

ASEAN Strategy for Preventing Transmission of Zoonotic Diseases from Wildlife Trade

ASEAN Senior Officials on Forestry 2022

ASEAN Strategy for Preventing Transmission of Zoonotic Diseases from Wildlife Trade

I. BACKGROUND

Southeast Asia, which is already disproportionately burdened with zoonotic and emerging/reemerging infectious diseases (EID) continues to experience the repercussions of the COVID-19 pandemic on its economy, livelihood, food security, and health systems. Responding to that, ASEAN is committed to developing regional wildlife trade policies and engaging global partners to share knowledge and experience in wildlife trade law enforcement.

On 7 October 2016, the Ministers of Agriculture and Forestry (AMAF) signed an agreement to establish the ASEAN Coordinating Centre for Animal Health and Zoonosis (ACCAHZ). This agreement provides a framework for facilitating coordination among the ASEAN Member States. In 2021, the ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies was adopted during the 43rd AMAF Meeting. This document mainly serves as the agreed framework to prevent, protect against, control and provide an animal health and zoonosis response to the international spread of disease in the region. It aims to give guidance to the ASEAN Member States to implement and strengthen the core capacities for Exotic, Emerging Diseases and Animal Health Emergencies- building the minimum components of the animal health system for early detection, early response, and outbreak investigation. Its scope is broad and mainly undertaken by the livestock sector- as such, it encourages enhancing collaboration within the One Health framework, to establish strong links between animal health and public health as well as the livestock sector for early detection, reporting, and response. It states that there is a need to combine surveillance data from other relevant sectors, i.e. public health and wildlife health.

Furthermore, the Plan of Action (POA) for ASEAN Cooperation on CITES and Wildlife Law Enforcement 2021-2025, which was adopted by the ASEAN Senior Officials on Forestry (ASOF) in October 2020 emphasizes the need for developing a comprehensive strategy for wildlife management to mitigate the spread of zoonosis. In addition to the aforementioned agreements or POAs, the Strategy is being aligned to the Policy Brief on "Prevention of Zoonotic Diseases from Illegal Wildlife Trade Through a One Health Approach", developed under the auspices of the ASOF.

In light of the ongoing SARS-Cov2 pandemic, this is an opportune time to strengthen capabilities and integrate a One Health approach to prevent the spread of zoonotic diseases from wildlife trade, mitigate economic loss and reduce the burden of illness in Southeast Asia¹. For this ASEAN Regional Strategy, wildlife trade pertains to the local, national, and international trading or exchange of wild animals and their products. Wildlife trading practices (for food, breeding, and other utilization), whether legal or illegal (including poaching or illicit trade) serve as a mechanism for the spread of zoonotic diseases. There is an urgent call for action to reduce the spread of zoonotic diseases arising from the wildlife trade². Because of the interconnectedness between wildlife, other animals, people, and the environment, mitigating its spread and impact on public health requires an integrated, harmonized approach. Strategic activities should be inclusive of all sectors that have a substantial role in the implementation of the Strategy. ASEAN Leaders

¹ ASEAN Comprehensive Recovery Framework, Adopted at 37th ASEAN summit

OIE, WHO & UNEP. Interim Guidance. Reducing public health risks associated with the sale of live wild animals of mammalian species in traditional food markets. https://www.who.int/publications/i/item/WHO-2019-nCoV-Food-safety-traditional-markets-2021.1

recognized the urgent need to strengthen Public Health Emergency Response capacities by adopting a "Whole-of-ASEAN" approach and signified strong support for the establishment of the ASEAN Public Health Emergency Coordination System (APHECS) to be integrated within the operationalization of ASEAN Center for Public Health Emergencies and Emerging Diseases (ACPHEED)³. The development and implementation of this ASEAN Regional Strategy will lean on the proposed public health risk management and coordination systems.

II. FRAMEWORK FOR THE STRATEGIC PLAN

Objective:

This regional strategy on wildlife trade and zoonosis could form part of a broader regional One Health strategy on zoonotic diseases risk management; thus, this strategy focused on wildlife trade would serve as a sub-strategy, and it will consolidate and guide the efforts of relevant ASEAN Sectoral Bodies/Organs/Entities in the implementation of specific activities for preventing transmission of zoonotic diseases from wildlife trade. The current focus on wildlife trade and the relevant drivers of zoonotic disease risks in relation to biodiversity is emphasized because of the overarching global initiative to urgently address emerging pandemic risks.

The Strategy will also identify lead sectoral bodies/entities (relevant area of responsibility and expertise) that will provide oversight, guidance, and/or implement the activities. These sectoral bodies are to be part of the proposed One Health Group described below.

The Implementation Plan is designed with an eye toward the existing relevant activities, policies, or mandate of respective ASEAN Sectoral Bodies/Organs/Entities. For example, strategic activities that have been initiated or implemented under the ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies will be reviewed for potential alignment and co-implemented with those indicated in the matrix. Similarly, the status of activities aimed to address components of the ASEAN POA, CITES and Wildlife Law Enforcement could also be assessed for alignment (e.g., the development of legal instruments and relevant international laws and regulations)."

