



**SECTOR BRIEFING NOTE**  
(MCRB's Briefing Paper on Biodiversity,  
Human Rights and Business)

# **Biodiversity and the Tourism Sector in Myanmar**

November 2018

This Briefing Note supplements MCRB's Briefing Paper: "[Biodiversity, Human Rights, and Business in Myanmar](#)" (2018). It is addressed to companies operating in the tourism sector that can have an impact on biodiversity. This includes hotels and other accommodation, tour and transportation operators, restaurants, retailers and others providing services to the sector.

### The Business Case for the Tourism Sector to Address Biodiversity

The tourism sector's potential for small-scale and large-scale impacts on biodiversity is increasingly well-documented globally. Given the growing presence of tourists in many areas of Myanmar, there is a high potential that tourism operations (small and large) overlap with areas of biodiversity value that support important ecosystem services. In addition to the general business case for companies to minimise impacts on biodiversity contained in the main [Briefing Paper](#):

- More diverse ecosystems are preferred destinations for tourism, so preserving natural tourism destinations is in the long-term interest of the sector.
- Many operators in the sector rely on ecosystem services (e.g. water supplies, flood control, etc.)
- Assessing and managing biodiversity impacts is a legal and contractual requirement under Myanmar laws (see below for details).
- There is increasingly intense scrutiny of the impacts of tourism by civil society and the media, internationally and locally, particularly in countries with significant biodiversity and weak government capacity to protect it such as Myanmar.

### Threats to Biodiversity and Ecosystem Services from Mining Operations in Myanmar

Almost all of Myanmar lies within the Indo-Burma Biodiversity Hotspot, one of 35 global hotspots that support high levels of biodiversity and endemism (see below). More detailed information on the 42 Protected Areas and 132 Key Biodiversity Areas (KBA) is available in the [Supplement on Biodiversity in Myanmar, including Protected Areas and Key Biodiversity Areas](#).

Myanmar's rich and varied natural environment is one of the key assets for the development of tourism. The country has large tracts of intact forest, and diverse coastal and marine habitats and lakes. There has been a rapid rise in tourism in Myanmar since 2011. Increasing tourism in Myanmar also has potential to increase public appreciation of the environment and awareness of the country's environmental challenges, but it also places additional strain on natural resources that are already not well protected in the country. Tourism therefore provides both positive and negative contributions to biodiversity conservation.

