



International Climate Change Forum (ICCF)

Session 03 - Technology and locally-led adaptation

Transformation to more efficient, inclusive, resilient and sustainable agrifood systems, leaving no one behind.

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FAO – Regional Office for Asia and Pacific
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- The “**agri-food system**” covers the journey of food from tillage to table – from when it is planted, grown, harvested, processed, packaged, transported, distributed, traded, bought, prepared, eaten and disposed of.
- The number of hungry people has been growing, now amounting to as many as 811 million people. The food demand is on increasing trend.
- At the same time, obesity and other non-communicable diseases are ever-growing global problems associated with insufficiently diversified healthy diets and consumption patterns.



- Food systems are contributing to, and affected by, extreme weather events as associated with climate change, land degradation and biodiversity loss.
- Climate variability and change can result in a range of shocks, impacts and feedback effects in food systems, affecting food production, availability, access and utilization.
- The IPCC's Sixth Assessment Report highlights that climate impacts on food systems are growing in scale and magnitude, emphasizing the importance of integrated approaches to meet multiple objectives, including resilient food systems.
- Food systems, in turn, influence the climate system through greenhouse gas (GHG) emissions resulting from the production, processing, distribution and consumption of food.

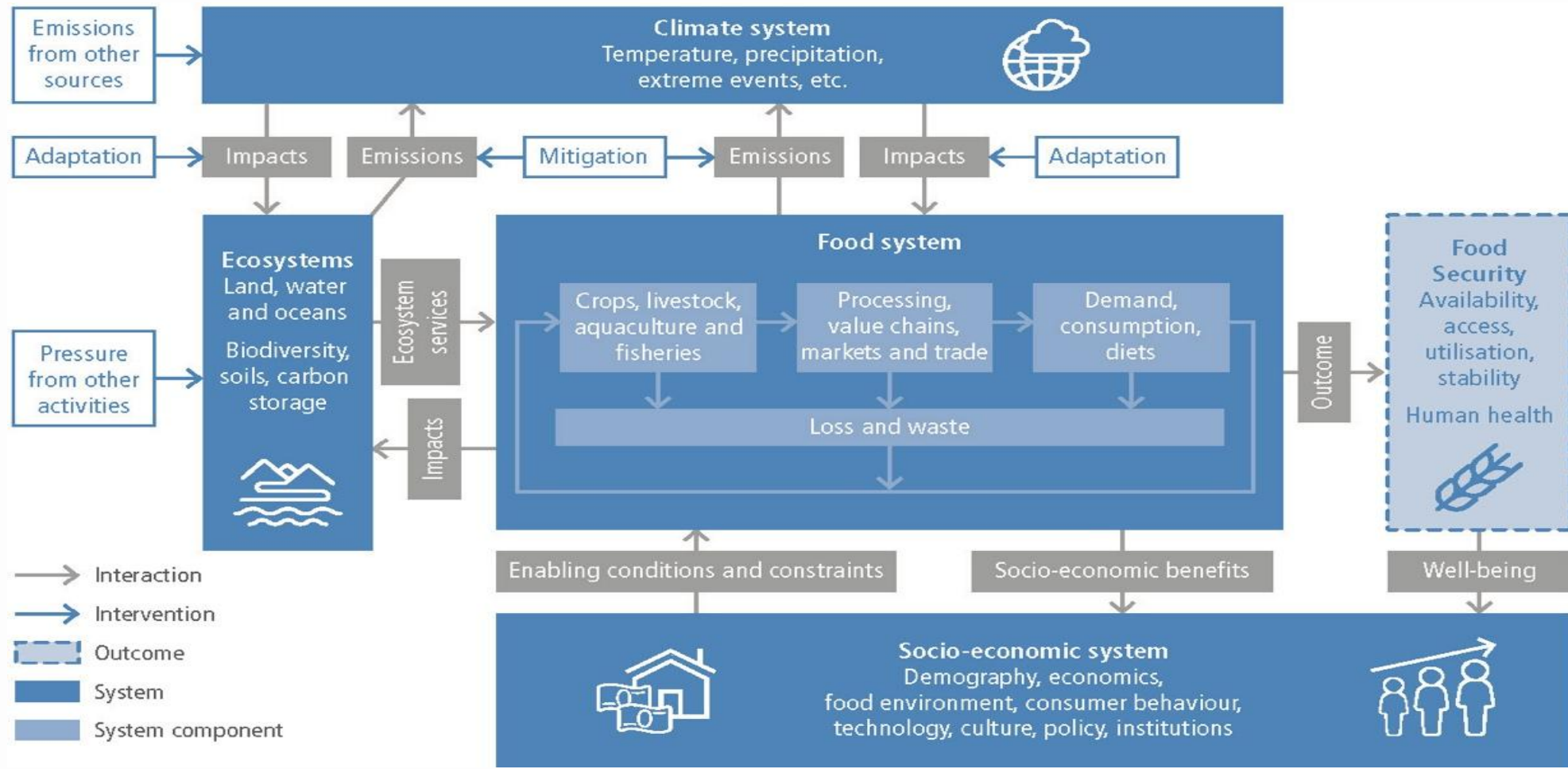
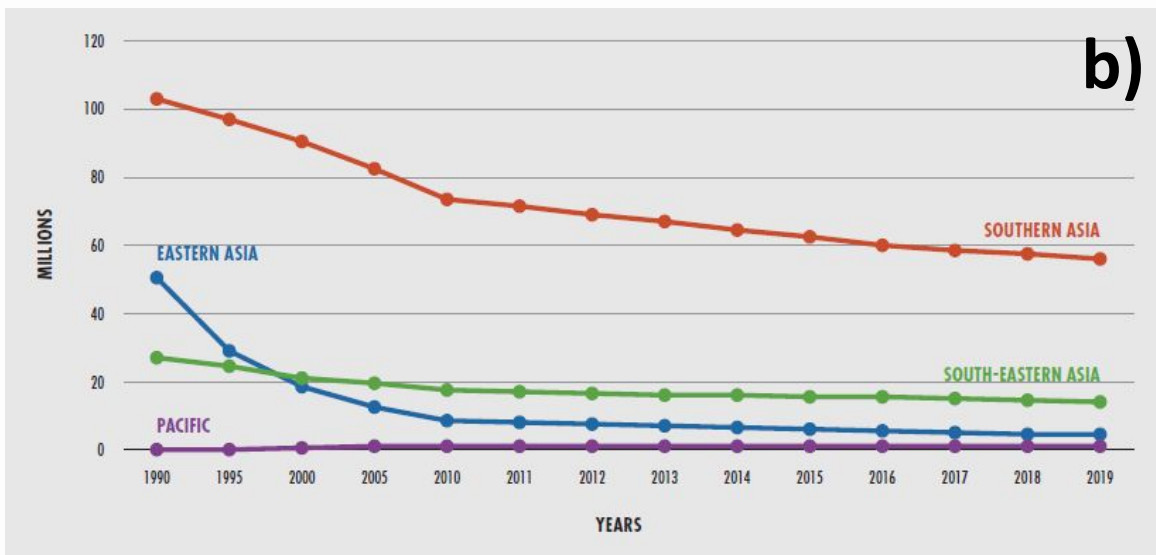
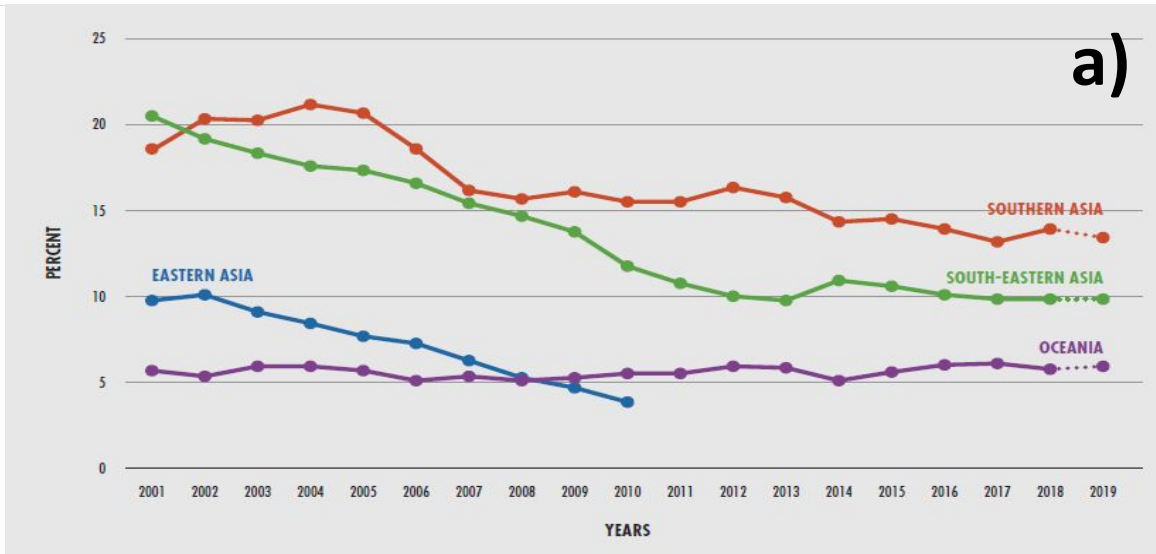


