

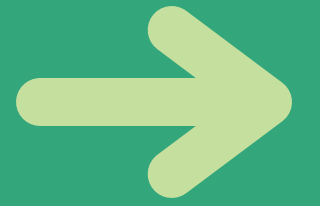
ประชุมเผยแพร่และรับฟังความคิดเห็น
ต่อรายงานแห่งชาติฉบับที่ 4



การประเมินความเปราะบาง และการปรับตัวต่อการ เปลี่ยนแปลงสภาพภูมิอากาศ (Vulnerability & Adaptation)



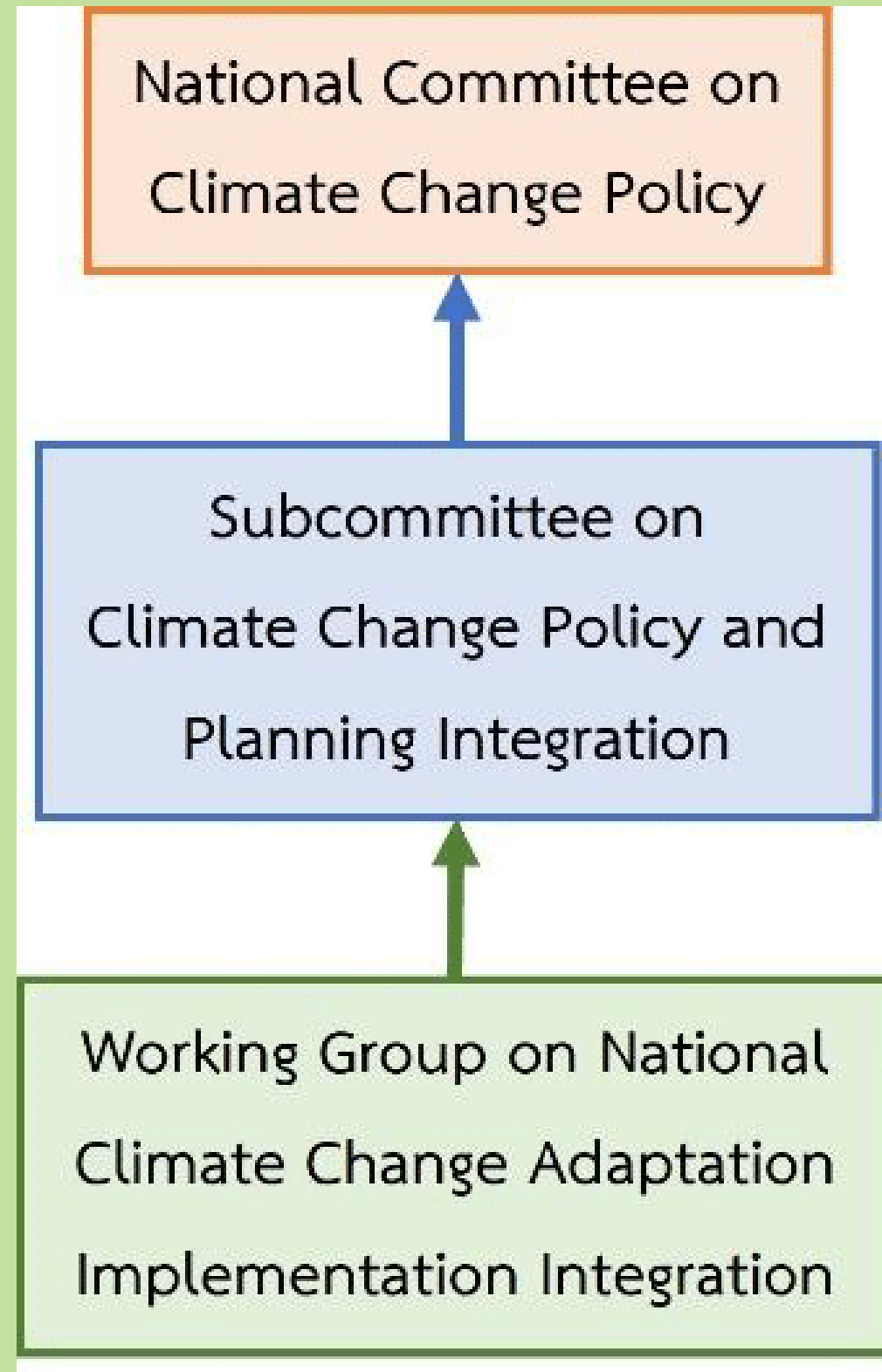
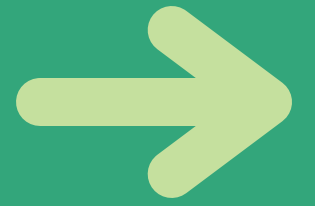
NATIONAL CIRCUMSTANCES



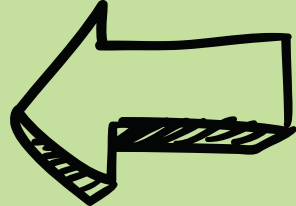
- Thailand is highly vulnerable to the impacts of climate change. According to the Global Climate Risk Index 2021, Thailand was ranked the 9th most affected country from weather-related loss events during 2000-2019.
- Different sectors and different regions in Thailand are vulnerable to different climate hazards, especially agricultural sector.
- In addition to the physical impacts of climate change, Thailand is also vulnerable to changes in socio-economic conditions, particularly aging population.