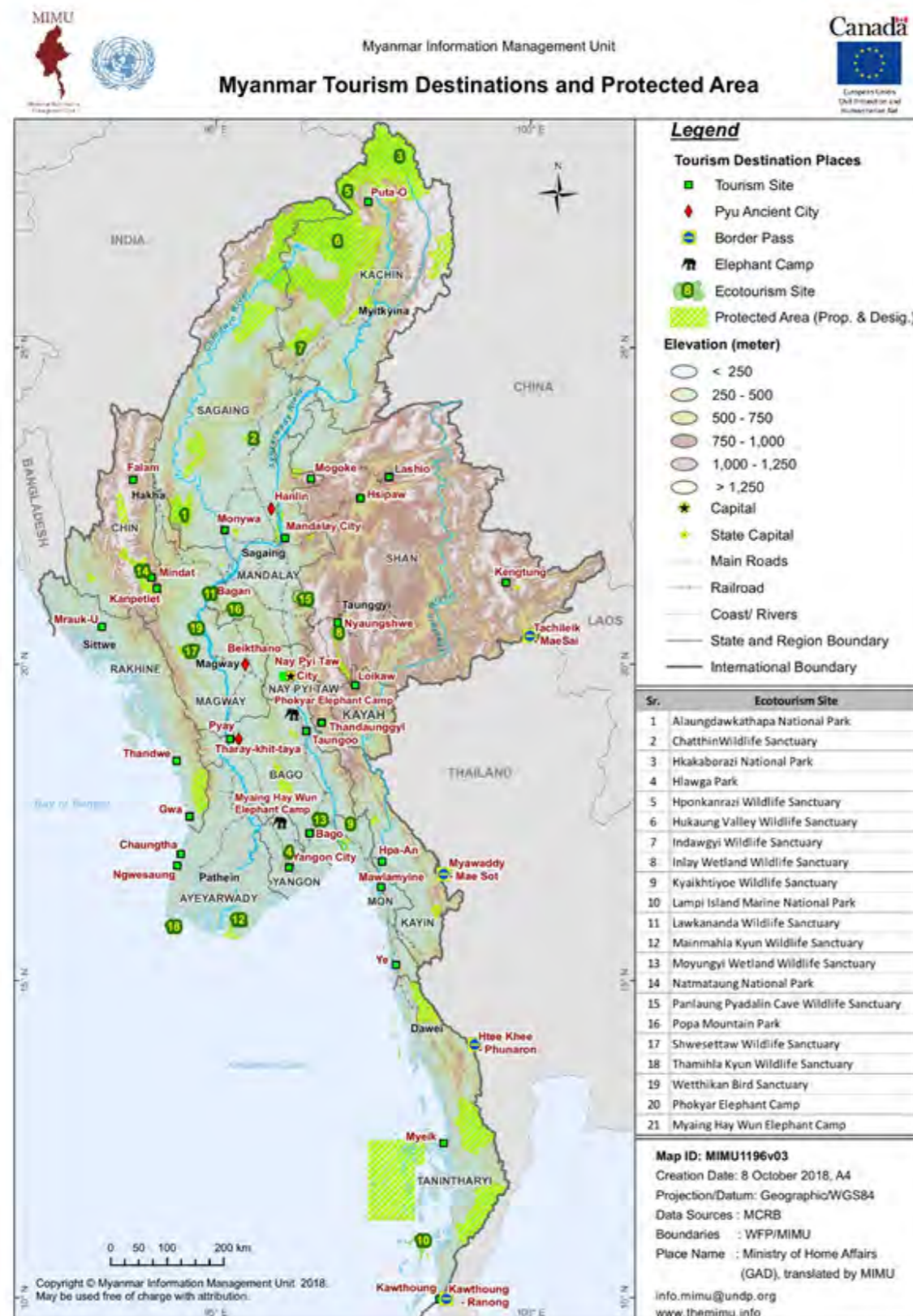
### BOX 1: FURTHER INFORMATION ON POTENTIAL BIODIVERSITY IMPACTS OF THE TOURISM SECTOR

- For some selected impacts of tourism operations on biodiversity and human rights see [Table 1](#)
- For a more detailed review of the human rights impacts of the sector, see MCRB's "[Myanmar Tourism Sector Wide Impact Assessment](#)" (2015)
- For a more detailed list of *potential biodiversity impacts* of the sector see the resources highlighted in the *Recommendations* below.
- For a more detailed discussion of the inter-relationship between business, *biodiversity and human rights impacts*, see [Biodiversity Briefing Paper](#) and in particular **Box 4**.





Figure 1: Overlap Between Protected Areas in Myanmar and Designated Ecotourism Sites



Legal and Regulatory Framework Relevant to Biodiversity and Ecosystem Services

This section highlights relevant laws, regulations and contractual arrangements for the tourism sector, and should be read together with **Chapter 3** of the [Briefing Paper \(Policy, Legal Framework and Institutions for Biodiversity Conservation\)](#) that addresses the overall policy and legal framework in Myanmar relating to environmental protection and biodiversity conservation.

**Tourism Master Plan 2013-2020** identifies tourism as a national priority sector. Environmental sustainability is one of the seven cross-cutting themes. Key Objective 3.1 calls for the development of integrated destination management plans for all flagship destinations. Key Objective 3.3 states that all tourism infrastructure projects will seek to avoid and minimize negative impacts on the physical environment and respect the cultural landscape. The planning process should include mapping and zoning of sites and destinations to ensure the protection of key habitats and natural and cultural assets.

**Myanmar’s Responsible Tourism Policy (2012)** identifies conservation and enhancement of the environment as one of nine key aims. Action points include support for the establishment and improvement of management of protected areas.

**Myanmar’s Policy on Community Involvement in Tourism (2013)** includes targets on establishing educational programs on environmental and sustainability awareness, waste management and resource utilization (e.g. energy, firewood, water) to enable safe and efficient use of resources and ease visitor-host competition over them in remote areas.

