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ASSESSING THE IMPACT OF MIST NETS ON MIGRATORY BIRDS WORKSHOP

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MOCK ASSESSMENT USING SELF-ASSESSMENT MONITORING FRAMEWORK ON ILLEGAL TAKING OF MIGRATORY BIRDS

(Prepared by the CMS Secretariat)

CHAMPION PLUS

Australia was recognized as Champion Plus for their generous support and commitment towards addressing Illegal Killing, Taking and Trade of Migratory Birds in the Asia-Pacific for the period of 2021-2025.

Australian Government

MOCK ASSESSMENT USING SELF-ASSESSMENT MONITORING FRAMEWORK ON ILLEGAL TAKING OF MIGRATORY BIRDS

Background

The draft self-assessment monitoring framework (or "scoreboard") on illegal taking of migratory birds in Southeast Asia prepared for government representatives in the East Asian-Australasian Flyway was developed by the CMS ITTEA in partnership with BirdLife International through a contractual arrangement between the CMS Secretariat and the BirdLife Asia office, made possible thanks to voluntary contributions by the Government of Australia to CMS. The monitoring framework is voluntary, transparent, easy to update, and aims to cover both enforcement and prevention challenges. The monitoring framework takes in account the socio-cultural context of Southeast Asia, including culturally regulated take and indigenous peoples. It was informed by the recently completed situation analysis by BirdLife International, *Assessing the Use and Impact of Nets on Wild Bird Populations in Asia and the Mediterranean*.

This situation analysis found that mist nets and improvised nets are widely used, both to trap resident and migratory birds and as deterrents to protect production landscapes, such as shellfish mudflats, from species seen as pests. Nets, snares and other traps are indiscriminate: they have caused heavy losses across many species, and accidental capture of non-target birds is widespread in farmland. Limited awareness of the extent and impact of this take has slowed stronger regulation and enforcement. The absence of a common way to track the impact of conservation actions has constrained progress on addressing illegal taking of migratory birds. Reliable baselines on numbers, species and hotspots allow enforcement to shift from reactive to targeted action. Comparable indicators help governments identify gaps, set national goals, and report consistently. A shared monitoring framework would support coordinated responses to transboundary take.

The monitoring framework contains **27 indicators in five themes**, each scored from 0 (little to no evidence of action) to 5 (robust action, including best practice), with some indicators scored on a 0 to 3 scale:

Theme (score)	Indicator	Self-assessment score	Maximum score
A. National monitoring of bird take (management of data on scope and scale of bird take) – three indicators (15)	Status, extent and scale of illegal bird taking		5
	Species affected by illegal bird taking		5
	Geographic hotspot of illegal bird taking		5
B. Comprehensiveness of national legislation – ten indicators (31)	National legislation regulating wildlife protection and take		5
	National legislation on regulated use		5

	Subnational legislation on regulated use (optional)*		3
	Prohibitions on bird and wildlife take activities under national legislation		5
	Subnational legislation on prohibitions on bird and wildlife take (optional)*		3
	Exceptions and exemptions under national legislation		3
	Sanctions and penalties		3
	Proportionality of penalties meted		5
	Use of criminal law in enforcement and prosecution		5
	Organised crime legislation (optional)*		3
C. Enforcement response (preparedness of law enforcement bodies and coordination of national institutions) – five indicators (17)	National action plans and strategies to address illegal take of wild birds		5
	Enforcement priority of wildlife infringements		3
	Participation of the relevant stakeholders in policymaking		3
	Human resources and capacity of enforcement agencies		3
	Technical training for enforcement agencies		3
D. Prosecution and sentencing (effectiveness of judicial procedures) – four indicators (18)	Guidelines for prosecution and sentencing		5
	Awareness among prosecution agencies and courts		5
	Training and capacity building of prosecution and the judiciary with wildlife crime cases		4
	Transparency of prosecution outcomes		4

E. Prevention (other instruments used to address illegal bird take) – five indicators (9)	International cooperation		3
	Understanding the drivers of wildlife crimes and initiatives to address them		3
	Demand reduction activities and initiatives		3
	Awareness from the regulated community (optional)*		3
	Indigenous and local community awareness (optional)*		3
Total score (excluding optional indicators)			90
Total score (for all optional indicators)			15

Five indicators on sub-national legislation, organized crime, and awareness of the regulated and indigenous communities are optional. Scoring criteria are specific and observable. For example, the indicator on the scale of take scores a country higher when estimates are current (within five years), quantitative, and drawn from official or standardized, repeatable monitoring.

Practice Mock Assessment

The monitoring framework will be applied to address nets and their impact on migratory birds. The tool is a self-assessment for national use, and the outputs of each round of assessment are shared at each government's discretion. It is not designed to rank or compare countries. The assessment should be conducted at regular intervals by countries to track their own progress.
There are multiple specific aspects of this monitoring framework that can be applied to the challenge posed by mist nets. Hotspots are defined to include coastal and farming landscapes where mist nets are heavily set up, so mapping net use helps target enforcement. The prohibitions indicator asks whether national legislation clearly forbids the use of hunting tools such as nets, traps, lime sticks and sound devices to capture birds. Enforcement training, prosecutorial outcomes, and understanding why nets are set (for example, to deter perceived pests) show whether responses match what is happening on the ground.

In preparation for this activity, participants are recommended to:

- Compile any available data on the scale of illegal take, species affected and geographic hotspots
- Review national and, where relevant, sub-national legislation, penalties, and sentencing guidelines related to mist nets and other hunting tools
- Read the scoreboard at least once to gain familiarity of the language used

<u>Recommended actions at the workshop:</u>

Participants are recommended to:

a) conduct at least one round of mock assessment based on a provided example or real dataset on migratory birds or other wild animal taxa focused on at least one theme (recommended: awareness-oriented themes A, B and/or E);

b) provide any feedback on the clarity, feasibility, and scoring of indicators after the mock assessment.

ANNEX

Draft 9 November 2026

Self-assessment monitoring framework for evaluating actions to address illegal bird take in Southeast Asia

Prepared by BirdLife International for the Convention on Migratory Species

With input from Shelby Wee, Anand Chaudhary & Ding Li Yong

CHAMPION PLUS

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List of abbreviations

AEWA	Agreement on the Conservation of African-Eurasian Migratory Waterbirds
ASEAN	Association of Southeast Asian Nations
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CBD	Convention on Biological Diversity
CMS	Convention on the Conservation of Migratory Species of Wild Animals
EAAF	East Asian-Australasian Flyway
EAAFP	East Asian-Australasian Flyway Partnership
IKB	Illegal Killing of Birds
ITB	Illegal Taking of Birds
ITTEA	CMS Asia Pacific Illegal Taking of Migratory Birds Intergovernmental Task Force
IUCN	International Union for the Conservation of Nature
MIKT	The CMS Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean
NGO	Non-government Organisation
SMART	Spatial Monitoring and Reporting Tool

Executive summary

Illegal take threatens more than 500 bird species in Southeast Asia, including many that are migratory and among the most threatened species in the region. Illegalities related to take in this region are complex and may involve the take and trade of species protected by law, the use of prohibited hunting tools, as well as taking of species in protected areas or outside hunting regulations (on hunting seasons, locations where hunting allowed). In time, illegal and poorly regulated taking activities also poses significant ecological impacts through biodiversity loss, and the degradation of ecosystem services. Migratory bird populations across Southeast and East Asia are connected through the East Asian-Australasian Flyway (EAAF), and therefore illegal take in one country can impact populations across borders, weakening conservation efforts at the site level. As awareness amongst the public and enforcement authorities of illegal taking has increased over time, there has been an increased interest to track how conservation actions have reduced or prevented illegal take. Tools under the Convention on Migratory Species (CMS) have been developed by countries and stakeholders in the Mediterranean region, through the Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (MIKT), to allow governments to track their action and progress in addressing the illegal taking of birds through a scoreboard and has supported the development of enforcement actions on the ground. No monitoring framework hitherto exists in Asia but there has been sustained progress to establish tools to address illegal take through the CMS Asia Pacific Illegal Taking of Migratory Birds Intergovernmental Task Force (ITTEA).

Here, we outline a new monitoring framework to assist governments in Southeast Asia to monitor and measure the implementation of actions, and progress on interventions to address illegal bird taking and associated illegalities. While this monitoring framework draws heavily from the MIKT scoreboard, it is also designed with consideration for the unique socio-cultural setting of Southeast Asian countries and has been developed through consultation with a diversity of stakeholders in this region. This framework is designed as a capacity-strengthening, policy-support tool to help Southeast Asian governments track, manage, and reduce illegal bird take by providing a structured approach, using quantitative indicators, to assess, (1) extent of knowledge on bird taking, (2) legal frameworks, (3) enforcement capacity, (4) prosecution effectiveness, and (5) stakeholder engagement.

A defining feature of this framework is a stronger attention to the regional and national contexts of Southeast Asia, including culturally regulated taking practices in countries in this region (e.g. Malaysia, Philippines and Cambodia), local livelihoods, and national legislation while encouraging adherence to international obligations. Indicators under this framework are also designed to be evidence-based, focusing on data-driven measures of taking prevalence, species affected, legal frameworks, enforcement, prosecutions, and international cooperation to guide policymaking on addressing illegal taking. Over time, this framework aims to provide evidence-based insights to enhance targeted enforcement and resource allocation, whilst strengthening legal and institutional frameworks by strengthening coordination with other international frameworks such as the Association of Southeast Asian Nations (ASEAN), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the East Asian-Australasian Flyway

Partnership (EAAFP). Insights from this assessment framework are also expected to facilitate capacity building for enforcement agencies, prosecutors, and conservation organisations.

1. Overview

1.1. Background

Illegal and unsustainable take is recognised as one of the most important and urgent threats to bird species in many parts of Asia, with increasing lines of evidence from across the region. For instance, a two-year long situation assessment of bird hunting in seven Southeast Asian countries, involving market surveys, questionnaire-based interviews with local hunters, net surveys and expert consultation highlighted the prevalence of bird hunting activities, often in violation of national laws, with at least 500 species with evidence of being trapped or hunted (Yong et al. 2022; 2024). Species such as the migratory, yellow-breasted bunting (*Emberiza aureola*) (CR), a species listed on Appendix I on the Convention on Migratory Species (CMS), have now become a textbook case study of how even common species, directly driven by high volumes of illegal and unsustainable take (for food and other uses), can suffer range-wide population declines and a contraction of the breeding range (Tamada et al. 2014; Beerman et al. 2021). Formerly common migratory shorebirds, such as the curlew sandpiper (*Calidris ferruginea*) (VU) and marsh sandpiper (*Tringa stagnatilis*) have undergone steep declines in the EAAF (Hansen et al. 2021), in part due to taking and mortality from the widespread use of nets as deterrence in production mudflats (for shellfisheries) in Asia (Liang et al. 2025). Many common, non-migratory species were also found to be taken from the wild in large numbers (e.g. bulbuls *Pycnonotus* spp.) for consumption (Yong et al. 2024) on top of migratory species.

Migratory species assessed to be in danger of extinction, or of unfavourable conservation status, and in need of international agreements for their conservation and management are listed on the CMS Appendices. According to Article III. of the CMS Convention Text[1], Parties that are Range States of a migratory species listed in Appendix I, such as the yellow-breasted bunting, shall prohibit the taking of animals belonging to such species. Only a few types of exceptions are identified, which have to be precise as to content and limited in space and time, and should not operate to the disadvantage of the species. Appendix II lists migratory species which have an unfavourable conservation status, and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement (Article IV. of the Convention Text). In the CMS convention text, ‘take’ is defined as “taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in any such conduct”. Herein, we adopt a similar definition where we consider ‘take’ to include in the broad definition of taking, hunting, capturing, harassing, deliberate and indeliberate killing, or attempting to engage in any such conduct. This is largely aligned with CMS’s definition, except with the ‘removal of fishing’, as it is irrelevant to the context of our Monitoring Framework, and the

[1] https://www.cms.int/convention-text

addition of indeliberate killing which was included because accidental capture and/or killing of non-target birds is widespread in agricultural landscapes in South-east Asia.

Hunting and trapping (subsequently referred to as 'take') of wild birds by rural communities is widespread across the Southeast Asian region, as well as adjacent regions of north-east India and in southern and eastern China. Anthropological studies of minority and indigenous communities in the mountains of Myanmar to Viet Nam, China and the Philippines have also documented diverse and complex wildlife hunting practices, some linked to well established local traditions and others to subsistence (Rao et al. 2010; Platt et al. 2012; MacMillan & Nguyen 2014; Yong et al. 2022). In some cases, the motivations for local people to take birds and other wildlife is to supplement livelihoods, but trade with major cities across the region means it can be particularly profitable to sell wildlife products and (bird) meat to buyers and middlemen (also Rao et al. 2010), fetching far higher prices, and putting even more pressure on wildlife, including migratory species.

In 2025, a newly published situation analysis[2] assessing the ubiquity of mist nets as tools for trapping birds and other wildlife commissioned by the CMS showed that mist-nets and other improvised nets are widely used, not just as tools for trapping resident and migratory species, but also as deterrence to protect production landscapes for species perceived to be pests (see also Angkaew et al. in review). The indiscriminate use of nets, alongside snares and other traps, have resulted in heavy losses to the populations of many species. Yet, the limited awareness of the extent, and impact of hunting among conservationists and governments, has impeded progress on strengthening regulation and enforcement.

