

Workshop on Addressing Human-Elephant Conflict in Myanmar

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Introduction

Myanmar has been experiencing increasing levels of human-elephant conflict (HEC) in recent years. HEC leads to significant crop and property damage, as well as injury and loss of life for people and elephants, and is a significant threat to the long-term conservation of elephants. To better address HEC in Myanmar, a coalition of groups, including Myanmar's Ministry of Natural Resources and Environmental Conservation (MONREC), the Smithsonian Conservation Biology Institute (SCBI), Wildlife Conservation Society (WCS) and WWF co-hosted a two-day workshop in Nay Pyi Taw in June, 2016. The workshop was an opportunity to review the draft chapter on HEC, which will serve as the national HEC strategy under the national Myanmar Elephant Conservation Action Plan (MECAP), and to develop a draft 3-year action plan to launch activities under the strategy. Meeting discussions identified drivers of HEC and measures to address them in the MECAP.

The workshop included 47 participants, with representation from the Myanmar Timber Enterprise (MTE), Fauna and Flora International (FFI) and local organization Friends of Wildlife, in addition to members of the organizations hosting the workshop. Presentations included background information on HEC; the MECAP process and HEC strategy; and stakeholder engagement.

Background on HEC

During the first session providing background information on HEC, Dr. Christy Williams, WWF-Myanmar Country Director and former leader of WWF's Asian Rhino and Elephant Action

Strategy (AREAS), presented on the wider HEC context in Asia, and provided different scenarios for the occurrence of HEC in various landscapes across Asian elephant range countries, as well as the advantages and disadvantages of existing HEC mitigation measures.

Maung Win (Nature and Wildlife Conservation Division - NWCD) gave an introduction to HEC in Myanmar by providing some background on the issue and highlighting recent increases in HEC – based on existing records, the year 2014 had the most human and elephant casualties in recent years, with most people killed in the Bago Region and most wild elephants killed in the Ayeyarwady Region.

During his presentation, Wayuphong Jitvijak (WWF) argued that HEC was not difficult to deal with if governments and communities had the right attitude, knowledge, and capacity, and if the government, NGOs, and community worked together, citing the case study of the POWER (Partnership On Wildlife and Ecosystem Resilience) Initiative in Thailand's Kui Buri National Park. Due to a number of successful interventions, including habitat management, there have been no elephant deaths in Kui Buri as a result of HEC or poaching since 2010.

Dr. Zaw Min Oo (MTE) discussed Myanmar's significant captive elephant population and mentioned that MTE is reducing, and will eventually stop, logging country-wide, which means that the elephants previously used for logging operations will be out of work. Any release plan for these working elephants must take into consideration the potential for increased HEC and transmission of zoonotic diseases.

MECAP

The session on the MECAP process and HEC strategy kicked off with a presentation by Dr. Simon Hedges (WCS), who provided an overview of the MECAP process, as well as a summary of progress, stressed that addressing HEC was a major component of the MECAP, which also includes three other key components – wild elephant conservation, illegal trade, and captive elephants. The MECAP is a 10-year plan, with the HEC action plan being the first chapter of the MECAP to be discussed in detail at the workshop. The workshop also contributed to the development of a shorter-term implementation plan. The MECAP is set to be completed and ready for implementation in 2018.

Following this, Dr. Peter Leimgruber (SCBI) provided an overview of HEC in Myanmar, outlining the current status, causes, and management of the issue. Most HEC is linked to development and expansion in agriculture, transportation and infrastructure, and dam construction. Following the onset of these developments, HEC increases as the result of the combined effects of habitat loss (e.g. loss in forest area), increases in human population, and increases in early successional vegetation areas. In Myanmar, the development of hydropower dams may have additionally contributed to the rise in HEC in some areas such as the Bago Yoma. As a consequence, addressing HEC should be a multi-sectoral and multi-stakeholder process involving a range of government departments (e.g. Forestry, Agriculture, Transportation, Energy), as well as local communities.

When addressing HEC in Myanmar, it's important to realize that elephant conservation is only possible if there are effective long-term strategies for managing HEC that are minimizing negative effects on people and elephants. This requires

- developing effective management structures;
- supporting HEC-affected communities;
- monitoring, research, and adaptive management;
- and d) addressing development impacts and land-use planning.

HEC action plan

The final session on stakeholder engagement provided context for the discussion on drawing up a HEC action plan, with key actors in HEC management giving presentations on their recent work and planned actions for the near future.

