



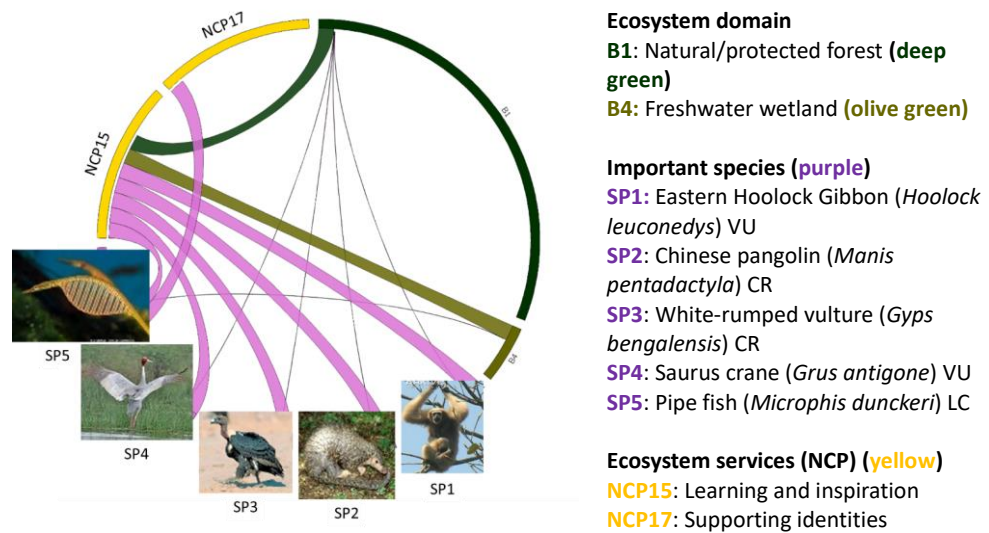
Project Final Report

Project Name	Conservation and sustainable use of freshwater ecosystems in Myanmar
Location	Kachin State and Tanintharyi Region
	<div style="display: flex; justify-content: space-around;"> <div data-bbox="457 457 954 1140"> <p>Fresh water ecosystem conservation project area Lenya, Nga wun and Tanintharyi river systems (Tanintharyi Region)</p> </div> <div data-bbox="961 457 1481 1140"> <p>Fresh water ecosystem conservation project area Put-a-O and Indawgyi Lake areas</p> </div> </div>
Implementing Organization	Fauna & Flora International (FFI)
Partners	Friends of Wildlife (FoW)
Size of Project Site	891 ha
Number of Beneficiaries	1,200 persons
Key Species	White-rumped Vulture (<i>Gyps bengalensis</i>) Slender-billed Vulture (<i>Gyps tenuirostris</i>) Pallas's Fish-eagle (<i>Haliaeetus leucoryphus</i>)
GEF Funding Amount	US\$86,000
Co-financing	US\$318,768
Period of Performance	April 2016 – December 2018

Summary (Including relevance to values, Indigenous Language and knowledge (ILK), and governance)

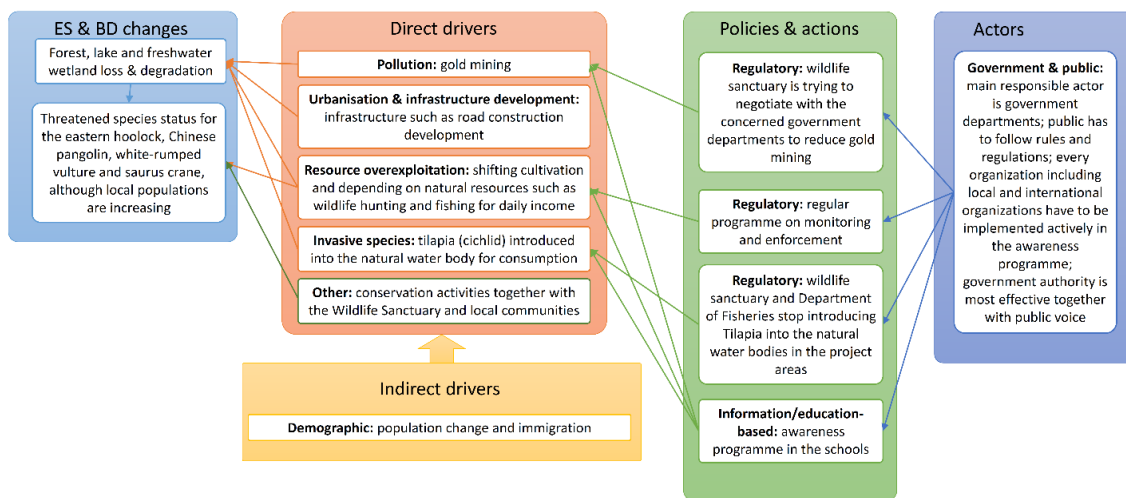
Outside Protected Areas, the Myanmar fisheries law allows the designation of fisheries management and conservation areas, but very few were designated and effectively managed. Fish are threatened by unsustainable fishing practices, open access, illegal gold mining, introduced species and hydropower development plans. The project built local capacity on fish taxonomy while undertaking comprehensive surveys in the Upper Irrawaddy and Tanintharyi/Lenya watersheds to identify key biodiversity areas for fish conservation. Several sites with outstanding fish diversity and numerous species new to science were identified. The objectives of this project were to: 1) complete the assessment of freshwater KBAs in the Upper Irrawaddy and Tanintharyi/Lenya watersheds, 2) pilot locally managed fisheries areas including fish conservation zones (FCZ) for the protection of freshwater KBAs, 3) integrate community-managed fisheries areas/fish conservation zones into protected area zonation and management plans and facilitate legal recognition. The project integrated traditional ecological knowledge and modern science for the identification of key fish biodiversity areas and replaced open access with recognized locally managed fisheries areas. In Myanmar this constitutes a major shift in the conservation paradigm from ‘fence and fine’ policies to a community-based conservation approach.