Recognizing the importance of trapping and trade as threats to migratory birds, the CMS Conference of the Parties at its 12th meeting (COP12, Manila, the Philippines October 2017) through adoption of Resolution 11.16 (Rev.COP15) *The Prevention of Illegal Killing, Taking and Trade of Migratory Birds*[3] catalysed the establishment of the CMS-coordinated Asia Pacific Illegal Taking of Migratory Birds Intergovernmental Task Force (ITTEA)[4], with a geographical focus on the East Asian-Australasian Flyway. Since its inception thanks to funding from the Australian Government, in 2022 in coordination with the East Asian-Australasian Flyway Partnership (EAAFP), concerted action has been undertaken by several governments of Asian countries and other local stakeholders to address illegal bird take. There has been notable progress made by the governments of Bangladesh, China, the Philippines and Viet Nam, among others, to address illegal taking on the ground, and at the national level. These include the passing of new policies

[2] CMS Information document: Assessing the Use and Impact of Nets on Wild Bird Populations in Asia and the Mediterranean. UNEP/CMS/COP15/Inf.26.1b. Accessible here: www.cms.int/sites/default/files/document/2026-03/cms_cop15_inf26.1b_use-and-impacts-of-nets-on-birds-in-asia-and-mediterranean_e.pdf

[3] Recently revised by CMS COP15 in 2026, accessible here: https://www.cms.int/document/prevention-illegal-killing-taking-and-trade-migratory-birds-14

[4] The task force was originally named as the Intergovernmental Task Force on Illegal Hunting, Taking and Trade of Migratory Birds in the East Asian-Australasian Flyway (ITTEA), and renamed by CMS COP14 in 2024.

and regulations, increased enforcement action on the ground (many leading to criminal prosecutions), and local-led initiatives to promote awareness and engagement of the issue.

With these developments, there is considerable scope not just to strengthen international cooperation to address a flyway-wide issue, but also to develop monitoring tools and the associated guidance to help governments and conservationists assess progress on addressing bird taking at the national level. Having a monitoring framework to track progress, potentially in the form of a 'scoreboard' framework can help measure successful and important interventions to address illegal bird take, whilst providing a stream of feedback on the extent and scale of taking, that will be needed to calibrate and prioritise conservation and enforcement interventions. The availability of a monitoring tool can also provide a platform to set national goals on addressing illegal taking, whilst driving stakeholder engagement at the national level. In the Mediterranean region, the Bern Convention and the CMS Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (MIKT) have since led the development of a voluntary, self-assessment tool, the 'Scoreboard to Assess the Progress in Combating Illegal Killing, Taking and Trade of Wild Birds' (often referred to as the 'MIKT Scoreboard'). The Scoreboard was adopted at the CMS 12th Conference of the Parties in Manila, and at the 37th Meeting of the Bern Convention Standing Committee in December 2017 and is intended (and designed) to function as a framework for national governments in the range of the MIKT and the Bern Convention to provide an objective, fact-based, self-assessment of the status of illegal killing of migratory birds (IKB) at the national level, enabling governments to measure progress tackling illegal taking of birds.

In the light of these developments, at the inception meeting of the ITTEA held in Brisbane, Australia in 2023, the ITTEA members endorsed as a component of the ITTEA Programme of Work[5] under Objective 1 - *To understand the scope, scale and motivations behind illegal hunting, taking and trade of migratory birds through a situation analysis of illegal take of migratory birds in the flyway* and its Target 1.2 an activity (1.2.1) to create an online scoreboard as a self-assessment tool to measure illegal taking of wild and migratory birds (ITB) at the national level (with consideration of similar scoreboards used in the framework of CMS) and countries' progress and effort in addressing this threat.

1.2. Methodology

The development of this framework of monitoring indicators to assess action to address illegal bird taking in the Southeast Asia region involves two components, (1) a desktop review of national legislation to assess the comprehensiveness of laws and policies in the Southeast Asian countries, and the MIKT Scoreboard, developed under the Bern Convention Tunis Action Plan 2013-2020 and the MIKT 2016-2020 programme of work, and (2) a two-step consultation process with both government and civil society stakeholders to identify key constituent indicators for

[5] Programme of Work accessible at https://www.cms.int/sites/default/files/document/cms_ittea1_doc.6b_pow_e.pdf

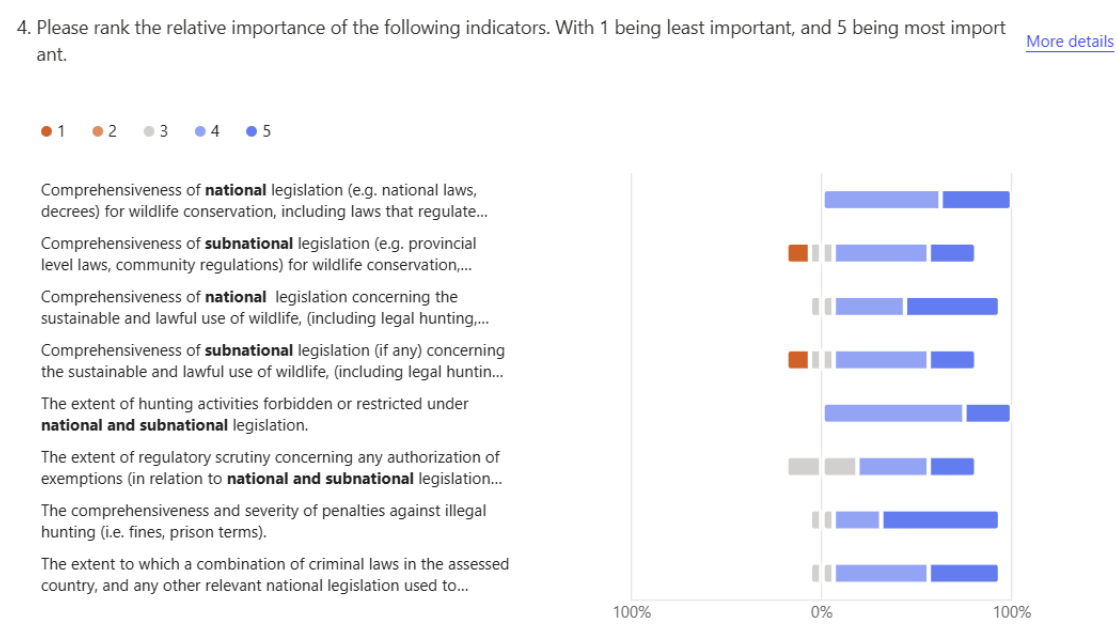
assessment. A workshop session was convened at the 12th meeting of the Partners of the EAAFP (MOP12, Cebu City, the Philippines, November 2025), with the aim of engaging a broad range of stakeholders to gather input on priority indicators and how information may be compiled for assessment of each indicator. Following this, a draft monitoring framework developed from this input was circulated to stakeholders (including contracting Parties) for specific feedback.

On 22 April 2026, a second consultation session was hosted by the CMS Secretariat and was open to CMS ITTEA and EAAFP ITB Task Force members and held virtually. During this session, participants were introduced to the draft monitoring framework, and an online questionnaire (see Annex 2, and supporting information) was subsequently disseminated to capture feedback on the importance and feasibility of measuring the various indicators in the framework.

1.2.1 Questionnaire feedback

We received a total of eight (8) responses on the questionnaire on priority indicators to measure. The questionnaire responses showed a consistent pattern where respondents generally ranked all proposed indicators as important to highly important. However, in terms of feasibility, responses were generally split with agreement that (select) indicators were feasible to measure but also uncertainty on how to measure them (example in Figure 1).

(a)



(b)

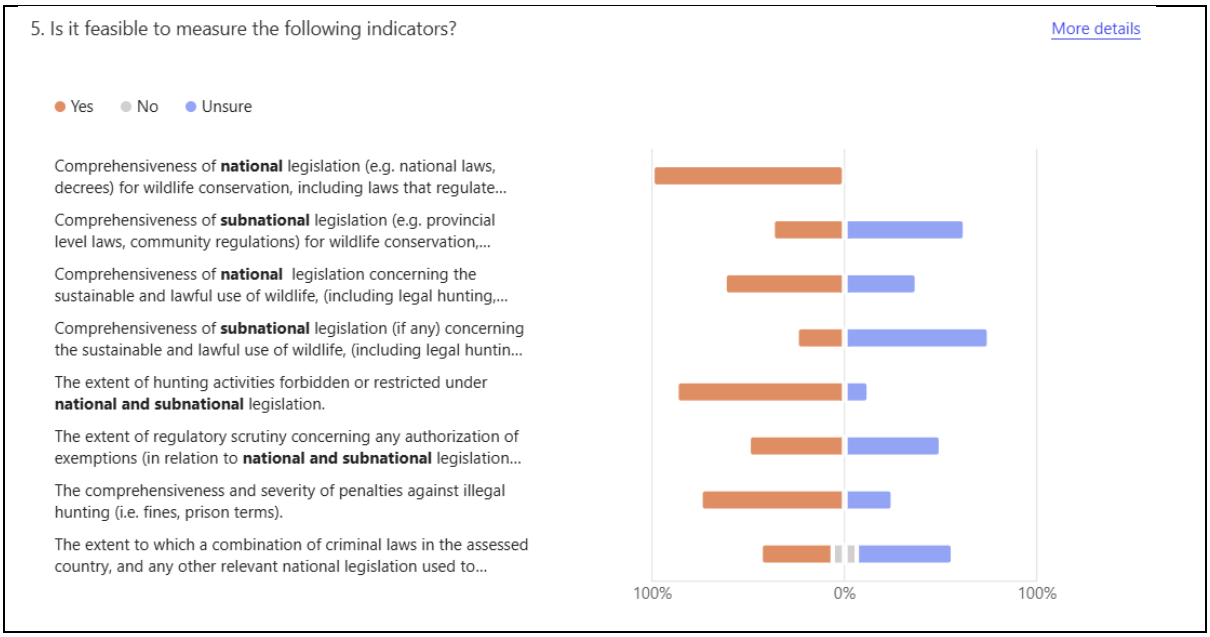


Figure 1. Responses to a questionnaire (see Annex 2) assessing the (a) importance of using various indicators to measure legislation; (b) feasibility of using the same indicators to measure legislation

The survey results suggested that our draft indicator framework captured the most important indicators to report but there is a need for a clear scoring framework to guide countries in conducting the self-assessments. Therefore, we have opted to retain all indicators in this final framework. However, respondents to our questionnaire noted that additional indicators on the comprehensiveness of subnational legislation were important. As such, we added two new indicators on sub-national legislation on regulated use and prohibitions on bird take.

The questionnaire responses also informed our approach to weighting. If at least one respondent had expressed that a specific indicator was unimportant, we reviewed and assessed if the scoring weightage of that indicator could be adjusted. As part of this process, we revised the scoring of three indicators.

1.3. Structure

This monitoring framework is expected to form the backbone of a new monitoring tool for relevant government agencies and stakeholders in Southeast Asian countries to undertake self-assessment to evaluate progress on actions to address bird hunting and take. Indicators under this framework are organized into five thematic assessment areas:

F. National monitoring of bird take (management of data on scope and scale of bird take) – three (3) indicators
G. Comprehensiveness of national legislation – ten (10) indicators
H. Enforcement response (preparedness of law enforcement bodies and coordination of national institutions) – five (5) indicators
I. Prosecution and sentencing (effectiveness of judicial procedures) – four (4) indicators
J. Prevention (other instruments used to address illegal bird take) – five (5) indicators

These 27 indicators—one fewer than the 28 indicators in the MIKT scoreboard, despite the inclusion of two new indicators—capture the breadth of the critical areas needed to assess the effectiveness of national responses to illegal bird take.

The first group of indicators provides an insight into the extent of and knowledge of the scale of illegal bird take at the national level, looking at the magnitude of wild birds illegally (or presumed illegally) hunted, taken or traded each year, as well as the geographical hotspots of bird take. The second group of indicators assesses the extent to which national legislation addresses the illegal take of wild birds through regulations, and incorporation of international obligations and regional commitments into national legislation. The third group of indicators explores the enforcement responses to illegal take in terms of the existence of a plan of actions with appropriate priorities shared among law enforcement agencies who are properly trained and staffed. The fourth group of indicators investigates the effectiveness of the judicial system in meting out penalties reflective of the seriousness of illegal take. Lastly, the final group of indicators looks at wider initiatives and instruments useful in reducing illegal take such as public awareness-raising, addressing drivers of illegal take, international coordination and stakeholder engagement.

