#CAIP2024

CLIMATE ADAPTATION INVESTMENT PLANNING FORUM 2024

17-18 SEPTEMBER 2024

ADB · adpc · Climate Bonds · CIF Climate Investment Funds · ICIMOD · IISD · NAP Global Network · OECD · UN

Time	17 September 2024 (Tuesday)	Time	18 September 2024 (Wednesday)
		09:00–10:00	**Plenary 3:** Funding and financing adaptation
09:00–10:15	High-level Opening Session	10:00–10:30	**Lightning Talk:** Resilience bonds to leverage private finance
10:15–10:45	Coffee Break	10:30–11:00	Coffee Break
10:45–11:45	**Plenary 1:** Understanding climate change risk to inform development pathways	11:00–11:45	**Partner Marketplace:** Adaptation funds, financing instruments and programs
11:45–12:30	**Spotlight 1:** Foresight thinking for transformational adaptation investments	11:45–12:30	**Clinic:** Finance matchmaking for adaptation investment plans
12:30–14:00	Lunch	12:30–14:00	Lunch
14:00–15:00	**Plenary 2:** Making adaptation investments a priority across governments and public and private sectors	14:00–15:15	**Policy Roundtable Discussion:** Priority actions for enabling adaptation investment planning
15:00–15:30	Coffee Break	15:15–15:45	Coffee Break
15:30–16:15	**Spotlight 2:** Making the economic and financial case for adaptation investment	15:45–16:30	Closing Session
16:15–17:30	Deep-dive discussions: Prioritizing adaptation investments across sectors		
18:00–19:30	Reception		

Risk-informed development pathways → Prioritizing adaptation investments → Funding & financing for adaptation investments

enabling environment

SPOTLIGHT 1

Foresight thinking for transformational adaptation investments

#**CAIP**2024

Spotlight 1: Foresight thinking for transformational adaptation investments

Natasha Kuruppu
Climate Change Specialist
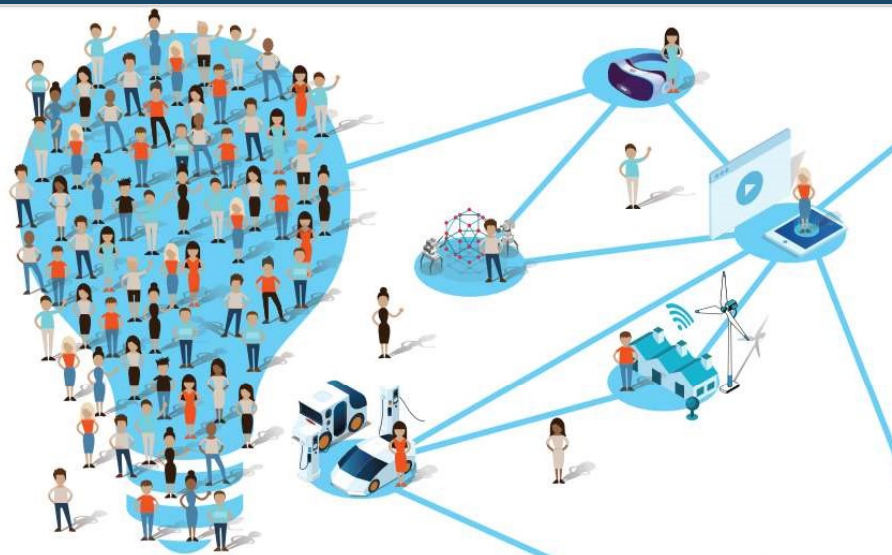**Moderator**

Rathana Peou Norbert-Munns
United Nations Food and Agriculture Organization

Siveun Nhak
Climate Adaptation and Agriculture Expert

FUTURES THINKING IN ASIA AND THE PACIFIC

WHY FORESIGHT MATTERS FOR POLICY MAKERS

APRIL 2020

Futures thinking and foresight is a powerful planning approach that can help the region meet economic, political, social, and environmental and climate change challenges

(ADB, 2020)

Foresight planning spotlight

Futures-oriented Climate Planning for Agrifood System Transformations at National and sub-national level

Dr. Rathana Peou Norbert-Munns
Climate Foresight Planning Specialist and Agrifood system Policy expert
Office of Sustainable Development Goals (OSG) and Regional Office of Asia Pacific (RAP), Food and Agriculture Organization of the United Nations

Mr. Nhak Siveun
ADB National Climate Change Adaptation expert

''Although there is a broad consensus that food systems need to be transformed, there is much less agreement on how the transformation should be undertaken across diverse types of food systems''

- The **UN Secretary-General's Call to Action** for Accelerated Food Systems Transformation released at the 1st UN Food Systems Summit Stocktaking **(UNFSS+2)** in July 2023 in Rome emphasizing, inter alia, the need to "*align the implementation of national food systems transformation pathways with the continuous updates of National Determined Contributions (NDCs) and national adaptation plans (NAPs) for climate action*".

- The **COP28 UAE Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action**, endorsed by the heads of 159 Member States stressing inter alia that "*any path to fully achieving the long-term goals of the Paris Agreement must include agriculture and food system*" and affirming that "*agriculture and food systems must urgently adapt and transform in order to respond to the imperatives of climate change*".

