MANGROVE MANAGEMENT

CHALLENGES & OPPORTUNITIES

Although they comprise less than 1% of the world's tropical forests, mangrove ecosystems provide significant ecosystem services to coastal regions and the people residing there. Key services and products provided by mangroves include: wood products (e.g. timber, charcoal, fuelwood, building material, etc.), non-wood resources (e.g. fruits, wildlife, capture fishery, mariculture, etc.), coastal protection, and eco-tourism.

Despite being one of the most productive ecosystems in the world, with huge benefits in terms of climate change mitigation, adaption and enhanced resilience, mangroves continue to be degraded and lost. A part of the problem is the lack of consideration given to the social aspects of mangrove management, including governance, tenure and land use planning. In many countries, there is also ambiguity and lack of clarity on jurisdiction and mandate over mangrove resources among multiple ministries and departments (e.g. forestry, fisheries and environment), which results in mangroves being relegated to the periphery of natural resources management, with few practices or policies devised to specifically address their unique needs.

The primary aim of a sustainable mangrove management strategy should be to maintain the health of the remaining mangrove ecosystems and their services and to reduce the rate of mangrove loss. Improving sustainable mangrove management and restoration provides huge environmental, social and economic benefits through carbon sequestration and avoided emissions, the addition of commercial fisheries species in mangrove waters, and protection of hundreds of thousands of people from coastal disasters. Key to successful mangrove conservation and management is the participation of local communities to ensure that the local people are involved in conducting mangrove restoration and protection activities to benefit from the sustainable utilization of mangrove resources. Support should be provided to help organize local communities, strengthen their capacity to implement, monitor and report on mangrove management activities, and build and sustain organizational structures for natural resource management.

Therefore, effective and sustainable management of mangroves is of increasing importance. It has to take into account a multitude of topics such as conservation and management of coastal biodiversity, sustainable fisheries and aquaculture, sustainable tourism development, pollution control and waste management as well as disaster risk and climate change mitigation and adaptation. As spaces and processes associated with mangrove areas are often not bound by sectors or administrative borders, hence tackling these challenges and their related objectives requires cross-sectoral, interregional and international stakeholder coordination and cooperation.

GFA CONCEPTS AND SERVICES

Taking the multidisciplinary and cross-sectoral nature of sustainable mangrove management into consideration, GFA offers a holistic approach. The GFA implementation strategies are based on combining international best practice with local knowledge and methods, field experience with scientific knowledge, and extensive knowledge of financial and institutional requirements to ensure services that meet customers' demands. Several challenges need to be addressed in order to establish a self-sustaining mangrove management program. Our range of services includes the handling of all these challenges and providing a variety of solutions, such as:

- Develop organizational capacity
- Ensuring free, prior and informed participation of local population (both, men and women) into project activities
- Provide the technical knowledge to manage mangrove resources legally and sustainably
- Develop legal forest and land use management plans
- Establish market access
- Establish the infrastructure needed for mangrove management
- Develop managerial and marketing skills
- Securing long-term economic returns and improvement of rural livelihoods

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MANGROVE MANAGEMENT – PROJECTS

FEASIBILITY STUDY FOREST PROGRAM VI: PROTECTION OF MANGROVE FORESTS INDONESIA, KFW, 2019

The aim of the feasibility study was to analyse options on how to best support Indonesian efforts to establish sustainable management of mangrove ecosystems and design a KfW co-financed project on protection of mangrove forests in Sumatra, Sulawesi, Kalimantan and Java regions, where mangroves have been over exploited for several decades and degradation is now advanced. GFA services included identification of measures for efficient and effective options for sustainable management of mangrove ecosystems by integration of community livelihood improvement, microfinance management, ecosystem improvement and appropriate policy interventions. Moreover, an environmental and social impact scoping was also conducted to assess the risks and give recommendations for necessary mitigation measures to be compliant with national regulations and the relevant international standards.

Contract value: € 207,545

FOREST PROGRAM – SUPPORT FOR THE MINISTRY OF FORESTRY – FC MODULE INDONESIA, KFW, 2011-2020

The project supports the Ministry of Environment and Forestry (MoEF) in contributing to the Indonesian Climate Policy by reducing emissions from deforestation and forest degradation (REDD). GFA advises on implementation of strategies for forest conservation and sustainable forest management resulting in reduced GHG emissions from the forest sector and improved living conditions for the impoverished rural population. As well as identification and design of Demonstration Activities (DAs), including improved management of active timber concessions, national park and protected areas/buffer zones, community based forest management/social forestry, and mangrove forest protection. This aims to support the coastal restoration measures and improved mangrove management by development of low-impact livelihood activities for coastal communities (e.g. NTFP cultivation and marketing); resolve jurisdiction conflicts between agencies responsible for mangrove & marine management; carbon monitoring etc.

Contract value: € 5,225,505

BIODIVERSITY CONSERVATION AND CLIMATE PROTECTION IN THE GUNUNG LEUSER ECOSYSTEM, INDONESIA, KFW, 2015-2020

The project supports selected communities in conservation oriented development activities and in resolving conflicts with the Gunung Leuser Ecosystem or adjacent forests. GFA advises on community border demarcation and community conservation agreements through participatory natural resource zoning and land use planning. This aims to improve the management and stewardship of forest landscapes through sustainable forest management and afforestation measures. As well livelihoods and welfare shall be improved with more rewarding and conservation oriented alternative income opportunities, such as agroforestry, the use of non-timber forest products (NTFP), ecotourism and payment for ecosystems services (PES).

Contract value: € 3,642,493

FEASIBILITY STUDY STRENGTHENING THE NATIONAL SYSTEM OF PROTECTED AREAS OF HONDURAS, KFW, 2017

A feasibility study for a project aimed at strengthening the National System of Protected Areas of Honduras (SINAPH) by improving the management effectiveness of a portfolio of 17 coastal and marine protected areas in the Honduran Atlantic through a result-based payment mechanism. The intervention area reflects an ecosystem "ridge to reef" approach and comprises both, Caribbean islands, coastal and lagoon areas, as well as watersheds in the hinterland mountains of the Biological Corridor of the Honduran Caribbean. A large part of the target group is comprised of afro-descendant communities (Garifuna) traditionally inhabiting the Caribbean coast and practicing a culture that is highly intertwined with the coastal environment. GFA services included, inter alia, identification of measures for efficient and effective co-management of protected areas, including reforestation and control of mangrove and watershed areas, improved management of fisheries within MPA waters, and sustainable tourism management.

Contract value: € 209,000