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International Institute For Global Health

ASEAN Scoping Study on Interlinkages of Health and Biodiversity - Highlights

Webinar on Biodiversity and Preventing Future Pandemics,
ASEAN Centre for Biodiversity

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Biodiversity and Health - Context

- Millennium Ecosystem Assessment – Health Synthesis (WHO 2005)
- Aichi targets (2011 – 2020) – Target 14- “contribute to health and well-being”
- State of Knowledge Review (2015) on Biodiversity & Health – SCBD and WHO
- 72nd World Health Assembly – Environment, Climate, Biodiversity and Health

- **COVID-19 Pandemic** shows vulnerability of our ecosystems, complexity and deep intersectoral nature of the situation, and seriousness of the costs of inaction in biodiversity and ecosystems (that are conventionally considered non-dominant sectors of health)
- **ASEAN region**- bio-culturally diverse, well integrated culturally and economically. Witnessing rapid changes, especially vulnerable to multiple threats to health and wellbeing
- Several **leverage points** exist in the region (natural resource availability, strong socio-cultural community and transboundary co-operation)

ASEAN Scoping Review on Biodiversity and Health

- Second ASEAN Conference on Biodiversity (2016) - Biodiversity and Health was adopted as a Strategic Focus Area for the region, UNU-IIGH has been working with ACB and partners.
- The Regional Meeting in Manila (2018) (ACB, CBD, WHO) led to the scoping review
 1. One Health and Biodiversity
 2. Food and Nutrition and Biodiversity
 3. Non communicable diseases (NCDs) and Biodiversity
 4. Traditional Medicine and Biodiversity
 5. Biodiversity planning and Health

Scope – Identifying relevant ASEAN regional policies & strategies, AMS national policies, sub-regional programs (e.g. Mekong river basin work, haze pollution), ASEAN + others, multilateral policies in context of ASEAN; Programs, Projects and Initiatives, Implementation mechanism, Institutions and Stakeholders

1. One Health



- One Health, (& Ecohealth, Planetary Health) - Intersectoral and interdisciplinary - integrates complex relationships between human health, animal health, agriculture, wildlife, vectors, microorganisms, environment and development. (One Health Guidance by SBSTTA – CBD)
- **Key regional priority** - Frequent epidemics of newly emerging & re-emerging infectious diseases (SARS, H1N1, and H7N9, COVID-19; largely zoonotics); increased use of antibiotics and pesticides in agriculture and livestock farming; increasing antimicrobial resistance, issues of food safety, NCDs etc.
- Regional and National policies and strategic plans about different aspects; Several global, regional cooperation initiatives - Research and Capacity development programs, Nearly 60 interesting projects/networks - **Fragmented; Needs convergence**
- Include both 'dominant' (public health & animal health) and 'non-dominant' sectors (such as biodiversity, environment, agriculture and land management, climate change)