The GEF-Satoyama Project aimed to address three barriers to SEPLS globally, namely, insufficient recognition of SEPLS values, disappearing traditional knowledge, and weak governance. A strong link between values, knowledge and governance can potentially enhance biodiversity and production in SEPLS. The interplay between values, ILKP and governance contributing to the sustainability and resilience of SEPLS was considered as well as the linkages between the drivers and corresponding policies are shown in the following figures and tables below.



Connection between ecosystem domains, species and ecosystem services (NCP)

Ecosystem governance structure in the landscape			
Ecosystem type	Protected/natural forest	Freshwater wetland	Stakeholder type
Ownership	Government	Government	Government
Management right holder	Forest Department	Forest Department	Government
Other stakeholders	Department of Fisheries, General Administrative Department, Police Department	Department of Fisheries, General Administrative Department, Police Department	Government
	Fauna & Flora International, Friends of Wildlife	Fauna & Flora International, Friends of Wildlife	Non-governmental
	In Chit Thu, Indawgyi Natural Conservation and Development Association	In Chit Thu, Indawgyi Natural Conservation and Development Association	Formal community org.
	All villages around Indawgyi Lake and 7 project villages in Putao District	All villages around Indawgyi Lake and 7 project villages in Putao District	Schools/universities
	Myikyina University, Moenhyin University	Myikyina University, Moenhyin University	Research institution
	CEPF, Helmsley, Norad, ACB-kfw, GEF-Satoyama, BIZ	CEPF, Helmsley, Norad, ACB-kfw, GEF-Satoyama, BIZ	International org.



Configuration of the linkages between ecosystem and biodiversity changes, their direct and indirect drivers and corresponding policies and actions

This project has contributed to the following Sustainable Development Goals (SDGs):



This project has contributed to the following Aichi Biodiversity Targets (ABTs):



Project Achievements

Name	Description
Establishment of FCZs	A total of 19 FCZs were established and are either Government approved, or community agreed. Signboards were erected to clearly show the demarcations and rules of the FCZs.
Discovery of new species to science	A total of 20 new species to science was found. These were published in scientific journals.

Lessons Learned

Description	Recommendation
Poverty of local communities	Focus on alternative livelihoods to ease the stress on limited fish resources.
Remoteness of Area	Empowerment of community members is crucial since accessing communities especially during the rainy season is difficult.
Illegal activities	Community patrols that is supported by law enforcement and government agencies is essential.

Outputs

Type	Details
Video	Our Fish Our Future https://www.youtube.com/watch?v=RbLxNGm1Ox0
Publication	A new genus and three new species of nemacheilid loaches from northern Irrawaddy drainage, Myanmar (Teleostei: Cypriniformes) https://lkcnhm.nus.edu.sg/app/uploads/2017/06/65rbz080-099.pdf
Publication	Schistura indawgyiana, a new loach from Lake Indawgyi basin, Myanmar (Teleostei: Nemacheilidae) http://pfeil-verlag.de/wp-content/uploads/2017/07/ief28_1_01.pdf
Publication	Salty Stories, Fresh Spaces: Lessons for Aquatic Protected Areas from marine and freshwater experiences https://www.academia.edu/35485291/Salty_stories_fresh_spaces_Lessons_for_aquatic_protected_areas_from_marine_and_freshwater_experiences
Publication	Lepidocephalichthys eleios, a new loach from Lake Indawgyi basin, Kachin State, Myanmar (Teleostei: Cobitidae) https://www.researchgate.net/publication/321315377_Lepidocephalichthys_eleios_a_new_loach_from_Lake_Indawgyi_basin_Kachin

	State Myanmar Teleostei Cobitidae
Publication	Amblyceps improcerum, a new sisoroid catfish from Kachin State, Myanmar (teleostei: Siluriformes: Amblycipitidae) https://link.springer.com/article/10.1007%2Fs10641-017-0712-0
Publication	A New Glyptosternine Catfish from Northern Myanmar (Teleostei:Siluriformes: Sisoridae) https://bioone.org/journals/copeia/volume-106/issue-1/CI-17-613/A-New-Glyptosternine-Catfish-from-Northern-Myanmar-Teleostei--Siluriformes/10.1643/CI-17-613.short

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