Figure 1. Interlinkages between the climate system, food system, ecosystems and socio-economic system. Adapted from IPCC. 2019. Also available at www.ipcc.ch/site/assets/uploads/sites/4/2019/11/Figure-5.1.jpg.



- Significant **past progress** in reducing food **insecurity**
- Unlocked through **investment** in R&D, extension, infrastructure as well as **key policy** and **institutional changes**
- But....
- **Gains** in addressing **undernourishment** **stagnating**
- **Poor nutrition** & micronutrient deficiencies **persist**

Figure – a) Trends in prevalence of undernourishment by subregion, 2001-2019; **b)** Number of stunted children under five years of age by subregion, 1990-2019

Source: FAO, UNICEF, WFP, WHO, 2021

Note: Eastern Asia excludes Japan. Pacific refers to Oceania excluding Australia and New Zealand.

- Systems perspective needed, but **policies still focused largely on production**
- **Unintended outcomes** include:
 - **Water stress & scarcity**
 - **Degradation** of natural systems and biodiversity loss
 - **Pollution** including GHG emissions
 - **Vulnerability** and risk from extreme events and climate change

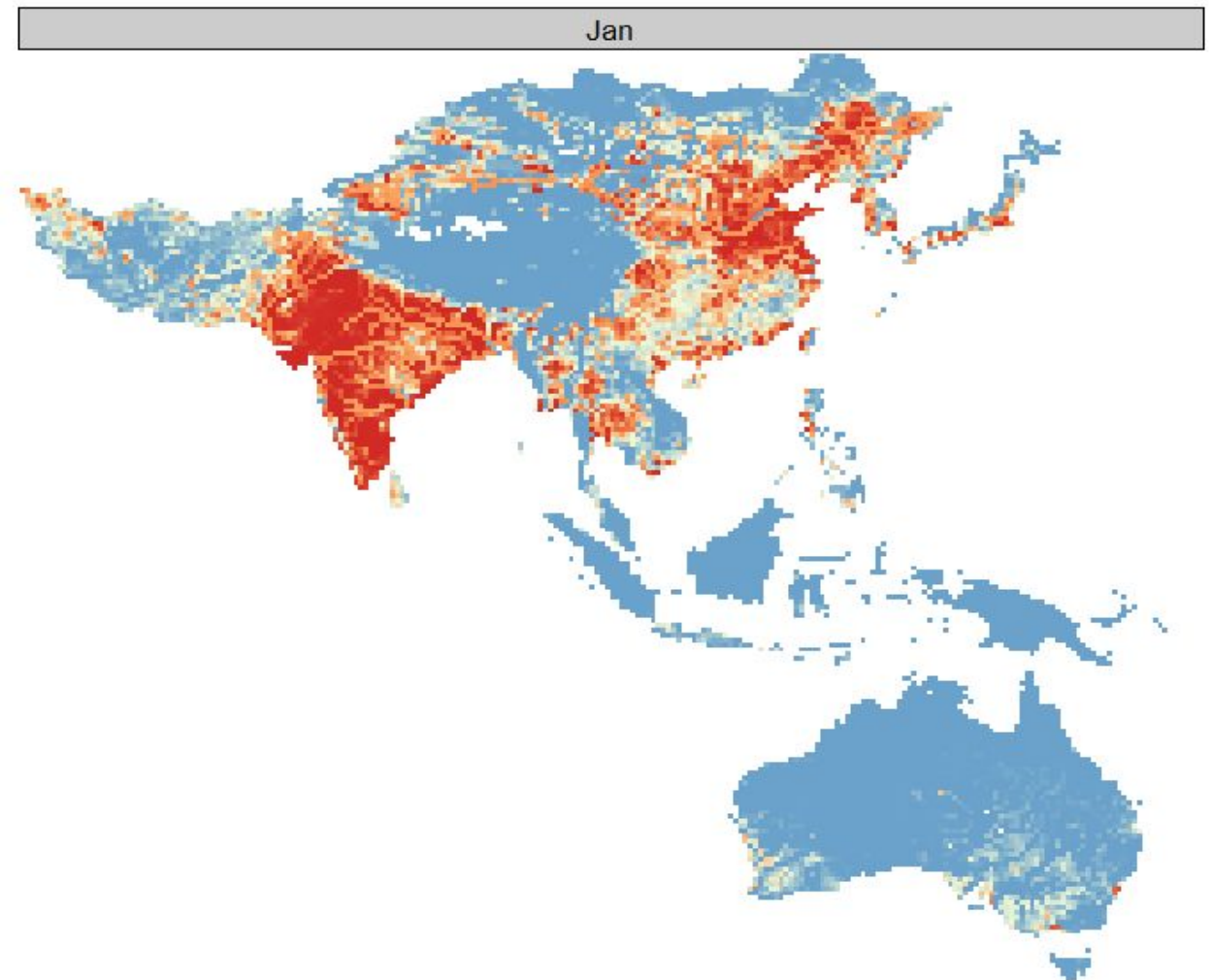


Figure – Seasonal variation in water scarcity

Source: FAO Regional Water Scarcity Program



- Agri-food systems are complex and diverse and are not realizing their full potential if we run business as usual.
- A systems-based approach required to addresses challengers and the range and complexities in a holistic and sustainable manner.
- The IPCC's Sixth Assessment Report (AR6) emphasizes the importance of integrated approaches to meet multiple objectives.

Therefore, transformation of the agri-food system to a sustainable food system is required.

- UN Food Systems Summit 2021 engaged countries in an ongoing process to strengthen resilience in national, regional and global food systems.
- A sustainable food system is one that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generation is not compromised.



1. Support National Pathways for Food System Transformation.
2. Scale up climate ambition in agriculture and land use.
3. Utilize climate risk assessment tools.
4. Leverage next generation agrometeorological services.
5. Adopt an anticipatory action approach for cost-effectiveness.
6. Practice agroecosystem restoration.
7. Advocate for nature-positive food systems.
8. Leverage blended finance solutions.
9. Account for agricultural Loss and Damage.



What do we need to do to transform them? What does it take to transform?