Dr. Zaw Min Oo (MTE) presented on the Emergency Elephant Response Units (EERU) managed by the MTE to reduce and prevent HEC. EERU teams educate local communities, drive wild elephants away from community areas, translocate wild elephants from the Delta and Bago West regions to North Zarmari Wildlife Sanctuary (with limited success), collect elephant data and information, and collaborate with FD and NGOs for collaring and research, among others.

Saw Htoo Thar Po (WCS) then spoke about WCS's past work on elephant conservation and HEC work, including helping create Hukaung Tiger Reserve, which is very good elephant habitat where they have done elephant survey work and provided law enforcement training; establishing an enforcement program in Alaungdaw Kathapa National Park—five Elephant Protection Units (EPUs) were recruited for patrolling, although this elephant program is currently suspended, establishing elephant conservation program in Rakhine Yoma Elephant Reserve (RYER) and recruiting two EPUs for patrolling in RYER. He also updated the group on WCS's future plans for HEC actions in the country, including conducting a country-wide elephant occupancy survey in collaboration with other NGOs.

Next, Kyi Soe Lwin (Friends of Wildlife Myanmar) provided information about the organization's recent work, including organizing a workshop on HEC and enforcement and field surveys on HEC in West Patheingyi, Tharbaung, and Gwa townships. Their future plans include establishing Elephant Conservation Units in selected villages in Ayeyarwady and Rakhine with 4 or 5 young villagers, and training villagers in community forestry for habitat restoration.

Nay Myo Shwe (FFI) then presented on their work in Lenya, where HEC cases are present because palm oil plantations are expanding into natural forests and increasing HEC. FFI's work to-date includes camera trapping inside plantation concessions, corridors, and in natural forests, and questionnaire surveys with the local community to investigate possible HEC hotspots.

Paing Soe (WWF) presented on WWF's aim, at the time, to launch field programs on elephant conservation, which have since been in effect, in partnership with SCBI. This included plans to GPS-collar elephants in the Bago Region in collaboration with SCBI and potentially in Tanintharyi in collaboration with FFI, set up a new EERU in Tanintharyi in collaboration with SCBI, and work with the private sector to promote sustainable business practices for large-scale agriculture projects.

The final presentation of the session was by Aung Myo Chit (SCBI) who presented on their work on testing and developing long-term HEC management strategies through research, monitoring, outreach and community-based conservation. SCBI has successfully collared and tracked 8 wild elephants together with MTE and FD, conducted pre-management community surveys, funded and trained village-based HEC response teams, trained MTE mahouts and villagers in collecting dung from conflict elephants for DNA analysis, and worked with communities to develop low-cost, small-scale electric fencing. SCBI has also collaborated with Compass Films to develop public service TV spots on HEC and an outreach campaign. Among their future plans is to conduct dung DNA surveys to identify elephants involved in HEC and conducting outreach campaigns, in addition to the collaborative elephant collaring and tracking with WWF.

Key outcomes for HEC strategy

- Addressing HEC
 - There is need for a national level plan to address HEC under the MECAP.
 - The village administrator, FD, and MTE should take leading role at the ground level

with capacity building of ground level staff.

- An early warning alarm system should be established for known HEC-prone areas and at relevant times of the year.
- Monitoring and adaptive management
 - Monitoring data must be collected in a reactive, not proactive manner.
 - Data on death and injury is more reliable than data on crop damages as crop damages can be over-reported.
 - EERU regular patrols can provide data on both HEC and poaching.
- Supporting local communities to address HEC
 - Local communities depending on forests are the focus of the support.
 - Proposed measures include: changing agriculture practices to cultivate crops that are unpalatable to elephants, electric fences and alarm systems, and planting elephant food plants in the forest far from villages.
 - Key government actors: FD, MTE, Police Force, and General Administration Department must be involved in providing support to communities.
 - Elected village representatives will coordinate with government agencies.
- HEC and Development Impacts / Land Use Planning
 - Infrastructure-related causes for HEC include dams and irrigation infrastructure, roads, power grids, urbanization – develop a payment system to mitigate the environmental impacts of infrastructure.
 - Collect information on elephant presence and work with developers and communities to reduce encroachment and habitat impacts.

The aim of the 3-year action plan was to launch some of the activities listed as priorities under the key outcomes.

The Myanmar Elephant Conservation Action Plan (MECAP) is currently awaiting endorsement from the Myanmar government, and implementation will begin in 2018.