



## Mainstreaming Biodiversity in Food and Agriculture in the ASEAN Region

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Agriculturists' Summit  
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Established in 2005, the ACB **facilitates cooperation and coordination** among the ASEAN Member States and with relevant national government, regional and international organisations, on the **conservation and sustainable use of biological diversity and the fair and equitable sharing of benefits arising from the use of such biodiversity in the ASEAN Region.**



ACB's programmes and thrusts continue to be anchored on supporting the ASEAN Member States' implementation of the CBD Strategic Plan for Biodiversity (2011-2020) and helping them achieve the Aichi Biodiversity Targets, through regional cooperation programmes, and projects on biodiversity thematic and geographic areas, consistent with the ASEAN Agenda 2025 and the ASCC Blueprint



## ACB's Programmes



ASEAN Heritage Parks Programme



ASEAN Clearing House Mechanism (CHM)



ASEAN Biodiversity Outlook



ASEAN Conference on Biodiversity



ASEAN Biodiversity Heroes



## Biodiversity

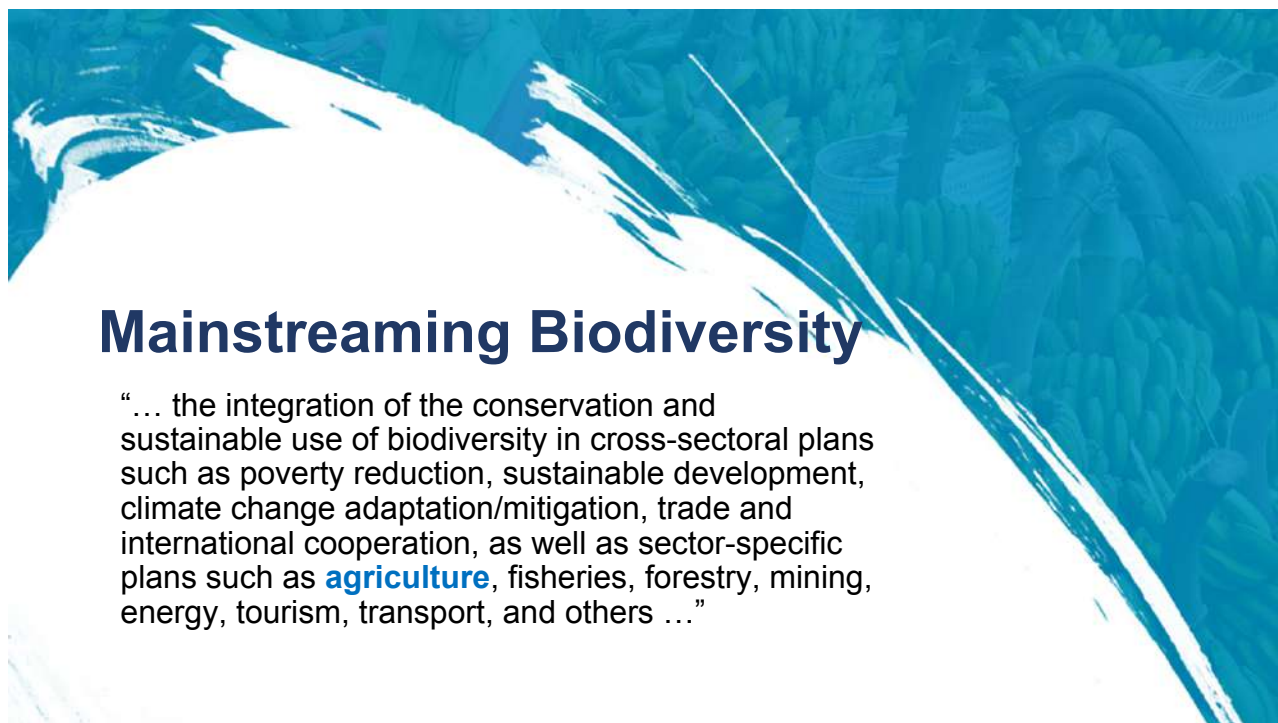
is a crosscutting environmental concern  
which affects many sectors.



