



# TROPICAL FOREST CONSERVATION ACTION FOR SUMATERA

## STRATEGIC PLAN 2010-2015

### A. BACKGROUND

Sumatra is one of the global biodiversity hot spot, meaning that this area has become one of the conservation priority areas in Sunda Shelf and one of the 34 places on this planet with high degree of biodiversity and outstanding endemism but which is currently under severe pressure causing a very high loss in biodiversity. Formation and geological history of this island has developed high differences in altitude, so that various ecosystem types were created and therefore suitable habitat for various unique flora and fauna such as Sumatran Tiger, Sumatran Elephant, Sumatran Orangutan, Sumatran Rhinoceros, White-winged Duck, Rafflesia Flowers, and others. The degree of taxa diversity is also comparatively high than other regions in Indonesia. However, more than 260 importantly known species which occur in Sumatra are now threatened with extinction.

Protection and conservation efforts of biodiversity in Indonesia, including in Sumatra, have been ongoing for decades. The Government of Indonesia has spent substantial monetary and human resources to manage protected areas, as well as additional funds obtained from international supports through bilateral and multilateral cooperation, including through national and international Non Government Organizations. To date, the Government of Indonesia has established 134 units of protected areas in Sumatra, with a total area of more than 5.7 million ha, more than 60% (3.882.218,48 ha) of which are contained within 11 National Parks.

It is known however, that unprecedented rate of deforestation and forest degradation in Sumatra has been alarming. Between 1985 and 2007 Sumatra has lost its 12 million ha of forest cover, or equal to 48 % just within 22 years due to forest conversion, illegal logging, and fires. Ministry of Forestry (2008) has recorded that during 2003-2006, deforestation rate in Sumatra was the highest compared to other large islands, namely 268.000 ha/year. This figure suggests that Sumatra has contributed 22.8 % to the total national deforestation in Indonesia (1.17 million ha/year). Despite the minimum requirement of 40% forest cover for Sumatra to enable its function for life support systems and protecting important biodiversity of Sumatra, the current forest cover is now only 29% left. Furthermore, most of the remaining primary forests are located on highland areas contained in protected areas and with relatively low level of biodiversity than those of the low lands.

Based on the recent gap analysis on ecological representativeness within protected areas, it is found that many important ecosystems are located outside the protected area boundaries. Furthermore, most of the important ecosystems at the low lands are not contained within protected areas systems (Ministry of Forestry and Ministry of Ocean and Fisheries, 2010). Therefore saving the remaining forest

patches of Sumatra, either within or outside protected areas, are highly desirable. This could be undertaken by extending the existing or establishing new protected areas as well as by implementing sustainable forest management system, to improve biodiversity and ecological services protection.

The Government of USA and the Government of Indonesia, the Yayasan Keanekaragaman Hayati Indonesia (KEHATI Foundation) and Conservation International Foundation (CI) has signed an agreement on redirecting the payment of Indonesian debt to the US Government into a trust fund to support activities which aim for tropical forest conservation, protection, restoration, and sustainable use in Sumatra. The program is then referred to as Tropical Conservation Action for Sumatera (TFCA-Sumatera Program).

TFCA- Sumatera Program is oriented to the management of priority ecosystem at landscape level. In this regard, this prioritized areas will be the basis for biodiversity conservation at the landscape level supported by sustainable management of entire natural resources elements including forestry, agriculture (agro ecosystem), coastal and shoreline, infrastructure and economic development. This approach is emphasizing collaborative model of natural resources management among all development actors at various sectors, in order to encourage and support forest conservation, and which in turn, will bring impacts on sustainable economic regional development.

Based on the current problem analysis and possible intervention given by TFCA-Sumatera, it is expected to lead to a condition where Sumatra Island will be able to accommodate tropical rainforest and biodiversity protection, as well as supporting established higher-quality human life to deal with the dynamics of social and regional economic development undertaken accountably.

This intervention is also expected to provide support to global climate change mitigation and the Indonesian Government commitment to reduce national carbon emission of at least 26%, including contribution from forestry sector of about 14% by the year 2020.

Strategic intervention of TFCA-Sumatera Program is prioritizing practical activities on the ground level which may be supported by collection of reliable data for the monitoring and evaluation purposes. This intervention is expected to provide supporting condition for good governance especially on conservation, policy making process and institutional strengthening, adoption of best management practices on natural resource management, community empowerment and local economic development, across those rich biodiversity landscapes.