- **FAO has been advocating for and supporting agri-food systems transformation.**
- **FAO has identified four cross-cutting/cross-sectional accelerators – technology, innovation, data and “complements” (governance, human capital, and institutions).**
- **The FAO Strategic Framework 2022-31 seeks to support the 2030 Agenda (SDGs) through the transformation to MORE efficient, inclusive, resilient and sustainable agri-food systems for *better production, better nutrition, a better environment, and a better life*, leaving no one behind.**





FAO Regional Office for Asia and the Pacific (FAO RAP):



FAO in the region has four Regional Priorities:

- a. Transforming agrifood systems for sustainable production and healthy diets.
- b. Accelerating sustainable natural resources management for biodiversity conservation and climate action.
- c. Supporting inclusive rural transformation for sustainable agrifood systems and equitable rural societies.
- d. Building sustainable and resilient agrifood systems in the Pacific Small Island Developing States (SIDS).

Areas of Focus under each Regional Priority

Supporting the transformation to **MORE** efficient, inclusive, resilient and sustainable agrifood systems, leaving no one behind.

REGIONAL PRIORITY 1



BETTER PRODUCTION

Sustainable and diversification of production by small holders.

- Transboundary plant and animal pests and diseases.
- One health with Env Sec Engage.
- Sustainable fishery and aquaculture management.

REGIONAL PRIORITY 2



BETTER ENVIRONMENT

- Climate adaptation & mitigation
- Ecosystem restoration and biodiversity actions.
- Water scarcity programme.
- Innovative blended finance in GEF8 and GCF RM.
- Scaling up Anticipatory Action

BETTER NUTRITION



- Development of Agrifood system transformation plan.
- Codex Implementation.
- Reform food control regulatory frameworks.
- Food security and urban food system.

REGIONAL PRIORITY 1

RP1: Transforming agrifood systems for sustainable production and healthy diets.

RP2: Accelerating sustainable natural resources management for biodiversity conservation and climate action.

RP3: Supporting inclusive rural transformation for sustainable agrifood systems and equitable rural societies.

BETTER LIVES



- Rural transformation and inclusion through DVI.
- Regional Gender Strategy and Action Plan 2022-25.
- Youth entrepreneur support.
- Response to emergency.
- HIHI and investment support.

REGIONAL PRIORITY 3

COVID-19 and L5E impact

Natural Resources Management, Biodiversity and Climate Action

BETTER
PRODUCTIO
N



Land & Water Module

Water Scarcity
International Waters
Next Generation of Irrigation
Land tenure
Social Inclusion, Indigenous Peoples
Sustainable Soil Management

Forest & Biodiversity Module

Ecosystem restoration
Sustainable Forest Management
REDD+
Biodiversity actions

Climate Change & Resilience Module

Access to Env & Climate Finance,
Climate Action & Partnerships
Agriculture climate services &
decision support
Resilience/Anticipatory Action



BETTER
LIFE



FAO is facilitating access to climate finance and resources to deliver action on the ground.

Key initiatives

- Over US\$500 Million GEF regional ongoing and pipeline projects
- Over US\$275 Million GCF regional ongoing and pipeline projects
- Developing innovative finance approaches specific to agriculture
- Enhancing access to carbon markets



Some examples of Key initiatives

1. Sustainable Rice Landscapes Initiative (SRLI)
2. Agriculture Readiness for enhanced climate finance in Southeast Asia (Cambodia, Lao PDR, Malaysia, Philippines, Thailand, Vietnam)
3. Public-Private Blended Finance Facility for Climate-Resilient Rice Landscapes (Bangladesh, Cambodia and Viet Nam)

	GEF-7 FOLUR	GEF-7 LDCF	GEF-7 Adaptation Challenge Fund	GEF-8 under discussion
Bangladesh			X	X
Bhutan				X
Cambodia		X	X	
China	X			
India	X			
Indonesia	X			
Nepal				X
Pakistan				X
Philippines				X
Sri Lanka				X
Thailand	X			
Timor-Leste				X
Vietnam	X		X	





2. Enhancing climate action and partnerships

Some examples of Key initiatives

- NDC design and implementation support
- ASEAN Climate Resilient Network
- Scaling Climate Ambition in Agriculture and Land-use
- Capacity Building Initiative for Transparency (GEF-CBIT)
- Identifying pathways to Net Zero for Agrifood and Land Use Systems in Asia
- Developing an Investment Roadmap for Agriculture Climate Services in Asia and the Pacific
- Nature-Based Solutions in Agriculture Landscapes

CLIMATE CHANGE NEGOTIATIONS FOR AGRICULTURE STAKEHOLDERS

This course provides a basic understanding of climate change negotiations within the United Nations Framework Convention on Climate Change (UNFCCC) framework.