Overview of the session

**Foresight, why does it matter?
Demystifying foresight**

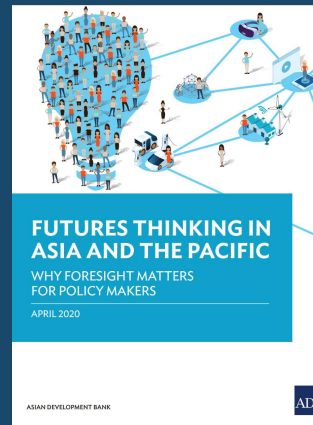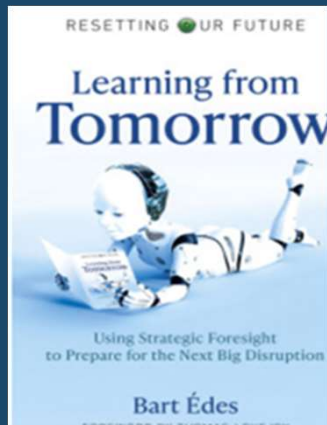**Key methods and
approaches**

**What is foresight planning
for food system
transformation**

**Two key policy uses: Integrating
foresight planning into long-term
policies and climate actions (
LTS4CN and CCPAP 2030)**

Learning from the futures, anticipating changes and uncertainties?

Futures scenarios is a common tool nowadays for countries, organizations, and firms to design policies and develop strategies that incorporate emerging challenges and uncertainties.

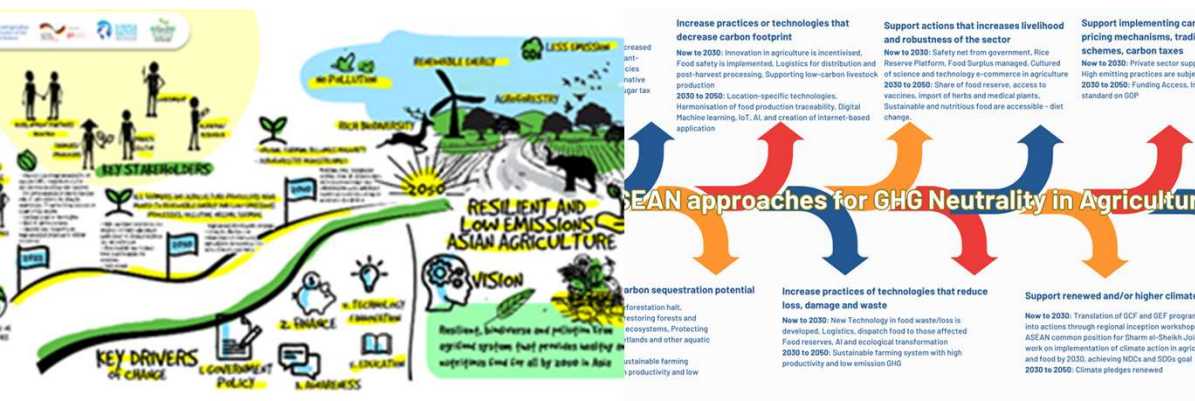**FAO, OECD, WEF, ADB, Shell are among the organizations using this approach to inform policies and strategies**
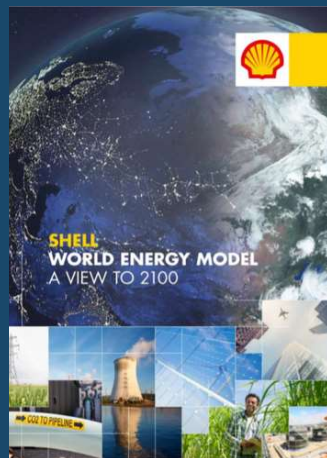
Long history of foresight practices

More than 42 years of practices in Singapore within the government
At the ASEAN level, in 1976 in Bali (almost 46 years ago) that the concept of resilience was introduced into the ASEAN discourse in the declaration of ASEAN concord (BALI Concord 1).

Evolution of Foresight in the Singapore Government

Scenario Planning in Ministry of Defence	Scenario Planning Office Established in Prime Minister's Office	Renamed as Strategic Policy Office	Centre for Strategic Futures Established	New Futures Units Established in Ministries	Transferred to Strategy Group, Prime Minister's Office, connected with a new strategic planning function under the Strategic Planning and Futures division.
1980s	1995	2003	2009	Ongoing	July 2015

Increased uses in the region

- **Most recently,** a set from foresight modelling and scenarios were used to guide Climate Action for Agriculture for ASEAN with the formulation of an **ASEAN Common Position on Agriculture.**

- **The ASEAN Carbon Neutrality Guidelines for agriculture** were endorsed by the AMAF in June 2024

ASEAN approaches for GHG Neutrality in Agriculture

Study

ASEAN Carbon Neutrality Guidelines for Agriculture

ASEAN Pathways for Carbon Neutrality in the Agrifood System and Land Uses Sector

Enhanced Regional EU-ASEAN Dialogue Instrument
E-READI

Key Challenges and limitations

Diverse and Complex Food Systems

○There is consensus on the need for food system transformation, but less agreement on how to undertake this across various food systems. The diversity complicates creating uniform strategies.