## **B. VISION**

Conservation of tropical forest biodiversity to support sustainable development in Sumatra.

## **C. OBJECTIVES**

TFCA-Sumatera Program will provide funding to mainly local organizations which include Non Government Organizations, Community Organizations, and Universities in Sumatra , which undertake activities to achieve the following objectives by 2015:

1. Improving the effectiveness of the management of at least 1 million ha of forests in Sumatra by 2015 in sustainable manner by the integration of protection, sustainability and utilization of forest biodiversity for the prosperity of local community;

2. Strengthening community participation in the conservation of key wildlife species of Sumatra, including Elephant, Orangutan, Tiger, and Rhinoceros, as well as establishment and/or maintenance of critical habitat connectivity to ensure the long term survival of viable population; and
3. Empowerment of local community in support of the reduction of the rate of deforestation and ecosystem degradation by at least 26%, at the priority landscapes.

#### **D. APPROACHES**

When submitting proposal to request funding by TFCA-Sumatera, the proponents are suggested to adopt integrated and collaborative management approaches. Collaborative and multi-stakeholders management is a key approach of the TFCA-Sumatera program, which in turn is expected to be able to improve synergy between actors and to increase the performance in the conservation of biodiversity at landscape level. This approach will also be able to be employed in the development of strategy and implementation of conservation action on the ground. Collaborative management have to be designed and developed by development actors responsible and concerned in the management of natural resources in the proposed landscapes, which include, among others, policy makers, forest or park authorities (both government and private sectors), development actors at site levels, Non-Government Organizations, Community Organizations, Universities, and other relevant stakeholders.

Public involvement, in particular local and traditional communities, must be taken into consideration in order to maintain the long-term sustainability of conservation activities by respecting traditional and customary rights. Natural resources conservation involving local community and local government must be put as a priority in the conservation endeavor.

TFCA-Sumatera Program has also to be undertaken based on integrated landscape management approach as the primary instrument in rectifying the failure of conservation projects in the past, which were only focusing on specific location or certain problems. Principles that have to be taken into account in the implementation of TFCA-Sumatera Program include: landscape connectivity, species population viability, best management practices, intergeneration equality and fairness, prudential and good governance principles. With those principles, it is expected that stakeholders will be able to solve the underlying problems in the management of biodiversity at landscape levels as prioritized by TFCA-Sumatera Program. It is also expected that using these principles alternative solutions to solve the problems by understanding the underlying problems can be recommended, either through policy or institutional development, or agreed collaborative management plan.

Based on the proposed collaborative plan, individual roles, including resources required on the implementation level can be formulated. Various activities or programs as part of the collaborative plan may be submitted to TFCA-Sumatera Program for funding, as long as it is fit into the strategy and policy of TFCA-Sumatera program.

#### **E. PRIORITIES**

##### **1. Landscape Priority**

TFCA-Sumatera Program focuses on the biodiversity rich landscapes, which consist of important ecosystems within and around protected areas, corridors and habitat connectivity, and agro-ecosystem areas managed by local community. During the first five years, TFCA-Sumatera Program will prioritize five landscapes, namely Leuser Ecosystems, Batang Toru Forest Range, Batang Gadis

National Park, Kerinci Seblat National Park, and Kampar-Kerumutan-Senepis peninsula landscapes. These landscapes were prioritized on the basis of their high pressures which threaten the existence of these landscapes.

For other landscapes included in the 13 TFCA-Sumatera geographic locations<sup>1</sup>), urgent activities will be prioritized according to the level of urgency of the proposed activities in terms of forest conservation at the landscape level. Further, Oversight Committee will add other prioritized locations beside those 5 appointed locations, based on funding availability and urgent requirements in Sumatra.

## **2. Prerequisite to achieve Sustainable Forest Conservation Management**

Implementation of the conservation activities needs to integrate several actions which lead to the establishment of protected areas, protection, and restoration of forest areas, as well as scientific based natural resource management. Those activities have to be undertaken integrally to achieve significant conservation impact at landscape level. It therefore needs to be supported by individual and institutional capacity buildings, community livelihood improvement, and policy changes to support conservation activities. Furthermore, enabling condition for sustainable natural resource management, in particular sustainable land use, and local or regional biodiversity management plan has to be established at both provincial and district level.

For those purposes TFCA-Sumatera Program has prioritized activities that in general can be categorized as: 1) landscape conservation, 2) habitat conservation, 3) species and genetic conservation, 4) development of models for natural resources best management practices, such as at the buffer zones, corridors, and high conservation value areas, 5) development of conservation policies, and, 6) promoting incentives for communities and local government roles in conservation.