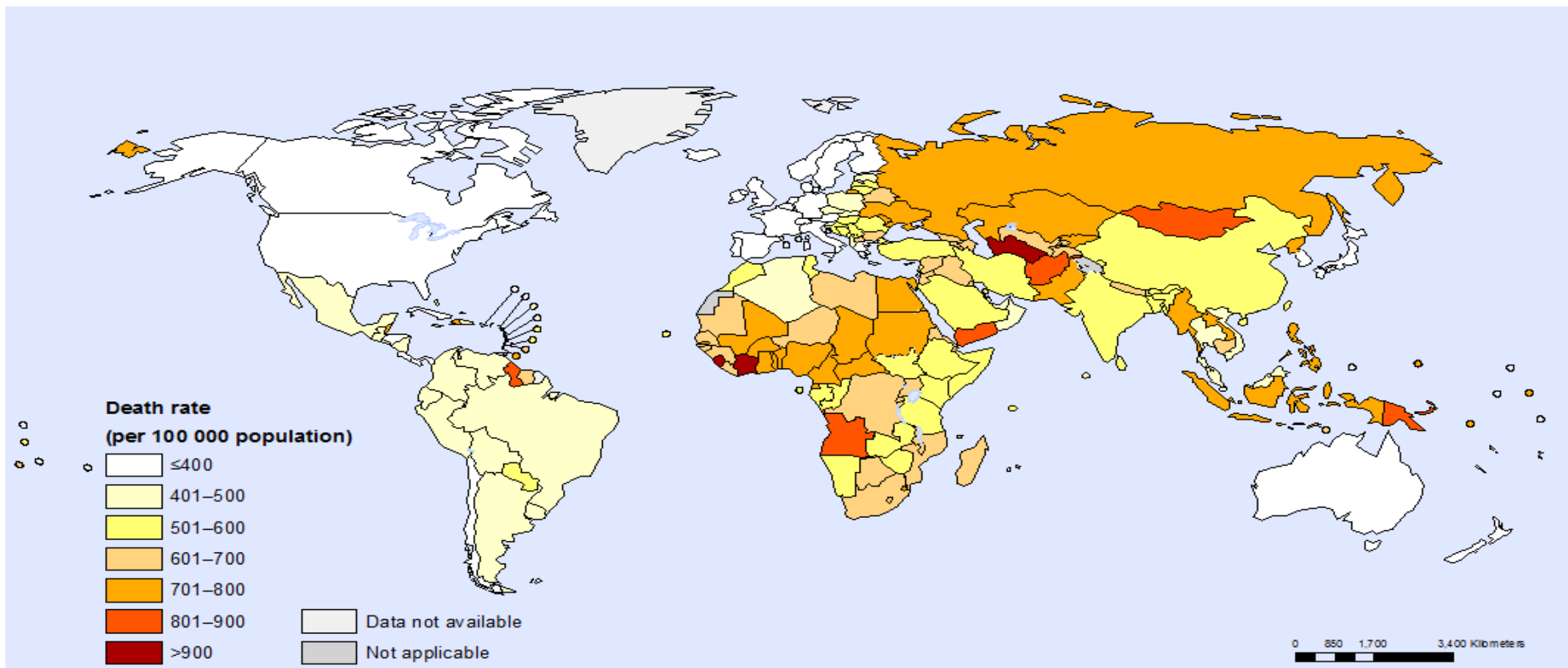
COVID-19 Response in the Region

- COVID-19 Response – ASEAN Secretariat – guided by ASEAN Post-2015 Health Development Agenda (APHDA) and its Governance and Implementation Mechanism (GIM), ASEAN Health Sector Cooperation has operationalized programs – Potential Integration with biodiversity & ecosystem dimensions
- ASEAN BioDiaspora program - real-time web-based risk assessment tools, linking multiple datasets including air travel data, demography data of ASEAN Member States, human population density, animal populations, industrialization and utility distribution, vector locations, and other relevant datasets
- ASEAN BioDiaspora Regional Virtual Centre (ABVC) for big data analytics and visualisation complements the national risk assessments, readiness and response planning efforts – No explicit reference to non-dominant sectors

2. Food and Nutrition

- Region rich in agrobiodiversity, dietary diversity and cultural practices, high dependency on agriculture – yet rapid changes in food security. changing consumption patterns, negative impacts of agricultural intensification, climate change etc.
- Under-five wasting, anaemia in women of reproductive age, low birth weight, obesity – below global targets. Insufficient data to comprehensively assess progress towards these global targets (Global Nutrition Report 2018)
- ASEAN Integrated Food Security (AIFS) Framework and Strategic Plan Action on Food Security (Spa-Fs) 2015 – 2020; ASEAN Economic Community Blueprint 2025 - ASEAN cooperation on food, agriculture and forestry (FAF) – two comprehensive policy frameworks – key intersectoral efforts are in place – A gap appears to be that biodiversity & ecosystems have low focus
- A clear nexus approach is desirable involving germplasm conservation and productive resources (soil, water, landscapes, etc.), linking to health outcomes (food security, nutritional security through dietary diversity), and livelihoods of those including indigenous and local communities; those living in urban and peri-urban settlements

Deaths due to noncommunicable diseases: age-standardized death rate (per 100 000 population) Both sexes, 2015



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Information Evidence and Research (IER)
World Health Organization



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3. Non-Communicable Diseases (NCDs)

