AND ECONOMIC CONTEXT** | | |
| 2.4.1 The social and economic characteristics of the region that may be affected (positively or negatively) by the Protected Area's designation and / or current management have been identified and their location, extent and severity described in the management plan or equivalent. | W3: Identify, analyse and understand stakeholders. List the benefits and impacts of the PA on stakeholders and vice versa | |
| 2.4.2 The social and economic benefits and impacts have been considered in the development of management goals and objectives for the Protected Area in the management plan or equivalent. | W3: Outline how stakeholders engage in decision-making and management related of the PA | |
| | | |
| **Component 3: Effective Management** | | |
| **3.1 DEVELOP AND IMPLEMENT A LONG-TERM MANAGEMENT PLAN** | | |
| 3.1.1 The Protected Area has a current management plan (or its functional equivalent) which includes: | | Q7b: Is there is an established schedule and process for periodic review and updating of the management plan? |

## Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| a) the goals and objectives for management of the natural values and social and/or economic objectives (where relevant) identified in Component 2 | W1b: Document principal management objectives and identify if there are links to site values<br>W5b Q1: Does the plan establish a clear understanding of the desired outcomes of management in clear terms rather than just specifying actions to be taken?<br>W5b Q2: Does the plan express the desired future for the site in a way that can assist management of new issues and opportunities that arise during the life of the plan?<br>W5b Q4: Does the plan provide an adequate and appropriate policy environment for management of the site?<br>W5b Q6: Is the plan based on an adequate and relevant information base?<br>W5b Q7: Have the values for the site been identified in the plan and linked to the management objectives and desired outcomes for the site?<br>W5b Q8: Does the plan address the primary issues facing management of the area within the context of the desired future of the site?<br>W5b Q9: Are the objectives and actions specified in the plan represented as adequate and appropriate response to the issues? | Q4: Is management undertaken according to agreed objectives? |
| b) the management strategies and activities to achieve these goals over the long term and an indication of the activities that are allowed or prohibited in the Protected Area and any zoning or temporal / spatial restrictions on access or use of the area | W5b Q13: Does the plan provide adequate direction on management actions that should be undertaken in the site?<br>W5b Q14: Does the plan identify the priorities amongst strategies and actions in a way that facilitates work programming and allocation of resources? | |

## Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| 3.1.2 The site can demonstrate that management activities and regulations are being implemented and are consistent with the management plan | W8a Q2: Is there a Management plan and is it being implemented?<br>W8a Q4: Are there regular work plans or other planning tools?<br>W9: Assess the level of implementation of activities outlined in the management plan<br>W10: Assess the output from implemented management activities | Q8: Is there a regular work plan and is it being implemented? |
| 3.1.3. Adequate, functional and safe equipment and infrastructure is available and accessible to staff as appropriate to manage the site | W8a Q7: Is equipment adequately maintained?<br>W8a Q8: Is management infrastructure (e.g. roads, offices, fire towers) adequate for the needs of the site?<br>W8a Q9: Are the available facilities (e.g. vehicles, GPS, staff accommodation) suitable for the management requirements of the site? | Q18:Is equipment sufficient for management needs?<br>Q19: Is equipment adequately maintained? |
| 3.1.4 The site has adequate numbers of appropriately trained staff, led by an effective management team, to implement all aspects of its management plan in the long term | W7a: Assess management requirements and current availability with regards to staff<br>W8a Q10: Do staff have the opportunity to feed into management decisions?<br>W8a Q11: How well are staff managed?<br>W8a Q12: Are staff adequately trained?<br>W8a Q13: Do staff have the capacity to enforce legislation? | Q13: Are there enough people employed to manage the protected area?<br>Q14: Are staff adequately trained to fulfil management objectives? |
| 3.1.5 There is no evidence that financial constraints are threatening the capacity of management to achieve the site's objectives | W7b: Assess management requirements and current availability with regards to budget<br>W8a Q14: Does the financial management system meet critical management needs? | Q15: Is the current budget sufficient?<br>Q16: Is the budget secure?<br>Q17: Is the budget managed to meet critical management needs?<br>Q29: If fees (i.e. entry fees or fines) are applied, do they help protected area management? |
| | | |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| **3.2 MANAGE ECOLOGICAL CONDITIONS** | | |
|---|---|---|
| 3.2.1 Strategies and actions to maintain ecological attributes and processes, (n.b. including natural disturbances) to maintain or enhance the area's major values are identified in a management plan, regional strategy or functional equivalent and are implemented in the area's work program or operational plan | W8a Q18: Is the biodiversity of the site adequately managed? | Q12: Is active resource management being undertaken?<br>Q30c: Are activities to maintain key biodiversity, ecological and cultural values a routine part of park management? |
| 3.2.2 The site can demonstrate that management activities related to natural values are being implemented and are sufficient for the maintenance of the area's major natural values and ecological processes | | |
| | | |
| **3.3 MANAGE WITHIN THE SOCIAL AND ECONOMIC CONTEXT OF THE SITE** | | |
| 3.3.1 The social and economic context of the site has been incorporated into management, based on consideration of social and economic goals and objectives for the area, as established in Criterion 2.4 | | |
| | W8a Q19: Are the site's cultural resources adequately managed? | Q21: Does land and water use planning recognise the protected area and aid the achievement of objectives?<br>Q22: Is there co-operation with adjacent land and water users? |
| 3.3.2 Opportunities to enhance the social and economic benefit of the site to local communities (where consistent with conservation of major site values) are considered during reviews of management plan and through adaptive governance, management and planning processes | W8a Q27: Are there programmes developed by the site managers that consider local people's welfare whilst conserving the site's resources? | Q24b: Are programmes to enhance community welfare, while conserving protected area resources being implemented?<br>Q25: Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services? |

## Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| **3.4 MANAGE THREATS** | | |
| 3.4.1 The site management is implementing a work program that identifies effective responses to each of the significant threats to (a) major site values identified under Criterion 2.3 or (b) the achievement of the areas goals and objectives including long term and 'external' threats | W8 Q15: Are there management mechanisms in pace to control inappropriate land uses and activities (e.g. poaching)? | Q30b: Are specific management programmes being implemented to address threats to biodiversity, ecological and cultural values? |
| | | |
| **3.5 EFFECTIVELY AND FAIRLY ENFORCE LAWS AND REGULATIONS** | | |
| 3.5.1 Patrol and surveillance systems, or equivalent, are in place where needed, are adequately set up with sufficient resources and effective operational procedures | W6 Q3b: Does lack of control over access to the site impact on management effectiveness?<br>W8 Q15: Are there management mechanisms in pace to control inappropriate land uses and activities (e.g. poaching)? | Q3: Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough?<br>Q10: Are systems in place to control access/resource use in the protected area? |
| 3.5.2 Legal or customary compliance mechanisms with appropriate sanctions are equitably applied to offenders | | |
| 3.5.3 Laws and regulations regarding the use of the area are publically accessible to civil society, stakeholders and rightsholders | | Q2: Are appropriate regulations in place to control land use and activities (e.g. hunting)?<br>Q6: Is the boundary known and demarcated? |
| | | |
| **3.6 MANAGE ACCESS, RESOURCE USE AND VISITATION** | | |
| 3.6.1 The types and levels of permitted activities are clearly described, and are compatible with the conservation of major site values | W6 Q3c: Does the location and nature of boundaries support or impede management? | Q2 deals with regulations of PA to control land use and activities (but not detailed) |
| 3.6.2 Where uses are permitted: | | |
| • Uses are managed to minimise harm to the major site values (for example through permits, design, access control, or education) | | |

## Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| • The site's management strives to accommodate the needs of users, so far as this is compatible with the achievement of conservation and social objectives | | |
| 3.6.3 The nature and level of permitted access for visitors are clearly described, and are compatible with conservation of major site values, and achievement of social objectives | W6 Q3c: Does the location and nature of boundaries support or impede management? | Q2: Are appropriate regulations in place to control land use and activities (e.g. hunting)? |
| 3.6.4 Where visitor access is permitted: | | |
| • Visitor impacts are managed to minimize harm to the natural and cultural values of the Protected Area (for example through permits, access control, the provision and siting of facilities, education and enforcement). | W8a Q21: Do commercial tour operators contribute to site management?<br>W8a Q24: Is visitor access sufficiently controlled? (e.g. through patrols, permits, etc.) | Q28: Do commercial tour operators contribute to protected area management? |
| • There is no evidence that the impacts of visitors are threatening the achievement of the Protected Area's social and environmental objectives | | |
| • Visitor services and facilities are appropriate to the character, values and use of the Protected Area. | W8a Q20: Are visitor facilities (for tourists, pilgrims, etc.) adequate? | Q27: Are visitor facilities adequate? |
| • Visitor services and facilities meet specified safety standards. | | |
| • Visitor services and facilities meet specified standards of environmental sustainability. | | |
| • Interpretive, educational and information services for visitors meet visitors' needs (e.g. the needs of different audiences, age groups, etc.). | W8a Q22: Have plans been developed to provide visitors with the most appropriate access and diversity of experience when visiting the site?<br>W8a Q23: Is there a planned education programme that addresses all audiences (i.e. local communities as well as visitors)? | Q20: Is there a planned education programme linked to the objectives and needs? |
| • The tourism industry within the site is managed to support the site's social and environmental objectives. | | |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| • Consideration has been given to the use of the Protected Area by disabled people, and their needs have been adequately taken into account | | |
| | | |
| **3.7 MEASURE SUCCESS** | | |
| 3.7.1 For each of the major site values identified under Criterion 2.1 a monitoring system is in place and a set of performance measures has been defined and documented, which provides an objective basis for determining whether the associated value is being successfully protected | W8a Q5: Are management activities monitored against performance?<br>W8a Q6: Are all the reporting requirements of the site fulfilled?<br>W8a Q16: Is there enough information to manage the site?<br>W8a Q17: Is there a programme of management-orientated survey and research work?<br>W11a: Monitor management outcomes for major site values (via indicators, thresholds, management responses in case of thresholds breaches, monitoring protocols, costs for monitoring, etc.) | Q11: Is there a programme of management-orientated survey and research work?<br>Q30a: Is the assessment of the condition of values based on research and/or monitoring ? |
| 3.7.2 A threshold level has been specified in relation to each set of performance measures that, if achieved, is considered to demonstrate objectively that the associated major site value is being successfully protected | | |
| | | |
| **Component 4: Successful Conservation Outcomes** | | |
| **4.1 DEMONSTRATE CONSERVATION OF MAJOR NATURAL VALUES** | | |
| 4.1.1 The site is meeting or exceeding the performance thresholds for the conservation of major natural values, specified in Criterion 3.7.2, or meets the requirements specified in Indicator 4.1.2 below | W11b: Assess outcomes of management for major site values based on monitoring (i.e. Look at condition of major site values) | Q30: What is the condition of the important values of the protected area as compared to when it was first designated? |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| 4.1.2 The Expert Assessment Group (EAGL) has recognised the external context in which the Protected Area operates as being especially challenging, and management is responding to prevent loss of the value | | |
| | | |
| **4.2 DEMONSTRATE CONSERVATION OF ECOSYSTEM SERVICES** | | |
| 4.2.1 The site is meeting or exceeding the performance thresholds for the conservation of ecosystem services, as specified in Criterion 3.7.2 | W11b: Assess outcomes of management for major site values based on monitoring (i.e. Look at condition of major site values) | |
| 4.2.2 The provision of ecosystem services does not impair the ecological values of the site | | |
| | | |
| **4.3 DEMONSTRATE CONSERVATION OF CULTURAL VALUES** | | |
| 4.3.1 The site is meeting or exceeding the performance thresholds for the conservation of cultural values, as specified in Criterion 3.7.2 | W11b: Assess outcomes of management for major site values based on monitoring (i.e. Look at condition of major site values) | |
| | | |
| **Additional Indicators not Attributable to GLPCA Indicators** | | |
| | | |
| | W4: Identify and describe relevant policy areas and how they contribute to or hinder preservation of site values | Chapter 4.4.3 of the 2016 METT Handbook includes a suggestion on how the effects of climate change might be tracked in protected areas and reflected in the METT assessment:<br>a. Is the protected area being consciously managed to adapt to climate change?<br>b. Is the protected area being consciously managed to prevent carbon loss and to encourage further carbon capture? |

## Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| | W8b: Assess effectiveness of management processes in 4 categories (management systems and structures, resource management, management and tourism, management and communities / neighbours) | Chapter 4.4.4 of the 2016 METT Handbook includes a suggestion on how to reflect social data in the METT assessment:<br>a. What are the improvements in livelihood outcomes as a result of conservation efforts (e.g. income, employment, payment for environmental services)?<br>b. Is there equal opportunities involvement in management? |
| | W12: Review results of management effectiveness assessment to define necessary follow-up actions | Chapter 4.4.4 of the 2016 METT Handbook includes a suggestion on how to reflect transboundary issues in the METT assessment:<br>Is there co-operation with adjoining protected areas (national and international)? |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