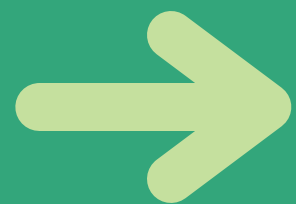


INSTITUTIONAL ARRANGEMENT

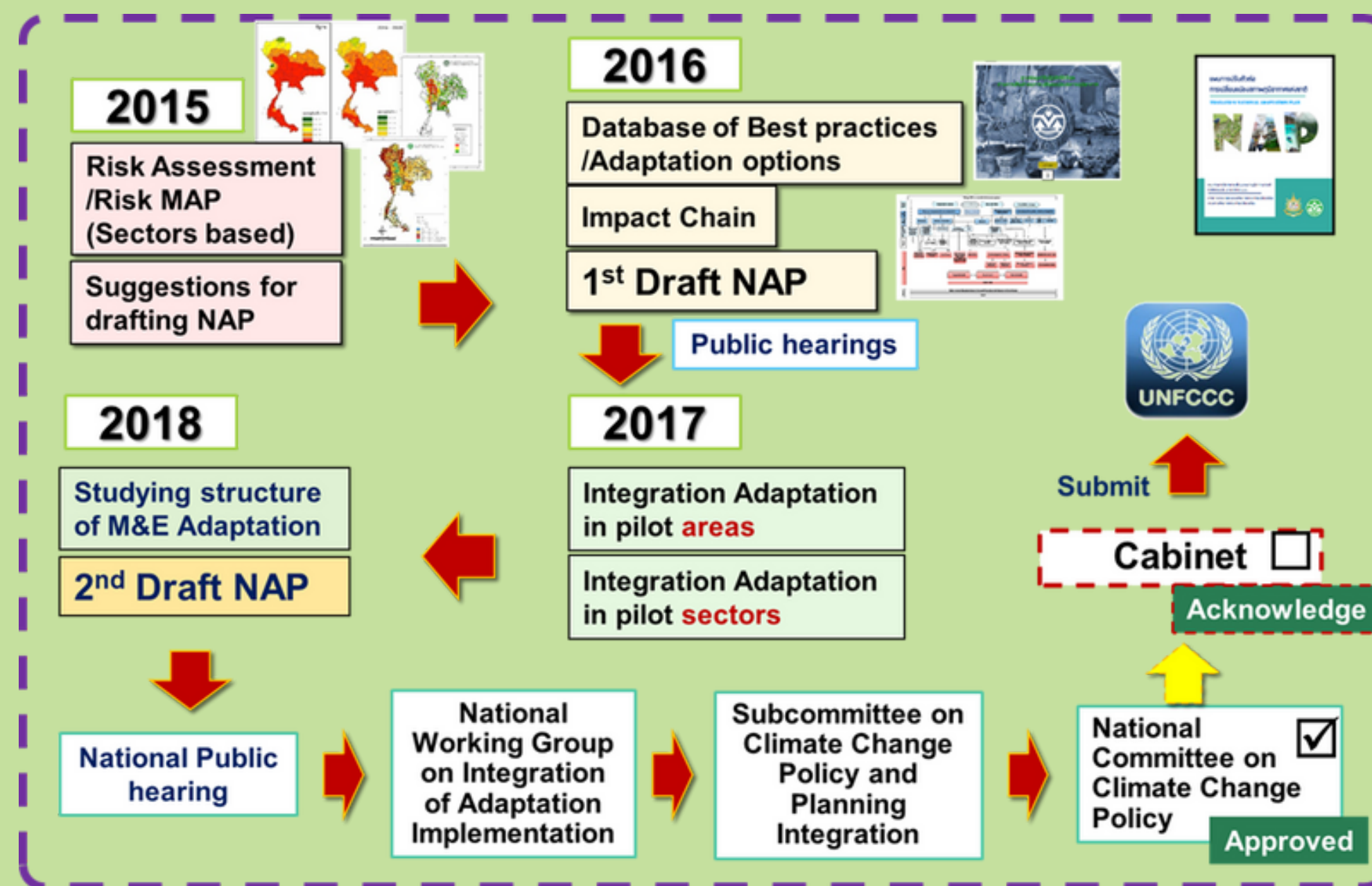


ONEP is serving as Chairman





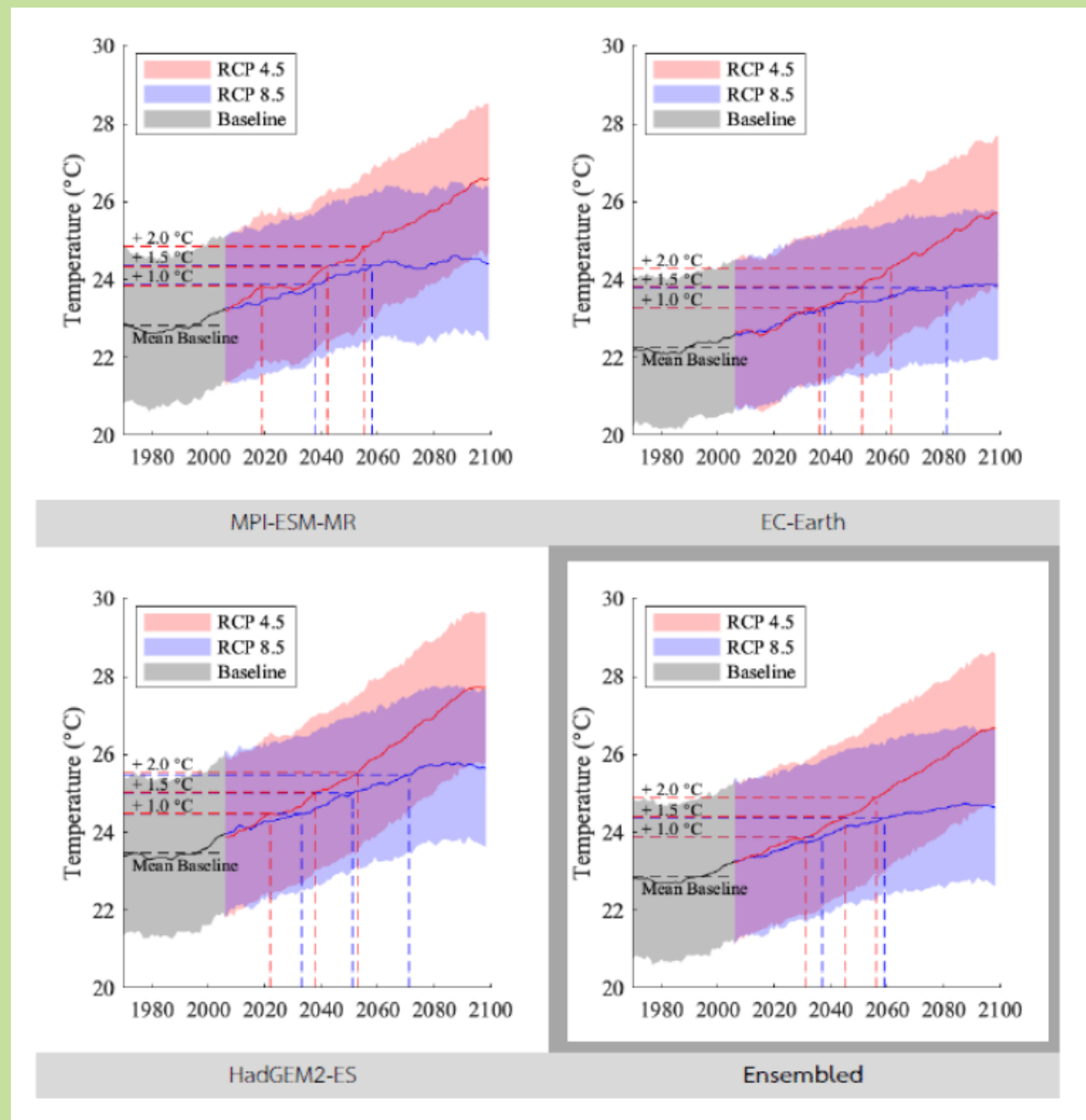
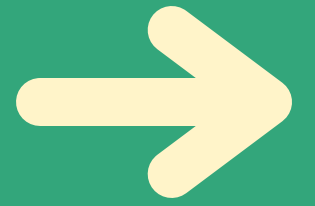
National Adaptation Plan (NAP) Formulation Process



IMPACTS, RISKS AND VULNERABILITIES



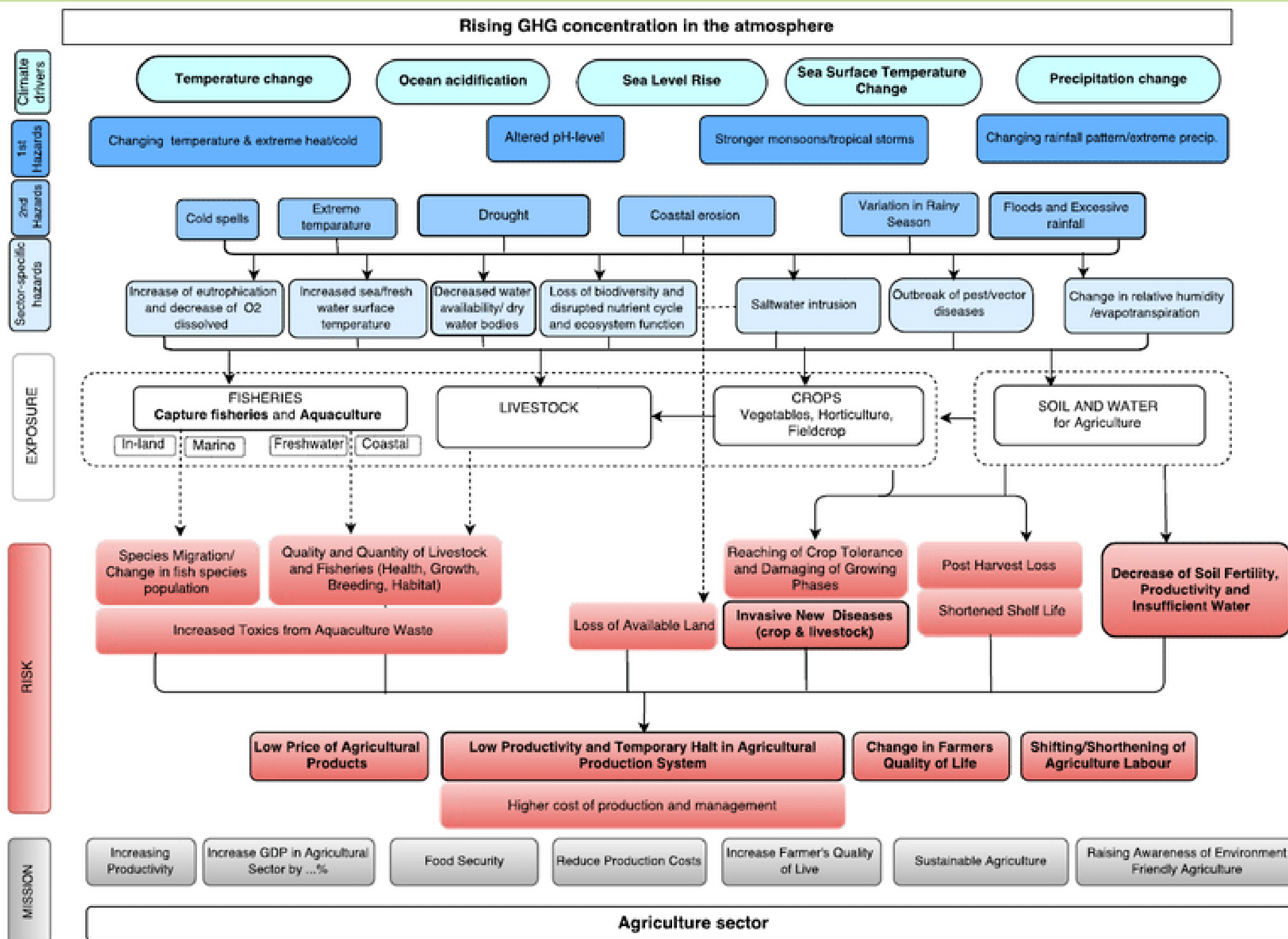
PROJECTED CLIMATE TRENDS AND HAZARDS



Future Changes in Temperature in Thailand based on 3 General Circulations Models (GCMs)