Business and health draw raw materials from biological resources and ecosystem services



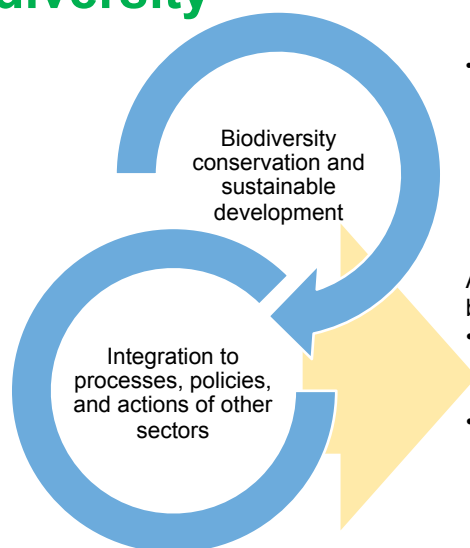
Diverse biological resources and multi-functionalities of ecosystems are the foundation of agriculture and food production



## Mainstreaming Biodiversity

“... the integration of the conservation and sustainable use of biodiversity in cross-sectoral plans such as poverty reduction, sustainable development, climate change adaptation/mitigation, trade and international cooperation, as well as sector-specific plans such as **agriculture**, fisheries, forestry, mining, energy, tourism, transport, and others ...”

## Mainstreaming Biodiversity



- CBD COP 13/Decision XIII/3 – mainstreaming to **agriculture**, fisheries, tourism sectors

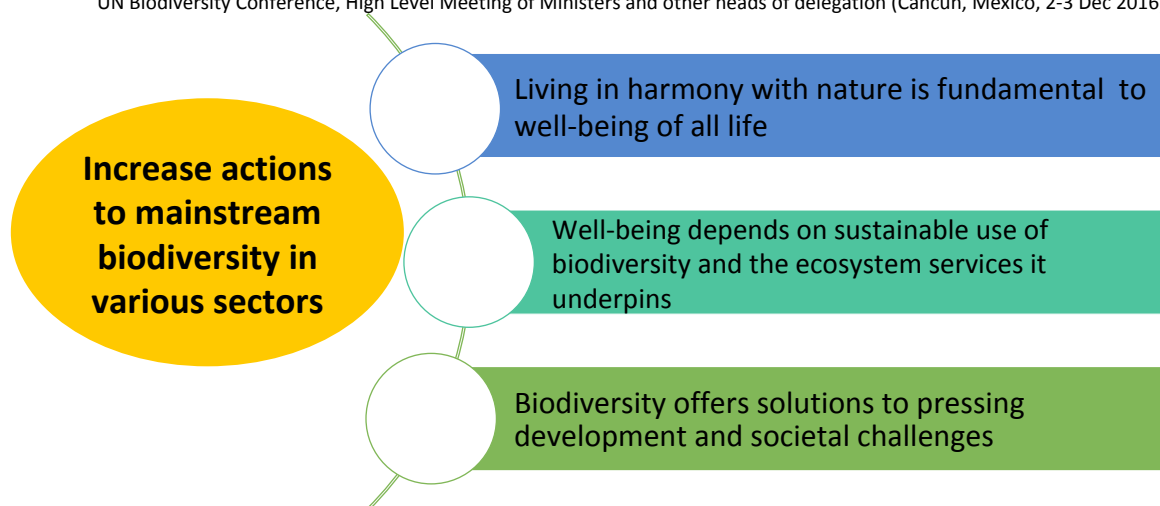
Address challenges in agriculture in relation with biodiversity:

- to sustain agricultural biodiversity and ecosystem services provided by, and necessary for, agriculture, and
- to mitigate the negative impacts of agricultural systems and practices on biodiversity which is not used directly whether in the same or other ecosystems ([www.cbd.int](http://www.cbd.int))



## Cancun Declaration on Mainstreaming the Conservation and Sustainable Use of Biodiversity for Well-being

UN Biodiversity Conference, High Level Meeting of Ministers and other heads of delegation (Cancun, Mexico, 2-3 Dec 2016)





## Cancun Declaration – Commitment and Actions

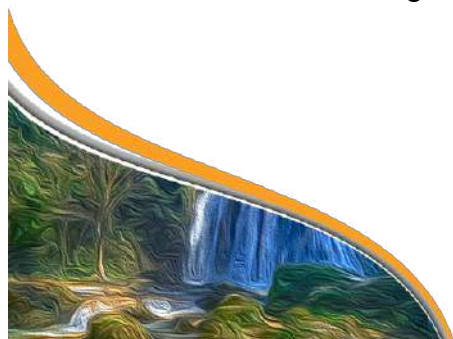
Support **sustainable production and consumption throughout the value chains**, the safe and sustainable application of technologies, and the phasing out of harmful incentives and strengthening of positive incentives