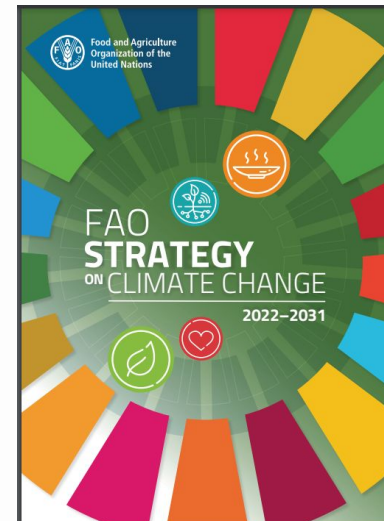
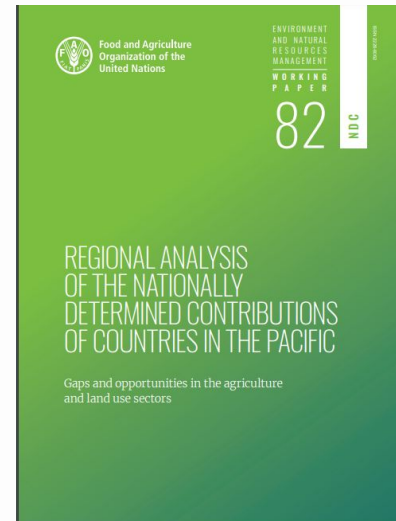
CERTIFIED COURSE



To enroll the course
<https://bit.ly/3Z68bx3>

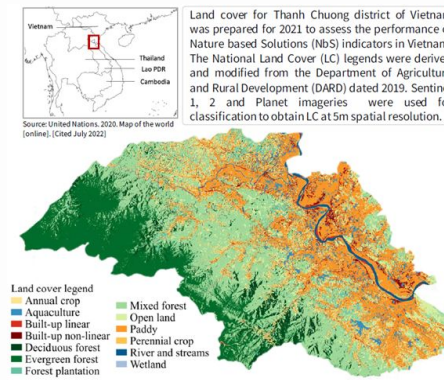
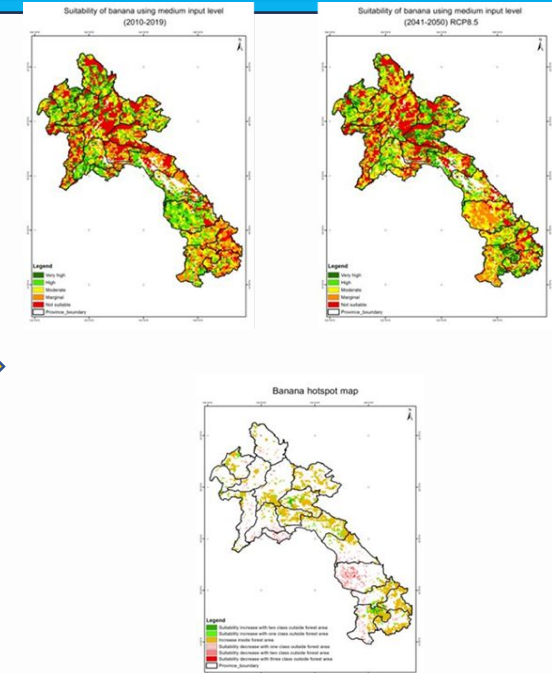
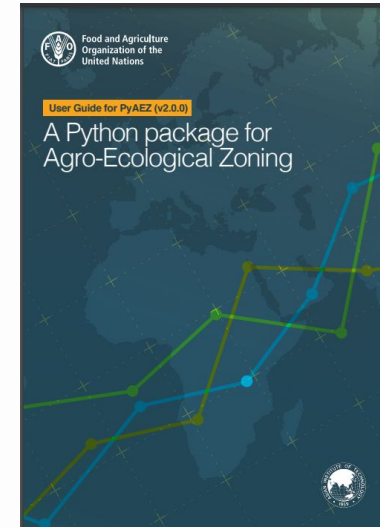