Source: ONEP and RU-Core i

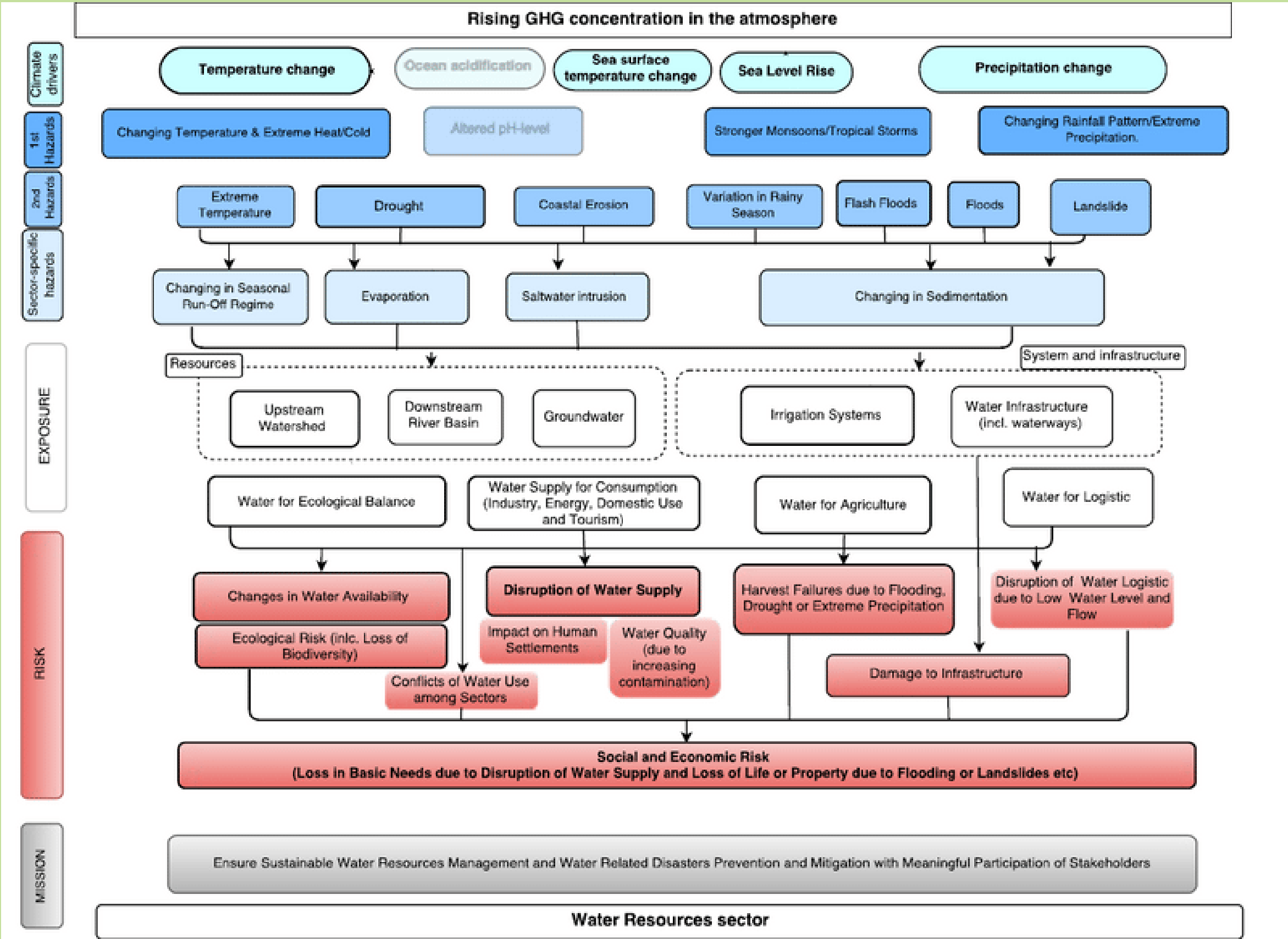
Impacts of climate change on agriculture



Source: GIZ i



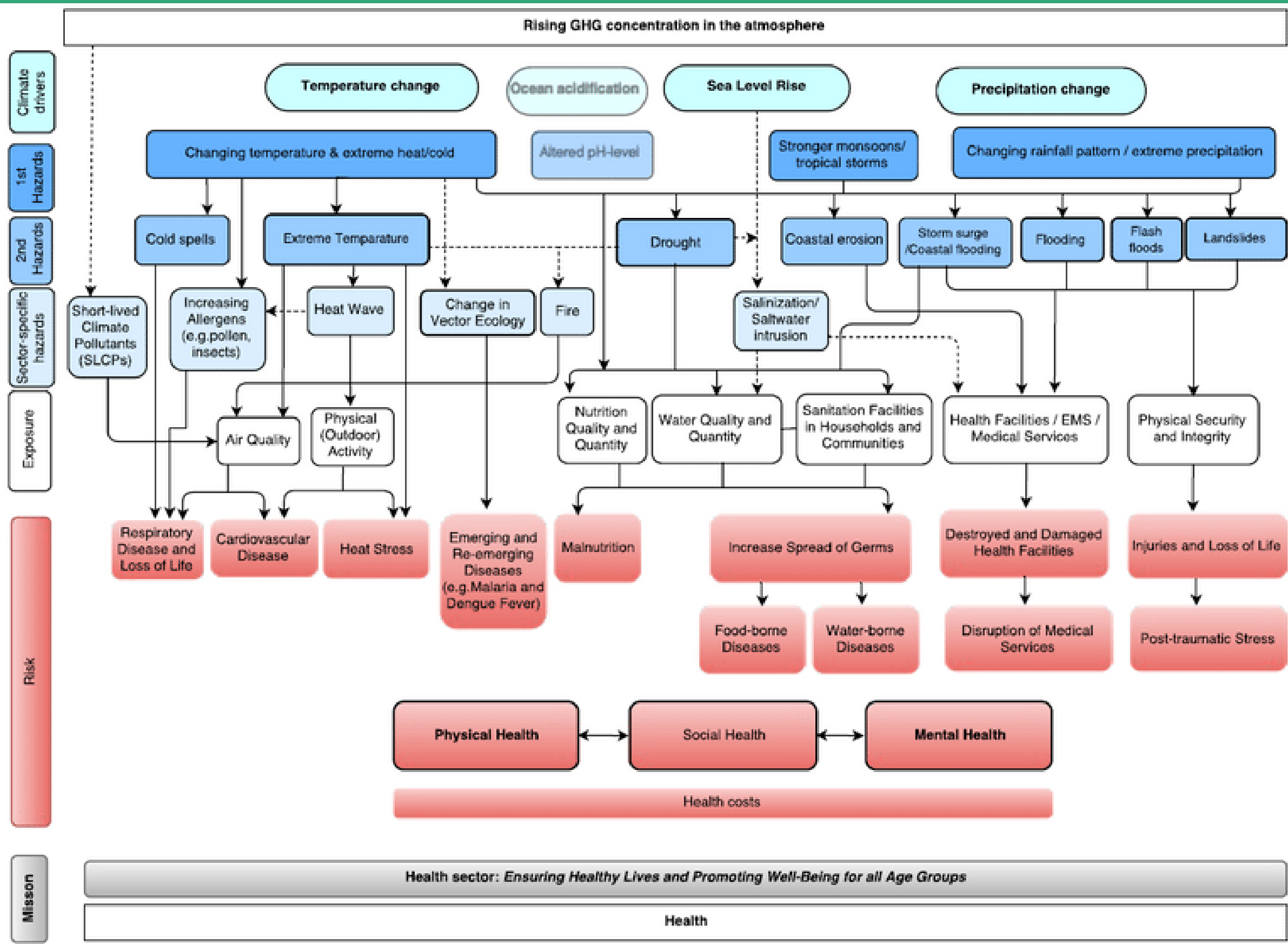
Impacts of climate change on water management