- Estimate suggests more than 70 % of deaths in some countries in the region are attributable to NCDs (WHO, 2017; 2018) - Hypertension, diabetes, Cardiovascular diseases, obesity and other lifestyle diseases
- Significant as comorbidities in COVID-19 and other epidemics – Higher Mortality Rate
- WHO country strategic AMS approaches have highlighted NCDs as focus area along with tackling infectious diseases. A ‘whole of government’ and ‘whole of society’ approach - **Adopted by AMS and there are specific initiatives**
- ASEAN Health Cluster 1: Promoting Healthy Lifestyle - focuses on promoting healthy lifestyle, active aging, food and nutrition security, and building capacities, awareness, information sharing amongst AMS countries – **Integration of biodiversity dimensions**
- Build on existing ASEAN level initiatives such as the Bandar Seri Begawan Declaration in ASEAN (2013) on NCDs, and national campaigns – **integrate biodiversity and ecosystems in a stronger approach.**

4. Traditional Medicine

- Major resource for public health due to megadiversity and rich cultural practices.
- Several **initiatives** – Resource use and Conservation, Trade, Quality Standards, R&D, Community health, NTFPs, Cultivation etc. – ASEAN Task Force on Traditional Medicine, WHO, IPGRI, FAO, UNCTAD, CITES, IUCN and other international agencies; Community Forest Enterprises (CFE) – ASEAN Economic Community.
- **Medicinal plants & TK Status** - Conservation of wild species and wildlife trade- A clear understanding of population status, movement and trade of these resources across region. **Updating information in an integrated fashion** to enable mapping and monitoring of resource use and further regulating illegal trade
- Need for Traditional Knowledge Digital Library (TKDL) – ILK documentation and evidence building, standardization, integration, IP Protection and ABS are crucial.
- **In Pandemics** – TM is a key resource for localization and coping in community health - immune modulation, prophylaxis, mental health, NCDs etc.

5. Biodiversity Planning and Health

- Status of Environment & Biodiversity sector in Health planning and vice versa
- **NBSAPs** - Conservation of resources and ecosystems to ensure healthy environment healthy people – limited to more tangible elements (like pollution)
- **Country Progress Reports** are largely silent on target 14 of Aichi Biodiversity Targets on direct health aspects
- **ASEAN Biodiversity Outlook (ACB 2017)** - Measures to achieve related targets such as addressing pollution (Target 8), water and sanitation (Target 14), sustainable agriculture (Target 7), sustainable consumption and production (Target 4) & climate change action (Target 15) appear well, yet not interlinked; Mainstreaming health sector not explicit amongst majority of AMS
- **COVID-19** - Need to invest in nature-based interventions, especially as a preventive measure - for joint action including surveillance, research studies, building capacities, design and implementation, monitoring and reporting

Reflections – Preventing Future Pandemics

- Several country level initiatives across various themes -Improved cross-sectoral collaboration, involving stakeholders at different levels. Requires methodological guidelines; has transaction costs linked to ensuring co-operation between different sectors - time, resources
- Insufficient data, financial resources, awareness and capacities of different stakeholders are some challenges
- ASEAN Secretariat Working Group for ONE Health (ASEC-ONE Health) - coordinates various health-related initiatives of the ASEAN Secretariat to maximize the use of resources and promotes efficiency and integration. Seven essential non-health sectors identified for ASEAN: Water & Sanitation; Food supply; Utilities and energy; Public transportation; Communication; Security and Order; Finance and Banking. - **Biodiversity is missing**
- The ASEAN Technical Working Group Pandemic Preparedness and Response (ATWGPPR) Senior Officials Meeting on Health Development (SOMHD) – **Integrate biodiversity and ecosystem dimensions with a stronger focus**

Concluding Remarks

- COVID-19 Pandemic clearly shows vulnerability of our ecosystems, complexity and deep intersectoral nature of the situation, seriousness of costs of inaction in non-dominant sectors of health such as biodiversity.
- To analyse the complexity and develop a pragmatic approach of implementation, a combination approach is critical - One Health (Ecohealth, Planetary health)
- Study (under review) is highly relevant in the context of ongoing IPBES Nexus Assessment of the Interlinkages among Biodiversity, Water, Food and Health in the context of Climate Change; Relevant to the Interagency Liaison Group on Biodiversity and Health of the SCBD and WHO
- **ASEAN Health Cluster post 2020 planning** as well as **ASEAN post 2020 biodiversity planning** are opportunities for further integration.

Thank you ASEAN Centre for Biodiversity!

Thank you all for your attention !

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