Table 1. List of themes and key indicators adopted in this monitoring scoreboard

Theme	Recommended indicator
A. National monitoring of bird take status and extent (volume, species and geographic distribution of bird take)	**1. Status, extent and scale of illegal bird taking** The extent to which data on illegal bird take is available in the assessed country
	2. Species affected by illegal take The number of species affected by illegal take in the assessed country
	3. Geographical hotspots of bird take The geographical hotspots of illegal bird take at the national level have been identified
B. Comprehensiveness of national legislation	**1. National legislation regulating wildlife protection and take** The comprehensiveness of national legislative provisions in force for wildlife conservation, management and use, including clear legislation on illegal take

	2. National legislation on regulated use The comprehensiveness of national legislation concerning sustainable and lawful use of wildlife, including regulated take
	3. Sub-national legislation on regulated use (optional) The alignment of sub-national legislation with national legislation concerning sustainable and lawful use of wildlife, including regulated take
	4. Prohibitions on bird and wildlife hunting under national legislation The extent of activities forbidden under national legislation
	5. Sub-national legislation on the prohibitions on bird and wildlife hunting under national legislation (optional) The alignment of sub-national legislation with national legislation concerning sustainable and lawful use of wildlife, including hunting
	6. Exceptions and exemptions under national legislation The extent of regulatory scrutiny concerning any authorization of exemptions
	7. Sanctions and penalties The extent to which penalties for illegal take are comprehensive
	8. Proportionality of penalties meted The extent to which severity of cases involving illegal bird take is reflected in the relevant national legislation
	9. Use of criminal law in enforcement and prosecution The extent to which a combination of relevant national legislation and criminal law are used to prosecute ITB in support of legislation enacted to combat wildlife crime
	10. Organized crime legislation (optional) The extent to which specific legislation to address organized crime is used to combat illegal take.
C. Enforcement response (preparedness of law	**1. National action plans and strategies to address illegal bird take**

enforcement bodies and coordination of national institutions)	The existence and implementation of a national strategy or action plan for addressing illegal take of birds (including illegal bird hunting, taking, trade, trapping etc)
	2. Enforcement priority of wildlife infringements The recognition of combating wildlife crime as a high national level priority
	3. Participation of the relevant stakeholders in policymaking The level of stakeholder participation in illegal bird take-related policymaking
	4. Human resources and capacity of enforcement agencies The level of staff resources in national law enforcement agencies to combat wildlife crime
	5. Technical training for enforcement agencies The percentage of enforcement officers trained per year in ITB- related aspects
D. Prosecution and sentencing (effectiveness of judicial procedures)	**1. Guidelines for prosecution and sentencing** The existence of national guidelines for the sentencing of offenders convicted for wildlife crime
	2. Awareness among prosecution agencies and courts The awareness and effectiveness of prosecution agencies in proposing appropriate penalties for illegal bird take-related offences
	3. Training and capacity building of prosecutors and the judiciary in relation to wildlife crime cases The extent to which prosecutors and judges have received specialised training to handle wildlife crime cases (including illegal bird take)
	4. Transparency of prosecution outcomes The extent to which prosecution outcomes are publicised and documented in public records
E: Prevention and other initiatives to address bird hunting	**1. International cooperation** The extent to which national institutions take advantage of the international initiatives and working groups on illegal bird take (e.g. EAAFP and CMS ITTEA, bilateral agreements)
	2. Understanding the drivers of wildlife crime and initiatives to address them

	The extent to which the drivers of ITB in the country are known, understood and addressed
	3. Demand reduction activities and initiatives The extent to which activities to reduce the demand of illicit wildlife products are implemented
	4. Awareness from the regulated community (optional) The extent of awareness-raising materials and/or programmes and initiatives are in place to increase the awareness of the regulated community on the laws that apply to the sustainable use of wild birds
	5. Indigenous and local community awareness (optional) The extent of awareness-raising materials and/or programmes in place to increase indigenous awareness of illegal bird take, created with the involvement of indigenous people

2. Monitoring framework

2.1. Overview

This monitoring framework contains a set of indicators that can be used to track national actions and progress in preventing and prosecuting illegal bird take in the context of the EAAF, with a particular focus on Southeast Asia and adjacent regions. Whilst it is shaped by elements from the MIKT scoreboard (see Bern Convention & Convention on Migratory Species 2017), it was also developed with input from consultation with regional stakeholders to ensure that political and socio-cultural contexts that are relevant to Southeast Asia's countries, including the engagement of indigenous peoples and local communities[6], are adequately considered.

Designed to be used as a self-assessment tool at the national level, the indicators set under this framework intends to provide governments, civil society, and international stakeholders such as the CMS and EAAFP bodies with an objective framework to review and assess the suite of

[6] Indigenous peoples and local communities are present in most countries in Southeast Asia, and several retain subsistence hunting traditions, including the take of wildlife for medicine and decorative material. Legislation in countries such as Malaysia, Indonesia and the Philippines have specific provisions for indigenous use of wildlife under specific circumstances

implementation efforts, enforcement effectiveness, and conservation outcomes, potentially using a consultative approach with relevant national stakeholders.

Indicators on this framework are designed and framed to be clear, quantifiable and comparable, representative of the diversity of actions and activities that are being implemented by governments and civil society organisations in this region. While these indicators are intended to be politically neutral, they are also policy relevant as they contribute to countries' commitments to, and to implementing goals and targets of international and regional frameworks such as the CMS, EAAFP (majority of Southeast Asian countries are members of the EAAFP) and the ASEAN Biodiversity Plan.

This monitoring framework is designed to be:

- Stakeholder driven (i.e. participatory)
- Evidence-based
- Easy to use for self-assessments
- Can be updated on a regular basis by governments
- Transparent methodology
- Covers both enforcement and preventive actions

Table 2. The scoring framework per indicator is numerical and weighted, on a scale from zero to five, or from zero to three to allow for nuances in each country to be considered and reflected in the scoring process.

Score	Extent of actions under indicator
0	Little to no evidence at the national level
1	Minimal action
2	Some action
3	Moderately extensive actions
4	Strong to fairly strong actions
5	Robust actions, including many actions considered as best practice

2.2. Theme A: National-level monitoring of bird taking status and extent (volume, species and geographic distribution of bird taking)

2.2.1. Status, extent and scale of illegal bird taking

Scored on a scale of 0-5, this indicator measures the quality of available national data (e.g. knowledge of the number of hotspots monitored, species and numbers taken), on the extent and scale of bird species taken, taken illegally. Without reliable baseline data on the number of birds

illegally taken from the wild, the most affected species and knowledge of where bird take occurs, enforcement agencies in countries are unable to pursue action to address illegal or unsustainable practices through active enforcement and prevention. Presently, there are limited monitoring data on the extent of illegal bird take even though researchers have compiled and published coarse estimates of numbers for common species in some countries (see also Xayyasith et al. 2020; Yong et al. 2024). Having an indicator that measures the extent and scale of bird hunting take can support evidence-based policy decisions, and feed into transparent reporting under frameworks such as the CMS ITTEA and the jointly coordinated EAAFP Task Force on Illegal Hunting, Taking and Trade of Migratory Waterbirds and is supported by stakeholder consultations at the CMS ITB workshop at EAAFP MOP12 (see Annex I for meeting notes).

Consider: To what extent are estimates of the numbers of birds taken (both illegally and legally) known?

Table 3. Scoring framework on the available data to assess and qualify the scale of bird take at the national level.

Score	0	1	2	3	4	5
Assessment	Regional and/or national estimate on number of birds taken and take hotspots are **not available.** Little or no information of where take hotspots are.	Regional and/or national estimate on number of birds taken **is available but outdated** (>5 years from time of self-assessment**).** Some information on take hotspots.	Regional and/or national estimates on number of birds taken and take hotspots is **current** (within 5 years from time of assessment) and completely based **on expert opinion**[7] and anecdotal information.	Regional and/or national estimates on number of birds taken and take hotspots is **current** (within 5 years from time of assessment) and based **partially on quantitative data and records,** and **partially on estimates**.	Regional and/or national estimate on number of birds taken and take hotspots is **current** (within 5 years from time of assessment) and **fully based on quantitative data** and records.	Regional and/or national estimate on number of birds taken and take hotspots is **current** (within 5 years), based on **quantitative** data derived from **official and comprehensive bird take statistic sources**[8], and/or **standardized, repeatable monitoring framework.**

2.2.2. Species affected by illegal take

An indicator focuses on assessing (or estimating) the number of species affected by illegal take is necessary because the scale of conservation impact cannot be understood solely through aggregate seizure data or enforcement statistics alone. The number of species can typically

[7] Expert opinion is defined as the knowledge of whom by virtue of special knowledge, skill, training, or experience is qualified to provide information in matters that exceed the common knowledge of ordinary people.

[8] From crime disclosure statistics, records of permits, scientific studies etc.

provide a proxy for the extent of bird take at the national level (see also Yong et al. 2024). Tracking how many and which species are the most heavily impacted by illegal take at the national level — supported by reliable species-level identification can provide a baseline for government agencies to prioritize enforcement actions toward threatened or declining species and evaluate the extent of compliance with national legislation and international commitments under the CMS and CITES. Data collated to assess this indicator also support evidence-based conservation planning and can be fed into other national frameworks and initiatives for species protection, such as national Red Lists. In the region, data on the decline and take of species such as the yellow-breasted bunting and watercock *Gallicrex cinerea* has resulted in both species being included as protected species under national lists and Red Lists.

Consider: To what extent are species targeted by illegal hunting practices known?

Table 4. Scoring framework for species affected by illegal taking.

Score	0	1	2	3	4	5
Assessment	A regional and/or national list of bird species which are taken **is unavailable.**	A regional and/or national list of bird species which are taken **is available but outdated** (>5 years from time of self-assessment).	A regional and/or national list of bird species which are taken is **current** (within 5 years from time of assessment) and completely based **on expert opinion**[9] and anecdotal information.	A regional and/or national list of bird species which are taken is **current** (within 5 years from time of assessment) and based **partially on quantitative data and records,** and **partially on estimates and extrapolation**.	A regional and/or national list of bird species which are taken is **current** (within 5 years from time of assessment) and completely based on **quantitative data** and records.	A regional and/or national list of bird species which are taken is **current** (within 5 years), fully based on **quantitative** data derived from **official and comprehensive bird taking statistic sources**[10], and/or **standardized, repeatable monitoring programmes.**

2.2.3. Geographical hotspots of illegal bird taking

Knowledge on where hotspots of illegal bird take are located is essential for any monitoring framework because spatial distribution and concentration of taking sites is often a defining feature

[9] Expert opinion is defined as the knowledge of whom by virtue of special knowledge, skill, training, or experience is qualified to provide information in matters that exceed the common knowledge of ordinary people.

[10] From records of permits issued by relevant agencies, market surveys, confiscations and seizures, and scientific studies etc.

of wildlife crime (i.e. presence of species of interest, concentration of hunters, low or no enforcement or surveillance on the ground). Hotspots are defined herewith to include sites and landscapes, both coastal and farming areas, including sites where mist nets are heavily set up to trap birds, as often seen in some parts of mainland Southeast Asia (see Nguyen et al. 2020; Yong et al. 2022), forest sites and agricultural areas where illegal bird take has been reported. Knowing the number and geographical distribution of these hotspots is expected to assist enforcement agencies to move from a reactive approach in enforcement to targeted, and prioritised monitoring and enforcement interventions, where enforcement resources are allocated more efficiently to 'hotspots', and assess whether mitigation efforts are making a difference on the ground. Data on ITB hotspots may also support coordinated cross-border responses — particularly in some transboundary areas in Southeast Asia.

Consider: To what extent are geographical hotspots of illegal bird taking known?

Table 5. Scoring framework to assess knowledge on the number of hotspots of taking.

Score	0	1	2	3	4	5
Assessment	A national list and/or map of geographical hotspots of bird taking within the country **is not available.**[11]	A national list and/or map of geographical hotspots of bird taking within the country **is available but covers a limited geographic range and/or is outdated** (>5 years from time of self-assessment**)**	A national list and/or of geographical hotspots of bird taking within the country is **comprehensive** (most of the country has been assessed) and/or **current** (within 5 years from time of assessment) and completely based **on expert opinion**[12] and anecdotal information.	A national list and/or map of geographical hotspots of bird taking within the country is **comprehensive** (most of the country has been assessed) **and current** (within 5 years from time of assessment) and based **partially on quantitative data and records,** and **partially on estimates and extrapolation**.	A national list and/or map of geographical hotspots of bird taking within the country is **comprehensive** (most of the country has been assessed) **and current** (within 5 years from time of assessment) and completely based on **quantitative data** and records.	A national list and/or map of geographical hotspots of bird taking within the country is **comprehensive** (most of the country has been assessed) **and current** (within 5 years), fully based on **quantitative** data derived from **official and comprehensive bird taking statistic sources**[13], and/or **standardized, repeatable monitoring framework.**

[11] National lists and maps of hunting take hotspots have been documented by conservation organisations and researchers now in many parts of Southeast Asia.

[12] Expert opinion is defined as the knowledge of whom by virtue of special knowledge, skill, training, or experience is qualified to provide information in matters that exceed the common knowledge of ordinary people.

[13] From crime disclosure statistics (wildlife crimes) if available, but may also include records of permits, market survey reports,

2.3. Theme B: Comprehensiveness of national legislation

2.3.1. National legislation regulating wildlife protection and take

This indicator assesses the comprehensiveness of wildlife legislation at the national level, which includes but is not limited to laws on wildlife protection and laws that regulate taking of wildlife species. Depending on country, this may also include relevant government decrees and directives (see Annex I), that address (1) wildlife protection, (2) natural resources management, (3) protected areas, and (4) environmental protection. Effective enforcement and conservation outcomes are dependent on the strength and clarity of the legal framework and is also an important indicator in the MIKT scoreboard (see Bern Convention & Convention on Migratory Species 2017).

In the absence of clear definitions of what are, (a) prohibited conduct and hunting tools, (b) protected species lists, (c) licensing systems, (d) trade controls, (e) penalties proportionate to harm, and (f) mechanisms for compliance, enforcing authorities on the ground lack a strong basis to prevent and prosecute illegal taking activity when found. Measuring legislative completeness allows governments to identify legal and regulatory gaps, inconsistencies, or outdated provisions that need revisions and ensures alignment with international obligations. This indicator also provides a foundation for the entire monitoring framework, recognizing that strong, coherent legislation is a prerequisite for deterrence, and long-term action.

Consider: Does comprehensive national legislation for wildlife conservation exist, including provisions to regulate bird taking (domestic) in wildlife or its products?

scientific studies etc.

Table 6. Scoring framework for comprehensiveness of national legislation on wildlife protection.