Other activities may be added to support those activities in integrated manner. TFCA-Sumatera Program will not be able to support very specific activities which address solely single activities such as research, design, model development, capacity building or campaign and advocacy, without having integrated with activities at site or landscape level whose roles are important in making significant changes in the field.

The above mentioned activities are expected to contribute the achievement of significant impacts as follows:

- 1) Maintenance of forest ecosystems at landscape level through various intervention, including promotion of the existence of enabling condition, such as sustainable land use and spatial planning, and policy improvement addressing conservation of forests.
- 2) Maintenance of wildlife habitat through effective management of prioritized protected areas, establishment and management of wildlife corridors to create habitat inter-connectivity as well as promoting best practice management of natural resources at the buffer zones and high conservation value forests.

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<sup>1</sup>) The landscapes of: 1) Kerumutan- Kampar Peninsula-Senepis; 2) Batang Toru Forest Range and Batang Gadis National Park; 3) Kerinci Seblat Ecosystem; 4) Leuser Ecosystem and Gunung Leuser National Park; 5) Bukit Barisan Selatan Forest Range; 6) Sembilang-Berbak; 7) Siberut National Park and the rest of Mentawai Archipelago; 8) Tesso Nilo Ecosystem; 9) Bukit Tiga Puluh National Park; 10) Way Kambas National Park; 11) Western Toba Watershed; 12) Angkola Lowland and Wilderness Tropical Forest; 13. Ulu Masen/Seulawah Heritage Forest.

- 3) Improvement of the population of key endangered species and population of the species in commercial trade through population and habitat recovery and rescue of endangered species and through control of utilization of commercially traded species ;
- 4) Promotion of sustainable use of biodiversity at ecosystem, species, or genetic levels, which lead to the forests sustainability;
- 5) Improvement of local community livelihood as part of incentive mechanisms, which in turn will contribute to the forest conservation; Meningkatnya peran pemerintah daerah baik di tingkat provinsi maupun kabupaten/kota dalam konservasi hutan sehingga mendorong terciptanya kebijakan-kebijakan daerah yang memberikan insentif bagi konservasi hutan;
- 6) Enhancement of local government roles, both at provincial and district/city levels on forest conservation in order to support development of local policies which provide incentives to forest conservation

## A. RESULTS AND INDICATORS

Programs which are proposed to TFCA-Sumatera are expected to achieve significant and achievable results. The programs should significantly improve measurable conservation methods and forest ecosystem condition in comparison with the existing available basic data.

The following table shows combination of several indicators which may be used to measure the success of the programs as a result from TFCA-Sumatera assistances. This table contains only some examples of indicators which may be used to indicate how TFCA-Sumatera targets may be achieved. While these are not meant to be the standard, proposals/concept papers may set some of the following and or other indicators to indicate significant achievement on conservation impacts:

Table 1. Possible success indicators of TFCA-Sumatera Activities

No	Indicators to be monitored	Measurement units
1	New protected areas established , areas of restored habitat , endangered wildlife corridors and protected areas' interconnectivity established, buffer zones are established/maintained/managed.	Hectare (ha)
2	Protected areas are effectively protected through law enforcement, including forest patrol and establishment of local community based protection	Number of forest crime cases reported or processed by law enforcement authorities
3	Disturbances on protected areas: encroachment, illegal logging, forest fires decreased	Cases/hectare/number of family/hot spot
4	Effectiveness of the park's management measured by standard method to reduce threats and pressures as well as improve conservation area management increased	e.g. % increase of park management, or fit it with standard method
5	Endangered species population increased	Number of population/density
6	Species Population improved: reintroduction, rehabilitation, habitat restoration, and population	Number of population, number of individual, hectare of restored habitat
7	Number of companies that implement natural resource best management practices increased and sites with high conservation value forest that are well protected and managed identified	Number of companies, Hectare, location, including natural resource that can be conserved because of the best management practice implementation

8	Policy and regulations by central and regional government supporting implementation of conservation issued and entered into force	Number of policy issued and implemented
9	Welfare (incentives) of local community as an impact from TFCA-Sumatera program increased	Number of individual/household which increasing income, productivity, access to water, electricity, alternative energy, natural resources, etc. (can be measured by survey)
10	Local community and local government involvement in forest conservation increased	Number of household who implement activities which are in accordance with conservation perspectives, etc.