Data Limitations

○Accurate foresight requires robust, high-quality data. Many regions, particularly in developing countries, lack reliable data, affecting the accuracy of modeling and scenario development.

Coordination Among Stakeholders

○Foresight planning requires multi-stakeholder involvement. Poor coordination can lead to fragmented efforts, misaligned goals, and inefficiencies in implementation.

Breaking Silos

○Institutional and sectoral silos need to be broken down to align different parts of the food system. However, overcoming these barriers is challenging due to entrenched practices.

Uncertainty of Climate Drivers

○Climate change introduces high uncertainty in foresight planning. Variability in climate projections complicates decision-making regarding adaptation and transformation strategies.

Financing and Investment Challenges

○Long-term transformations need significant financial resources. Gaps in financing for adaptation and new food systems models can slow or hinder transformation efforts.
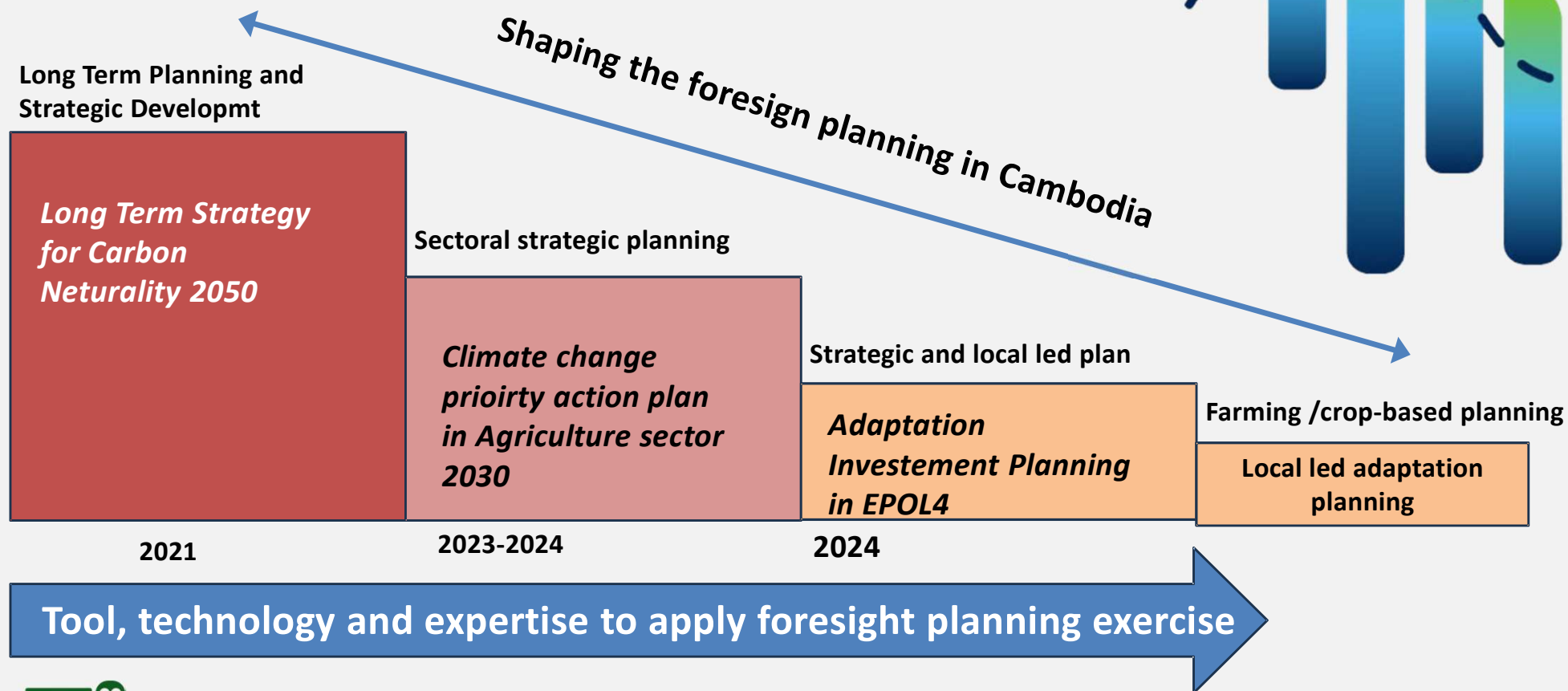
Technological and Expertise Gaps

○Advanced tools (e.g., GHG modeling, scenario formulation) are essential but not always available, limiting governments' and organizations' ability to anticipate and plan for future changes.