Source: GIZ i



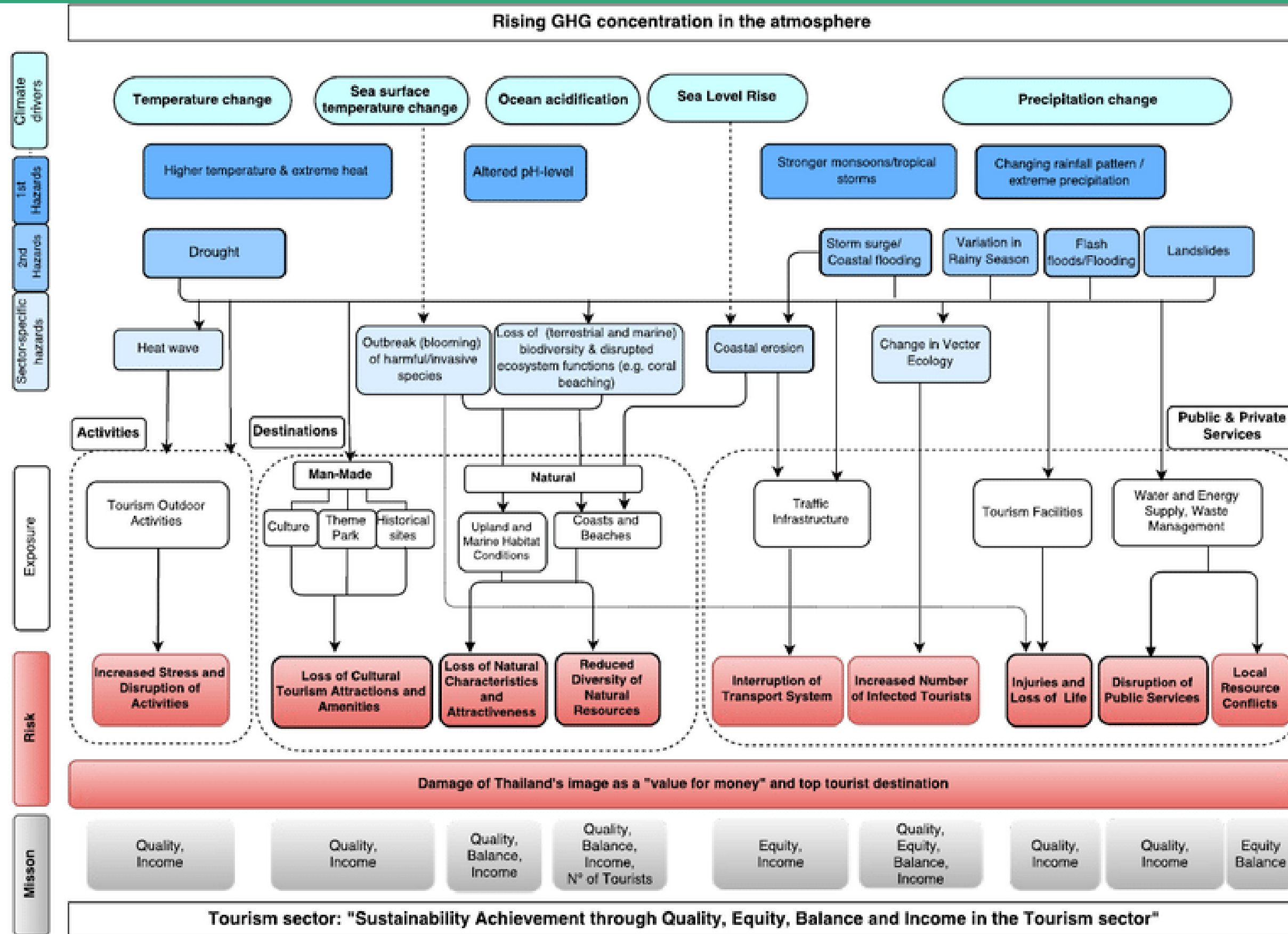
Impacts of climate change on health



Source: GIZ i



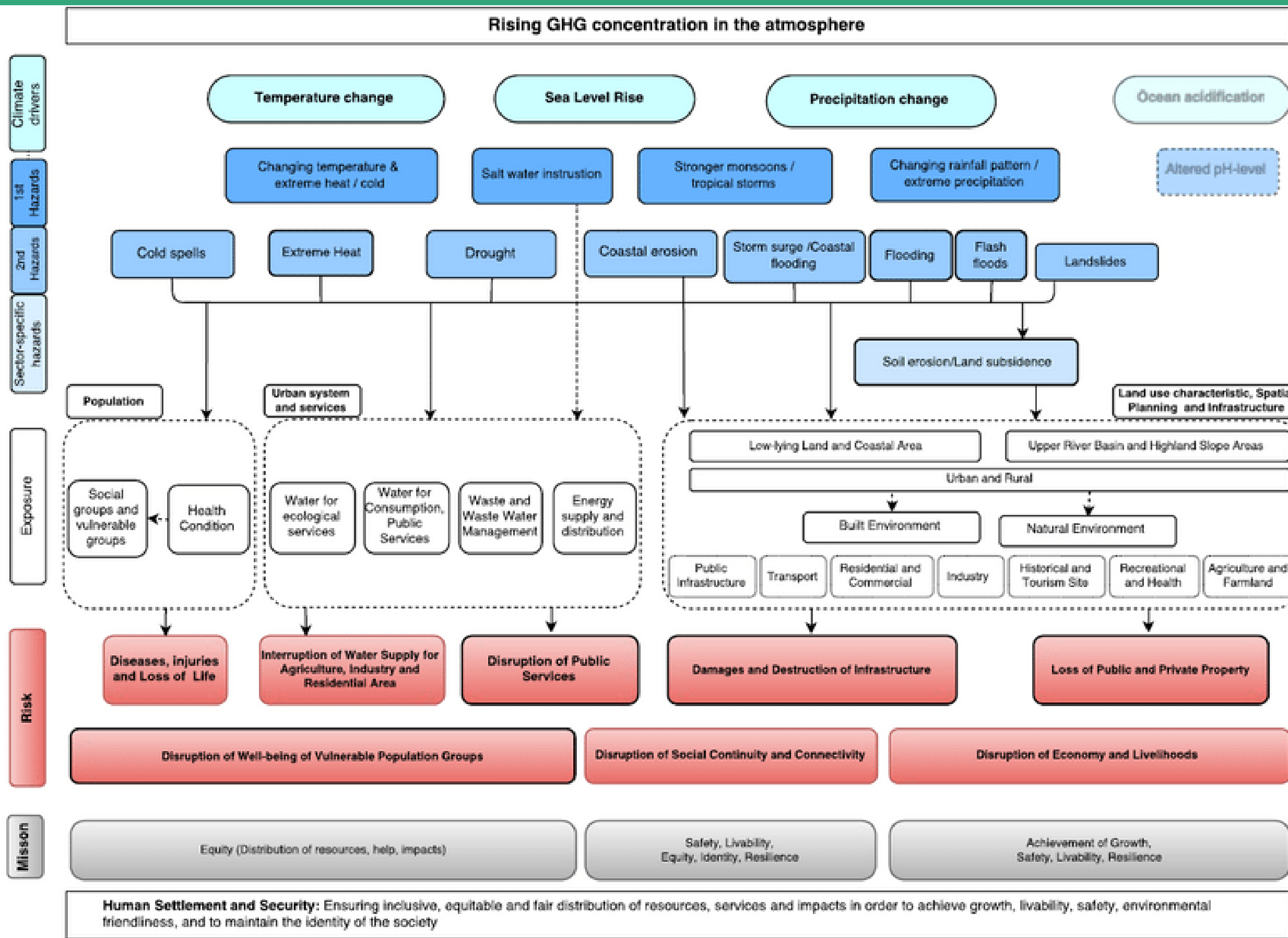
Impacts of climate change on tourism



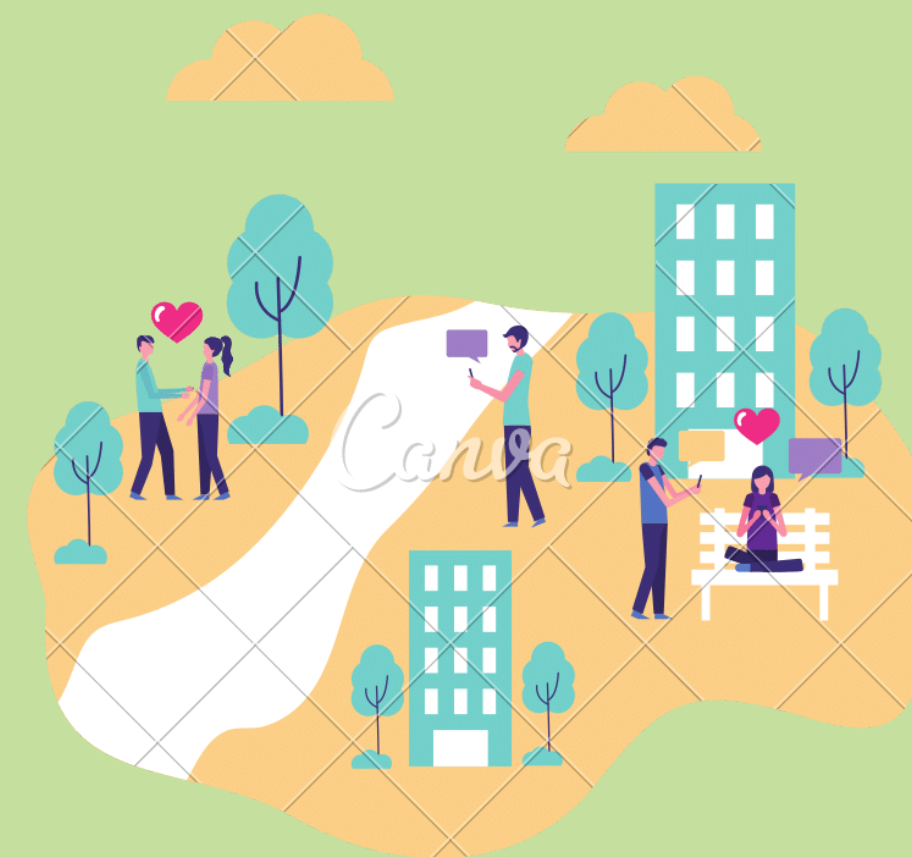
Source: GIZ i