Approach: Activities in the Implementation Plan are built on related existing (adopted) regional agreements and frameworks with the introduction of new activities relevant to zoonotic diseases and Emerging Infectious Diseases (EID) risk management. The activities are intended to be inclusive, holistic, and adhere to One Health principles and consider the utility of existing national, regional, and international tools, mechanisms, and networks aimed at addressing shared threats in the animal-human-environment interface.

The Strategy includes the following strategic components⁴:

- 1. Institutional Arrangements and Activities;
- 2. Multisectoral, One Health Coordination, Collaboration, and Communication;
- 3. One Health Planning and Capacity Development;
- 4. Surveillance, Investigation, Risk Assessment, and Research Information Sharing;
- 5. Public and Stakeholder Communication, Education, and Advocacy and Behaviour Change;
- 6. Biodiversity Protection, Restoration, and Sustainable Management;

³ ASEAN Public Health Emergency Coordination System (APHECS), Assessment and Viability Analysis Report.

⁴ Please refer to **Annex 1**

Description of Priorities under the Regional Strategy Implementation Plan for the aim and description of each of these components

- 7. Biosecurity and Inspection Systems Enhancements;
- 8. Legal Arrangements and Wildlife Trade Law Enforcement;
- 9. Partnership and Resource Mobilization

There are overlapping themes with the ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies, such as surveillance (Focus area 2) and laboratory (Focus area 3). The intent is to identify points for synergies and complementarity among relevant ASEAN mechanisms and to elaborate multisectoral One Health collaboration and coordination. The aim is to formally establish within ASEAN the capacity to prevent future pandemics. Indicative activities for each of the 9 components are provided as examples that could be refined to be more specific during the planning and implementation phase of this regional strategy based on input from the sectors.

III. INSTITUTIONAL ARRANGEMENTS

A. Rationale

The strategic component/priority areas; which are under purview of the forestry cooperation will be coordinated by the ASOF/AWG CITES and WE, while the broader areas/issues beyond forestry (wildlife) will be coordinated under the ASEAN Coordinating Centre for Animal Health and Zoonosis (ACCAHZ). The Food, Agriculture and Forestry Division (FAFD) of the ASEAN Secretariat will facilitate and support ASOF/AWG CITES and WE in its implementation.

B. Responsibilities

The main functions of ASOF/AWG CITES and WE/FAFD:

- 1. Coordinate the implementation of the Strategy;
- Develop strategies on how Members and relevant Sectoral Bodies/Organs/Entities can prioritize activities and identify synergies and convergence points with relevant existing strategies or mechanisms;
- 3. Identify subgroups/working groups on specific activities or components and define the scope of the topics or responsibilities assigned to these subgroups;
- 4. Develop a timeline for implementation and adjust if needed, cognizant that there is an urgent need to implement these initiatives to help limit the spread of zoonotic diseases and EID; and
- 5. Monitor the progress of the Strategy and identify challenges and potential solutions.

C. Multi-Stakeholders on the ASEAN Regional Strategy for Preventing Transmission of Zoonotic Diseases from Wildlife Trade (*Multi-Stakeholders on the ARS*)

The Multi-Stakeholders on the ARS (MS-ARS) is adhoc in nature and will become the mechanism that implement, monitor, evaluate, prioritize and when necessary to revise the Strategy. The MS-ARS represents the responsible ASEAN bodies, such as ASOF, SOM-AMAF, SOMHD, ASOEN, and ACC WG-PHE as the policy-making bodies; and AWG-CITES/WE, AHC-2, ASWGL, ACB, and AWG-NCB as the technical level bodies. The ASOF/AWG CITES and WE will be responsible to oversee the MS-ARS.

D. Duration of the ASEAN Regional Strategy

Final Draft

Approved by the AWG-CITES and WE through ad referendum on 19 Aug 2022 Endorsed by ASOF on 6 Sept 2022 through ad referendum Endorsed by SOM-AMAF on 14 Sept through ad referendum Adopted by AMAF at 44th AMAF on 26 Oct 2022

This ASEAN Regional Strategy will be implemented between 2022 and 2025 with the possibility of extension if expected outputs have not been achieved. The ASEAN Regional Strategy is a living document that will be reviewed and updated during Annual Meetings. The implementation timeframe and the completion of the Strategy beyond 2025 will be determined by the stakeholders together with ASOF and SOM-AMAF.

E. Frequency and Objective of Consultations

The MS-ARS assisted by the ASEAN Secretariat will be convened on an annual basis to review the implementation of activities of the ARS and take stock of outputs achieved, on-going as well as those that have not been implemented. Annual Meetings are also the opportunity to identify challenges, address possible solutions and identify new priorities. Specific and ad-hoc technical working group meetings can be scheduled as and when necessary.

F. Resource Mobilization

Implementing the activities under the Plan will require a substantial amount of funding, in-kind and/or in cash. Member States are encouraged to source those funds voluntarily from national budgets or forge partnerships with entities that have similar objectives (i.e. CSOs and/or the private sector).

G. Engagement with External Parties

Upon adoption by AMAF and the ASEAN Leaders, the ASEAN Strategy will be launched and introduced to ASEAN Dialogue and Development Partners and international organizations such as FAO, WOAH, WHO, UNEP, and other relevant organizations to forge collaboration and cooperation in implementing activities under the Implementation Plan.