Exploring Foresight uses in Cambodia

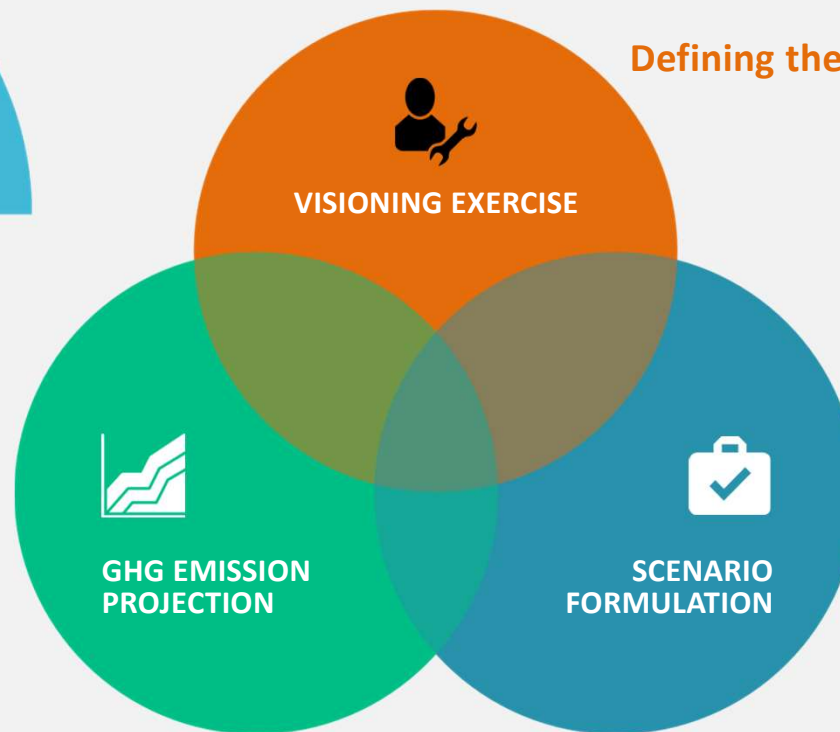# Applying Foresight methologies in different layers in Cambodia

Shaping the foresign planning in Cambodia

Long Term Planning and Strategic Developmt

Long Term Strategy for Carbon Neturality 2050

Sectoral strategic planning

Climate change prioirty action plan in Agriculture sector 2030

Strategic and local led plan

Adaptation Investement Planning in EPOL4

Farming /crop-based planning

Local led adaptation planning

2021

2023-2024

2024

Tool, technology and expertise to apply foresight planning exercise

Climate data: AEZ map analytics

Modelling tool: NEXT tool

What are the process of Foresight work in Cambodia?

70%

VISIONING EXERCISE

GHG EMISSION PROJECTION

SCENARIO FORMULATION

AGENDA SETTING

Defining the priorities, framing the issues

Agenda Setting
Defining the priorities,
framing the issues within the priorities

GHG PROJECTION
- DATA inputs
- Tool used to analyse the GHG Emission and mitigation measure.

FOURMULATION SCEANARIO
- Key drivers of change
- Categorize of most uncertain and most impactful **DRIVERS**
- Key assumptions identification

Lesson learned of applying foresight in LTS4CN

Around 17 stakeholders meeting, conducted among relevant stakeholders to define the future scenarios of Carbon Neutrality.

The scenarios that are actionable, robustness climate ambitions, social and economic inclusions.
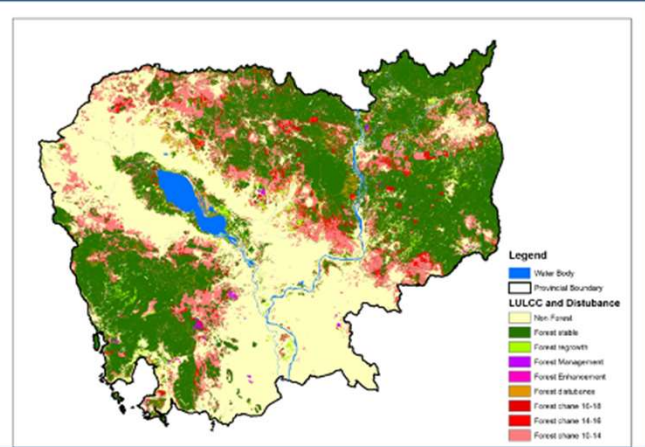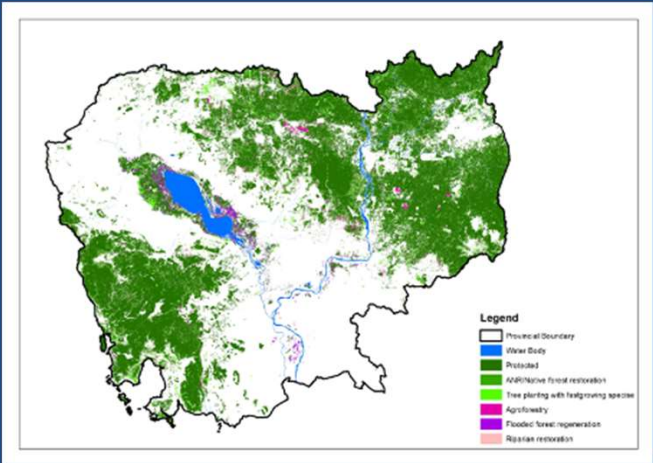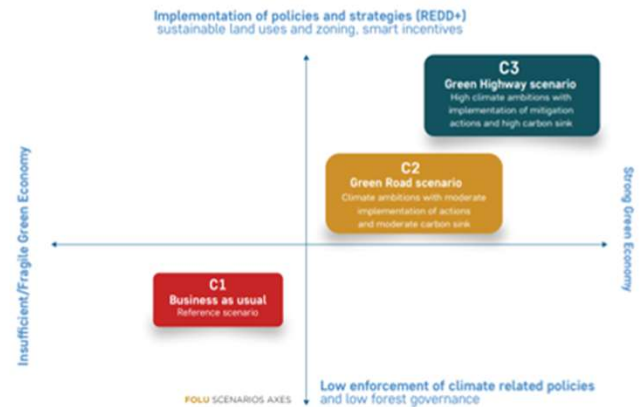
The Cambodia Long-term Strategy for Carbon Neutrality 2050 (LTS4CN)