Score	0	1	2	3	4	5
Assessment	Legislation on wildlife protection and conservation has been enacted. Laws lack provisions and definitions for prohibited and regulated take activities, domestic trade in wildlife or wildlife derivatives, and hunting tools. Protected species list is highly incomplete with major gaps, and is poorly defined or unclear. Many exemptions, often unclear.	Legislation on wildlife protection and conservation has been enacted. Laws contain clear definitions and provisions for a subset of prohibited and regulated take activities, domestic trade in wildlife or wildlife derivatives, and hunting tools. Protected species list is somewhat incomplete or unclear.	Legislation on wildlife protection and conservation has been enacted. Laws contain clear definitions and provisions for a subset of prohibited and regulated take activities, domestic trade in wildlife or wildlife derivatives, and hunting tools. Protected species list somewhat defined.	Legislation on wildlife protection and conservation has been enacted. Presence of some supporting legislation and/or policies. Laws contain clear definitions and provisions for most if not all prohibited and regulated take activities, domestic trade in wildlife or wildlife derivatives, and hunting tools. Protected species list well defined.	Legislation on wildlife protection and conservation has been enacted and updated (< 5 years). Presence of several supporting legislation and/or policies. Laws contain clear definitions and provisions for most if not all prohibited and regulated take activities, domestic trade in wildlife or wildlife derivatives, and hunting tools. Protected species list well defined, covers majority of species.	Legislation on wildlife protection and conservation has been enacted and updated (< 5 years). Presence of several supporting legislation and/or policies which are clearly linked and consistent. Laws contain clear definitions and provisions for all prohibited and regulated take activities, domestic trade in wildlife or wildlife derivatives, and hunting tools. Protected species list very comprehensive and covers most species known. If the country is a party to CMS, this list is updated to reflect species included on CMS appendices (see appendices (CMS, 1979; CMS Appendices I and II)

2.3.2. National legislation on regulated use

This indicator measures the comprehensiveness of national legislation with respect to the sustainable and lawful use of wildlife. Many Southeast Asian countries have laws regulating the subsistence use of wildlife resources (and/or regulations for (legal) take, and in fact some legal hunting (under specific conditions, e.g. for indigenous people, and licensed hunting for targeted species) is allowed in most Southeast Asian countries. This may include and involve regulation of hunting seasons, use of hunting tools such as firearms, designated hunting areas, and hunting quotas for regularly hunted species (mostly mammals, but also some waterbird species such as

ducks, herons and rails). Strong regulation of wildlife use under national laws is important for species conservation but requires an evidence-base that considers how species populations change over time and the needs of local communities. Even if instances of taking are considered as lawful or legal, poorly defined hunting seasons, inadequate spatial restrictions on where take is allowed, or species take quotas misaligned with population data can also create enforcement loopholes. Measuring the existence, clarity, and scientific basis of these regulatory mechanisms enables governments to demonstrate that their legal taking frameworks adequately considers overexploitation, reduced opportunities for illegal take, and safeguarding of wildlife populations, while catering to the needs of rural communities.

Consider: Through which measures and controls do national legislation regulate the take of wild birds?

Table 7. Scoring framework on the regulated use of wildlife (with a focus on wild birds).

Score	0	1	2	3	4	5
Assessment	National legislation does not clearly regulate the take of wild birds at all.	National legislation does not specifically regulate take of birds from conservation / sustainable use. Any legislation concerning take of birds mainly addresses the activity from arms control/ public safety points of view and does not consider wildlife conservation issues	National legislation regulates take for some species and sets basic parameters that regulate the take of some bird species: (1) 'Hunting seasons' or 'open seasons' (2) List of huntable species (3) Permitted hunting methods	National legislation regulates take for some species and sets basic parameters that regulate taking of some bird species: (1) Hunting seasons (2) List of huntable species, including CMS appendix I, II species (3) Hunting areas (4) Permitted hunting methods (5) Authorisation mechanisms and licensing/permit criteria (6) Hunting quotas and reporting requirements However, regulations on take remains largely sectoral and only partially linked to conservation planning	National legislation integrates taking regulation within national wildlife conservation legislation. Ensures taking decisions explicitly take into account biological and conservation considerations Includes: (1) Biologically informed hunting seasons and species lists (2) Defined hunting areas (3) Permitted hunting methods (4) Robust licensing with compulsory examination (5) Biologically based bag limits and quotas (6) Systematic bag data collection and reporting Enforcement powers for competent authorities exist	National legislation integrates take and regulation within national wildlife conservation legislation. Meets all criteria of score (4), and additionally, establishes a science-based, adaptive management framework, including: (1) Mandatory periodic review of hunting seasons, species lists, and quotas based on population data (2) Legal mechanisms to suspend or restrict hunting in response to population decline or ecological risk (3) Integration of monitoring data into binding regulatory decisions Precautionary principles guide regulation on take.

2.3.3. Sub-national legislation on regulated use (optional)

This indicator measures how well sub-national legislation governing the sustainable and lawful use of wildlife aligns with national legislation in countries where such legislation exists, including in autonomous or self-governing regions. In Southeast Asian countries, sub-national legislation may adapt national law to local contexts or may operate *in lieu* of national legislation, particularly under decentralised governance or where adaptations are needed to reflect customary practices. Measuring the existence and clarity of such legislation enables governments to demonstrate that they have comprehensively considered sub-national contexts, including those of provinces, divisions and states.

Table 8. Scoring framework on the clarity and relevance of sub-national regulations on regulated use to the local sub-national context.

Score	0	1	2	3
Assessment	Subnational legislation: **Does not define** the jurisdiction and responsibilities of any relevant sub-national government agencies Regulations e.g. restrictions, monitoring provisions and/or permitting systems are **not locally adapted** to sub-national contexts[14].	Subnational legislation: Defines the jurisdiction and responsibilities of a **limited** number of relevant sub-national government agencies only Regulations (e.g. restrictions, monitoring provisions and/or permitting systems) are **partially adapted to sub-national contexts**, with scope for broader application	Subnational legislation: Defines the jurisdiction and responsibilities of **all** relevant sub-national government agencies Regulations (e.g. restrictions, monitoring provisions and/or permitting systems) demonstrate **moderate alignment with national legislation mostly adapted to sub-national contexts**	Subnational legislation: Defines the jurisdiction and responsibilities of **all** relevant sub-national government agencies, and **clarifies links** between sub-national and national government responsibilities Regulations (e.g. restrictions, monitoring provisions and/or permitting systems) are **comprehensively adapted to sub-national contexts**

2.3.4. Prohibitions on bird and wildlife take activities under national legislation

[14] This includes ecological (e.g. specific threats, occurrence of endemic species), socioeconomic (e.g. dependence on natural resource use), governance (e.g. customary land) and cultural contexts (e.g. traditional practices, culturally significant species) that may vary across sub-national regions in a country.

This indicator measures the extent to which activities associated with wildlife hunting and take are forbidden under national legislation on wildlife protection. Prohibitions or forbidden actions/activities under national laws and policies on hunting wildlife, and related activities such as the use and possession of (illegal) hunting tools such as snares and nets (see Gray et al. 2021), alongside the possession and handling of wildlife carcasses and their derivatives provides clear restrictions that define the boundaries between lawful and illegal conduct. Without specific prohibitions with their contexts clearly defined, enforcement authorities may face ambiguity in prosecuting cases on counts of illegalities, making it difficult to detect, investigate, and prosecute cases effectively under national legislative frameworks. For instance, studies such as Gray et al. (2021) acknowledge the lack of clarity of national laws in Southeast Asia on the use of hunting tools such as snares, widely used to trap wildlife, and the penalties meted out for the possession of snares. Measuring the scope and clarity of these prohibitions enables governments to ensure that legal frameworks comprehensively address both direct hunting and associated activities that drive wildlife crime, supports deterrence, and aligns with international commitments under agreements such as the CMS and CITES.

Consider: To what extent does national legislation in your country make bird take illegal? Are prohibitions listed, and if so, are they comprehensive, or do they cover only a subset of potentially forbidden activities?

Table 9. Scoring framework on prohibitions on bird and wildlife take.

Score	0	1	2	3	4	5
Assessment	National legislation does not clearly forbid the following activities: Deliberate hunting of wild birds Taking of wild birds The use of hunting tools such as nets, traps, lime sticks, sound-devices, etc for capturing birds Possession of live or dead wild birds or their parts Importation or transport of wild birds or their derivatives Sale of wild birds	National legislation generally prohibits: Deliberate hunting of wild birds Taking of wild birds	National legislation generally prohibits: Deliberate hunting of wild birds Taking of wild birds The use of hunting tools such as nets, traps, lime sticks, sound-devices, etc. for capturing birds	National legislation generally prohibits: Deliberate hunting of wild birds Taking of wild birds The use of hunting tools such as nets, traps, lime sticks, sound-devices, etc. for capturing birds Possession of live or dead wild birds or their parts	National legislation contains a broad list of prohibitions: Deliberate hunting of wild birds Taking of wild birds The use of hunting tools such as nets, traps, lime sticks, sound-devices, etc. for capturing birds Possession of live or dead wild birds or their parts Importation or transport of wild birds or their derivatives Sale of wild birds and their derivatives	National legislation contains a comprehensive list of prohibitions: Deliberate hunting of wild birds Taking of wild birds The use of hunting tools such as nets, traps, lime sticks, sound-devices, etc. for capturing birds Possession of live or dead wild birds or their parts Importation or transport of wild birds or their derivatives Sale of wild birds and their derivatives Sale of means such as nets, traps, lime sticks, sound devices etc. for capturing birds.

2.3.5. Sub-national legislation on prohibitions on bird and wildlife hunting (optional)

This indicator measures how well (and the extent to which) sub-national legislation is used to regulate the lawful use of wildlife and may be applicable in several subnational divisions in the region (e.g. autonomous regions, states and provinces). In Southeast Asia, sub-national legislation may exist to adapt national law to local contexts, or may exist in lieu of having a national law, especially in cases of decentralised governance or when adaptations are necessary to reflect

local practices and socioeconomic realities. Measuring the existence and clarity of these legislations enables governments to demonstrate comprehensive consideration of sub-national contexts (e.g. province, division, states etc.).

Table 10. Scoring framework on clarity and relevance of sub-national regulations on prohibitions on bird and wildlife taking to the local sub-national context.

Score	0	1	2	3
Assessment	Subnational legislation does not define the jurisdiction and responsibilities of any relevant, sub-national government agencies Regulations e.g. restrictions, monitoring provisions and/or permitting systems are **not locally adapted** to sub-national contexts	Subnational legislation defines the jurisdiction and responsibilities of a **limited** number of relevant sub-national government agencies only Regulations (e.g. restrictions, monitoring provisions and/or permitting systems) are **partially adapted** to sub-national contexts, with **scope for broader application**	Subnational legislation defines the jurisdiction and responsibilities of **all relevant** sub-national government agencies Regulations (e.g. restrictions, monitoring provisions and/or permitting systems) are **mostly adapted** to sub-national contexts	Subnational legislation defines the jurisdiction and responsibilities of **all relevant** sub-national government agencies, and **clarifies links** between sub-national and national government responsibilities Regulations (e.g. restrictions, monitoring provisions and/or permitting systems) are **comprehensively adapted** to sub-national contexts

2.3.6. Exceptions and exemptions under national legislation

This indicator assesses the extent of regulatory scrutiny concerning the authorisation of exemptions and exceptions for activities otherwise considered as prohibited or illegal. An indicator separately assessing regulatory scrutiny (distinct from other metrics of legal comprehensiveness, prohibitions) and focusing on exemptions and exceptions under national legislation and policies for hunting wildlife (including wild birds) should be measured because the existence and scope of exceptions can significantly influence enforcement effectiveness and conservation outcomes. Clear but limited instances of what may be exempted would allow for some legal take for specific contexts such as research, with exemptions being mandated from a defined authority. On the other hand, the high number of exemptions or the lack of clarity of what is exempted (or who the exempting authority is) can weaken enforcement or prosecution.

Exemptions, where they exist[15], may be granted to indigenous peoples, regulated hunters, and local communities. Without a clear definition of when, where and for whom taking is permitted —

[15] See also Article III (5) of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). Under Article III (5) Parties that are Range States of a migratory species listed in Appendix I shall prohibit the taking of animals belonging to such species. Exceptions may be made to this prohibition only if:
a) the taking is for scientific purposes;
b) the taking is for the purpose of enhancing the propagation or survival of the affected species;

such as licensed hunters, subsistence or indigenous needs, scientific research, or the highly specific cultural practices associated with certain local communities, enforcement authorities may struggle to distinguish lawful from illegal activity, and loopholes can be exploited by criminal networks, undermining species protection. Measuring how legislation defines, limits, and monitors exemptions can thus offer a good measure of the robustness of legal frameworks and supports evidence-based decision-making. This indicator may also be useful for helping governments balance sustainable use with species conservation by improving accountability in wildlife management.

Consider: To what extent does national legislation make it possible to authorize exemptions from the general prohibitions outlined in the answer to previous question?

c) the taking is to accommodate the needs of traditional subsistence users of such species; or
d) extraordinary circumstances so require;
provided that such exceptions are precise as to content and limited in space and time. Such taking should not operate to the disadvantage of the species.

Table 11. Scoring framework on exceptions and exemptions under national laws.

Score	0	1	2	3
Assessment	National legislation makes it straightforward for authorization of exemptions involving activities that are otherwise generally prohibited under national legislation Legislation does not include specific criteria or processes for granting / monitoring such exemptions	National legislation makes it possible for authorization of exemptions involving some activities generally prohibited under national legislation Legislation defines the basic criteria upon which such exemptions can be granted by the responsible authority; however, such criteria for granting exemptions do not correspond to the criteria for exemptions stipulated under CMS, or does not include specific regulatory mechanism for monitoring and reporting upon exemptions granted	National legislation makes it possible for authorization of exemptions involving some of the activities generally prohibited. Legislation defines comprehensive criteria upon which such exemptions can be granted by the responsible authority; such criteria correspond to the criteria for exemptions and species under CMS Appendix I. Does not define or include specific regulatory mechanism for monitoring and reporting after exemptions have been granted. Little oversight on hunting exemptions	National legislation makes it possible for authorization of exemptions involving some of the activities generally prohibited. Defines comprehensive criteria upon which such exemptions can be granted by the responsible authority; such criteria correspond to criteria for exemptions and species under CMS Appendix I. Establishes, for each exemption, a specific regulatory mechanism that ensures strict supervision of compliance, monitoring and reporting Requires that data on all exemptions granted, is compiled on an annual basis and is publicly available including information on affected species, number of specimens, justification, the responsible authorities, permitting and licensing procedures, compliance monitoring and supervision.