## Social Assessment for Protected Areas (SAPA)

Please note that the SAPA is listed on a separate tab since it is not an assessment of management effectiveness and as GLPCA, EoH and METT.
The SAPA assesses the social impacts, meaning the benefits and costs, of protected areas and related conservation and development. Activities.

| SAPA standard questions |
|---|
| What is the overall contribution to human wellbeing of the PA and related conservation and development activities? |
| What are the more significant negative impacts of the PA and related conservation and development activities? |
| What are the more significant positive impacts of the PA and related conservation and development activities? |
| To what extent are communities aware of key information on the PA and related conservation and development activities? |
| To what extent is there community participation and influence in decision-making regarding the PA and related conservation and development activities? |
| How are relations between the PA and local communities? |

| Household survey (Consisting of 7 parts) |
|---|
| A. Respondent profile: |
| Key information about the person being interviewed |
| Geographic location of the household including GPS coordinates |
| Household size |
| Household wellbeing – assessed through the following 5 types of indicator: |
| Food security (material wellbeing) |
| Assets, for example quality of housing, ownership of a radio or TV (material wellbeing) |
| Influence on decision-making at village level (relational wellbeing) |
| Feeling of security (subjective wellbeing) |
| The question "how's life" (overall wellbeing) |

# Overview of indicators covered by GLPCA, EoH, METT, SAPA

| |
|---|
| B. Factors affecting household wellbeing (general wellbeing and food security) |
| C. Specific PA-related social impacts (negative, positive, overall) (see below for examples of what these could be) |
| D. Other PA-related social impact issues (Human wildlife and other impacts) |
| E. PA Governance (see indicators and questions below on information, participation, community-PA relations) |
| F. Other PA governance issues |
| G. Other issues |

## Examples of governance indicators and questions

| Indicator | Question | Comment |
|---|---|---|
| **Participation** | | |
| Effectiveness of community representation | Do you know your representative on the park-community committee? | Only applies if there is a community-park committee |
| | How often does this person meet with you? | Give a set of options with boxes to tick and advise that only one box should be ticked |
| Influence on PA related decision-making | Who makes decisions on PA management (in general)? | Give a set of options with boxes to tick and advise that only one box should be ticked |
| | How much influence do you have on ..... (specify a particular type of decision)? | Responses should be evaluated in relation to the governance type of the PA |
| **Information** | | |
| Awareness of ownership of the PA | Who owns the PA? | A good question for community conserved areas and private PAs but not for state governance |
| | | Give a set of options with boxes to tick and advise that only one box should be ticked |
| Awareness of source of funding for community projects associated with the PA | Where does the funding for ..... (name of the funding scheme) come from? | Only applicable if there is a funding scheme |
| | | |

## Overview of indicators covered by GLPCA, EoH, METT, SAPA

| | | |
|---|---|---|
| Awareness of an important PA-related regulation | Are communities allowed to harvest ..... from the PA? | Only applicable if harvesting of this resource is allowed |
| **Community-PA relations** | | |
| Relations with law enforcement staff of PA | How would you describe your relationship with law enforcement staff? | Give a set of options with boxes to tick and advise that only one box should be ticked |
| Relations with staff of the PA's community programme | How would you describe your relationship with staff of the PA's community programme? | Only applies if there is a separate community programme<br>Give a set of options with boxes to tick and advise that only one box should be ticked |

| **Examples of monetary and non-monetary social impacts of a protected area at site level** | | |
|---|---|---|
| | **Positive social impacts (local benefits)** | **Negative social impacts (local costs)** |
| Monetary | Micro-projects funded by hunting revenues | Damage to crops by wildlife (human-wildlife conflict) |
| | Resources harvested from the protected area (provisioning ecosystem service benefit) | Time and staffing required for protection activities (management cost) |
| Non- monetary | Clean water (regulating ecosystem service benefit) | Reduced access to markets (opportunity cost) |
| | Cultural identity and heritage, recreation (cultural ecosystem service benefit) | Reduced/lost access to resources (displacement cost) |
| | Improved security | Loss of access to cultural sites (displacement cost) |
| | Reduced risk of landslides | Time spent attending meetings (transaction costs) |
| | Helping people adapt to climate change | Increased risk of conflict between protected area management and communities |