Evidence-based Approaches, Innovations and Technology: Smart Solutions to Address Illegal Wildlife Trade

Special ASEAN Ministerial Meeting on Illegal Wildlife Trade Side Event

Holiday Inn Chiang Mai, Thailand

21 March 2019; 13:00 – 15:00

Summary Report

Submitted by:

Asian Institute of Technology
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BACKGROUND

Species of wild fauna and flora, both on land and under water, are integral for sustainable development. This “natural capital” ensures that our biosphere is in balance, ecosystems are perpetual and economies productive. Poaching and illicit trade in wildlife and forest products emerge as a major impediment for sustainable development as it is globally damaging natural capital, cultural heritage, livelihoods and sustainable economic development. This trade is fueled by criminality and corruption; and is estimated as the fourth largest criminal activity with annual proceeds of nearly USD23 billion and threat to some of the world’s most iconic species. This is reversing the conservation efforts, accelerating threats to national and regional security while undermining good governance and the rule of law.

Trade in wildlife and their products are governed by laws and rules at domestic and international levels. These include the Convention on International Trade in Endangered Species of wild fauna and flora (CITES), which aims to ensure international trade in specimens of wild animals and plants without threatening their survival. However, burgeoning demand, globalization, use of social media and highly sophisticated and dangerous actors into the illegal wildlife trade arena, have proven a deadly combination for many species and posed serious challenges in the conservation and enforcement efforts in the Global South. Understanding the shift and constraints, it is clear that the wildlife conservation and enforcement communities must channel their concerted efforts equipped with appropriate tools, technologies and approaches to effectively stem the tide of wildlife crime.

The Association of Southeast Asian Nations (ASEAN) with 3% of the global total land hosts 18% of known flora and fauna and 34% of world’s coral reefs. ASEAN Member States are signatories of CITES and have been exerting collective efforts to counter illegal wildlife trade in the subregion. The East Asia Summit Declaration on Combating Wildlife Trafficking, Kuala Lumpur Declaration on Combating Transnational Crime and ASEAN Plan of Action in Combating Transnational Crime provide evidence of the political will and commitment among the leaders of the ASEAN Member States to stem the illicit trade in wildlife and their products.

Achieving these commitments require new innovation approaches that are socially inclusive and environmentally benign. Innovation as new forms of social practice and organization, and new or improved technological products and processes, can be considered as a key enabler for fulfilling international commitments while attaining national targets for conservation as well. The Bangkok Conference on Science, Technology and Innovation for Addressing Wildlife and Forest Crimes and Attaining SDGs effectively highlighted that science, technology and innovation play critical role in addressing wildlife and forest crimes and attainment of SDGs, and unanimously agreed on the need of a multilayered architecture to connect political levels with the community of practice and international cooperation to articulate challenges to catalyze implementation of activities targeted at multiple SDGs, that underpins progress towards improving people’s lives in fundamental ways.
PURPOSE

The ASEAN Center for Biodiversity; Asian Institute of Technology; Department of National Parks, Wildlife and Plant Conservation, Thailand; Freeland Foundation and International Fund for Animal Welfare jointly organized the event to:

1. Highlight the innovative technology and tools to counter wildlife and forest crimes;

2. Outline a set of solution-oriented strategies for the region to tackle illicit trade in endangered species of wild fauna and flora;

3. Bring to attention of ASEAN’s political leadership the strategies, approaches and tools to enhance the governance of trade in wild fauna and flora and their derivative products; and

4. Facilitate collaboration among the stakeholders to support ASEAN’s efforts to advance evidence-based approaches to fulfill national targets and international commitments.
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<td>13:00 – 13:10</td>
<td>Opening Remarks</td>
<td>Mr. Somklat Soontornpitakkul, Director, Division of Wild Fauna and Flora Protection, Department of National Parks, Wildlife and Plant Conservation, Thailand</td>
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<td>13:10 – 13:25</td>
<td>Keynote Address</td>
<td>Dr. Theresa Mundita Lim, Executive Director, ASEAN Center for Biodiversity</td>
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<td>13:25 – 14:30</td>
<td>Panel Discussion</td>
<td>Moderator Mr. Robert Steele, Founder and Director, Sustainability Asia</td>
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<td>Panelists Fingerprinting Technology, Mr. David Cowdrey, FRGS, Head of Policy and Campaigns, International Fund for Animal Welfare</td>
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<td>Digital Forensics, Mr. Steve Galster, Chair, International Management Committee, Freeland Foundation</td>
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<td>Transcontinental Platform for Information Management, Mr. Manesh Lacoul, Deputy Director, WEMS Secretariat, AIT Solutions, Asian Institute of Technology</td>
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<td>14:30 – 14:50</td>
<td>Q &amp; A Session</td>
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The Evidence-based Approaches, Innovations and Technology: Smart Solutions to Address Illegal Wildlife Trade commenced with the opening remarks from Mr. Somkiat Soontornpitakkul, Director, Division of Wild Fauna and Flora Protection, Department of National Parks, Wildlife and Plant Conservation under the Ministry of Natural Resources and Environment of the Royal Government of Thailand. Mr. Soontornpitakkul highlighted the objectives of the event, thanked the partners for organizing the event under the “Partners Dialogue on the Illegal Wildlife Trade”, and welcomed the recommendations from the event for the Secretariat’s consideration.