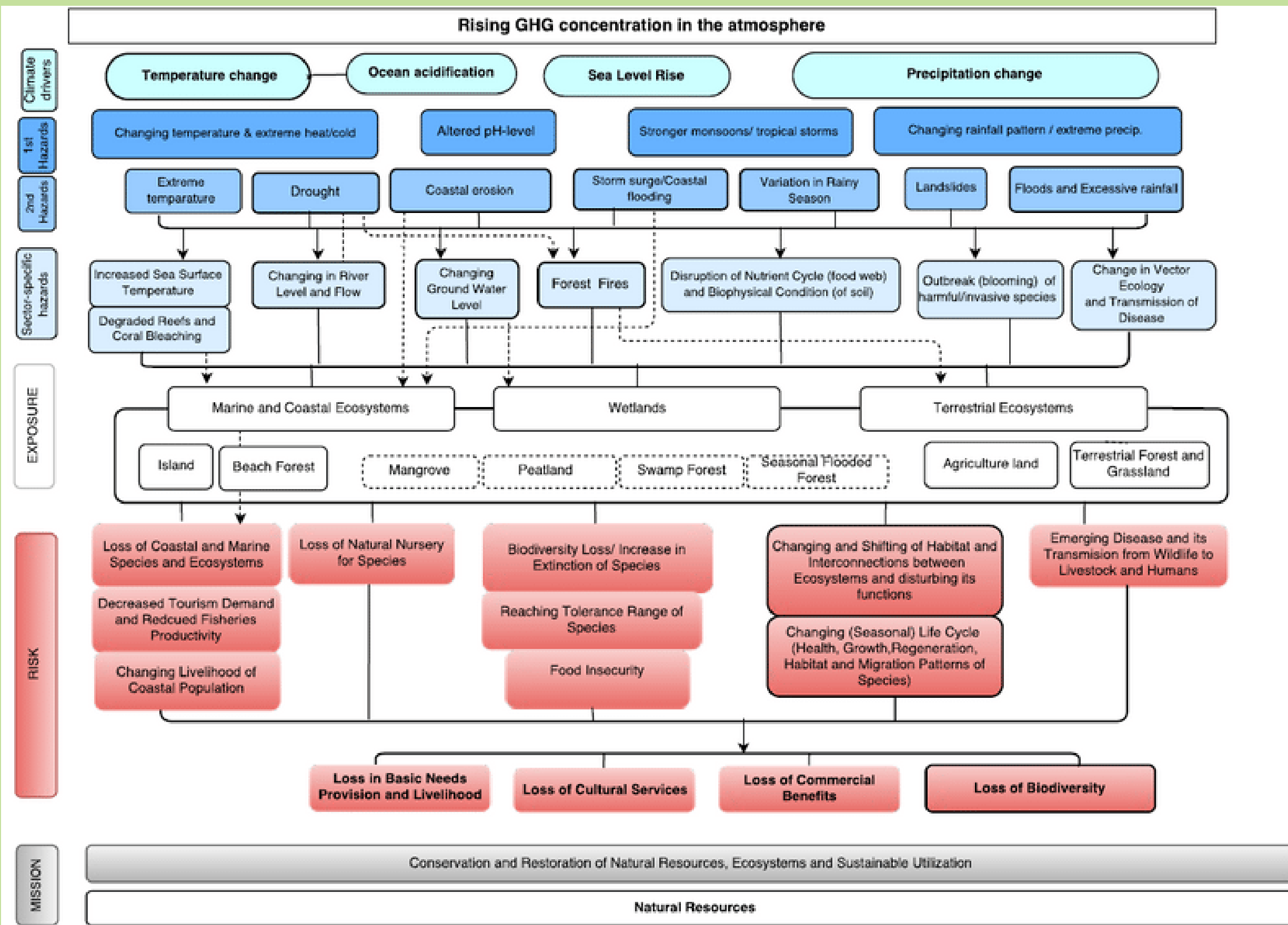
Impacts of climate change on human settlement



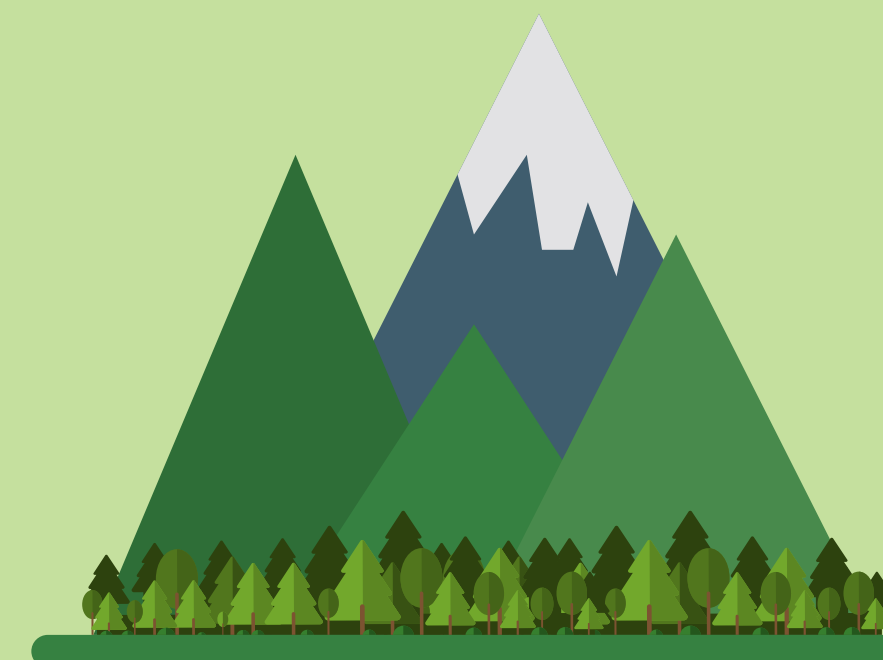
Source: GIZ i



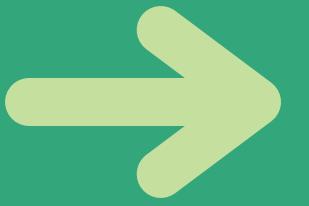
Impacts of climate change on natural resources