ACTIONS	
1. Promotion of sustainable agriculture	7. Soil conservation
2. Integration of agriculture and biodiversity	8. Promotion of diversified agroecosystems and agrobiodiversity sites (e.g. GIAHS)
3. Integrated and cross-sectoral planning processes	9. Prevention of agricultural pollution and safe and sustainable use of agricultural inputs
4. Conservation and cultivation of native varieties	10. Safe and sustainable use of appropriate technologies
5. Implementation of GPAAP and GRFA of FAO	11. Use of biodiversity in agricultural systems to control pests and diseases
6. Conservation and management of pollinators	12. Promotion of sustainable production and consumption patterns

## Agricultural Biodiversity or AGROBIODIVERSITY

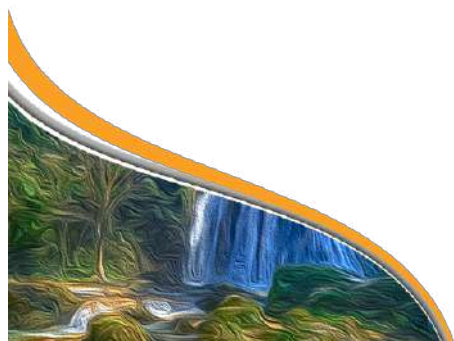
“...the variety and variability of animals, plants and micro-organisms, at the genetic, species, and ecosystem levels, that sustain the functions, structure, and processes of the agro-ecosystem.” (CBD 2008)

“Biodiversity for food and agriculture includes all the components of biological diversity of relevance to food and agriculture together with the components of biological diversity that constitute the agro-ecosystem.” (Sajise, 2019)



## Biodiversity for Food and Agriculture

**Agro-ecosystems are known for their multi-functionality and not just production.**



Some High-biodiversity agro-ecosystems:

- Mixed Cropping System
- Crop-livestock production
- Crop-fish production and
- Forest-crop-livestock production system

## Biodiversity for Food and Agriculture

The use of multi-species and multi-breed of crops and animals is one strategy that many traditional farmers, including those in AMS, use to maintain high diversity in on-farm niches, and to buffer against climatic and economic adversities.

Known for their use in:

**Integrated Pest Management**

**Increasing yield (product quality and kind)**

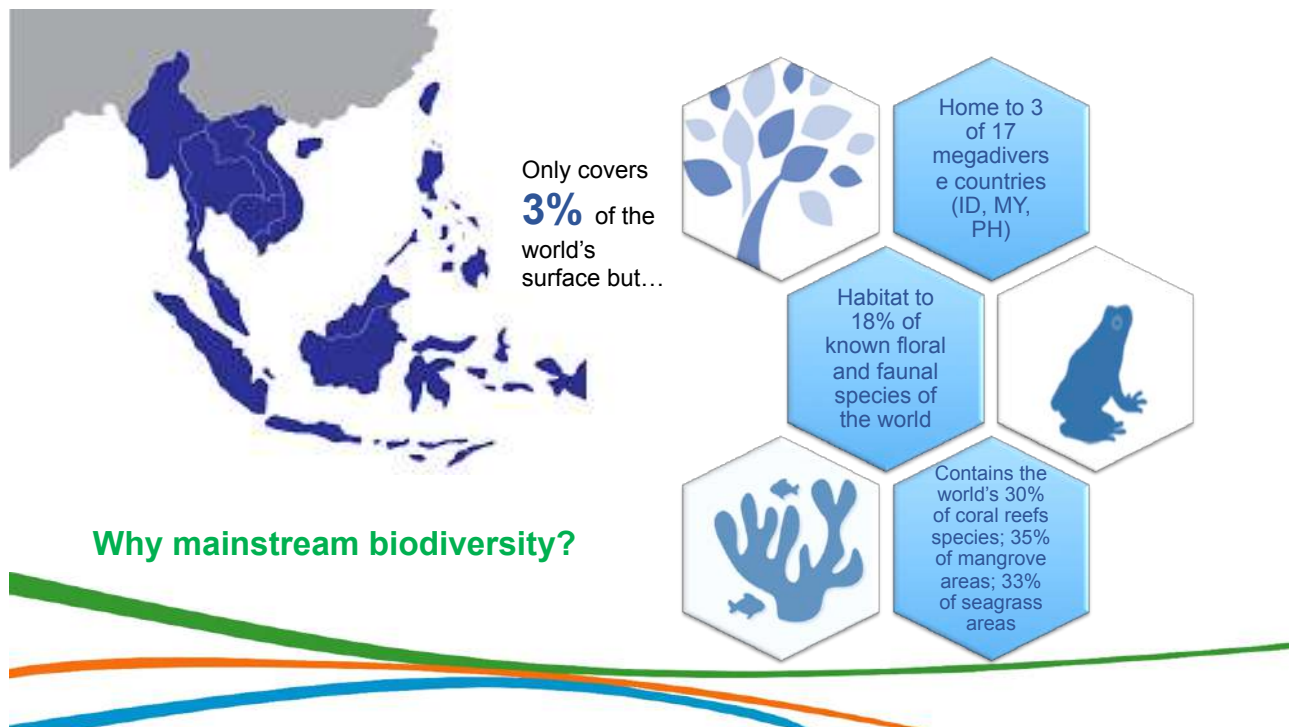
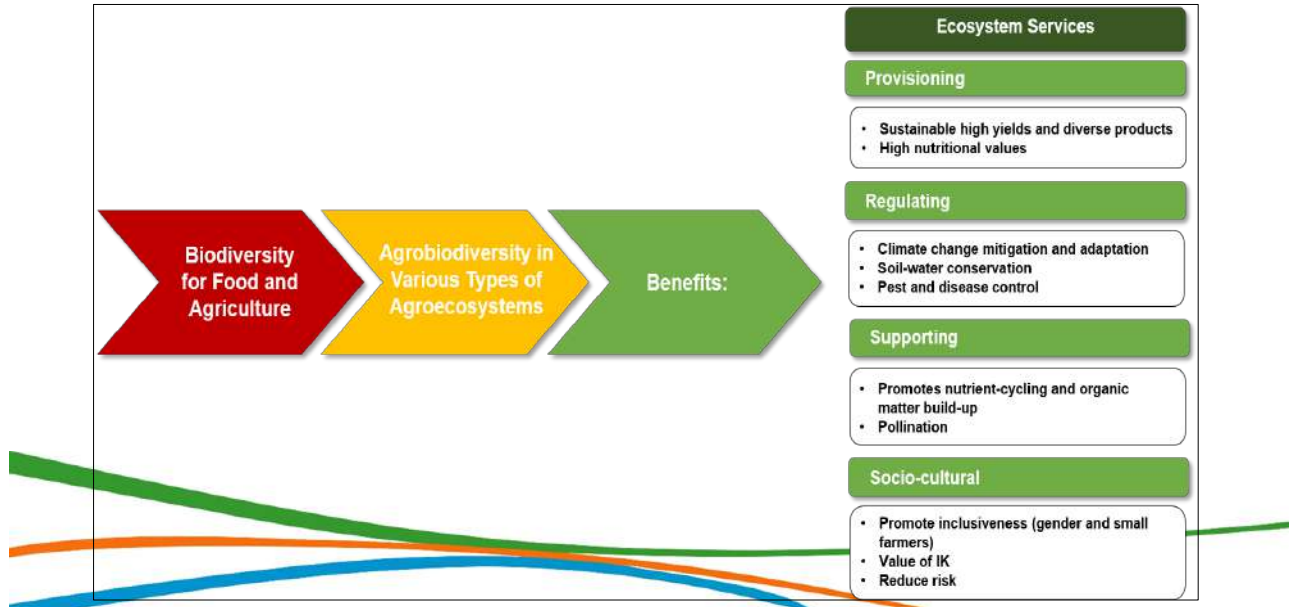
**Risk management in response to fluctuations in market demands and prices**