**Myanmar’s Ecotourism Policy and Management Strategy for Protected Areas 2015-2025** focuses on developing and managing tourism activity in and around Myanmar’s national protected areas. It highlights the Government’s intention to develop 21 ecotourism sites around the country but notes it will start with developing management plans for 10 priority Protected Areas (some of which are already degraded by visitors). It includes 10 guiding principles for Myanmar ecotourism that make aligning with protected area objectives and management plans to ensure resource conservation the number one priority. The Policy also includes plans to strengthen the legal and regulatory environment for ecotourism and protected areas.

**Guidelines for Developing Ec lodges in Myanmar (2017)** requires that environmental impact and impact assessment are incorporated into the planning and design of the lodge (see below on EIA). The EcoLodge Permits granted by the Nature and Wildlife Conservation Division (NWCD), Ministry of Natural Resources and Environmental Conservation (MONREC) will be conditional on satisfactory completion and approval of an EIA, which should incorporate a Water Conservation Plan, Waste Management Plan, and Energy Conservation Measures and a Monitoring Plan. In addition, the Guidelines remind the tourism sector that ecolodges must be active in the conservation and protection of natural resources.

**The Conservation of Biodiversity and Protected Areas Law No. 12/2018** implements the Government’s biodiversity strategy. It provides for the designation and protection of seven different types of protected areas and designates the types of activities that can be conducted in each area. The law empowers MONREC to set up a system of payment for ecosystem services from protected areas (Art. 13), which could become relevant for tourism operations near Protected Areas. It empowers MONREC to designate buffer zones around Protected Areas by regulating the

**TABLE 1: BIODIVERSITY IMPACTS AND RELATED HUMAN RIGHTS IMPACTS - TOURISM**

	<b>BIODIVERSITY IMPACT</b>	<b>ACTIVITIES CAUSING OR CONTRIBUTING TO THE IMPACT</b>	<b>RELATED HUMAN RIGHTS IMPACTS</b>
<b>ACCOMMODATION (HOTELS, GUESTHOUSES, INNS)</b>	Habitat damage, fragmentation and loss	<ul style="list-style-type: none"> <li>• <b>Unplanned clearance of land, deforestation and conversion</b> of habitats providing important ecosystem services for tourism developments or supporting infrastructure</li> <li>• <b>Construction of access roads</b> and other infrastructure that open up previously inaccessible areas to development</li> <li>• Increased <b>pollution of soils and inland waterways and coastal areas</b> (including mangroves and coral reefs), as a result of discharges of inadequately treated sewage that results in elevated nutrient levels with profound adverse impact on corals, fisheries or other aspects of aquatic biodiversity</li> <li>• <b>Poor waste management and waste disposal</b> or burning of domestic/commercial waste from tourism facilities including hotels, recreational and other facilities that kill, significantly reduce and contaminate both plant and animal species</li> <li>• <b>Blocking or redirecting natural watercourses</b> and drainage paths; creating <b>over-shaded areas</b>, thus altering vegetation composition and distribution</li> <li>• Poor construction practices leading to <b>soil erosion and increased sedimentation discharge</b> to watercourses</li> <li>• <b>Failure to require the decommissioning</b> of buildings and restoration of sites.</li> <li>• <b>Restricting access</b> to ecosystem services through the creation of physical barriers (such as hotel or marina developments along waterfronts or beaches)</li> </ul>	<p><b>Right to Food and Adequate Standard of Living</b></p> <ul style="list-style-type: none"> <li>• Reduced or eliminated provisioning services because of elimination of food stocks, medicines, fuel.</li> <li>• Restricted access to food sources due to destruction or degradation of plants and animals, or their habitats or due to restrictions to allow tourists access for game-viewing for example</li> </ul> <p><b>Right to Water</b></p> <ul style="list-style-type: none"> <li>• Reduced physical access to water, because of blockage of access from facilities and associated zoning</li> <li>• Reduced access to potable water due to pollution</li> <li>• Reduced quantities of water due to use for tourists</li> <li>• Reduced regulating services because of altered hydrologic /hydrogeological regimes, including reduced groundwater</li> </ul> <p><b>Right to Health</b></p> <ul style="list-style-type: none"> <li>• Direct impacts due to consumption of contaminated plants and animals</li> <li>• Indirect impacts due to restricted or eliminated access to plant or animal biodiversity with health-restoring properties</li> </ul> <p><b>Cultural Rights</b></p> <ul style="list-style-type: none"> <li>• Reduced or eliminated access to habitats that are culturally significant</li> </ul>
	Species loss	<ul style="list-style-type: none"> <li>• <b>Wildlife disturbance and relocation</b> through increased noise, light and human presence</li> <li>• <b>Direct loss and fragmentation of habitat</b> for tourism facilities and infrastructure which can be of particular concern to <b>highly threatened</b> marine species such as turtles which use beaches for nesting</li> <li>• <b>Clearance of mangroves</b> in coastal areas, which play an important role as nurseries, for tourism developments</li> <li>• Tourists as <b>major vectors for the introduction of exotic species and disease</b>. In some cases, introductions may be deliberate, e.g. for hunting, fishing or aesthetic reasons</li> <li>• <b>Direct threats to individual species</b>, for example from recreational activity or use for food items, souvenirs or other trading</li> </ul>	
	Over-exploitation of resources	<ul style="list-style-type: none"> <li>• <b>Over extraction of water</b> for guest use, swimming pools and other water features, including golf courses, particularly in water-scarce areas including Bagan, and beach areas, leading to limited water resources for wildlife</li> <li>• Illegal <b>removal of sand</b> from beaches for resort construction</li> </ul>	