Developing an investment roadmap for agricultural climate services in Asia and the Pacific

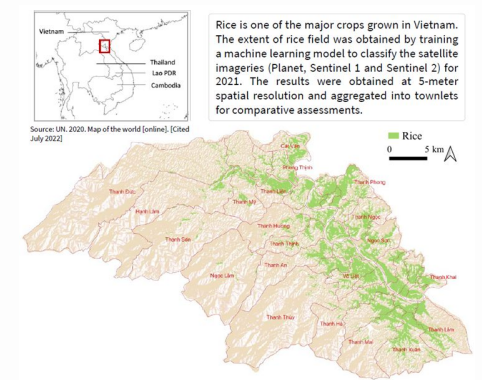


Some examples of Key initiatives

- Tools and guidance to support climate change foresight and scenarios analysis and investments (Py-AEZ/GAEZ, Aquacrop)
- Climate and Agriculture risk Visualization and Assessment Platform
- Development of climate foresight approaches and guidance
- Next generation tools for integrated investments in climate and ecological resilience through nature-based solutions



NBS Geospatial Indicators

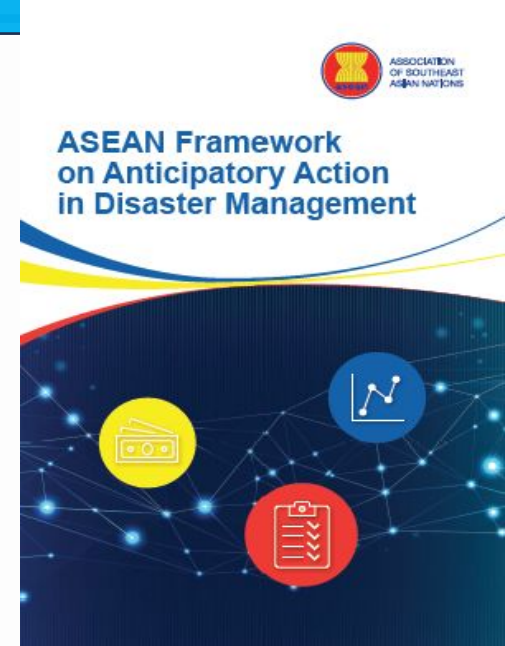


NBS intervention options



Some examples of Key initiatives

- FAO together with UN agencies pioneered Anticipatory Action and Shock-responsive Social Protection in ASEAN and Asian countries
- Countries have Anticipatory Action Protocols in place, with pre-defined actions, delivery mechanisms and finance and triggering mechanisms to act before a flood, cyclone or drought strikes
- Evidence of positive return of investment across countries
- The ASEAN has developed its own Anticipatory Action Framework, the first of this kind globally
- The ASEAN dedicates 2023 as “Year of Anticipatory Action”



FAO activates its anticipatory action protocol for typhoons in Viet Nam

Typhoon Noru is expected to hit Viet Nam in the morning of 28 September 2022. Forecasts show there is a high likelihood that it will hit provinces in Central Viet Nam, with winds reaching **Typhoon Category 1 levels** at a minimum. In light of these forecasts, the Food and Agriculture Organization of the United Nations (FAO) activated its anticipatory action protocol for typhoons over the weekend, to protect livelihoods and food security ahead of the event.

During the three days before Typhoon Noru is due to make landfall near Thua Thien Hue and Quang Tri provinces, the FAO project team is distributing cash and waterproof drums to store food and agricultural assets (e.g., seeds, tools) to communities expected to be affected. It is also assisting them in moving their livestock to locations safe from typhoon-induced flooding.



***Thank you so
much!***