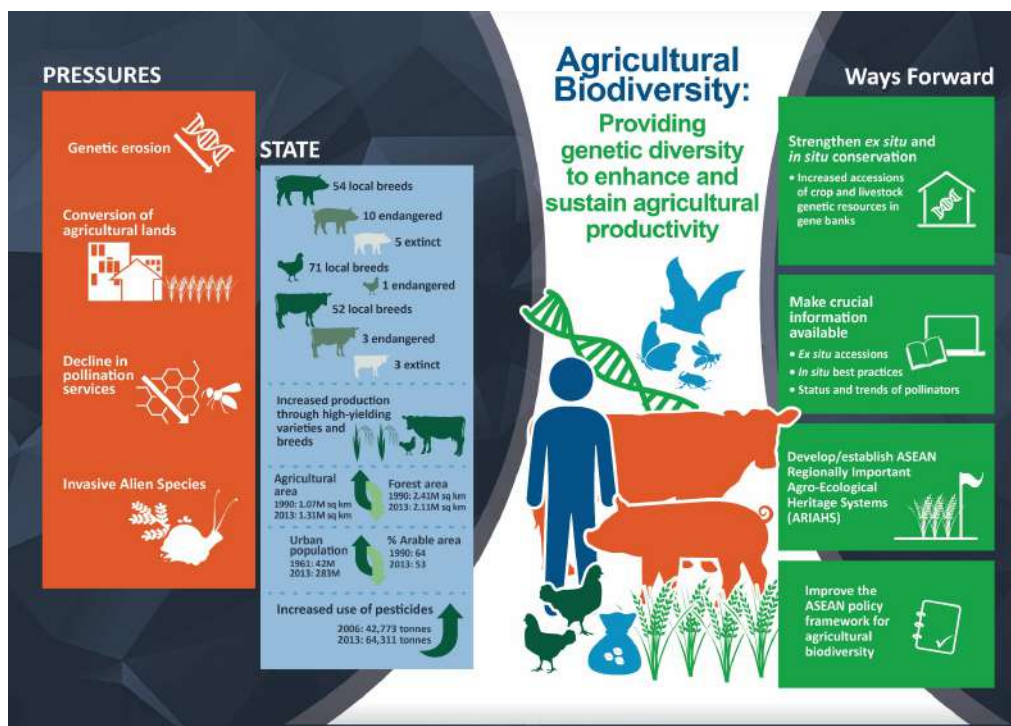
**Climate change adaptation**

**Efficient nutrient and mineral cycling for sustainability**

**Pollination management**

## Summary of benefits derived from deployment of biodiversity for food and agriculture in various types of agro-ecosystems





## Agrobiodiversity as a key element in the blueprints of the ASEAN pillars



- **ASEAN Economic Community (AEC) (B.8, C.5, C.6).** Sustainable economic development (i.e., FAF), good agricultural and forestry management practices, ensuring food security, food safety and better nutrition, increasing resilience to climate change, natural disasters and other shocks, tourism science, and technology for environmental protection and climate change;
- **ASEAN Socio-Cultural Community (ASCC) (C.1, C.4, D.3).** Conservation and sustainable management of biodiversity and natural resources, environmental education, green lifestyle, public-private partnership, enhanced capacities for climate change, sustainable management of biodiversity for marine, coastal, wetlands and peatlands, policy, capacity building, attainment of Aichi targets, and regional, and global networking;
- **ASEAN Political-Security Community (AP-SC) Blueprint 2025 (B6.2, B3.1).** Maritime cooperation in protection of marine resources, biodiversity, and combatting transnational crimes, i.e., wildlife and timber.



## SDGs, CBD Targets that the ASEAN Community Blueprints are related:



- **Goal 2:** Zero Hunger
- **Goal 6:** Clean Water and Sanitation
- **Goal 12:** Sustainable Consumption and Production
- **Goal 13:** Climate Action
- **Goal 14:** Life below Water
- **Goal 15:** Life on Land
- **Goal 17:** Partnership for the Goal

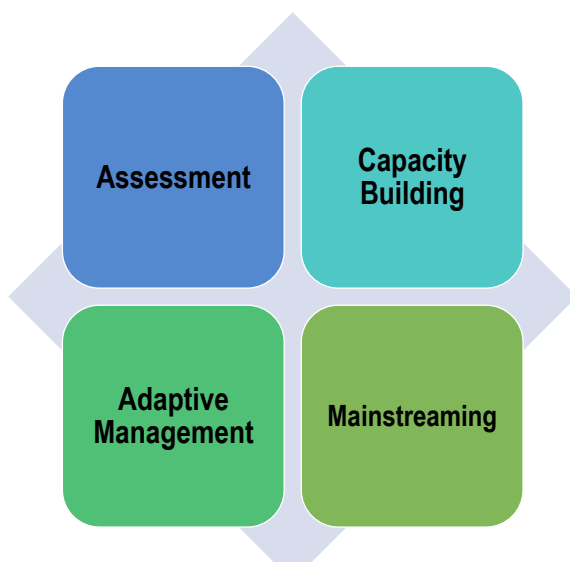


### Convention on Biological Diversity **Aichi Biodiversity Targets**



Understanding the state of agricultural biodiversity, identifying the pressures, and suggesting ways to respond to such pressures are essential to achieving **Aichi Biodiversity Target 13**, which aims to develop and implement strategies to minimize genetic erosion and safeguard genetic diversity. Consequently, this would contribute to accomplishing other Aichi Biodiversity Targets, i.e. sustainable production and consumption (**Target 4**), sustainably managed agriculture (including aquaculture and forestry) (**Target 7**) and fully integrated and respected traditional knowledge, innovations, practices, and customary use of biological resources (**Target 18**).