IV. MONITORING AND EVALUATION

Monitoring and Evaluation of the implementation of the ASEAN Strategy will be conducted on an annual basis during the Annual Meeting of the MS-ARS to measure the success and the achievement of the Strategy's indicators. The MS-ARS, with the support from the Chair of ASOF/SOM-AMAF and the ASEAN Secretariat, will be responsible for managing the Monitoring and Evaluation of the ASEAN Strategy in collaboration with the ASEAN Member States, particularly in the collection of the outputs outlined under the performance indicators, collection of official post-activity documents, analyzing the progress of the activities outlined under the matrix, collection of data on results/outcomes of activities and drafting annual reports on the activities, outputs and results.

V. MATRIX OF THE STRATEGIC IMPLEMENTATION PLAN, AS FOLLOWS:

ASEAN Regional Strategy for Preventing Transmission of Zoonotic Diseases from Wildlife Trade IMPLEMENTATION PLAN

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
1. Insti	itutional Arrangements and Activities					
1.1	Strengthening of institutional framework and mechanisms to support preventing transmission of zoonotic diseases from wildlife trade (within the One Health approach)	ASOF, SOM-AMAF, ASWGL, AHC-2 Country Coordinators, SOMHD, ASOEN, AWG-CITES- WE, ACB, AWGNCB, and ACC WG-PHE	Supporting One Health systems at all levels; this is a general system that could address any threats in the humananimal-environment interface	Desk review and workshops on best practices on relevant government instruments and mechanisms supporting One Health operationalization; review existing strategy that already adopts a One Health approach (e.g., to address AMR) ⁵ and explore potential expansion (if existing) to be inclusive of broader threats (zoonotic diseases from wildlife trade).	Framework to prevent zoonotic diseases transmission from wildlife trade (considering One Health System) is developed	SOMHD, SOM- AMAF, ASOF/AWG CITES and WE
2. Mult	tisectoral, One Health Coordination, Collab	oration, and Communication	1			
2.1	Establishing linkages between sectors that have a role in this Strategy and strengthening communication channels at various levels (e.g., subnational, national, regional) ⁶	ASOF, SOM-AMAF, ASWGL, AHC-2 Country Coordinators, SOMHD, ASOEN, AWG-CITES- WE, ACB, AWGNCB, and ACC WG-PHE	Establishment of the MS-ARS (including communication channels amongst sectors).	Coordination meetings convened to discuss the roles and responsibilities of the sectoral bodies (at the regional level or line agencies (at the national level) responsible to coordinate the implementation of this strategy	Development of a basic communication plan among sectors coordinates its activities.	ACCAHZ, SOM- AMAF, ASOF,
2.2.	Engagement of One Health stakeholders (traditional and non-traditional actors) to	ASOF, SOM-AMAF, ASWGL, AHC-2 Country Coordinators, SOMHD, ASOEN, AWG-CITES-	Fostering participation of all relevant actors in the discussions and/or	Organize meetings, including key stakeholders (FAO/WOAH/WHO/UNEP, ASEAN, USAID, SEAOHUN,	Regional meetings (ToR, membership list, rotating chairmanship,	ACCAHZ, SOM- AMAF, ASOF

⁵ ASEAN Strategic Framework to Combat Antimicrobial Resistance through One Health Approach [2019-2030]. Source: https://asean.org/wp-content/uploads/2021/10/Agd-6.2.b ASEAN-Strategic-Framework-to-Combat-AMR_Adopted-by-AHMM.pdf

⁶ It is important that each ASEAN Member State establish its own One Health Multisectoral Coordination Mechanisms (MCM) with representation to the team tasked to implement this plan.

	Adopted by AMAF at 44 AMAF OIT 20 OCT 2022					OCI 2022
	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
	discuss approaches to zoonotic disease prevention	WE, ACB, AWGNCB, and ACC WG-PHE	implementation of indicative activities.	others in conjunction with regional One Health meetings already established with rotating chairs among FAO/WOAH/WHO/UNEP ensuring that discussions are inclusive of wildlife zoonoses themes. Expand the network to include groups that contribute to the drivers of ecological disruptions and potential zoonotic disease spill-back/spill-overs.	network meeting schedules & records of decisions, planned or sponsored activities 7)	
3. One	Development of workforce and procedures for joint One Health risk management	ASOF, SOM-AMAF, ASWGL, AHC-2 Country Coordinators, SOMHD, ASOEN, AWG-CITES- WE, ACB, NCB, and ACC WG-PHE	Development of relevant plans, protocols, SOPs, guidance documents, and training of the relevant workforce as indicated in relevant strategy (Focus Area 1: Animal Health Emergency Preparedness) ⁸	Review of existing technical capacities and formulate and share models for scenariospecific guidelines/plans to test the capacities primarily on 1) Detection of cases, 2) Prevention of infection, 3) Management of spill-over/spill-back events and emergency preparedness and response in collaboration with partner organizations, institutions, and countries	Synthesized country reports on the status of (baseline data and progress): 1) Animal health: the Performance of Veterinary Services (Desired: >3 on Professional and Technical Staffing of Veterinary Services and Coordination Capability of Veterinary Services) 9; 2) Human health: progress of relevant components of IHR (e.g., Zoonotic Events	SOMHD, SOM- AMAF

⁷ The Regional One Health Network will ultimately provide support to various Activities indicated in this implementation plan.