2.3.7. Sanctions and penalties

This indicator measures the extent to which penalties such as fines and imprisonment terms (see Hutchinson et al. 2023) for violations (of the relevant wildlife protection and/ or use legislation) are comprehensive in relation to the extent and circumstance of the offence/infringement, whilst being of sufficient deterrent value[16]. Participants at the CMS ITB workshop at EAAFP MOP12 (see annex) acknowledged that there is a need for a metric on any monitoring framework on bird take to consider the extent of penalties for illegal bird take. The deterrent effect of the legislation depends not only on prohibitions but on the certainty, severity, and enforcement of consequences for violations.

[16] Deterrent value can be determined by the extent of which a penalty, whether a fine or a prison term, is sufficiently large to discourage illegal activities.

Without clear and consistently applied penalties, illegal hunting and take may persist despite legal protections, undermining conservation objectives and compliance with international obligations. There is a clear scope for measuring the type, and the effectiveness of sanctions, including but not limited to fines, prison terms, confiscation (of hunting tools), and trade restrictions.

Table 12. Scoring framework on sanctions and penalties.

Score	0	1	2	3
Assessment	National legislation: Does **not specifically** describe Illegal bird take-related offences and does not foresee specific penalties for such offences Does **not specifically** penalize Illegal bird take-related offences unless these are coupled with breaches of other legislation such as arms control laws	National legislation: Provides **basic description(s)** of Illegal bird take-related offences that encompass illegal hunting, trapping and trade of wild birds Stipulates **maximum** penalties for most Illegal bird take- related offences **but does not stipulate a minimum penalty** Provides for a **limited spectrum** of criminal and administrative sanctions including: Fines Imprisonment (usually suspended jail terms in the most severe cases of Illegal bird take) Suspension of license. Confiscation of hunted birds (dead or alive)	National legislation: Provides a **comprehensive description(s)** of specific Illegal bird take-related offences that encompass illegal hunting, trapping, trade, possession, transport, importation and taxidermy of wild birds Stipulates **both the minimum and a maximum penalty** for some categories of offences Provides for a **wide spectrum** of criminal and administrative sanctions including: Fines Imprisonment (usually suspended jail terms in the most severe cases of Illegal bird take) Suspension of license. Confiscation of take (dead or alive) Permanent revocation of license Community service Other sanctions	National legislation: Provides a **comprehensive description(s)** of specific Illegal bird take-related offences that encompass illegal hunting, trapping, trade, possession, transport, importation and taxidermy of wild birds, including penalties for repeat offenders. Stipulates **both the minimum and a maximum penalty for all offence categories** except those where a level of penalty is fixed permanently in the law Provides for a **full spectrum** of criminal and administrative sanctions including: Fines, imprisonment (both effective and suspended jail terms are usually automatic for the most severe cases of Illegal bird take) Suspension of licenses, confiscation of take (dead or alive) Confiscation of equipment Permanent revocation of license in the case of illegal take involving highly protected species, community service and other sanctions.

2.3.8. Proportionality of penalties meted

This indicator reflects the extent to which the severity of cases involving illegal bird take is reflected in penalties and sanctions under relevant national legislation. Overly lenient or disproportionate consequences can undermine the deterrent effect of the law, while excessively harsh penalties may create enforcement challenges or unintended social backlash. Measuring whether fines, imprisonment terms, and other sanctions are proportionate to the severity of the offence allows governments to ensure that existing legal frameworks effectively deter illegal take, promote compliance, and reflect the principles of justice and fairness in relation to local socioeconomic circumstances. Ideally, the proportionality of penalties such as fines should be consistent with or exceeds widely accepted standard for transnational wildlife crimes.

Consider: Does national legislation adequately and fairly penalize illegal bird taking offences?

Table 13. Scoring framework on the proportionality of penalties and sanctions under national legislation.

Score	0	1	2	3	4	5
Assessment	Penalties for illegal bird take are not defined or do not exist	Penalties for illegal bird take: Only make provisions for **administrative** penalties (e.g. fines, bans, suspensions) Are **not proportional** to the nature and severity of illegal bird hunting Are **inadequate** as they do not provide an effective deterrent[17]	Penalties for illegal bird take: Are prescribed in legislation and provide for criminal prosecution **Do not differentiate** offences, leaving a wide margin of judiciary discretion in the determination of the magnitude of penalties meted out Are **inadequate** as they do not provide an effective deterrent	Penalties for illegal bird take: Are prescribed in legislation and provide for criminal prosecution Provides a basic penalty structure that reflects severity of offences; however, leaving a wide margin for judiciary discretion Are generally seen as providing an **adequate** and proportionate deterrent for most cases of illegal bird take	Penalties for illegal bird take: Are prescribed in legislation and provide for criminal prosecution Detailed penalty structure **fully** reflects severity of offences Are generally seen as providing an **adequate** and **proportionate** deterrent for all illegal bird take cases, as evidenced through sustained illegal bird take crime decline (sustained decline in illegal bird take cases observed over at least 3 years)	Penalties for illegal bird take: Are prescribed in legislation and provide for criminal prosecution Detailed penalty structure **fully** reflects severity and offences Are generally seen as providing an **adequate** and **proportionate** deterrent for all illegal bird take cases, as evidenced through sustained illegal bird take crime decline (sustained decline in illegal bird take cases observed over at least 3 years) Treat wildlife crime offences (including organized criminal groups) as serious crime carrying a minimum prison term

[17] Measuring and estimating the effects of criminal sanction on subsequent criminal behaviour is complex and there is generally no agreed consensus on the deterrence of sanctions on criminal behaviours. Please make sure you assess here the adequacy of the law and not the effectiveness of the judicial system.

2.3.9. Use of criminal law in enforcement and prosecution

This indicator measures the extent to which a combination of criminal law (including criminal and penal code) is used in connection with the relevant wildlife laws to prosecute illegal take. Effective deterrence and enforcement rely on how general and specialized legal frameworks (legislation on wildlife conservation, natural resources use, protected areas) are integrated and considered within the wider legal framework in a country. Assessing the appropriate use of criminal law in relation to wildlife crimes provides insight into whether illegal take of wildlife (including birds) is treated as a serious offence, and how the different legal instruments interact. Ideally, the legal framework clearly stipulates which types of crimes should be considered under a country's criminal law and which ones can be penalised through administrative penalties. This indicator (the use of criminal law, and how it 'speaks' to other legislation) can also help governments undertaking the assessment to identify gaps in the legal architecture, such as underutilized provisions or weak enforcement pathways. It also ensures alignment with international commitments such as CITES, by demonstrating that national legislation effectively translates legal obligations into enforceable actions against illegal take of wildlife species.

Consider: Do prosecutions of illegal bird taking cases ensure the commensurate penalties by taking into account criminal law?

Table 14. Scoring framework on the use of criminal law.

Score	0	1	2	3	4	5
Assessment	Illegal bird taking is not criminalized Offences involving illegal bird take are only subject to administrative penalties Not possible to apply criminal law offences in illegal bird take cases	Illegal bird take is criminalized in some situations. However, there are provisions severely limiting concurrent use of other criminal laws Concurrent use of other criminal laws has never taken place	Illegal bird take is criminalized Concurrent use of other criminal laws is possible but subject to strict conditions Concurrent use of other criminal laws has rarely taken place	Illegal bird take is criminalized Use of criminal laws is possible, and in has been applied in some cases. Concurrent use of other criminal laws has taken place	Illegal bird take is criminalized Use of criminal laws is explicitly recognized. Clear guidance on charge aggregations/ aggravating circumstances linking cross-over elements Concurrent use of other criminal laws has often taken place	Illegal bird take is criminalized Use of criminal laws is explicitly recognized and is well integrated into cases involving illegal bird take Cross-over offences are legally mandated Concurrent use of other criminal laws has taken place in most illegal bird hunting cases

2.3.10. Organised crime legislation (optional)

The extent to which specific legislation addressing organised crime is used to combat illegal bird take and trade may be excluded if stakeholders do not assess organised crime as being closely linked to illegal wildlife hunting activities in their country. Organised crime networks have been widely implicated in the large-scale take and illegal trade of wildlife, including protected species (Gray et al. 2023). An indicator assessing the extent to which laws address organised crime networks involved in the take of wildlife, including birds, is essential because illegal take is increasingly embedded in broader criminal operations that may span regions or cross borders rather than occurring in isolation. Measuring whether governments have enacted organised crime legislation and included provisions enabling prosecutors and courts to refer to and use such legislation in wildlife crime cases provides insight into their capacity to prosecute appropriately and deter threats from organised wildlife crime networks. This indicator helps ensure that legal frameworks are robust enough to disrupt organised wildlife crime, support intelligence-led enforcement and enable coordinated responses. Under this framework, the indicator is optional because of the variation in circumstances affecting wildlife crime across Southeast Asian countries and is weighted to a maximum score of three.

Question: How is national legislation to address organized crime being used in the investigation and prosecution of illegal take of birds?

Table 15. Scoring framework on the use of legislation on organised crime.

Score	**0**	**1**	**2**	**3**
Assessment	National legislation on organized crime: Has not been enacted Cannot be used for prosecuting illegal bird take.	National legislation on organized crime: Is in place but is **rarely** used in the prosecution of cases involving illegal bird take. Does **not** have provision for special investigation methods	National legislation on organized crime Is in place and is **sometimes** used in cases involving illegal bird take Special investigation methods used for organized crime are **not available** for cases involving illegal bird take.	National legislation on organized crime: Is in place and **used as appropriate** in cases involving illegal bird take. Special investigation methods used for organized crime are **applied also** to cases involving illegal bird take.

2.4. Theme C: Enforcement response

2.4.1. National action plans and strategies to address illegal take of wild birds

This indicator measures the existence of a national strategy or action plan to address illegal take and the extent to which it has been implemented in the country. Such strategies may have a broad remit, covering wildlife or bird take in general, may be linked to national Red Lists, or may target specific locations and widely taken species. Assessing the extent to which national strategies and action plans have been developed to address the illegal take of wildlife is essential because coordinated planning across agencies can provide a foundation for effective prevention, enforcement and conservation measures, in collaboration with stakeholders such as conservation NGOs. Measuring the existence, scope, comprehensiveness and clarity of these strategic documents allows governments to demonstrate that they have identified priorities, allocated responsibilities and set measurable objectives to tackle illegal take. This indicator also provides insight into whether in-country actions are evidence-based, coordinated across stakeholder groups and aligned with international obligations under frameworks such as CMS, EAAFP, CITES and CBD. By tracking strategy development and implementation, the indicator assesses accountability, inter-agency coordination, resource planning and the ability to monitor progress over time towards reducing illegal take.

Consider: Is there a national action plan or equivalent document to tackle illegal bird take in your country? To what extent has this national action plan or strategy been adopted and implemented?

Table 16. Scoring framework on the extent of national action plans, strategies and frameworks to address illegal take.

Score	0	1	2	3	4	5
Assessment	A national action plan to address illegal take of birds, or more broadly, the illegal taking of wildlife: Has **not** been developed Illegal bird take is **not covered** by any other relevant enforcement strategies or action plans	A national action plan to address illegal take of birds, or more broadly, the illegal taking of wildlife: is in the process of being developed Illegal bird take is tangentially covered by other relevant enforcement strategies or action plans	A national action plan to address illegal taking of birds, or more broadly, the illegal taking of wildlife: Has been developed Has **not** been adopted by any relevant national enforcement agencies Is **not actively** implemented by all relevant enforcement agencies Has **not** been regularly updated	A national action plan to address the illegal take of birds: Has been developed Has been adopted by some relevant national enforcement agencies Is **actively** implemented by **some** relevant enforcement agencies Has **not** been regularly updated	A national action plan to address the illegal take of birds: Has been developed Has been adopted by all relevant national enforcement agencies Is **actively** implemented by **all** relevant enforcement agencies Has **not** been regularly updated	A national action plan to address the illegal take of birds: Has been developed Has been adopted by all relevant national enforcement agencies Is **actively** implemented by **all** relevant enforcement agencies Is being **monitored and reviewed** to ensure it remains up to date

2.4.2. Enforcement priority of wildlife infringements

This indicator measures national-level, government recognition of addressing wildlife crime as a high priority for enforcement. This indicator is essential because the effectiveness of legal frameworks depends not only on their existence but on the extent to which governments dedicate resources, attention, and operational focus to addressing violations. Measuring enforcement priority—through staffing, budgets, specialized units, and high-level directives can provide insight into whether illegal take is treated as a serious offence and integrated into broader law enforcement planning. This indicator also helps identify gaps in institutional commitments and helps inform resource allocation for enforcement. Depending on the country, it may be more difficult to compile information to make assessments under this indicator due to the nature of enforcement information being considered more sensitive.

Consider: Is combating illegal take of wild birds identified as a high priority for action at the national level?

Table 17. Scoring framework on enforcement priority at the national level.