**TABLE 1 [CONTINUED]: BIODIVERSITY IMPACTS AND RELATED HUMAN RIGHTS IMPACTS - TOURISM**

	<b>BIODIVERSITY IMPACT</b>	<b>ACTIVITIES CAUSING OR CONTRIBUTING TO THE IMPACT</b>	<b>RELATED HUMAN RIGHTS IMPACTS</b>
<b>AIRLINES, CRUISE LINES, TOUR OPERATORS</b>	Habitat damage, fragmentation and loss Species disturbance and loss	<ul style="list-style-type: none"> <li>• <b>Wildlife disturbance and relocation</b> through increased noise, light and human presence from traffic congestion because of increased tourism-related traffic such as tour buses and taxis.</li> <li>• Increased <b>air pollution</b> due to a greater number of tour buses, taxis and flights and increased <b>water pollution</b> due to wastewater discharge from vessels that kills, significantly reduces or contaminates both plant and animal species</li> </ul>	<p><b>Right to Housing</b></p> <ul style="list-style-type: none"> <li>• Loss of housing and land due to land acquisition, especially where this involves involuntary resettlement</li> </ul> <p><b>Right to Security and life</b></p>
<b>RESTAURANTS &amp; RETAIL &amp; SUPPLIERS</b>	Habitat damage and change	<ul style="list-style-type: none"> <li>• <b>Overuse of pesticides</b> leading to nutrient enrichment and changes in habitat, partly due to sewage disposal from hotels but also due to the development of market gardens (and floating farms) to supply the tourist industry (e.g. Greater Inle Lake region)</li> </ul>	<ul style="list-style-type: none"> <li>• Disputes between communities and tourism companies related to impacts on ecosystem services (especially water).</li> <li>• Opening up of previously inaccessible areas to illegal logging and wildlife trafficking increases insecurity</li> <li>• Vulnerability to natural disasters particularly in coastal areas.</li> </ul>
	Species loss	<ul style="list-style-type: none"> <li>• <b>Hunting and overfishing</b>, destructive fishing practices such as use of dynamite and cyanide to supply tourism industry with fish and lobsters.</li> </ul>	
<b>CUMULATIVE &amp; CLIMATE</b>	Habitat damage & loss, species loss	<ul style="list-style-type: none"> <li>• Failure to prepare <b>Strategic Environmental Assessments (SEAs)</b> or use other effective spatial planning to plan tourism impacts on sensitive environments, such as Inle Lake, coastal areas such as Ngwesaung and the Myeik Archipelago</li> <li>• While the loss of habitats or water pollution associated with individual tourism developments may not be significant, the <b>cumulative effects</b> of multiple developments can be severe. Unplanned and uncoordinated development of tourism accommodations can have direct or indirect impacts on habitats, including habitat fragmentation that contributes to species range contraction and extinctions</li> <li>• Given the <b>lack of management plans and resources for Protected Areas</b> in Myanmar, the presence of tourists is reported more as a threat than as a resource due to the fact that tourist revenues do not directly contribute to supporting management of protected areas and because of <b>unregulated intrusion of tourists</b></li> <li>• Cumulative contribution to <b>climate change</b> through generation of greenhouse gas emissions through road and air transport, as well as energy consumption by air conditioning, heating and lighting, and use of generators powered by diesel in tourism establishments</li> </ul>	