Forests provide a carbon sink of 50 MtCO2e in 2050

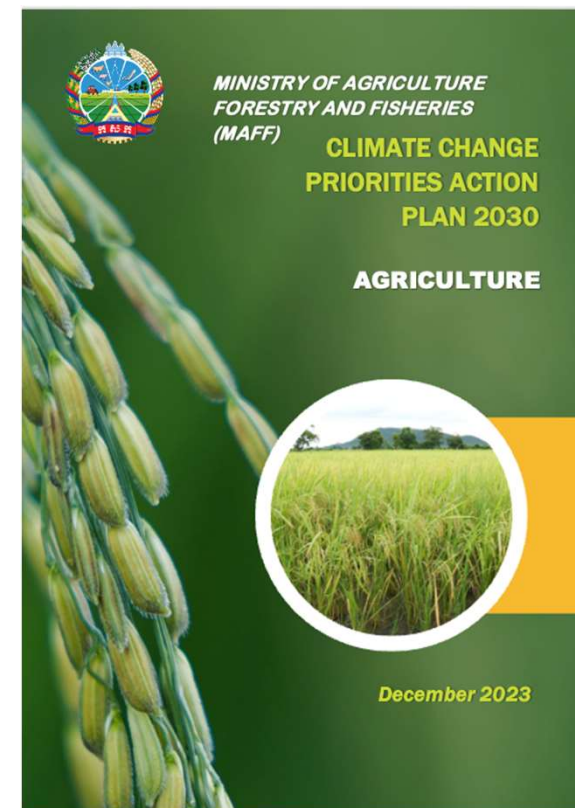|	
Agriculture	• Less methane-intensive rice cultivars • Direct seeding practices • Alternate wetting and drying practices • Promotion of organic fertilizer and deep fertilizer technology • Feed additives for cattle • Improved fodder management • Introduction of composting technology
Forestry and other land uses	• Reducing the deforestation rate by 50 percent in 2030 • Stopping deforestation by 2045 • Afforestation, improved forest management and forest restoration • Agroforestry and commercial tree plantation • Full implementation of the REDD+ Investment Plan by 2050

CCPAP – 2030 Formulations

Over 20 meeting conducted among relevant stakeholders to prioritised and shape the future scenarios in agriculture sectors.
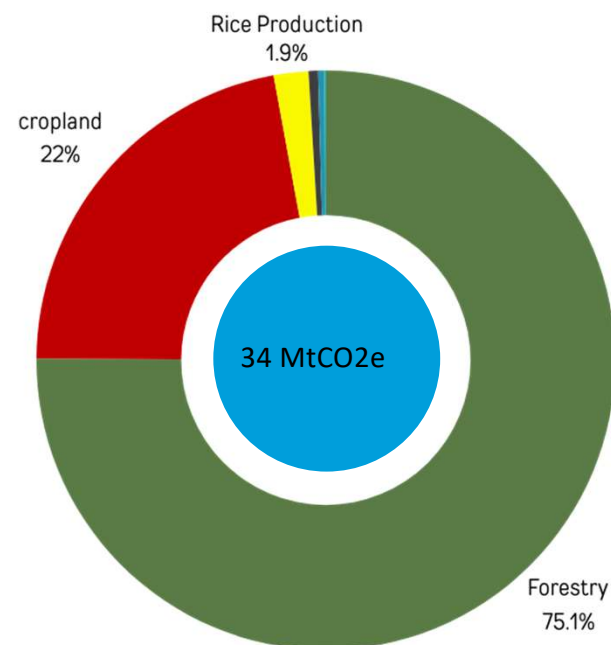
150 drives of changes identified

The driver of changes under each sub-sector address climate adaptation or/and mitigation targets

35 most important driver of changes classifed

The driver of changes that contribute to long term impacts of social economic, environmental and resiliences

3 categories of driver of changes

Key drivers of change that influence the agri-food system.

4 most impactful and uncertain

The drivers of change that shape the transformation and development of the sector, influencing its practices, policies, and outcomes in the longterm policy and institutional reforms, urbanisation and food systems, and behavioural change.

Visioning setting and scenario formulation

The scenario that drives the Cambodia agriculture toward to becoming climate resilient as it moves towards sustainable agri-food system by 2030.