Score	0	1	2	3
Assessment	Wildlife-related crimes (including of wild birds) are not considered a priority among national law enforcement agencies	Crimes involving the illegal take of birds: Is **rarely** identified as a **high priority** among national law enforcement agencies Has **not** been formally adopted and/or acknowledged as a high priority such as in national strategies, action plans etc. Is **not supported by dedicated resources** (e.g. Specialized units, funding, training.)	Crimes involving the illegal take of birds: Is **sometimes** identified as a **high priority** among national law enforcement agencies **Has** been formally adopted and/or acknowledged as a high priority such as in national strategies, action plans etc. Is **not supported by dedicated resources** (e.g. Specialized units, funding, training.)	Crimes involving the illegal take of birds: Is **usually** identified as a high priority among national law enforcement agencies **Has** been formally adopted and/or acknowledged as a high priority such as in national strategies, action plans etc. Is **supported by dedicated resources** (e.g. Specialized units, funding, training.)

2.4.3. Participation of the relevant stakeholders in policymaking

The indicator measures the level and extent of stakeholder participation (including civil society participants from research institutions, NGOs) in policymaking to combat illegal bird take. It assesses the extent of inclusive engagement which can strengthen legitimacy of policies and strategies and enhance implementation effectiveness. Measuring the collective involvement of diverse actors, such as government agencies, law enforcement, civil society, scientific experts, indigenous peoples and local communities, and industry representatives provides insight into how decisions reflect practical knowledge, ecological priorities, and societal interests. Like indicator 2.4.1., this indicator can also identify gaps in consultation and ensures that strategies to address wildlife crimes (including illegal bird take) are informed by multiple perspectives. By capturing stakeholder engagement, the indicator supports transparent, participatory governance and increases the likelihood that policies in place will reduce illegal take more effectively while balancing socio-economic considerations.

Consider: To what extent and through which means are stakeholders involved in policy-making to address illegal bird take?

Table 18. Scoring framework on stakeholder participation in policymaking on illegal bird take.

Score	0	1	2	3
Assessment	Stakeholders' participation in policy decisions concerning illegal bird take: **Is not envisaged or provided for in national laws** Is limited and informal, **whenever it occurs on an *ad hoc* basis** Is largely limited to **provision of basic** information on the policies that **are being** developed	Stakeholders' participation in policy decisions concerning illegal bird take: **Is envisaged or provided for in national laws, <u>but:</u>** Is limited to consultation Is achieved through *ad hoc* meetings as no formal committee is established Is achieved via consultation with academics through the national wildlife agency (or similar technical body)	Stakeholders' participation in policy decisions concerning illegal bird take: **Is envisaged or provided for in national laws, <u>and:</u>** Ensures that their inputs are treated as advice and are taken into consideration in the policy- making process Is achieved through formal structures and committees **But is however** incomplete as one or more stakeholders' group is not involved	Stakeholders' participation in policy decisions concerning illegal bird take: **Is envisaged or provided for national laws, <u>and:</u>** Ensures that they are **fully consulted on key policy changes** Is ensured by formal structures and committees that meet with the appropriate frequency Is complete as all **major** stakeholders are involved

2.4.4. Human resources and capacity of enforcement agencies

This indicator measures the level of staff resourcing in national law enforcement agencies to tackle wildlife crime. An indicator assessing the human resources and operational capacity of enforcement agencies to tackle wildlife crimes, including illegal bird take is essential because the effectiveness of law enforcement is dependent on the availability of trained personnel (familiar with the contexts of wildlife crimes, species involved), adequate staffing levels, and institutional capability. Measuring the skills (including widely used patrol frameworks such as SMART), specialization, and distribution of enforcement officers, as well as access to surveillance equipment for enforcement and patrol work, technology, and logistical support, can provide key insight into whether agencies have the capacity to detect, investigate, and prosecute wildlife crimes effectively. This indicator also captures capacity gaps that may limit deterrence, thereby informing targeted investment and training.

Consider: What staff resources do national law enforcement agencies have to combat illegal bird take in your country?

Table 19. Scoring framework on enforcement capacity at the national level.

Score	0	1	2	3
Assessment	Law enforcement agencies[18] are, **Significantly** under-staffed **Rarely** able to recruit and/or attract additional staff **Lacks** the experience, skills and tools/equipment required to enforce against wildlife crimes	Law enforcement agencies: **Occasionally** have a full complement of staff, but major staffing gaps exists **Usually** experience staffing[19] shortages/staff lack experience, skills and tools/equipment required to enforce against wildlife crimes	Law enforcement agencies: **Usually** have a full complement of staff with occasional staffing gaps. Staff are fairly well-trained with the skills and tools/equipment required to enforce against wildlife crimes	Law enforcement agencies: **Usually** have a full complement of staff and rarely experience staffing gaps. Staff are very well trained with the skills and tools/equipment to enforce against wildlife crimes. Staff are familiar and kept up to date on wildlife crime trends

2.4.5. Technical training for enforcement agencies

An indicator that measures the extent of technical training provided to enforcement agencies and officers to tackle wildlife crimes, including illegal bird take is essential because specialized knowledge and skills are needed for the effective detection, investigation (including crime scene investigation and forensic techniques), and prosecution of complex wildlife offenses. Measuring the availability and quality of training programmes, including species identification for field and market surveillance, wildlife-crime investigative methods, forensic methods, and prosecution procedures can provides insight into whether personnel are equipped to respond to evolving wildlife crimes. Wildlife-related illegalities are known to evolve with respect to shifts in demand for certain species[20], the ease of availability of hunting tools such as snares and nets, enforcement regimes, and other factors. There is a need for enforcement agencies to be familiar with such shifts and circumstances surrounding wildlife illegalities for effective enforcement on the ground. For instance, enforcement officers patrolling in forested landscapes would need to be familiar with hunting approaches common in such environments (e.g. use of snares for ground species, shotguns), while mist-nets are more commonly used to trap wild birds in open environments such as rice paddies and coastal wetlands (e.g. Angkaew et al. 2022).

[18] Includes all enforcement agencies involved in enforcing the country's wildlife laws; this may include but is not limited to police, military, immigration checkpoint officers, law enforcement arms of natural resources/ wildlife management agencies, protected are rangers.

[19] Staffing includes factors such as the presence of an appropriate mix of full-time, part-time and casual staff in enforcement and/or conservation agencies.

[20] Shifts in buyer/owner preference for species is well documented in the trade for pet birds, particularly in Indonesia.

Consider: How many of the enforcement officers have received regular training in illegal bird take-related aspects? How relevant and comprehensive are the training modules?

Table 20. Scoring framework on the extent of technical training for enforcement agencies.

Score	0	1	2	3
Assessment	Technical training programmes are **unavailable or not developed** for enforcement agencies. Enforcement agencies are **unfamiliar** with wildlife crimes based on assessments.	Technical training programmes are **unavailable or not developed** for enforcement agencies. Enforcement agencies are **familiar with some** wildlife crimes based on assessments.	Technical training programmes are **developed** for enforcement agencies but **limited implementation**. Enforcement agencies are **familiar with some** wildlife crimes based on assessments.	Technical training programmes are **developed** for enforcement agencies and **widely implemented**. Enforcement agencies are **familiar with all classes of** wildlife crimes based on assessments.

2.5. Theme D: Prosecution and judicial procedures

2.5.1. Guidelines for prosecution and sentencing

This indicator measures the existence (and comprehensiveness) of national guidelines or other guiding principles for prosecution and sentencing of offenders convicted for wildlife crime. An indicator assessing the existence of national guidelines or legal guidance for the prosecution and sentencing of offenders convicted of wildlife crimes, including illegal bird taking is essential because a consistent application of legislation is dependent on clear procedural directions for prosecutors and courts, and in fact has been made available in some countries for prosecution agencies. In countries where there are relatively stronger enforcement and regular prosecutions for wildlife crimes, there is expectedly a greater level of prosecutorial experience, and as a result, detailed guidance can be made available for prosecuting future cases involving wildlife crimes. Measuring whether such guidance exists, its comprehensiveness and accessibility can provide insight into the ability of the justice system to deliver proportionate and legally sound outcomes through legal precedents and case studies. An indicator to assess national guidelines on prosecution and sentencing can also help identify gaps in legal clarity, supports capacity building within the judiciary, and ensures alignment with international obligations. By tracking the availability of prosecutorial and sentencing guidance, the indicator strengthens accountability and promotes effective enforcement.

Consider: Are there clearly defined national guidelines or provisions in the national legislation for the sentencing of offenders prosecuted for illegalities related to bird taking?

Table 22. Scoring framework on sentencing and prosecution guidelines.

Score	0	1	2	3	4	5
Assessment	There are **no sentencing and prosecution guidelines** for cases involving the illegal take of wildlife	Sentencing and prosecution guidelines exist for cases involving illegal wildlife take but are mostly generic. Guidelines **specific to illegal bird taking do not exist.**	Sentencing and prosecution guidelines for cases involving illegal wildlife take, including **illegal bird take are available**, but **not regularly updated** (>10 years from time of assessment) Guidelines are **not widely used** by prosecutors and the courts.	Sentencing and prosecution guidelines for cases involving **illegal bird take** are **available and updated regularly** but only **occasionally referenced** by prosecutors and courts. Sentencing and prosecution guidelines are fairly **comprehensive**.	Sentencing and prosecution guidelines for cases involving **illegal bird taking** are **formally adopted and regularly reviewed or updated** to reflect new casework experience and precedents. Sentencing and prosecution guidelines are **comprehensive.**	Sentencing and prosecution guidelines for cases involving illegal wildlife take are **very comprehensive, with many specific case examples of illegal bird take.** Guidelines are formally **adopted and regularly used by the courts**, and **reviewed or updated** to reflect new casework experience and precedents. Guidelines widely disseminated with other stakeholders.

2.5.2. Awareness among prosecution agencies and courts

Wildlife crime cases are often marginalised due to competing prosecution priorities and perceived unimportance, receiving limited attention and resources. This indicator measures the extent of knowledge and awareness of wildlife crimes and its seriousness among prosecutors and judges (in local and national courts), and the appropriateness of the sentences handed down. Tracking awareness levels in the courts can provide insight into whether prosecution agencies and courts understand the seriousness and societal impacts of wildlife crimes, and the need for proportionate and timely legal responses. This indicator can help identify gaps in knowledge and inform future targeted training for prosecution agencies.

Consider: Are prosecutors and courts (including district, and lower courts) aware of the serious nature of wildlife related offences, including illegal bird take?

Table 21. Scoring framework on awareness of wildlife crime offences among prosecution agencies and courts.

Score	0	1	2	3	4	5
Assessment	The prosecutors and judges: Have little or **no awareness** of the nature and prevalence of illegal bird take, and the impact and potential profits of wildlife crime Have n**o awareness** of illegal bird take-related charges Usually treat illegal bird take as a **minor offence** Do **not** adhere to sentencing guidelines where they exist	The prosecutors and judges: Have **limited** awareness of the nature and prevalence of illegal bird taking, and the impact and potential profits of wildlife crime Have **limited** awareness of illegal bird take-related charges Collaborate with stakeholders (e.g. relevant government departments, civil society organizations, CSOs) to deliver verdicts that are **sometimes** appropriate to the nature and severity of the crime **Rarely** adhere to sentencing guidelines even where they exist	The prosecutors and judges: Have **some** awareness of the nature and prevalence of illegal bird take, and the impact and potential profits of wildlife crime Have **some** awareness of illegal bird take-related charges Collaborate (e.g. with relevant government departments, CSOs) to deliver verdicts that are **usually** appropriate to the nature and severity of the crime **Sometimes** adhere to sentencing guidelines where they exist	Have **a general** awareness of the nature and prevalence of illegal bird take, and the impact and potential profits of wildlife crime. Have awareness of illegal bird take-related charges, though this is **not consistently reflected** in case handling Collaborate (e.g. with relevant government departments, CSOs) to deliver verdicts that are **usually** appropriate to the nature and severity of the crime **Frequently but not systematically** adhere to sentencing guidelines where they exist	The prosecutors and judges: Have a **good** awareness of the nature and prevalence of illegal bird take, and the impact and potential profits of wildlife crime Have a **high level** of awareness of illegal bird take-related charges Collaborate (e.g. with relevant government departments, CSOs) to deliver verdicts that are **usually** appropriate to the nature and severity of the crime **Routinely** adhere to sentencing guidelines where they exist	The prosecutors and judges: Have a **strong** awareness of the nature and prevalence of illegal bird take, and the impact and potential profits of wildlife crime Have a **high level** of awareness of illegal bird take-related charges, **including cross-cutting offences** (e.g. trafficking, firearms, corruption, money laundering) Collaborate (e.g. with relevant government departments, CSOs) effectively to deliver verdicts that **fully reflect** the nature and severity of the crime **Routinely** adhere to sentencing guidelines where they exist, including aggravating and mitigating factors

2.5.3. Training and capacity building of prosecution and the judiciary with wildlife crime cases

An indicator assessing the extent to which prosecutors and judges dealing with wildlife crime have received specialized training[21] to prosecute and sentence cases involving illegal bird hunting is essential for the monitoring framework because the effectiveness of the justice system depends on the competence and confidence of those interpreting and applying the law. Measuring the availability, scope, and frequency of training ensures that prosecutors and judges (of local and national courts) consistently understand the seriousness of wildlife crimes, and how the relevant legislation and sentencing guidelines can be most effectively applied. This indicator helps identify gaps in judicial and prosecutorial capacity, informs targeted capacity-building programmes, and are linked to the previous two indicators.

Consider: To what extent are prosecutors and judges who handle cases of wildlife crime have received training in illegal bird take cases?

Table 23. Scoring framework on training capacity on prosecution and the judiciary.