Dr. Theresa Mundita S. Lim, Executive Director, ASEAN Center for Biodiversity delivered the keynote address during the event. In her address, Dr. Lim highlighted the global significance of biodiversity residing in the ASEAN region. Dr. Lim outlined the current challenges and drivers for biodiversity loss in the region. She stressed the role of ASEAN Member States as the source, transit and destination points in the illicit trade in wildlife spanning across the globe and drew attention to the efforts from the ASEAN Member States and ASEAN Center for Biodiversity to counter the loss of biodiversity and attain Aichi targets and Sustainable Development Goals.

“In addressing the issue of wildlife crime from the source, a number of approaches incorporating technologies such as aerial monitoring with drones, real-time anti-poaching cameras, forensic analysis, use of sensors and trackers and new software for patrolling field data such as the CyberTracker could be implemented alongside innovative approaches incorporating community awareness about wildlife and protected areas, where the community sees themselves as a human fence protecting the PA, as eyes and ears of the authorities in preventing illegal activities from happening inside the PA”, said Dr. Lim.

Mr. Robert Steele, Founder and Director, Systainability Asia introduced the panel discussion and the panelists. Mr. Steele laid out the plan of the panel discussion and moderated the discussions.

Mr. David Cowdrey, Head, Policy and Campaigns, International Fund for Animal Welfare (IFAW) delivered a presentation on the Ivory Fingerprinting kit developed by IFAW in collaboration with Metropolitan Police (London) and King’s College. Mr. Cowdrey highlighted the kit’s capability to extract finger-prints off ivory up to twenty-eight (28) days, which is critical information in tracking handlers of the confiscated ivory. According to him, one-hundred and eighty (180) kits have been diffused to forty (40) countries globally; however, there is lack of feedback mechanism on the usage of the kit. Further, there is lack of a database to upload the fingerprints for cross-referencing and sharing them with INTERPOL and other relevant agencies/institutions. Currently, the production of kits is entirely supported through donor funds.

Mr. Steve Galster, Chair, International Management Committee, Freeland Foundation underscored the importance of information to curb the illegal wildlife trade and outlined Freeland Foundation’s current technological interventions and applications. The
Interventions include application of Artificial Intelligence to track the money flow, Digital Forensics, Open Source Data to map out wildlife trade, blockchain to provide digital rewards for data suppliers, and Mobile Application to monitor project progress remotely. According to Mr. Galster, mapping the money linked to global illegal wildlife trade is an effective approach to deter traffickers. He indicated the need of a mechanism to make traffickers finance anti-trafficking activities, i.e., utilize a portion of the value of confiscated assets and funds from traffickers to incentivize data suppliers.

Mr. Manesh Lacoul, Deputy-Director, WEMS Secretariat in Asian Institute of Technology deliberated on the concept of a transcontinental platform as an innovative approach for enhanced governance of illegal wildlife trade. According to Mr. Lacoul, while there are multiple reporting requirements for governments, the findings of the Assessment of Wildlife Crime Databases revealed that majority of countries in the Global South require support to establish information management infrastructure, innovative tools (policy, decision, monitoring) and capacity for effective governance of illegal wildlife trade. Mr. Lacoul, also, expressed the importance to build bridges for interoperability across multitudes of systems for effective and efficient information management at national and regional levels. Finally, Mr. Lacoul underscored the need of a baseline study to understand key variables, flora and fauna scenarios and root causes or challenges around the illegal wildlife trade. He, also, emphasized on the call for the South-South Enhanced Cooperation as an innovative approach to govern illegal wildlife trade that emerged during the Bangkok Conference on Science, Technology and Innovation to Address Wildlife and Forest Crimes and Attain SDGs. The South-South Enhanced Cooperation Initiative is envisioned as a multi-tiered architecture connecting political levels with community of practice and international cooperation in the Global South.

Mr. Steele summarized the key outcomes of the discussion and wrapped up the event.

The event was emceed by Ms. Siriporn Sriaram, Program Officer, IUCN.
RECOMMENDATIONS

The event identified some key recommendations to be considered by ASEAN Member States in their declared “war against illegal wildlife trade” as follows:

1. Evidence-based approaches, innovations and technology are key ingredients for enhanced governance of illegal wildlife trade.
2. Wildlife forensics and effective management of wildlife crime scenes can generate evidences for identifying perpetrators and for successful prosecutions.
3. With increasing amounts of digital evidence recovered during wildlife crime investigations, digital forensics is critical for extraction of data of interest from confiscated devices.
4. Use of artificial intelligence and open source data could be key to deciphering the global network of illegal wildlife trade through mapping of money flow.
5. “Make traffickers pay for anti-trafficking” – utilizing a portion of the value of confiscated assets to incentivize data suppliers/whistle-blowers and finance anti-trafficking activities could be an effective technique.
6. Setting up Conservation Restitution Fund could prove to be a successful means to tackle illegal wildlife trade.
7. Information management tools like Wildlife Enforcement Monitoring System provide platforms to integrate local and sectoral information for national and regional efforts.
8. As multitudes of systems are in operation even at national level, interoperability of systems could be a good option for effective information management.
9. Capacity and inclusivity for the Global South are essential issues to successfully dismantle the transnational organized crime network including on illegal wildlife trade.
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PHOTOGRAPHS

Courtesy of Ms. Siriporn Sriaram, IUCN
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