activities that may take place in the adjacent areas. It specifically allows for the local ecotourism activities in defined buffer zones and ecotourism developments in Protected Areas subject to specific regulations to be issued (Art. 13). It also notes that there will be further protection and conservation of living organisms and their natural habitats along the coast (Art. 17) which could result in restrictions on the construction or operation of tourism sites.

**Environmental Conservation Law No 9/2012, the Environmental Conservation Rules (2014), Environmental Impact Assessment (EIA) Procedure (2015)** set out the rules for EIA. Annex 1 of the EIA Procedure specifies whether an Initial Environmental Examination (IEE) or an EIA is required. It requires an IEE for smaller tourism projects (over 80 rooms or greater than 200,000m<sup>2</sup>) and an EIA for larger hotels. Golf courses of 9 holes require an IEE and those of 18 holes require an EIA. In addition, under the EIA Procedure, an EIA requirement can also be applied to a smaller project because it is located in an environmentally sensitive area. All accommodation in Protected Areas is expected to require an EIA (Art. 25) and MONREC may determine that projects outside Protected Areas should also undertake an EIA (Art. 26).

**National Environmental Quality (Emissions) Guidelines (2015)** that apply as part of the EIA process, set specific effluent levels for tourism and hospitality facilities, including hotels, resorts and other accommodation and catering facilities for wastewater discharges. The Guidelines are intended to protect ecosystem health.

**Biodiversity Action Plans can be required** as part of Environmental Management Plans (EMPs) that are an integral part of EIAs, are contractually binding commitments. The Environmental Compliance Certificate (ECC) issued at the end of the EIA process can also add specific requirements on biodiversity protection where needed.

The **2018 Myanmar Tourism Law** includes as an objective the promotion of responsible tourism activities that will contribute to ecotourism and conservation of the natural environment. The Law also outlines duties of the Central Committee on National Tourism Sector Development, tasked with achieving a responsible tourism sector that respects the cultural practices of Myanmar and conserves the natural environment. The Tourism law further outlines the duties of the Tourism Working Committee, which is tasked with coordination between relevant government departments and organisations on activities that support environmental conservation in order to preserve Myanmar's natural beauty and biodiversity

The **Order for Sustainable Coastal Areas, MOHT Notification 2/2015** (originally 2004) aims at regulating construction, operation and management of coastal beach areas

### Recommendations for Companies

The [Briefing Paper](#) makes general recommendations on biodiversity conservation for all companies. Specific suggestions for companies in the tourism sector are:

#### Essential

- **Do not locate tourism developments** in or adjacent to legally Protected Areas or in areas that have been designated to be set aside for protected areas (including World Heritage Sites) or in KBAs, unless provided specific permission to do so in accordance with the Conservation of Biodiversity and Protected Areas Law.

- Adhere to all applicable Myanmar environmental laws on the protection of the environment.
- If the company is required to carry out an ESIA, it should incorporate biodiversity considerations at each stage (screening, scoping, assessment, management, monitoring and reporting), including in **Biodiversity Action Plans** developed as part of the Environmental Management Plan (EMP).
- On the company website, publish **all draft EIAs** (and EMPs) once submitted to MONREC for consideration, in line with the legal requirement in the EIA Procedure, and publish all subsequent **monitoring reports** submitted to MONREC.

#### Desirable

- Develop an informed and proactive approach to managing and protecting biodiversity by applying relevant **guidance for the tourism sector** such as:

- Convention on Biological Diversity page on [Biodiversity and Tourism](#)
- UNDP and UNEP. (2015). [Tourism Supporting Biodiversity: A Manual on applying the CBD Guidelines on Biodiversity and Tourism Development](#)
- Spenceley, A., et al (2017) [Guidelines for tourism partnerships and concessions for protected areas: Generating sustainable revenues for conservation and development](#)
- [Global Sustainable Tourism Council \(GSTC\) Criteria](#) for hotels, tourism operators and destinations
- [IUCN Siting and Design of Hotels and Resorts Principles and Case Studies for Biodiversity Conservation](#)
- Hüttche, C.M., A.T. White and M.M.M. Flores. 2002. [Sustainable Coastal Tourism Handbook for the Philippines](#). Coastal Resource Management Project of the Department of Environment and Natural Resources and the Department of Tourism, Cebu City, Philippines
- UNWTO (2010). [Tourism and Biodiversity - Achieving Common Goals Towards Sustainability](#). UN World Tourism Organisation
- IFC's [Performance Standards](#) (PS), which includes PS 6 on Biodiversity Conservation and the Sustainable Management of Living Natural Resources (2012)
- IFC, [Environmental, Health, and Safety Guidelines for Tourism and Hospitality Development](#)

- Educate staff and tourists about the importance of protecting biodiversity
- Given the low capacity of the Myanmar Government to collect biodiversity data, collaborate with MONREC and environmental NGOs to share relevant biodiversity data including through platforms such as:
  - [Myanmar Biodiversity Clearing House Mechanism](#)
  - [Myanmar Alliance for Conservation](#)
  - [One Map Myanmar \(OMM\)](#)

## INLE LAKE (RAMSAR SITE, UNESCO BIOSPHERE RESERVE, ASEAN HERITAGE PARK, NATIONAL WILDLIFE SANCTUARY)

At Inle Lake, lack of adequate conservation management has led to a reduction of the lake's surface area from a combination of expansion of 'floating garden' agriculture on the lake's surface, and increased sedimentation that has led to growth of river deltas in the lake. Combined agriculture and fishing practices disturb the natural lake flora, and disrupt the breeding grounds for endemic fish species, placing some on the IUCN endangered species list. Sedimentation has two main causes: upstream deforestation and poor land management that leads to soil degradation linked to annual vegetation burning; and an increased boat water traffic that erodes feeder stream banks and stirs up more sedimentation.

According to a recent study, the site, designated as a Protected Area, is in a state of 'environmental emergency'. Lack of access to fresh water is a significant issue in many villages, and poor waste water management has caused issues in the stilt-villages on the lake. The tourism industry contributes only some of the cumulative impacts on this fragile ecosystem: watershed deforestation, poor agricultural practices, including poorly controlled expansion of Inle's famous 'floating gardens', and excessive use of pesticides are also key contributors. Future expansion of hotel accommodation including the new hotel zone on a hillside has a negative impact on the landscape. The Myanmar Government has pledged to spend USD 35 million tackling the ecosystem loss of Inle Lake caused by the tourism boom.

A regional tourism destination management plan for the greater Inle Lake region was launched in April 2014 to ensure proper coordination and management of the lake and its surrounding area.<sup>1</sup> Subsequently a Destination Management Plan for the Inle Lake Region was elaborated by Myanmar Institute for Integrated Development and launched in September 2014. The aim of the Destination Management Plan is to provide a framework for the development of a Destination Management Organisation (DMO) that will coordinate responsible and sustainable development in the Inle Lake region. This DMO was established in late 2016 but remains inactive. In 2016 the Inle Lake Authority was established. However, it lacks the political strength to unite ministries which differ and line departments to manage the lake effectively, and still lacks an executive department to implement effective conservation measures.

### Endnotes

- 1 See [Destination Management Plan for the Inlay Lake Region 2014-2019](#) (2014), Republic of the Union of Myanmar, Ministry of Hotels and Tourism

### Photo Credits

Cover: A.W. Tordoff, Indawgyi Lake, an emerging tourist destination in Kachin State, Myanmar.  
p3: Makusheva, I., 2016; Boats on Inle Lake, Shan State Myanmar.  
Back Cover: Makusheva, I., 2016; Balloons in Bagan, Myanmar.



Myanmar Centre for  
Responsible Business

**ADDRESS:**

6(a) Shin Saw Pu Road  
Kayin Chan Ward, Ahlone Township, Yangon  
Myanmar

**P.** +95 1 512613

**E.** [info@myanmar-responsiblebusiness.org](mailto:info@myanmar-responsiblebusiness.org)  
[www.mcrb.org.mm](http://www.mcrb.org.mm)  
[www.myanmar-responsiblebusiness.org](http://www.myanmar-responsiblebusiness.org)