Score	0	1	2	3	4
Assessment	Prosecutors and judges have received **no training** on wildlife crime cases.	**Basic training** programmes on wildlife crime cases exists. **Less than 10%** of prosecutors and judges have received training on wildlife crime cases.	**Basic training** programmes on wildlife crime cases exists. Between **10% and 50%** of prosecutors and judges have received training on wildlife crime cases.	**Moderate to comprehensive** training programmes on wildlife crime cases are available. **Many (more than 50%)** of prosecutors and judges have some exposure or have received training on handling wildlife crime cases.	**Comprehensive** training programmes on wildlife crime cases are available. **Most (over 70%)** of prosecutors and judges have some exposure or have received training on handling wildlife crime cases.

[21] Specialised training programmes on wildlife crimes and their prosecution are now increasingly available and documented, including by Interpol, and NGOs working in the wildlife crime, although likely none that is specific to bird conservation in the region, at present.

2.5.4. Transparency of prosecution outcomes

This indicator assesses the extent to which prosecution outcomes are publicised and documented in public records, including in the media. This indicator is useful because it measures the extent to which the public can access information on sentencing outcomes including details on the crime, the laws violated, the administrative and/or criminal penalties which were given, and the maximum and minimum penalties prescribed in law. Increased transparency of sentencing outcomes can encourage accountability amongst prosecutors and judges, and act as a deterrent for repeat offences. As summarised by UNODC (2024), a perceived certainty of punishment has shown an impact on crime levels, more so than the perceived severity of punishments. Consistently publicising successful prosecution outcomes of wildlife crime (including illegal bird hunting) can therefore be an effective deterrent, even if this only included a selection of high-profile cases.

Consider: To what extent are prosecution outcomes publicised or disseminated?

Table 24. Scoring framework on transparency of prosecution outcomes.

Score	0	1	2	3	4
Assessment	Prosecution/ sentencing outcomes are **never publicised** and are **never documented** in a publicly accessible record.	Prosecution/ sentencing outcomes are **rarely publicised** and documented in a publicly accessible record (less than 10% of cases) If publicised, the information presented includes details such as: a. Crime(s) committed	Prosecution/ sentencing outcomes are **sometimes publicised** and documented in a publicly accessible record (about 50% of cases) If publicised, the information presented includes details such as: a. Crime(s) committed b. Laws violated	Prosecution/ sentencing outcomes are **mostly publicised** and documented in a publicly accessible record (over 70% of cases) If publicised, the information presented includes details such as: a. Crime(s) committed b. Laws violated c. Penalties meted out	Prosecution/ sentencing outcomes are **always publicised** and documented in a publicly accessible record (100% of cases) If publicised, the information presented includes details such as: a. Crime(s) committed b. Laws violated c. Penalties meted out. Maximum and minimum penalties that could have been given

2.6. Theme E: Prevention and other initiatives to address bird hunting

2.6.1. International cooperation

This indicator measures the extent to which governmental institutions and agencies leverage on international initiatives, frameworks and working groups on wildlife crime and illegal bird taking to strengthen national mechanisms (e.g. legislation, policies, action plans and strategies). Wildlife crime is often transboundary, and therefore effective prevention and enforcement demands collaboration beyond national borders, including government-to-government collaboration. Measuring participation in such networks, programmes, information sharing programmes and adherence to international best practices can provide insight on national integration into regional and global efforts. This indicator helps identify gaps in international cooperation and encourages alignment with commitments and/or implementation of agreed goals and targets under frameworks for regional cooperation, such as the EAAFP, or instruments under CMS, CBD and ASEAN, and bilateral agreements and initiatives, if they exist. Both the CMS and EAAFP have existing task forces and working groups convened specifically to promote regional cooperation on addressing ITB, although there are visible gaps in government participation at present. By capturing engagement in these regional initiatives and frameworks, the indicator measures engagement in internationally coordinated responses to address illegal take.

Consider: Do governmental agencies in your country participate actively in illegal bird take-related international initiatives?

Table 25. Scoring framework on government participation in frameworks that promote regional and international cooperation.

Score	0	1	2	3
Assessment	National government **does not** participate in: Meetings of the CMS/EAAFP Intergovernmental Task Forces on Illegal Taking of Migratory Birds in Asia[22] Relevant CITES Initiatives ASEAN Wildlife Enforcement Network Initiatives Any bilateral ITB and migratory bird conservation initiatives	National government **rarely (less than 50% of meetings in last three years)** participate in: Meetings of the CMS/EAAFP Intergovernmental Task Forces on Illegal Taking of Migratory Birds in Asia Relevant CITES Initiatives ASEAN Wildlife Enforcement Network Initiatives Any bilateral ITB initiatives	National government participates **(more than 50% of the meetings in the last three years)** in: Meetings of the CMS/EAAFP Intergovernmental Task Forces on Illegal Taking of Migratory Birds in Asia Relevant CITES Initiatives ASEAN Wildlife Enforcement Network Initiatives Any bilateral ITB initiatives	National government participates (**more than 50% of the meetings in the last three years)** and takes an **active role**[23] in: Meetings of the CMS/EAAFP Intergovernmental Task Force on Illegal Taking of Migratory Birds in Asia Relevant CITES Initiatives ASEAN Wildlife Enforcement Network Initiatives Any bilateral *ITB* initiatives

2.6.2. Understanding the drivers of wildlife crimes and initiatives to address them

This indicator assesses the extent to which the drivers and motivations behind the illegal take of birds are well understood by the key stakeholders, including but not limited to government bodies, civil society and researchers. It is widely acknowledged that legal enforcement alone (covered in earlier indicators) is often insufficient to achieve sustained reductions in wildlife crime where structural factors such as rural poverty, limited livelihood alternatives, weak market regulation, consumer demand, remain unaddressed. Tracking such initiatives (both NGO-led and government-led) enables governments to evaluate whether policies extend beyond reactive enforcement and wider socio-economic issues to drive real behavioural change, while mitigating risks. The indicator measures the need for a more comprehensive, prevention-oriented approach aligned with international best practice in long-term biodiversity conservation outcomes.

Consider: What is the level of awareness of the drivers of illegal bird take among key stakeholders in your country, including those relating to the supply and consumer demand for illicit products?

[22] CMS Asia Pacific Illegal Taking of Migratory Birds Intergovernmental Task Force (ITTEA; https://www.cms.int/taskforce/ittea) and EAAFP Task Force on Illegal Hunting, Taking and Trade of Migratory Waterbirds (https://eaaflyway.org/task-force-on-illegal-hunting-taking-and-trade-of-migratory-waterbirds/)

[23] Active role includes actions such as regular participation in the majority of meetings, replying to questionnaires and implementing initiatives at national level.

Table 26. Scoring framework on knowledge of drivers of ITB and the initiatives to address drivers of wildlife crimes, including illegal bird hunting.

Score	0	1	2	3
Assessment	The drivers of illegal bird take are either **unknown** and/or have **never been formally assessed**. **No initiatives at** present to address drivers of illegal bird take.	Knowledge of the drivers of illegal bird take is **basic**, largely **anecdotal** and based on limited sources, but not necessary research. **Little or no initiatives** to address drivers of illegal bird take.	Knowledge of the drivers of illegal bird take is **moderate** but there are **gaps** in knowledge. Some research on the issue exists. **Some initiatives** to address the drivers of illegal bird take exists, including but not limited to awareness and livelihood programmes.	Knowledge of the drivers of illegal bird take is **robust and comprehensive across most stakeholders** and is based on corroborated information from a variety of sources **including social science research** **Several initiatives** to address the drivers of illegal take exists, including but not limited to awareness and livelihood support programmes.

2.6.3. Demand reduction activities and initiatives

This indicator assesses whether government agencies, especially agencies with mandates on biodiversity and wildlife conservation, have implemented targeted and evidence-based measures to reduce demand for illegally taken wild birds and bird-derived products. In many contexts, illegal bird take is sustained by demand for human consumption (see Yong et al. 2024), traditional practices, or commercial trade in domestic and cross-border markets. Effective demand reduction requires approaches that address specific consumer segments through behaviour change interventions (several already exists in Southeast Asia to address other aspects of the wildlife trade), regulation of physical and online marketplaces (including on social media platforms such as Facebook and Tiktok), engagement with traders, and strengthened compliance monitoring, and expectedly requires coordination with conservation NGOs operating in the region. Monitoring this indicator ensures that national responses tackle market-side incentives that drive hunting pressure of species, thereby complementing enforcement efforts with the view of sustaining a reduction in illegal offtake over time.

Question: Are activities implemented to address the demand for illegally obtained wild birds?

Table 27. Scoring framework on demand reduction activities and initiatives.

Score	0	1	2	3
Assessment	Demand reduction activities: Have **neither** been developed nor Implemented There is **no** information available on the demand and/or the reason for demand for wild birds illegally taken in the country.	Demand reduction activities: Have been **developed but are broad and not targeted at the drivers of demand** Are **rarely** implemented in full due to a lack of available resources (e.g. technical, human, financial) Are based on information on demand for illegally obtained wild birds in the country	Demand reduction activities: Have been developed to **target** drivers of demand and **implemented** Are **regularly** reviewed to identify the outcomes achieved Are based on information on demand for illegally obtained wild birds in the country	Demand reduction activities: Have been developed to **target** drivers of demand and **implemented** Are **regularly** reviewed to identify the outcomes achieved and **revise targeted strategies if necessary** Are **not needed** as data confirms that there is very little demand for illegally obtained wild birds in the country

2.6.4. Awareness from the regulated community (optional)

This indicator assesses the extent to which businesses operating in sectors at risk of facilitating the illegal take of wildlife —such as wildlife markets, pet shops, restaurants, and the intermediaries (i.e. third-party businesses such as middlemen and distributors), alongside hunting groups and associations (which occur in several Southeast Asian countries) demonstrate awareness of the applicable wildlife protection laws and regulatory obligations in-country. Effective prevention requires that regulated actors understand national legislation on wildlife protection and protection status of specific species, sourcing restrictions, licensing requirements, and the penalties for non-compliance. Monitoring awareness within the regulated community enables assessment of whether governments have undertaken adequate outreach, compliance assistance, and risk communication measures to deter deliberate (or accidental?) participation in illegal supply chains for wildlife products (including wild bird meat in several parts of Southeast Asia).

Question: Are efforts taken to increase the awareness of the regulated community, of the legislative requirements concerning sustainable use of wildlife and the penalties for non-compliance?

Table 28. Scoring framework on awareness from the regulated community.

Score	0	1	2	3
Assessment	Efforts to increase awareness of the regulated community: Are not undertaken at all.	Efforts to increase awareness of the regulated community: Are limited, usually informal and reactive. Are not comprehensive or widespread.	Efforts to increase awareness of the regulated community: Are based on structured awareness raising materials that have been developed and are relatively updated. Are sometimes comprehensive or widespread. Some targeted awareness initiatives directed at identified regulated sectors (e.g., market vendors, restaurant associations, pet traders) exist.	Efforts to increase awareness of the regulated community: Are based on well-developed[24] and up-to-date awareness raising materials. Comprehensive and targeted awareness initiatives directed at identified regulated sectors (e.g., market vendors, restaurant associations, pet traders) exist. Written guidance or compliance advisories are provided, and outreach is linked to enforcement priorities.

2.6.5. Indigenous and local community awareness (optional)

This indicator assesses the extent to which indigenous people and local communities in each country are informed and aware of their rights to hunt legally for subsistence and the legal protections for wild birds under national and/or subnational wildlife laws[25]. This is necessary to avoid unintentional take of protected species, and also because traditional practices or subsistence hunting is known to intersect with illegal harvesting for commercial purposes. Awareness in these communities is essential to prevent unintentional violations (in line with existing laws that legalise some levels of subsistence hunting), encourage indigenous people and local communities' participation in conservation activities, and integrate traditional knowledge into sustainable wildlife management practices. Monitoring this indicator evaluates whether governments have implemented culturally appropriate outreach, education programmes, and participatory mechanisms to promote understanding of species protection and take restrictions.

[24] Developed based on studies, surveys, or other assessments of the target group or population.

[25] Governments may choose to exclude this indicator, if indigenous peoples and rural communities are not (or no longer) known to actively practice hunting traditions. This is likely to vary from country to country and depends on the level of engagement with indigenous communities in each country.

Question: Are efforts taken to increase indigenous peoples' and local communities' awareness of the environmental, social and economic impacts of illegal bird take?

Table 29. Scoring framework on indigenous and local community awareness.

Score	0	1	2	3
Assessment	Efforts to increase indigenous peoples' and local communities' awareness: Are not undertaken.	Efforts to increase indigenous peoples' and local communities' awareness: Are usually informal and reactive Are neither comprehensive nor widespread There are no communication strategy or strategies and approaches used do not include or involve perspectives of indigenous and local communities	Efforts to increase indigenous peoples' and local communities' awareness: Have been developed and promoted by civil society organisations and/or governmental bodies Indigenous and local communities are sometimes consulted and involved in these initiatives Communication strategies and approaches are partially informed by perspectives of indigenous and local communities	Efforts to increase indigenous peoples' and local communities' awareness: Are widely developed and promoted by civil society organisations and/or governmental bodies [26] Indigenous and local communities are widely consulted and involved in these initiatives Communication strategies and approaches are comprehensive and well informed by perspectives of indigenous and local communities

[26] Developed on the basis of studies, surveys, or other assessments of the target group.

3. Summary of scores

Table 30. Self-assessment scoring table.