⁸ ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies. Source: https://asean.org/wp-content/uploads/2021/12/FAFD-35.-ASEAN-Strategy-Exotic-Emerging-Diseases-and-Animal-Health-Emergencies.pdf.

⁹ World Organization for Animal Health (OIE). Performance of Veterinary Services. https://www.oie.int/app/uploads/2021/03/2019-pvs-tool-final.pdf

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
					and the Human– animal Interface, National Health Emergency Framework) ¹⁰	
				Organize knowledge exchange meetings to share experiences/best practices under Focus Area 1 of the ASEAN Strategy (Animal Health Emergency Preparedness: biocontainment and biosecurity) ¹¹	Number of regional meetings (One Health agenda)	
				Develop a tool for assessment and recognition of good farm biosecurity and biosafety programs and invite regional support	A biosecurity tool or scoring system developed	
				Development of regional training modules based and guidance documents (emergency preparedness plans, implementing biosecurity programs)	Training document for field workers.	
3.2	Utilization of the Tripartite operational tools (SIS-OT, MCM-OT, JRA-OT) ¹²	ASOF, SOM-AMAF, ASWGL, AHC-2 Country Coordinators, SOMHD, ASOEN, AWG-CITES- WE, ACB, NCB, and ACC WG-PHE	Piloting of relevant Tripartite tools to identify areas for improvement of national preparedness and response capacities	Organize coordination meetings (with quadripartite support) and Identify countries to pilot and roll out the MCM Operational Tool (OT) ¹³ , SIS OT (specific animal-human-environment interface applications) or JRA OT, together with a joint investigation	Tripartite operational tool country pilot results - report and recommendations.	SOMHD, SOM- AMAF

¹⁰ WHO. International Health Regulations. Online query - Country Profiles. Source: https://www.who.int/health-topics/international-health-regulations#tab=tab_1

¹¹ ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies. Source: https://asean.org/wp-content/uploads/2021/12/FAFD-35.-ASEAN-Strategy-Exotic-Emerging-Diseases-and-Animal-Health-Emergencies.pdf

¹² FAO, WHO and OIE. Joint Risk Assessment Operational Tool (JRA OT). Source: https://www.fao.org/3/cb2883en/cb2883en.pdf

¹³ FAO. WHO and WOAH. Multisectoral Coordination Mechanisms Operational Tool (MCM OT). An operational tool of the Tripartite Zoonoses Guide. Source: https://apps.who.int/iris/bitstream/handle/10665/359001/9789240053236-eng.pdf?sequence=1

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
				of animals infected or at risk of zoonotic infection.		
				Share outcomes of piloting of OTs among AMS.		
3.3	Strengthening of zoonosis laboratory capacities and the regional laboratory network	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF	Standardization of laboratory methodologies, supply logistics (e.g., regional procurement scheme), communication, and technical training to enhance capacities as previously agreed and defined in ACCAHZ ¹⁴ and relevant strategy (Focus areas 2: Surveillance, risk assessment and response and 3. Laboratories) ¹⁵	Develop basic assessment tools (or modify existing tools such as those developed for AMR monitoring-ATLASS) ¹⁶ and conduct a simplified assessment of laboratory capacity to diagnose zoonotic disease threats (including surge capacity). Laboratories should have the proper classification (Biosafety Levels [BSL]) to handle diverse animal pathogens.	Veterinary or wildlife diagnostic laboratory standards and laboratory assessment reports (synthesized from individual country report to determine overall/regional capacities and status of BSL levels).	SOMHD, SOM- AMAF
				Under the guidance of FAO and WOAH, conduct regional workshops and consultations to gain an understanding of regional laboratory capacities (i.e., for the performance of relevant diagnostic tests following appropriate levels of biosafety and biosecurity)	Number of regional workshops and consultation meetings.	SOM-AMAF
				Organize activities to harmonize protocols on testing, including sample referral to regional reference laboratories	Guideline documents for field workers (veterinarians, para veterinarians, and	SOM-AMAF

¹⁴ Agreement on the Establishment of the ASEAN Coordinating Center for Animal Health and Zoonoses. Source: http://agreement.asean.org/media/download/20161108071810.pdf

¹⁵ ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies. Source: https://asean.org/wp-content/uploads/2021/12/FAFD-35.-ASEAN-Strategy-Exotic-Emerging-Diseases-and-Animal-Health-Emergencies.pdf.

¹⁶ Countries could learn from FAO'S ATLASS methodologies to define targets to improve laboratory capacities for zoonotic diseases detection. ASEAN is already supporting the implementation of this tool to address the threats related to antimicrobial resistance.