## Mainstreaming Biodiversity in Agriculture: Agrobiodiversity



### Convention on Biological Diversity

#### The CBD Programme of Work (PoW) on Agricultural Biodiversity

The PoW aims to **promote the positive effects and mitigate the negative impacts of agricultural systems and practices on biodiversity** in agro-ecosystems and their interface with other ecosystems; promote the conservation and sustainable use of genetic resources of actual and potential value for food and agriculture; and promote the fair and equitable sharing of benefits arising out of the genetic resources. The elements of the PoW are Assessment, Adaptive Management, Capacity-building, and Mainstreaming.

# Mainstreaming Biodiversity in Agriculture: Promoting Agrobiodiversity in the ASEAN Region



Regional stocktaking workshop (2017)



Multi-sectoral consultation (2018)

## Mainstreaming Biodiversity in Agriculture: Opportunities and Areas for Collaboration in ASEAN

*Mainstreaming Biodiversity in Agriculture for Sustainable Development and Food Security in SEA*  
12-14 September 2017 | Chiang Mai, Thailand

Development of policies and strategies for AgBd	Capacity-building	Networking and collaboration	IEC/CEPA	Development of programmes and projects
<ul style="list-style-type: none"> <li>Strengthen role of key institutions in policy development</li> <li>iterative and adaptive strategies</li> <li>Cross-sectoral and interdisciplinary collaboration</li> <li>Mainstream AgBD into thrusts of ACB &amp; SEARCA</li> </ul>	<ul style="list-style-type: none"> <li>Build and strengthen institutional capacity of governments and other sectors</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen multi-stakeholder cooperation and collaborative actions</li> <li>Create opportunities for strategic cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen education and communication among relevant sectors</li> <li>Better understanding of agrobiodiversity among the implementers</li> <li>Document best practices</li> </ul>	<ul style="list-style-type: none"> <li>Infra support for ex-situ and in-situ conservation of AgBD</li> <li>Policy research</li> <li>Pilot an ASEAN agrobiodiversity index (building on Bioversity's recent work)</li> </ul>

## Mainstreaming Biodiversity in Agriculture: Proposed Joint Actions in ASEAN

ASEAN Multi-Sectoral Workshop on Mainstreaming Biodiversity for Food and Agriculture  
4-6 December 2018 | Bangkok, Thailand

- Implement a cross-sectoral workshop on the development of **regional guidelines** on agrobiodiversity assessments.
- Develop **regional and national collaboration plans** for mainstreaming biodiversity in the agriculture sector to include the appointment of agrobiodiversity focal points in each AMS and a multi-sectoral committee or working groups (WGs) to support regional and national activities.
- Implement **education and training programmes** on mainstreaming biodiversity in the agriculture sector, including curriculum development.
- **Promote a common understanding of agrobiodiversity** through social media, online platforms, training manuals and guides, forums, and sharing of best practices.
- Conduct **studies to assess and consolidate best practices and existing policies** on agrobiodiversity and the typology of agrobiodiversity, and other technical assessment methods, such as spatial mapping.

### ACB's Mainstreaming Approach:

#### 3-Phased Regional-level Work in Agriculture, including Fisheries & Aquaculture



**Phase 1:** Identify and compile best practices inc. existing policies

**Phase 2:** Develop IEC/CEPA of the best practices/ case studies



**Phase 3:** Promote application/ adoption of AMS of best-suited models through enabling activities (e.g. technical visits, side-by-side with education and social media approaches)



## Some best practices identified in the ASEAN Member States

Cambodia	ongoing development of biodiversity-based value chain mainstreaming guidelines; Ibis rice project
Indonesia	utilization/ preservation of bufferzone of Mt. Ciremai
Lao PDR	TABI initiatives
Malaysia	Center of Agrobiodiversity and Environment Research under MARDI
Myanmar	ITPGRFA: Namathalay Rice Variety Project
Philippines	biodiversity-friendly agriculture guidelines for bufferzones in protected areas
Thailand	20-year MOAC strategies including "Balanced and Sustainable Management of Agricultural Resources and the Environment"
Viet Nam	policy discussion on mainstreaming of biodiversity-based value chains



## Way Forward for the ASEAN Cooperation







For more information, log on to  
**[www.aseanbiodiversity.org](http://www.aseanbiodiversity.org)**