Theme (score)	Indicator	Self-assessment score	Maximum score
A (15)	Status, extent and scale of illegal bird taking		5
	Species affected by illegal bird taking		5
	Geographic hotspot of illegal bird taking		5
B (31)	National legislation regulating wildlife protection and take		5
	National legislation on regulated use		5
	Subnational legislation on regulated use (optional)*		3
	Prohibitions on bird and wildlife take activities under national legislation		5
	Subnational legislation on prohibitions on bird and wildlife take (optional)*		3
	Exceptions and exemptions under national legislation		3
	Sanctions and penalties		3
	Proportionality of penalties meted		5
	Use of criminal law in enforcement and prosecution		5
	Organised crime legislation (optional)*		3
C (17)	National action plans and strategies to address illegal take of wild birds		5
	Enforcement priority of wildlife infringements		3
	Participation of the relevant stakeholders in policymaking		3
	Human resources and capacity of enforcement agencies		3
	Technical training for enforcement agencies		3

D (18)	Guidelines for prosecution and sentencing		5
	Awareness among prosecution agencies and courts		5
	Training and capacity building of prosecution and the judiciary with wildlife crime cases		4
	Transparency of prosecution outcomes		4
E (9)	International cooperation		3
	Understanding the drivers of wildlife crimes and initiatives to address them		3
	Demand reduction activities and initiatives		3
	Awareness from the regulated community (optional)*		3
	Indigenous and local community awareness (optional)*		3
Total score (excluding optional indicators)			90
Total score (for all optional indicators)			15

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Annex 1. Workshop output from EAAFP MOP12

1. Review of existing monitoring metrics (in the MIKT Scoreboard)

To assess the framework of the MIKT Scoreboard and its potential relevance to the circumstances (and situation) in South-east Asia, four experts (familiar with the SE Asia/S Asia situation) reviewed each of the following thematic areas of assessment in relation to the extent (and nature) of bird take in each of the 11 Southeast Asian countries, and existing legislation for wildlife protection:

- National monitoring of bird take (data and information on scale and scope of bird take geographically and taxonomically, at the national level)
- Comprehensiveness of national legislation such as laws, decrees and associated policies for wildlife protection (and in regulating take)
- Enforcement response (preparedness of law enforcement bodies and coordination of national institutions)
- Prosecution of wildlife crime associated with bird take (effectiveness of judicial procedures)
- Prevention (other initiatives and tools to address bird take, including awareness and capacity building activities)

One discussion meeting was organised (internally) in consultation with BirdLife experts familiar with the implementation context of the MIKT scoreboard in early October 2025, to evaluate and compare experiences in developing and implementing the MIKT scoreboard, and lessons that can be transferred to the development of a scoreboard for Southeast Asia, alongside two meetings to review the MIKT scoreboard against the situation and legislative context in Southeast Asian countries. It was agreed that whilst a monitoring framework will emerge once the specific indicators to be measured are identified, consulted and agreed upon, the framework may not necessarily have to be labelled or named as ‘scoreboard’, as it may give undue pressure to government stakeholders (who may perceive that countries are measured against each other). Experiences from the process in developing the MIKT scoreboard (over 2015-2018) highlighted that some government stakeholders expressed reservation on how the scoreboard could be used as a regional comparison and cast a negative image on wildlife crime and management. Several monitoring tools and frameworks developed by international conventions (including the Ramsar Convention) were discussed, including the wide adoption of the Ramsar monitoring mechanism, ‘RMETT’ in monitoring the state of wetlands of international importance, and the process of promoting its adoption by countries.

2. Consultation with stakeholders

To assess stakeholder interest, and to consult how a new monitoring framework can be developed to track the extent of illegal take of birds and activities (and progress) to address illegal bird taking at a national level, a facilitated breakout discussion was organised at the pre-Meeting of the Partners of the East Asian-Australasian Flyway Partnership (EAAFP) workshop (full-day workshop) convened in Cebu, the Philippines by the CMS and EAAFP Secretariats on the 9 November 2025. The session was attended by representatives of governments (of EAAFP partner countries), conservation organisations (both international and local) and research institutions. The series of presentations before the breakout discussion was designed to provide the regional context of bird taking in the Southeast Asian region, with key updates on the extent of mist-net use, and its impact on wild bird populations, and a summary of the BirdLife-led situation analyses on bird hunting in Southeast Asia. Discussion highlights from the breakouts were reported at a EAAFP MOP side event on the 11 November 2025 '*Progress on Addressing the Illegal Take of Migratory Birds (ITB) in the Asia Pacific*'.

Discussion points at the breakout session included:

- What should governments and the conservation community monitor to assess action and progress on addressing illegal bird hunting?
- If a monitoring framework is created, what should we ideally monitor?
- What are the priorities for monitoring to track progress?

Through the discussion, each breakout group was asked to identify:

- Up to five (5) priority elements for a building a monitoring framework on illegal bird hunting
- How should we measure each of these (5) priority elements
- Other considerations relevant to your country/region

3. Results

3.1. Output of breakout discussion

Two breakout discussion groups were formed, with representatives of research institutions, conservation organisations and national governments (representatives from governments of Malaysia, Mongolia, Cambodia).

3.1.1. Group one

Group one noted that a monitoring framework to track progress on addressing illegal bird hunting needs to include the following measurables:

(a) Penalties, and the severity of penalties such as the length of jail terms and fines, alongside a measure of prosecution rates of cases of illegal hunting (which can be measured by the number of cases prosecuted).

(b) Capacity and strength (including knowledge and experience) of enforcement officers in relation to tackling the enforcement of legislation on illegal wildlife hunting. This can be measured in terms of the extent of trainings (number of trainings) and test results (test scores from training sessions and programmes).

(c) The volume of birds (illegally) hunted needs to be measured in some way, as a proxy of the extent of illegal hunting. This can be measured using survey data from priority sites but may be difficult to carry out. 'Outsourcing' of such survey and monitoring work on illegal taking, to local conservation NGOs may be required.

(d) Demand for (illegally) hunted birds can be measured, through a combination of online surveys and physical market surveys using standardized methodology.

3.1.2. Group two

Monitoring illegal bird taking needs to consider pressures (measures of the scale of the problem) and responses (measures of the actions taken to address the problem).

(a) To measure and assess scope and scale of illegal bird taking, there is a need to measure and monitor the species and abundance of species hunted and assess the reasons for hunting. This may include measures of the count or extent of birds hunted.

(b) Enforcement responses from government agencies can be measured by the capacity of enforcement officers (through tests, and other metrics of capacity) and the number of enforcement officers knowledgeable about enforcement on illegal bird hunting.

(c) Monitoring tools to keep track of illegal bird seizures over standardized timeframes (seizures over a year, which can be coordinated with wildlife rescue centers, if they are present), wildlife crime hotline records and other sources of confiscation data that may be kept by government agencies or conservation organisations.

(d) Monitoring (or measures of the number of) hotspots, and other measures. This may include the number of bird hunting hotpots identified (and the extent of different types of taking).

(e) Extent of trade (or demand) can be measured by the number or abundance of birds traded on online platforms, which can be collected from standardized online surveillance of websites and online platforms for the trade of wildlife products. This can also include monitoring surveys at bird markets (or food markets known to trade wild birds, as in some parts of Southeast Asia), and monitoring of traders (which may be more complex). Monitoring of the transit and supply chains may also be considered.

(f) Extent of the types and abundance of hunting tools (tools known to be specifically used for trapping birds and other wildlife, such as nets and snares), can be measured from confiscations and at shops and markets.

(g) Legislation and permits given out for legal hunting can also provide a useful measure of the extent of hunting, alongside with the extent of penalties and prosecution rates for wildlife crimes (prosecuted cases against the total number of cases).

(h) Community measures may also be considered. This may include measures of local communities (surveyed) of their understanding of laws and regulations on hunting, and other means of engaging with local stakeholders to assess local progress. Awareness tools may also provide a measure – including the number and extent of effort to promote awareness and the number of audiences engaged.

3.1.3. Discussion summary

All participants agreed that the scale of illegal hunting is directly related to the extent of progress on addressing illegal bird hunting, and needs to be actively captured into a monitoring framework for measurement (and to provide baselines), and this can be measured using indicators on the extent/abundance of traps and hunting tools, restaurants selling wild meat, food markets and online markets selling wildlife. There is also consensus that there is a need to monitoring hunting hotspots and specifical globally threatened species.

Participants also recognize that, at least in the context of Asia, there needs to be a clear measure for local and indigenous use, given that there is precedent and legal exemptions for many minority and indigenous people to trap wildlife (including birds) for subsistence consumption, although it is widely acknowledged the wildlife hunting quotas are rare in the region, unlike in Europe where wildlife population numbers are more reliable.

Last, participants agreed that there is a need to measure action and response against illegal hunting, including existing laws and regulations (including local laws such as ordinances, as in some parts of Southeast Asia), and documentation on enforcement and prosecutions, which is expected to involve the number of reports of prosecutions (e.g. court cases, local information, and other data that can be provided by government agencies, alongside the extent/amount of effort

for enforcement) and penalties applied on the number of cases where violators are caught. Public perception on illegal (bird) hunting can also provide a proxy measure of the extent of the problem and can be measured yearly through direct and indirect approaches.

3.2. Next steps

The pre-MOP workshop session at the EAAFP MOP12 provided an opportunity to engage and consult key stakeholders interested in addressing illegal hunting, take and trade of wild birds in the Asia-Pacific region, and review what the structure of a monitoring framework designed to help track progress on bird hunting in the region, may look like. Workshop participants (independently from the MIKT scoreboard) identified thematic metrics that should be included in such a monitoring framework, and shortlisted metrics that are broadly like the MIKT scoreboard. However, stakeholders also pointed out that given the scale of bird trade that shows up, and is likely measurable on online platforms, as is the case with many countries in Asia, the monitoring framework should also aim to capture the extent and scale of bird hunting, where possible using standardized methods, of online platforms such as shopping websites and social media websites. Participants also highlight the need to consider other measures not considered in the MIKT framework, including the issuance of hunting permits per annum, and the scale of indigenous hunting for subsistence consumption of wildlife and other localised uses, which may offer a proxy measure of the extent of bird hunting. Participants agree that the metrics and thematic areas identified at the workshop needs to be further reviewed and fine-tuned, and converted into scorable measures, and consulted with stakeholders once more in the next three months.

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Annex 2. Consultation questionnaire on assessing the importance of monitoring indicators

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Please rank the relative importance and feasibility of measuring each of the following indicators (prioritised earlier during the EAAFP Pre-MOP12 workshop) for a monitoring framework to trade progress on actions addressing the illegal take of birds at the national level. Your input will guide the allocation of weightages for each indicator

You are providing input on:

(name of country)

No.	Indicator	Feasibility (Yes/No/Unsure)	Importance (1/2/3/4/5)
National monitoring of bird hunting status and extent			
1	The extent to which information and knowledge on illegal bird hunting is available in the assessed country.		
2	Information and knowledge on the number of species affected by illegal hunting in the assessed country.		
3	Information and knowledge on where the key hotspots of bird hunting are in the assessed country.		
Comprehensiveness of national legislation			
4	Comprehensiveness of national legislation (e.g. national laws, decrees) for wildlife conservation, including laws that regulate and/or prohibit hunting.		
5	Comprehensiveness of subnational legislation (e.g. provincial level laws, community regulations) for wildlife conservation, including laws that regulate and/or prohibit hunting.		

6	Comprehensiveness of national legislation concerning the sustainable and lawful use of wildlife, (including legal hunting, quotas).		
7	Comprehensiveness of subnational legislation concerning the sustainable and lawful use of wildlife, (including legal hunting, quotas).		
8	Comprehensiveness of subnational legislation (if any) concerning the sustainable and lawful use of wildlife, (including legal hunting, quotas).		
9	The extent of hunting activities forbidden or restricted under national and subnational legislation.		
10	The extent of regulatory scrutiny concerning any authorization of exemptions (in relation to national and subnational legislation concerning wildlife conservation and the use of wildlife).		
11	The comprehensiveness and severity of penalties against illegal hunting (i.e. fines, prison terms).		
12	The extent to which a combination of criminal laws in the assessed country, and any other relevant national legislation used to prosecute wildlife crime.		
Enforcement response			
13	The presence of a national strategy, initiative or action plan for illegal hunting (including illegal bird hunting) and the extent of its implementation.		
14	The extent in which addressing/combating wildlife crime is recognised as a high national level priority for crime.		
15	The extent and level of stakeholder involvement participation in (illegal) bird hunting-related policymaking.		

16	The level (and magnitude) of staff resources in national law enforcement agencies (in the relevant ministries) to combat wildlife crime.		
17	The extent and/or the proportion of enforcement officers trained per year to address and enforce laws to address illegal bird hunting.		
Prosecution and sentencing			
18	The extent of awareness and effectiveness of prosecution agencies in meting out appropriate penalties for illegal bird hunting-related offences.		
19	The existence and availability of national guidelines for the sentencing of offenders for wildlife crime.		
20	The extent to which prosecutors and judges have received specialised training to handle wildlife crime cases (including illegal bird hunting).		
21	The extent to which prosecution outcomes are publicised and documented in public records.		
Prevention			
22	The extent to which national institutions take advantage of the international initiatives and working groups to address illegal bird hunting (for e.g. EAAFP and CMS ITTEA, bilateral agreements).		
23	The extent to which the drivers and main causes of illegal bird hunting in the assessed country are known, understood and addressed.		
24	The extent to which initiatives and activities to reduce the demand of illicit wildlife products are implemented.		
25	The extent of awareness-raising initiatives and/or programmes are in place to increase the awareness of		

	the regulated community, of the laws regulating the sustainable use of wild birds. (This may include initiatives and activities of both government agencies and non-government organisations)		
26	The extent of awareness-raising initiatives and/or programmes in place to increase indigenous awareness of illegal bird hunting, created with the involvement of indigenous people. (This may include initiatives and activities of both government agencies and non-government organisations)		