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
					animal health community workers)	
				Conduct training (e.g., retooling of community field workers) and workshops on laboratory biosafety and biosecurity, and sample collection and handling (including safe handling of animals)	List of countries and number of laboratory or field training, number of laboratory staff/field workers trained. This aligns with PVS requirements (Item#3.1)	SOM-AMAF
3.4	Evaluation of One Health- zoonotic risk management capacities (multi-sectoral preparedness and response)	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, ACCWG-PHE	Validation of capacities through simulation and tabletop exercises following concepts defined for Focus Area 1: Animal Health Emergency Preparedness as described ¹⁷ .consistent with regional guidelines	Organize workshops and meetings to develop One Health systems evaluation tools and conduct regional simulation table-top exercises for testing the One Health systems preparedness and response plans	Finalized regional One Health systems preparedness and response plans	SOM-AMAF
4. Surv	veillance, Investigation, Risk Assessment,	and Research Information S	haring			
4.1	Strengthening regional networks for information and data sharing	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, ACCWG-PHE, ACB, AWGNCB	Fostering real-time and open sharing of surveillance, epidemiological investigation, and research information (e.g., to understand how pathogens move across species and ecosystems)	Conduct multi-stakeholder/multi- partner (including research organizations and funding agencies) regional meetings and workshops on information/data sharing on surveillance and epidemiological investigations, such as on the roles of animals in the spillover/spill-back and transmission pathways at the animal-human interface.	Creation of a regional research network/consortium (zoonoses and EID focused research) for information sharing and prioritization of collaborative regional research; this network meets annually.	SOM-AMAF

¹⁷ ASEAN Strategy for Exotic, Emerging, Re-emerging Diseases and Animal Health Emergencies. Source: https://asean.org/wp-content/uploads/2021/12/FAFD-35.-ASEAN-Strategy-Exotic-Emerging-Diseases-and-Animal-Health-Emergencies.pdf.

World Health Organization Western Pacific Region. Asia Pacific strategy for emerging diseases and public health emergencies (APSED III): advancing implementation of the International Health Regulations (2005): working together towards health security. https://iris.wpro.who.int/handle/10665.1/13654

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
4.2	Surveillance, epidemiologic investigations, and risk assessment	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, ACCWG-PHE, ACB, AWGNCB	Enhancing collection and collation of surveillance, epidemiological investigation, and risk assessment information	Workshops to develop regional capacities for mapping hazards risk (EID hotspots); mapping wildlife habitats and their potential virus reservoirs; epidemiological surveillance; virus genomics, and; access to technology or tools (GIS).	Plans and SOPs for mapping hazards risk (EID hotspots) are drafted. Sentinel surveillance (data collection in different components of A-H-E piloted.	ASOF
4.3	Conducting targeted research to better understand and manage zoonotic disease risks	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, ACCWG-PHE, ACB, AWGNCB	Generating information and evidence for the formulation of One Health policies and interventions	Facilitate strategic research to fill important data/information gaps such as 1) mapping and analysis of human activities that are potentially disrupting biodiversity/wildlife; 2) characterization of wildlife market chain, farming, and consumption (baseline information on species traded, trading dynamics, profiles of poachers and buyers/traders, motivation for hunting and trading, etc); 3) Characterisation of the frequency and intensity of interactions of animals and animals and people within communities	Research studies are published and disseminated (regional technical reports or peer-reviewed publications).	SOMHD
5. Publ	ic and Stakeholder Communication, Educ	ation, Advocacy, and Behav	iour Change			
5.1	Enhancement or development of communication strategies for advocacy, public awareness, and education	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, AWG-CITES- WE, ACB, ACCWG-PHE, AWGNCB:	Generating information and evidence for communication strategies targeting the public and key stakeholder groups.	Facilitate research to gather data on awareness of public and relevant stakeholders and identify feasible actions Organize regional workshops to enhance (expand themes to include zoonoses and EID	Annual regional communication and advocacy plan (budget, communication products, and guidelines).	ASOF

Endorsed by ASOF on 6 Sept 2022 through ad referendum
Endorsed by SOM-AMAF on 14 Sept through ad referendum

		Lead Sector
Adopted by AMAF as	t 44 th AMAF on 26	Oct 2022
Thudised by SOM-AMAR ON 14 C	sepi illibugil au le	lerendum

	Adopted by AMAF at 44 AMAF of 20 Oct 2022					OUI LULL
	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
			Developing regional public and stakeholder communication strategies and appropriate product/s and platforms for each target audience.	prevention) existing communication strategies 19 and review those already developed for addressing similar threats 20, share best practices, review other means towards the enhancement of communication strategies for advocacy, public awareness, and education		
				Develop and produce strategic campaigns on zoonotic diseases and One Health, targeting various key stakeholder groups including consumers, and children/youth promoting pretested messages and using accessible channels	Accessible archive of tested communication products and templates (e.g. Trello) relevant to key stakeholder groups.	ASOF
				In collaboration with communications focal points (communication designates of the AWGs) and guidance from the FAO/WOAH/WHO/UNEP (communication designates), organize media information sessions in selected countries (to promote this strategy, provide an overview of zoonotic diseases epidemiology, highlight the success of completed activities). This will cover traditional and social media.	List of traditional media personnel and key social media influencers trained per country.	ASOF
5.2.	Development of science-based advocacies on food safety policies and practices related to zoonotic disease	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, AWG-CITES-	Fostering multisectoral engagement to develop food safety policies and practices	In collaboration with relevant One Health stakeholders (e.g., livestock sectors), organize meetings or workshops to	Education and training modules for agri-food businesses (food handlers, live	SOM-AMAF

¹⁹ Strategic Plan of Action for the ASEAN Cooperation in Forestry (ASOF), Strategic Thrust#4.