MINISTRY OF AGRICULTURE FORESTRY AND FISHERIES (MAFF)

CLIMATE CHANGE PRIORITIES ACTION PLAN 2030

AGRICULTURE

December 2023

GHG Emission Reduction Potential in the CCPAP 2030

- Afforestation, forest management and agro-forestry are projected to be Carbon Sequestration Potential.

Applying foresight in Climate Adaptation Investment in Northwestern Cambodia

And.. what is inside?
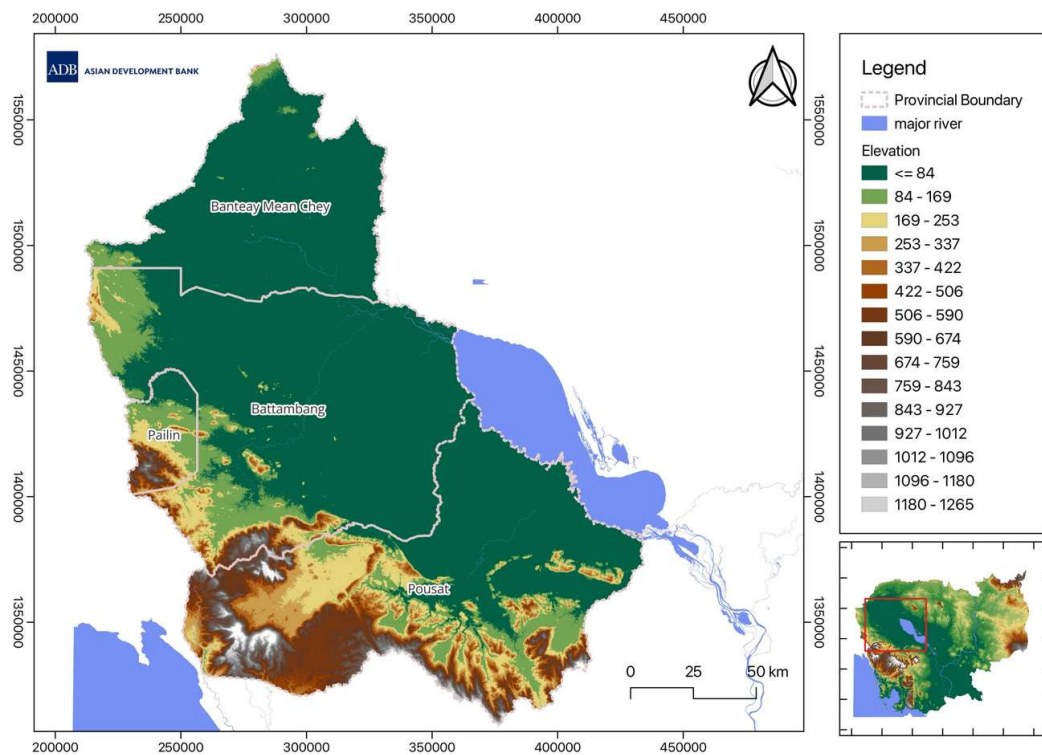
Foresight is a process to facilitate stakeholders to discuss and plan the future priorities in EPOL4

Scanning Climate Risk

Study has developed a set of possible futures to 'stress-test' in EPOL-4:

- Different levels of warming

- Different levels of ENSO variability

ownscaled data for EPOL4

CC stories line
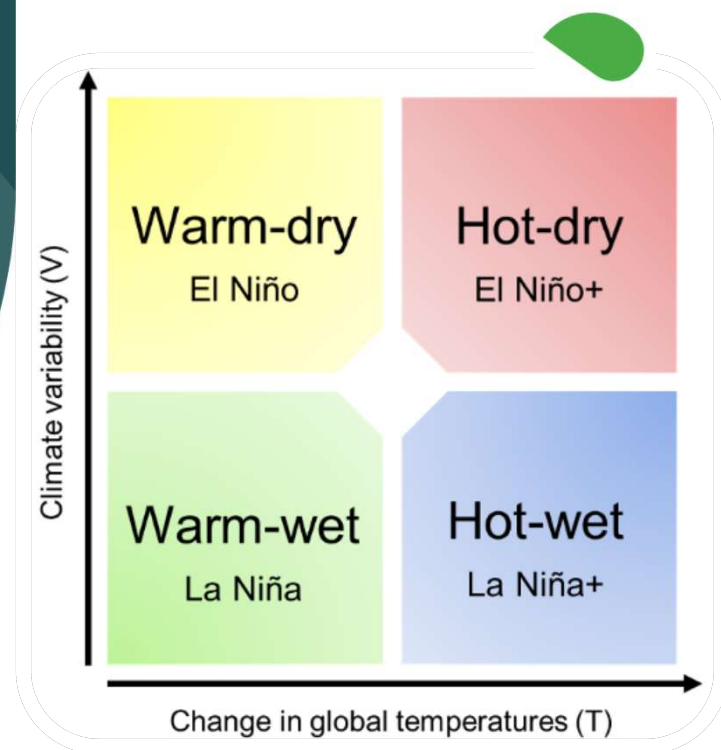
CAMBODIA CLIMATE RISK
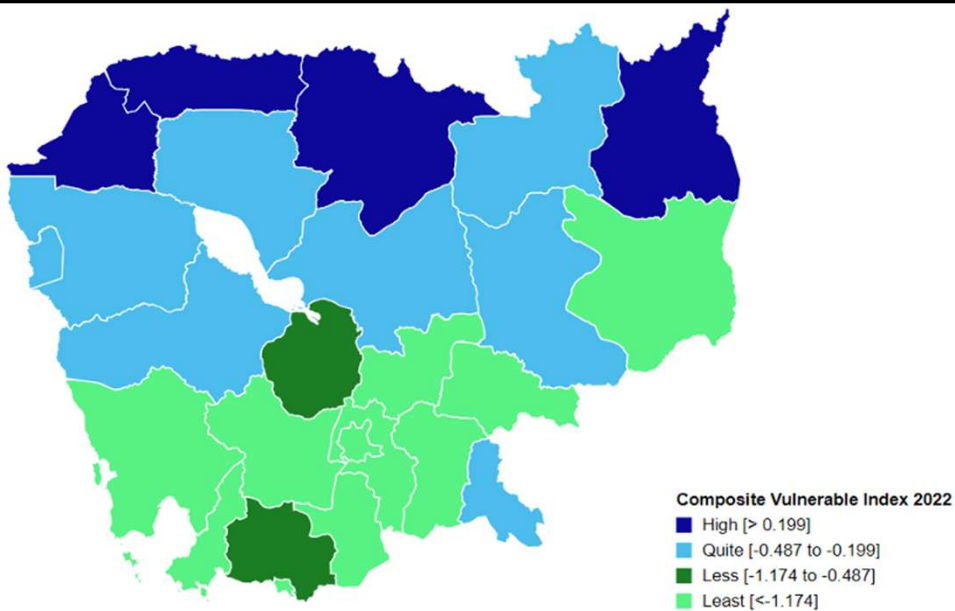
Scanning the historical impact of climate change

Composite Vulnerable Index 2022
- High [> 0.199]
- Quite [-0.487 to -0.199]
- Less [-1.174 to -0.487]
- Least [<-1.174]

Storm Vulnerable Index 2022
- High [> -0.162]
- Quite [-0.229 to -0.162]
- Less [-0.296 to -0.229]
- Least [< -0.296]

Flood Vulnerable Index 2022
- High [>0.407]
- Quite [-0.38 to 0407]
- Less [-1.182 to -0.38]
- Least [< -1.182]

Drought Vulnerable Index 2022
- High [> -0.678]
- Quite [-1.200 to -0.687]
- Less [-1.722 to -1.200]
- Least [< -1.722]
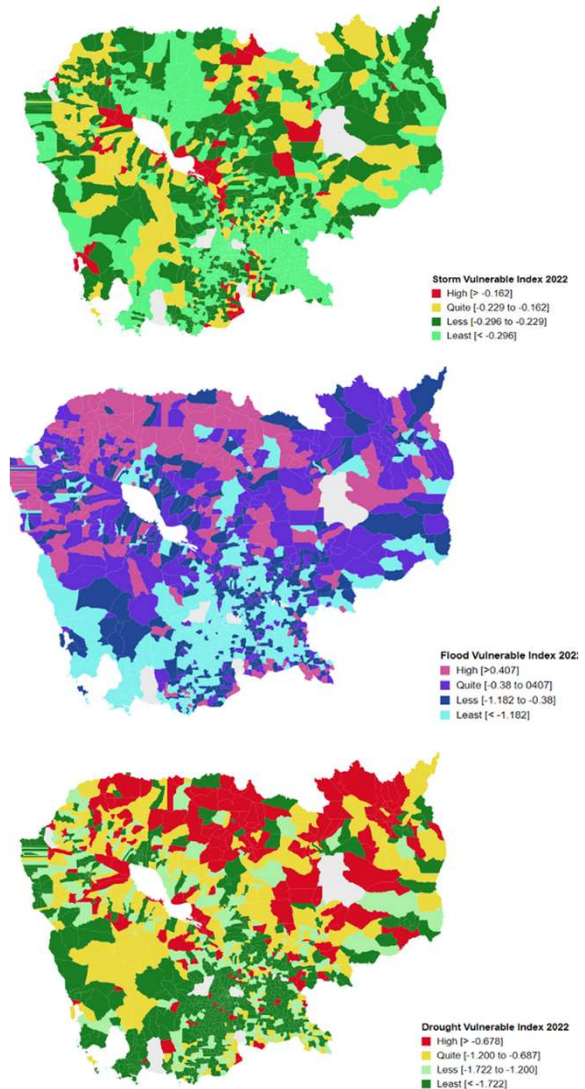
Key driver of changes

Climate change

- Average temperature increase
- Average rainfall change
- Extreme heat
- Heavy precipitation
- Flash and river flooding

Other drivers

- Dry spells and drought
(1) Population dynamics,
- Increasing variability
(2) Urbanization,
- Large-scale shocks
(3) Food prices,
(volatility)