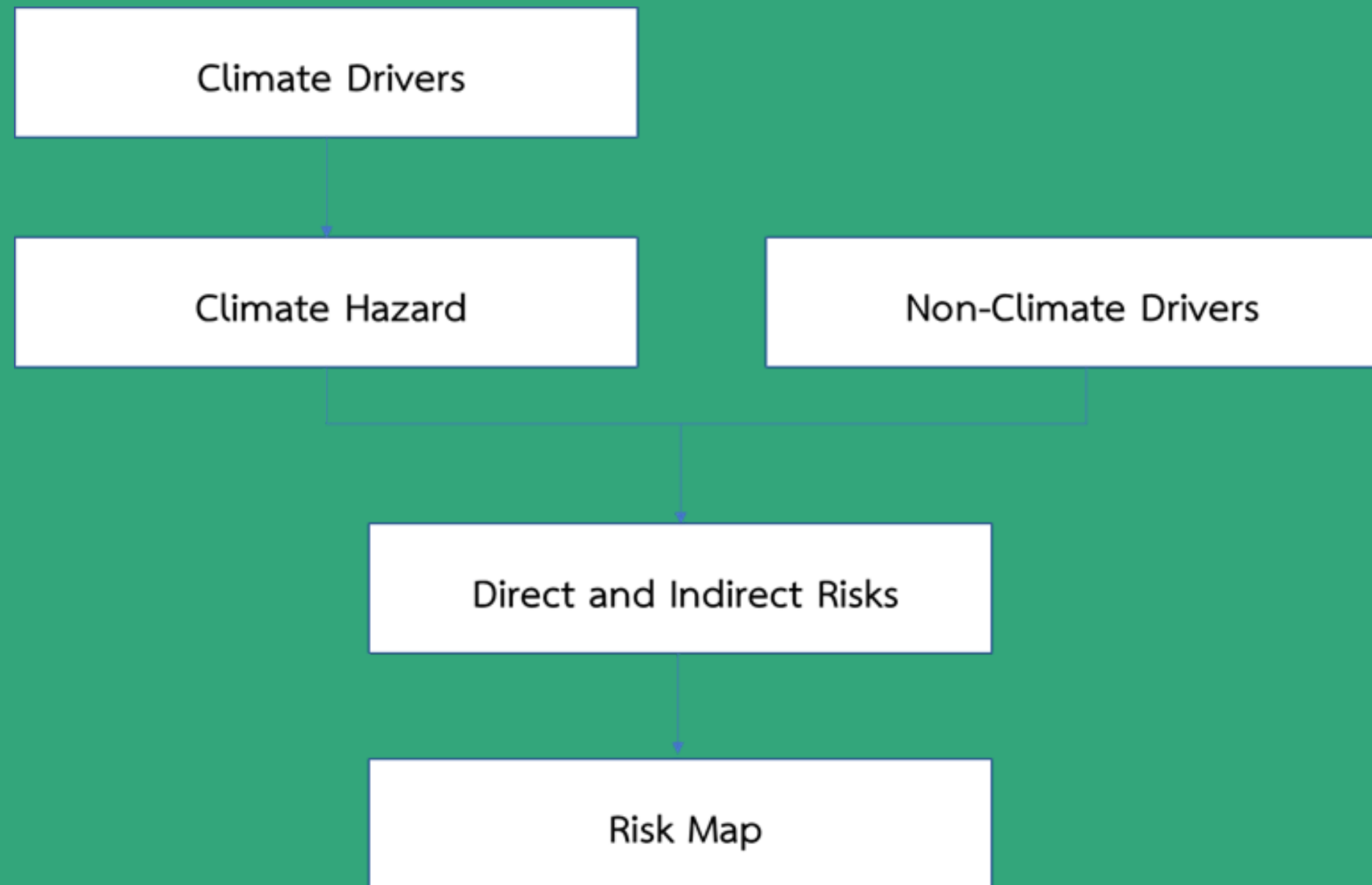
Source: GIZ i



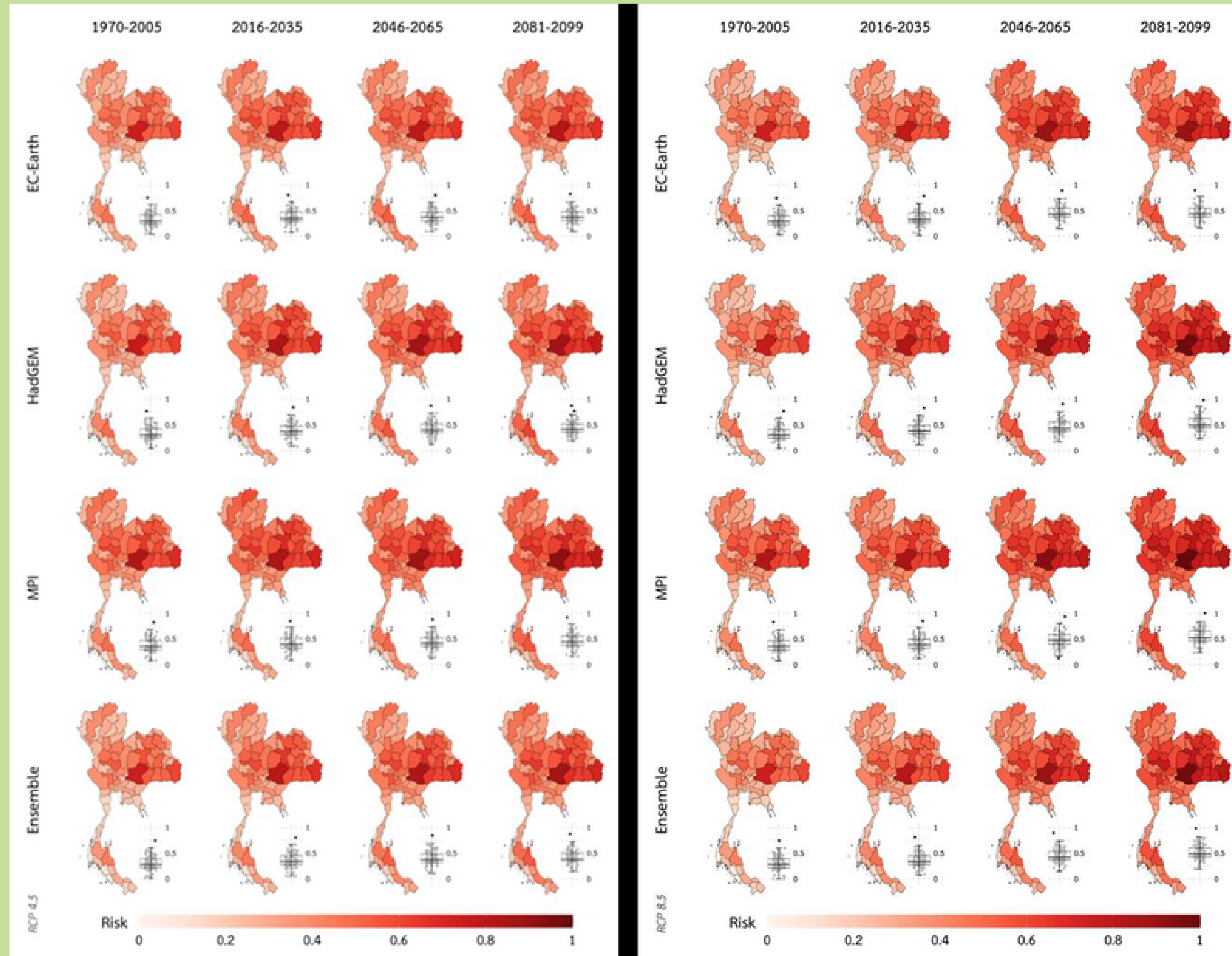
BUT...IMPACTS OF CLIMATE
CHANGE ARE NOT
HOMOGENOUS ACROSS HAZARD
TYPE, TIME AND AREAS