²⁰ ASEAN Regional Strategy on Antimicrobial Resistance Communication and Advocacy (Adopted 39th AMAF Meeting). Source: https://asean.org/wp-content/uploads/2012/05/15.-ASEAN-Regional-AMR-Communication-and-Strategy.pdf.

Final Draft Approved by the AWG-CITES and WE through ad referendum on 19 Aug 2022 Endorsed by ASOF on 6 Sept 2022 through ad referendum

Endorsed by SOM-AMAF on 14 Sept through ad referendum Adopted by AMAF at 44th AMAF on 26 Oct 2022

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
	risks at all levels of animal food production	WE, ACB, ACCWG-PHE, AWGNCB		formulate food production and marketing policies and practices that will enhance food safety and mitigate misinformation and negative impacts on the animal production sector	operation workers) and retailers. Number of workshops/seminars conducted, and number of workers or establishment trained	
5.3	Promotion of zoonosis and EID risk reduction measures at all levels	AHC-2-SOMHD, ASWGL, SOM-AMAF, ASOF, ASOEN, AWG-CITES- WE, ACB, ACCWG-PHE, AWGNCB Additional ASEAN bodies: AWGEE, SOM-ED	Generating guidelines, best practices, and formal education platforms and materials for reducing the risk of exposure and transmission of zoonotic diseases and EID	Organize workshops and meetings to formulate guidelines on appropriate measures to reduce human and animal exposure and prevent zoonotic disease transmission; Conduct large-scale risk communication and community-level engagement on addressing issues.	Practical guidelines are available for diverse groups or sectors (parks and recreations, animal health workers, and live animal production workers in agri-food sectors/businesses)	SOMHD, SOM- AMAF
				In partnership with the education sector, organize workshops to develop strategies for novel formal education modalities from the K-12 level to higher education. One Health theme could be built on existing strategy and existing education network ²¹	One Health/zoonosis module developed (or as part of curricula). Educational materials/modules developed and broadly disseminated across the different levels of education systems.	
5.4	Enhanced communication, social mobilization, and advocacy focused on sustainable wildlife use that targets certain actors or consumer segments to change behaviour and social norms that will reduce demand for wildlife and wildlife-derived products	ASOF, ASOEN, AWG- CITES-WE, ACB, NCB, ACCWG-PHE, AWGNCB	Promotion of better understanding of the relationship of local wildlife consumption to international demand for wildlife consumption and trade	Conduct knowledge synthesis or scoping review (evidence obtained in component #4 such as information on species traded, sources of wildlife, characteristics of the local market relating to international markets, profiles of local wildlife consumers, poachers and buyers/traders, socio-political	Social and Behaviour Change Communication (SBCC) implementation plan. Accessible archive of tested SBCC products and templates relevant to specific target	ASOF

_

²¹ AWGEE Action Plan. Strategic Priority 7. Environmental Education (and sustainable consumption and production), Programs 3 (Regional Communication, Education and Public Awareness [CEPA] and 4 (Sustainable Consumption and Production [SCP].

	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
				factors, and norms influencing current practices, and the motivations and barriers to consume, and engage in hunting and trading). Workshops to transform knowledge into programs (communication strategy targeting relevant actors in the wildlife trade including urban consumers)	groups e.g., exotic pet traders and owners, wild meat traders and consumers	
			Enhancing communication and advocacy for wildlife law enforcement which can be integrated into strategic component #5.	Conduct advocacy meetings on increased awareness among industry stakeholders on their key contributions to multistakeholder collaboration about law enforcement	Advocacy materials published and broadly disseminated (law enforcement focused).	
6. Biod	iversity Protection, Restoration, and Sust	ainable Management				
6.1	Implementation of practical Nature-based Solutions/ecosystem-based approach (NbS/EbA)	SOM-AMAF, ASOF, ASWGL, ASOEN, AWG- CITES-WE, ACB, NCB, ACCWG-PHE, AWGNCB	Enhancing NbS/EbA on the protection of biodiversity and wildlife health	Identify nature-disrupting activities and the needs of impoverished communities and formulate plans and programs on EID risk reduction using NbS/EbA approaches	Guidelines and strategies on NbS/EbA and alternate livelihood programs within the regional One Health system are developed	ASOF
			Integration of NbS/EbA defined in existing mechanisms/strategies concerning forest management, wildlife and biodiversity ²² ²³ ²⁴	Formulate and share strategies in addressing biodiversity loss and ecosystem restoration (e.g., improper land use, expansion of agriculture, wildlife trading and consumption, local livelihood and food insecurities, others)	Scoping review of the regional "state of science" on biodiversity loss and ecosystem restoration projects and "Proof of Concept – NbS/EbA" document completed	ASOF/AWG CITES and WE

²² SPA for the ASEAN Cooperation in Forestry. 1.3 (Enhancement of forest management involving community living within and surrounding the forest for the sustainability of the forest and prosperity of the people.