CCPAPIII

Adaptation

National Agricultural Development Policy (ADP), NDC, LTS4CN)

Production

1. Rice

2. Fish

Value addition
3. High value

Transport

Storage
Export

Processing
Transport
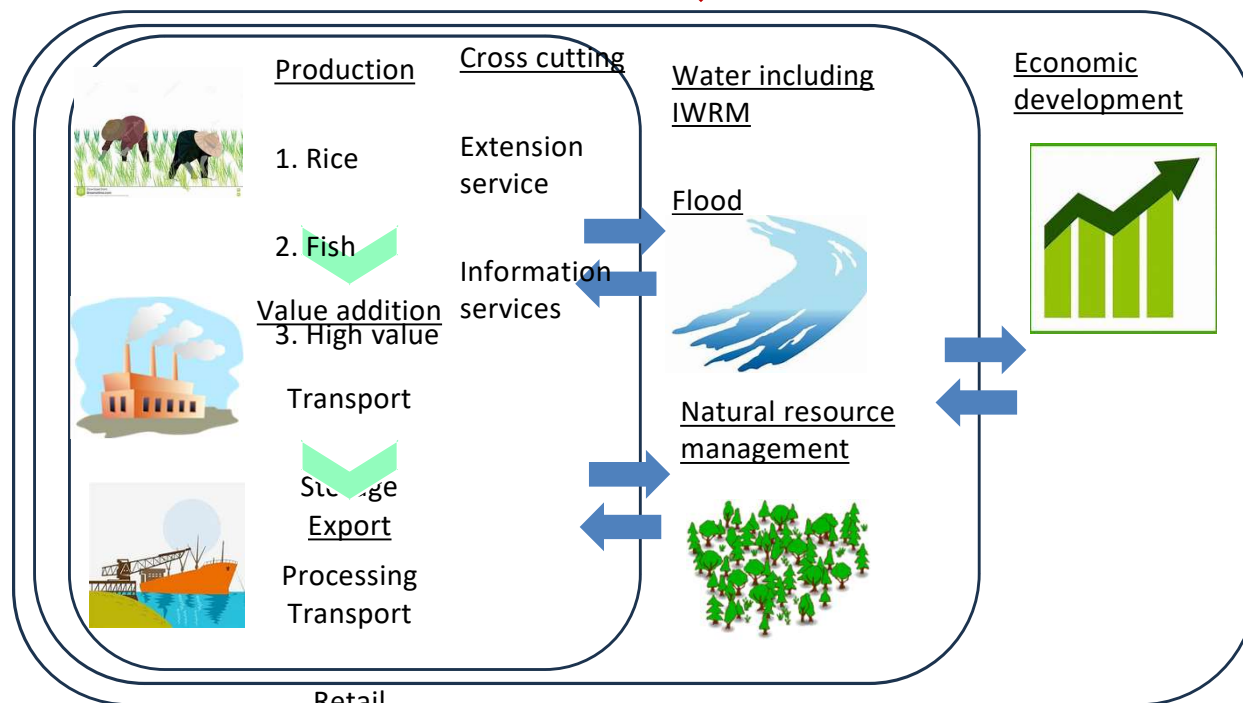
Retail
Value chains

Consumption

Cross cutting

Extension service

Information services

Water including IWRM

Flood

Natural resource management

Natural resources

Economic development

Economy & Fiscal

Visioning

Desired Outcomes?

EPOL4 investments

Poverty reduction

09 Adaptation Investment Packages

1. Climate Resilient Planning of EPOL4.	2. Climate Smart High Value Crop Production	3. Climate resilient transport and logistics	4. Climate resilient value chains (processing, storage)	5. Weather and climate services	6. IWRM	7. Research development & commercialisation	8. Integrated natural resource and landscape management
Formulation of the Climate Change investment Framework in EPOL that are focusing the Fish and rice corridors	**2a Climate smart agriculture** • Promotion climate smart practices (including Modern Agriculture Cooperative (MAC)), demonstration and incentives.	• Climate uplifts in design standards for new roads • Network analysis and upgrade of most vulnerable nodes or sections	• Climate resilient spatial land use mapping and zoning for economic zones, agro-industrial parks	Improved weather and seasonal forecasts, as well as early warning, implemented though value chain approach (forecasting, communication, uptake and use).	Integrated Water Resources Management (IWRM) - process that promotes the coordinated development and management of water resources	Resilient varietal research and development, and subsequent scale up though seed value chains	• Geo-Spatial land use planning/mapping. Promote urban and peri-urban planning. • Enhance locally led adaption / Nature Based Solutions/ Micro and macro watershed management.
Defining potential investment options for future climate resiliences	• Promotes adaptation actions in the CC PAP IIII (2030)	• Investigation of adding contingency, (i.e., strengthening secondary roads	• Scaling up climate-resilient infrastructure for heat, such as cold chain systems, climate resilient building design and energy efficiency	Tailored services to end users (production, irrigation) and value added, including links to digital			• Uptake of landscape restoration
Looking at a broader landscape of geo-spatial planning that	**2b Heat and labour**						*Additional investment package identified in the Foresight exercise*

SPOTLIGHT 1

Thank you!