THIS IS WHY DEVELOPMENT OF RISK MAPS IS IMPORTANT



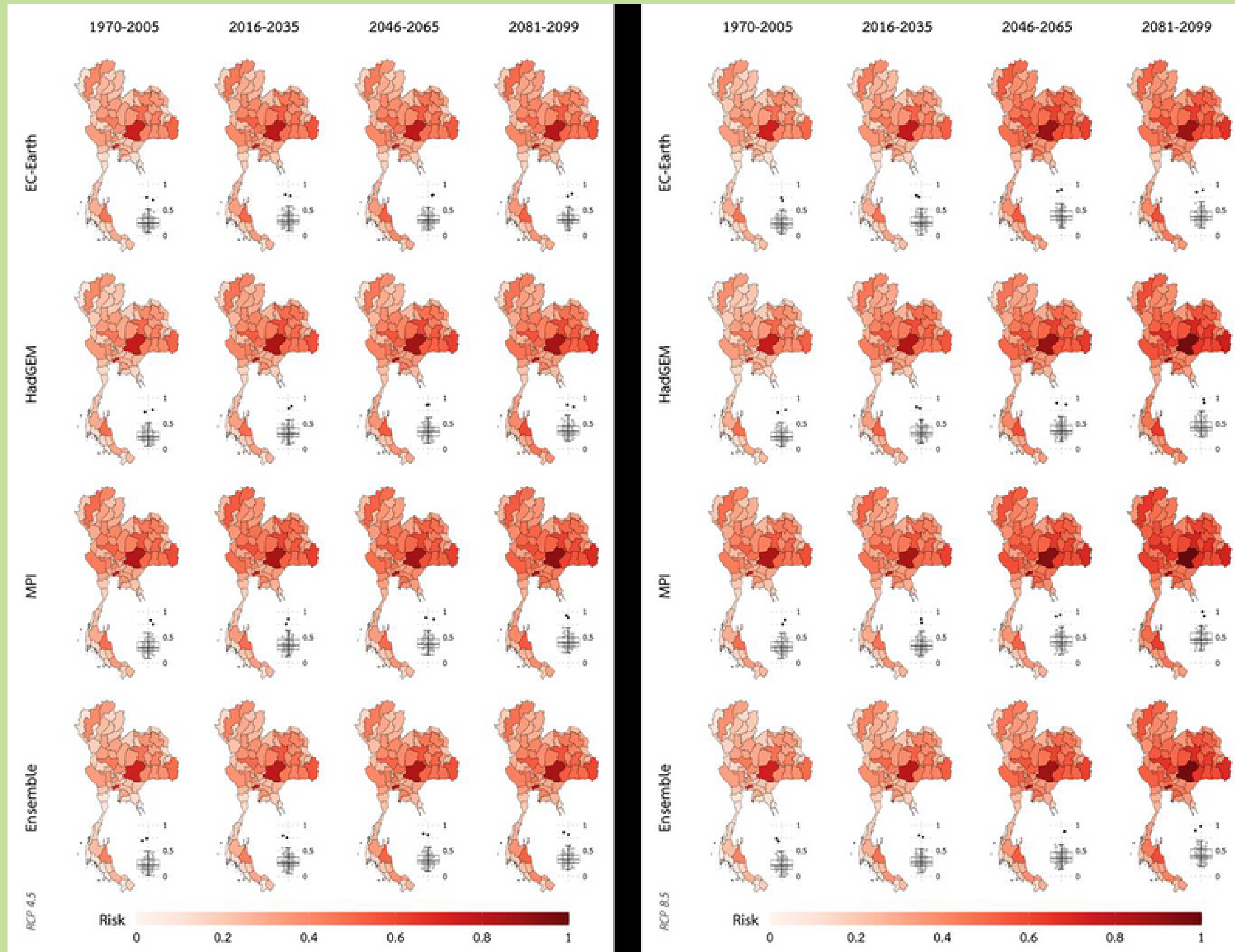
Risk map for agricultural sector



Source: ONEP and RU-Core i



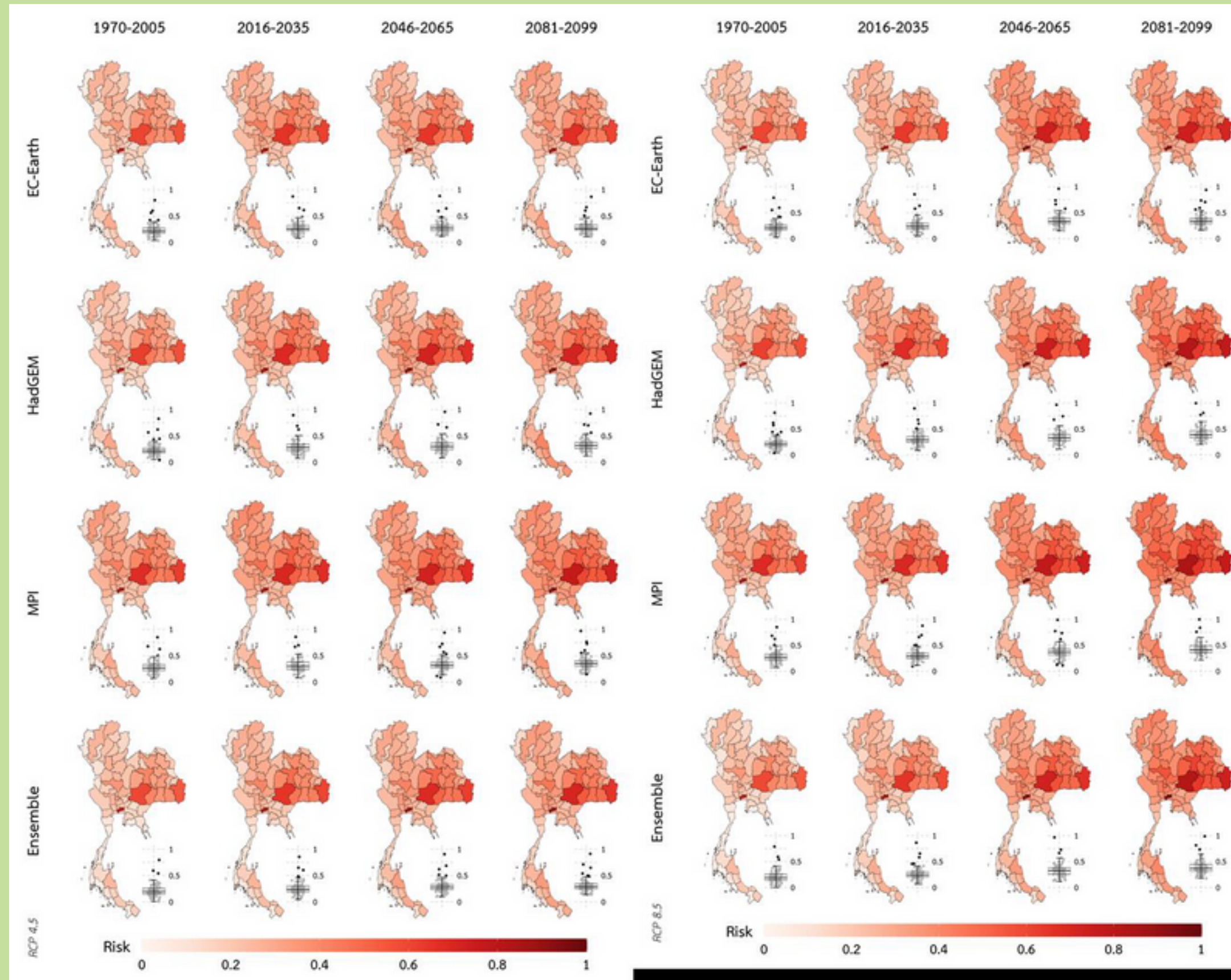
Risk map for water management



Source: ONEP and RU-Core i



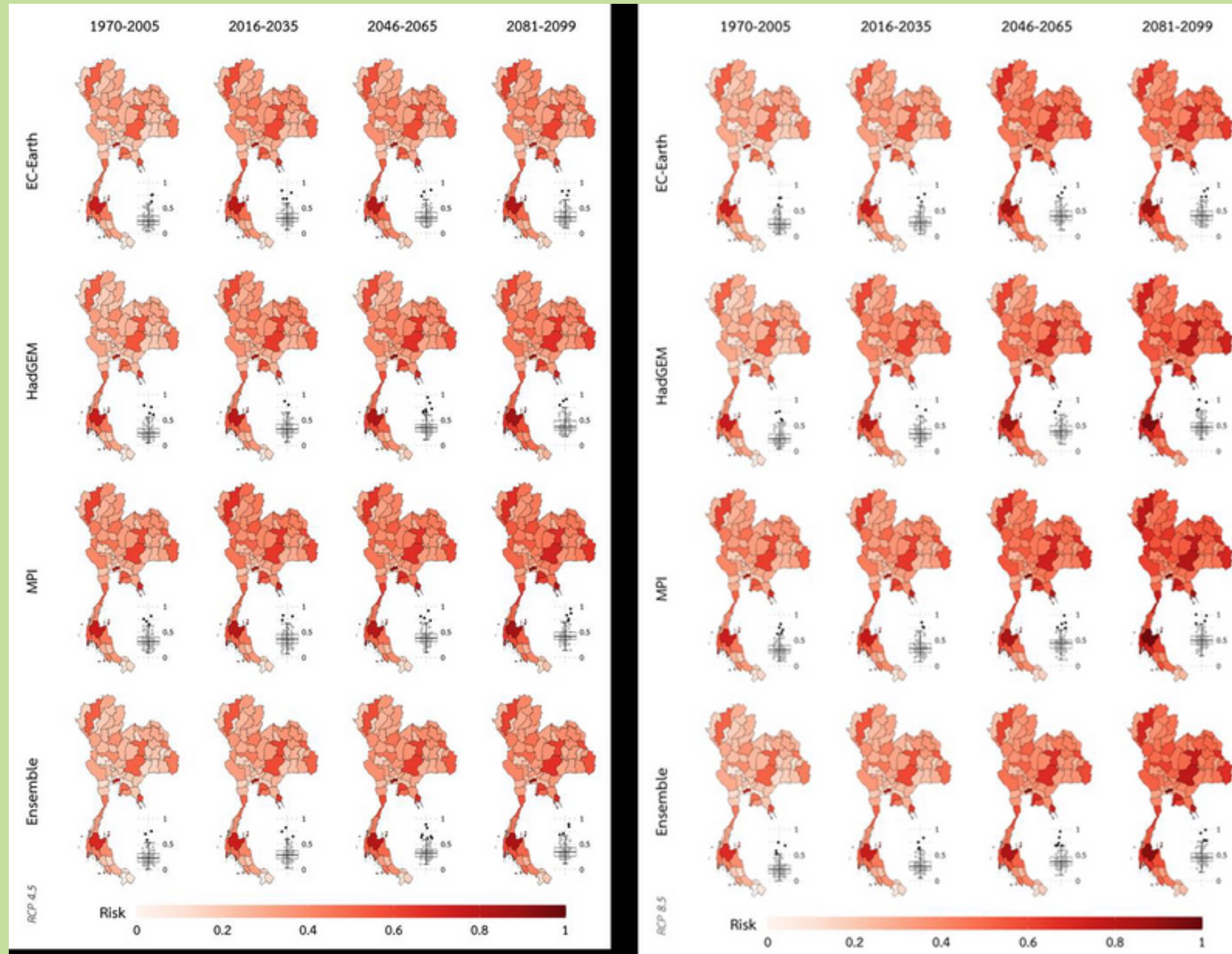
Risk map for health



Source: ONEP and RU-Core i



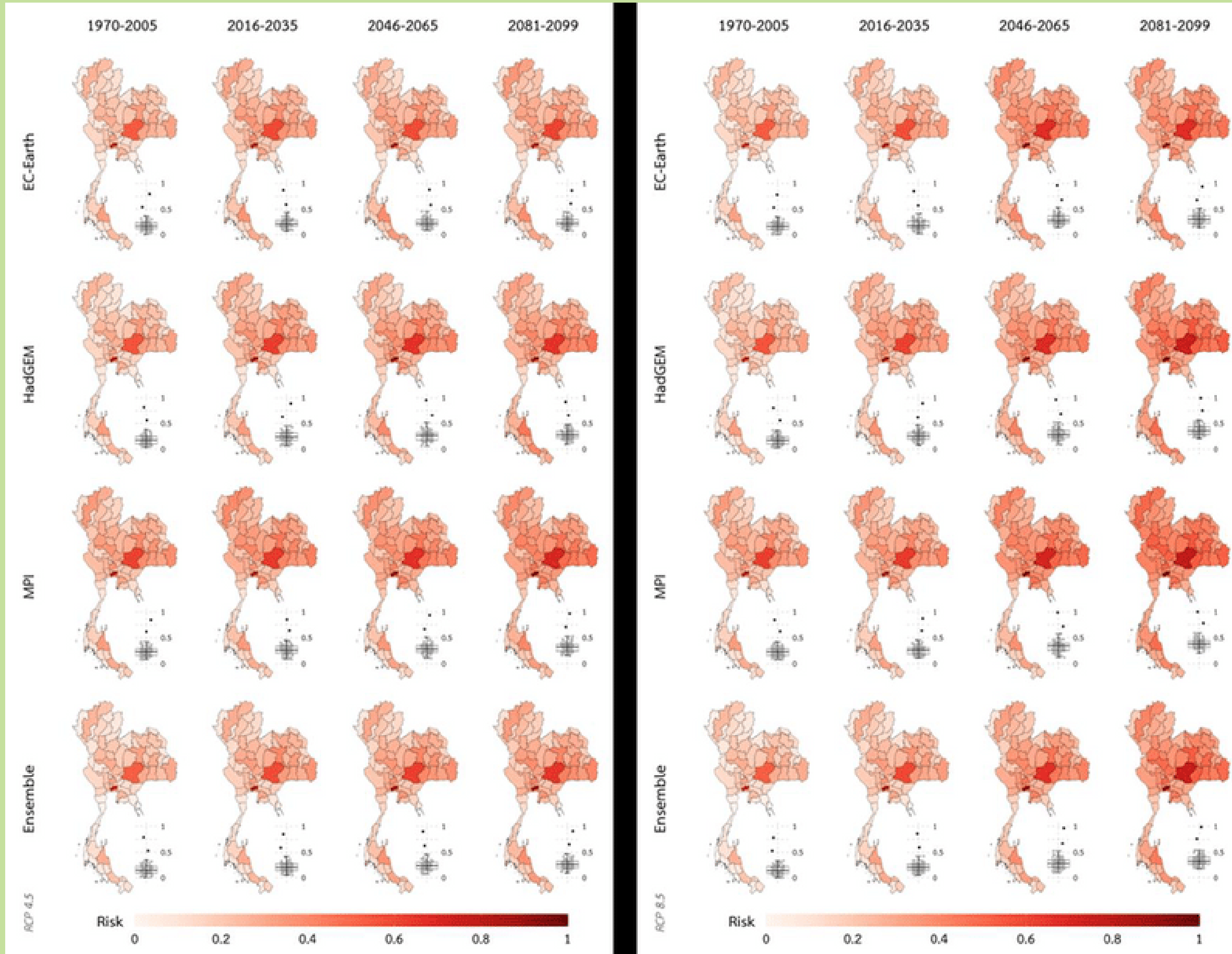
Risk map for tourism



Source: ONEP and RU-Core i



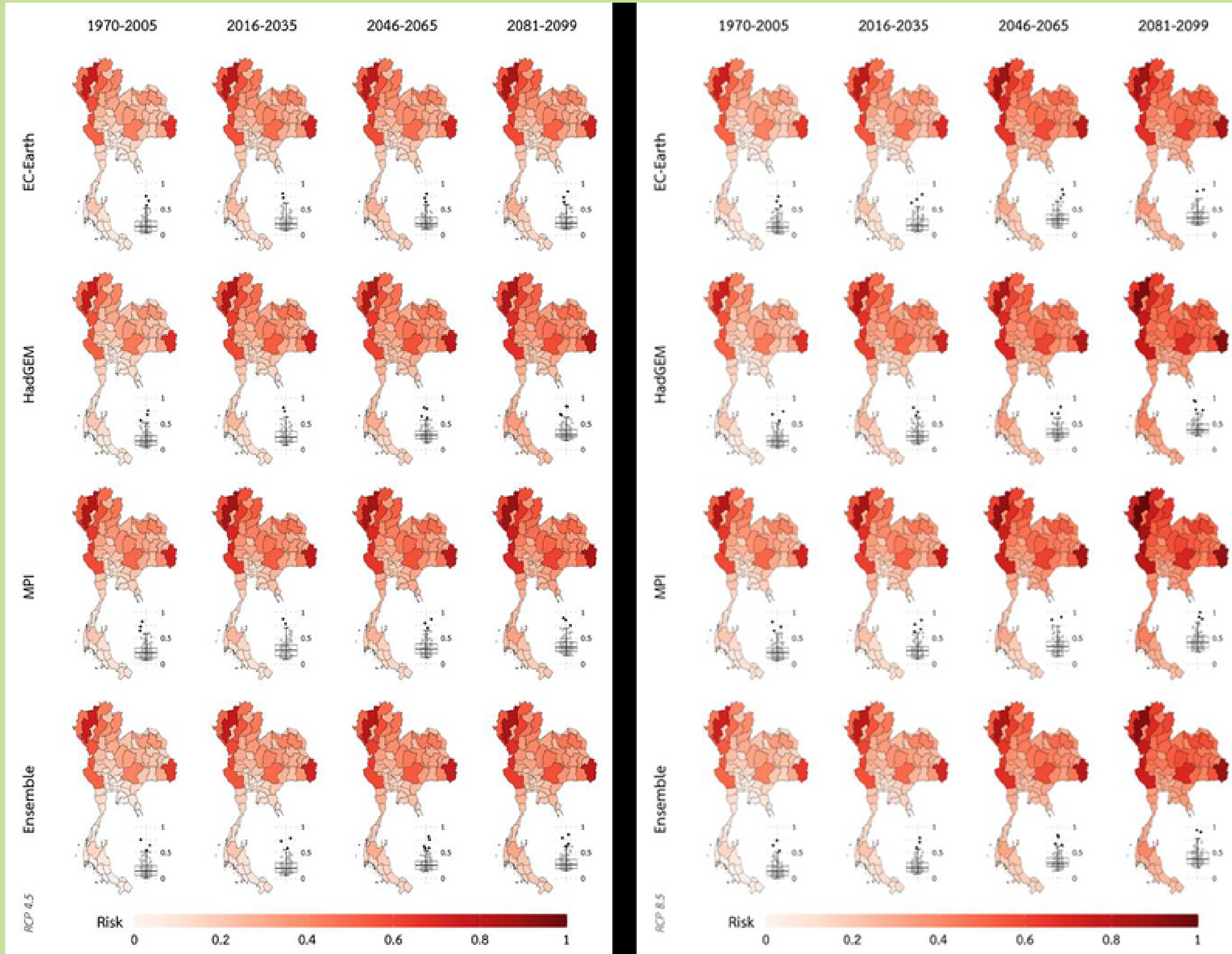
Risk map for human settlement



Source: ONEP and RU-Core i



Risk map for natural resources

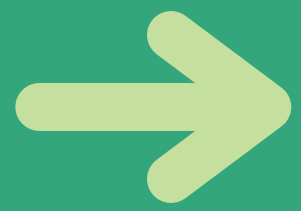


Source: ONEP and RU-Core i



IMPLEMENTATION OF ADAPTATION AND PLANS

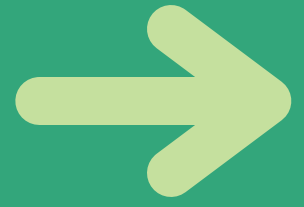




Examples of adaptation in water management

- Designating areas as flood detention: e.g. Bang Rakam
- Water diversion tunnels: e.g. Prasae-Khlong Yai project
- Solving saltwater intrusion: e.g. Khlong Lat Pho Floodgate Project