²³ AWGNCB (ASEAN Working Group on Nature Conservation and Biodiversity) action plan (9 July 2019); mainstreaming biodiversity in different sectors.

²⁴ Revised AWGCC Action Plan (2019-2025), Core theme 2f which states, "Enhancing Nationally Defined Contributions Through Nature-Based Solutions".

				Adopted by A	MAF at 44" AMAF on 26	OCI 2022
	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
6.2	Introduction of alternate livelihood programs	SOM-AMAF, ASOF, AWG CITES and WE, ASOEN	Implementation of alternate livelihood in communities	Conduct workshops and community engagement to formulate incentive programs (indigenous communities dependent on wildlife) to encourage the conservation of wildlife management and wildlife habitats. Exploration of other uses of wildlife as alternate livelihood (captive breeding/production, tourism)	Alternate livelihood programs piloted in select countries as case studies.	ASOF/AWG CITES and WE
7. Bios	security and Inspection Systems Enhancer	nent				
7.1	Implementation of inspection systems and enhanced biosecurity in markets (wet markets, live bird markets, and butcher shops/facilities) ²⁵	ASWGL, SOM-AMAF, ASOEN, ASOF, AWG CITES and WE	Implementing processing/food handling best practices	Under the guidance of the UNFAO's subcommittee on livestock ²⁶ , conduct desk review of the following: 1) existing inspection regulations concerning markets where wildlife is likely traded (wet markets, live bird markets), 2) licensing or registration system for operators/vendors, and 3) biosecurity practices (cleaning and disinfection, downtime, and rest period). Conduct field work and situational analysis to review country experiences and adopt the Progressive Management Pathway for Biosecurity (PMP-B)	Plan for improving biosecurity capacity in wildlife production or processing facilities and value chain.	SOM-AMAF, ASOF/AWG CITES and WE

²⁵ With emphasis on unregulated establishments (where wildlife is most likely traded) or unofficial trading mechanisms or exchange of wildlife products.

²⁶ FAO. Committee on Agriculture (Sub-committee on Livestock). 1st Session: Strengthening national coordinated capacities to manage the risks of animal diseases and emerging zoonoses through the One Health approach. COAG:LI/2022/5. Available: https://www.fao.org/3/ni007en/ni007en.pdf

	Adopted by AMAF at 44 th AMAF on 26 Oct 2022					
	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
		SOM-AMAF, ASOF, AWG CITES-WE	Management of the supply of wildlife products, both for consumption and other uses ²⁷	Workshop to discuss implementation of supply management (volume of wildlife product traded) and monitoring.	Reporting protocol and annual report document (dashboards/trends) on volumes and species traded captured by monitoring systems	ASOF/AWG CITES and WE
8. Lega	al Arrangements, Wildlife Trade Law Enfor	cement, and Stakeholder Aw	areness and Commitment			
8.1	Development of a voluntary framework in which to operate/advance enforcement of wildlife trade laws to prevent the spread of zoonotic diseases from wildlife	ASOF, SOM-AMAF, ASWGL, AHC-2 Country Coordinators, SOMHD, ASOEN, AWG-CITES- WE, ACB, NCB, and ACC WG-PHE	Generating a legal instrument/regulatory framework	Workshops to discuss the development of a legal instrument (sectoral roles and responsibilities defined). Conduct legal consultation meetings/workshops.	Legal Instrument to operate or advance enforcement of wildlife trade laws to prevent the spread of wildlife zoonoses at national and regional levels is developed	ASOF/AWG CITES and WE and SOM- AMAF
8.2	Strengthening enforcement, and harmonization of wildlife trade laws and cross-border policies on zoonotic disease risk reduction	ASOF, AWG CITES and WE, ASOEN	Enhancing laws and enforcement of laws for the protection of wildlife and fostering harmonized border control. Frameworks/methods learned in conducting formal review of legal instruments such as those developed for review of legal instruments concerning AMR could be used as a basis.	Desk review of existing laws; development of guidelines, strategies, and SOPs on key aspects of law enforcement (related to CITES); and regional sharing of experiences/best practices in law enforcement.	Law enforcement guidelines and strategies within the regional One Health system is developed	ASOF/AWG CITES and WE, ASOEN
				Conduct regional consultations with relevant government stakeholders to discuss and agree on mechanisms to enhance law enforcement	(Signed) Agreement on regional activities strengthening IWT measures.	

.

²⁷ Plan of Action (PoA) For ASEAN Cooperation on CITES and Wildlife Law Enforcement (2021-2025).

				7 ldopted by 7	AIVIAI al 44 AIVIAI UII 20	OUI ZUZZ
	Strategic Components/ Priority Areas	Relevant ASEAN Bodies/ Organisations/Entities	Focus Areas of Activities	Indicative Activities	Expected Outputs	Lead Sectoral Bodies/Entities
				(CITES) and harmonize border control mechanisms		
			Enhancing data sharing on wildlife law enforcement (regionally and internationally)	Formulate guidelines-strategies and SOPs on the collection, sharing, and exchange of information (i.e., data sharing agreements) and regional and international cooperation for sustained transboundary wildlife law enforcement. (activation of ASEAN-WEN)	(Signed) data sharing agreements (or as part of the agreement above)	
			Development of wildlife trade "minimum" data elements for collection and reporting	Organize collection and use of CITES wildlife trade data, including using data as indicators of countries' progress in zoonotic pathogen risk management.	Annual reports (dashboards of indicators).	
9. Part	nership and Resource Mobilization					
9.1	Engagements at all levels including ASEAN Dialogue and Development Partners and international partners and promoting public-private-partnerships/technical cooperation to support and mobilize resources.	AHC-2-SOMHD, SOM-AMAF, ASOF, ASOEN, AWG-CITES- WE, ACB, ACCWG-PHE	Enhancing broader global partnership in the prevention and mitigation of zoonotic disease risk from wildlife trade	Organize discussions on partnerships, resource mobilization, and fundraising, with development partners and identify support options that are in line with specific objectives.	Bilateral and multilateral partnership agreements, involving WB, ADB, JBIC, USAID, DFAT, etc. (in establishing/ strengthening coordination and capacity building)	SOM-AMAF, ASOF
				Build collaboration with other regional associations, e.g., the European Union, to collaborate and support ASEAN in this context	Ongoing dialogue (ASEAN-EU, ASEAN- Canada, ASEAN- USA)	

•••

Annex 1

Description of Priorities under the Regional Strategy Implementation Plan

- 1) **Institutional Arrangements and activities**: aimed to strengthen existing One Health systems (such as those already formed to address antimicrobial resistance) and ensure its interoperability in addressing shared threats in the animal-human-environment interface.
- 2) **Multisectoral, One Health Coordination, Collaboration, and Communication**: this intends to bring together a core team or working group comprised of technical experts nominated by the relevant sectoral groups and AMS representatives tasked to implement this strategy. The operationalization (including coordination, collaboration, and communication mechanism at various levels) of the core team will benefit from the newly established ASEAN bodies, ACPHEED and ACHAZ, that have a vision for One Health capacity strengthening. This component builds on previous experiences in addressing broad threats, established networks, and tools that have been formed to strengthen One Health governance by encouraging sectoral leadership and accountability.
- 3) One Health Planning and Capacity Development: this aims to develop guidelines and protocols for early warning and detection of diseases, responding to zoonotic disease emergencies, and implementation of infection prevention and control. This component aims to improve critical competencies of WOAH's Performance of Veterinary Services (Technical Authority and Capability) by training the national workforce, for example, animal health workers, veterinarians/Para-veterinarians, and the progressive strengthening of regional laboratory capacities for detection of zoonotic diseases and emerging infectious diseases from wildlife.
- 4) Surveillance, Investigation, Risk Assessment, and Research Information sharing: this aims to establish and strengthen research and surveillance coordination mechanisms to generate evidence, strengthen surveillance and data collection, as well as develop a regional event reporting system for rapid alert and response. This component is essential to other components of this Implementation Plan to fill much-needed data gaps and monitoring and evaluation requirements.
- 5) Public and Stakeholder Communication, Education, Advocacy, and Behaviour Change: aim to strengthen communication strategies for advocacy, public awareness, and education on zoonotic diseases and EIDs from wildlife. Mainstreaming communication on zoonotic diseases and EID prevention into existing sectoral strategies concerning wildlife, livestock, agriculture, forestry, environment, and public health are essential to have a cohesive approach for educating the public and stakeholders about this issue.
- 6) **Biodiversity Protection, Restoration, and Sustainable Management**: this aims to identify activities leading to biodiversity loss, develop Nature-based solutions and implement these initiatives by piloting. These could also be harmonized with relevant strategies or mechanisms (E.g., forestry, biodiversity).
- 7) **Biosecurity and Inspection Systems Enhancement:** this component aims to understand current practices to identify gaps and enhance inspection systems focused on markets where wildlife is likely traded illegally (wet markets, live bird markets, and butcher shops/facilitates). An enhanced and implemented inspection system ensures compliance by relevant actors to local

Final Draft

Approved by the AWG-CITES and WE through ad referendum on 19 Aug 2022 Endorsed by ASOF on 6 Sept 2022 through ad referendum Endorsed by SOM-AMAF on 14 Sept through ad referendum Adopted by AMAF at 44th AMAF on 26 Oct 2022

laws and regulations about slaughter, biosecurity, and food safety best practices. Inspection could be used as a means to monitor the volume of wildlife products sold and distributed via these markets for consumption and other uses.

- 8) Legal Arrangements, Wildlife Trade Law Enforcement: aims to develop a legal instrument and/or regulatory framework in which to operate/advance the collective enforcement of wildlife trade laws to prevent the spread of zoonotic diseases from wildlife. It also aims to intensify wildlife trade law enforcement, enhance existing laws and regulations concerning wildlife, conduct sharing of knowledge and best practices on international wildlife law enforcement, and develop relevant declarations, guidelines, and strategies that integrate One Health concepts. The collection, sharing, and exchange of information and regional and international cooperation (activating the ASEAN-WEN) is a key component.
- 9) **Partnership and Resource Mobilization**: aims to strengthen technical cooperation and partnerships at various levels, leveraging funds and promoting leadership and accountability in relevant sectors, cognizant that the activities can only advance with a sustainable funding source and stakeholder commitment.