- Community water management
- Establishment of an early warning system





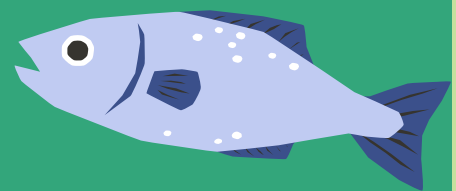
Examples of adaptation in agriculture



- Improving crop varieties
- Plantation management
- Improving infrastructure for farmers

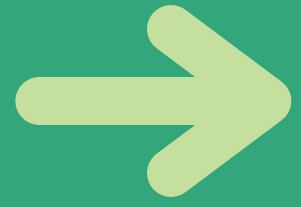


- Closed-system farming
- Development of heat-resistant livestock



- Shifting the method of fish rearing
- Management of physical environment and water quality





Examples of adaptation in health

- Community-level extreme weather alert tool
- Heat and smog early warning system
- Thermal index processing program
- A simple toolkit for monitoring heat at the community level
- Heat health warning criteria and systems for Thailand
- Emergency and disaster response systems in medicine and public health
- Infectious Diseases Surveillance System

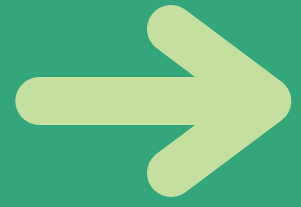




Examples of adaptation in tourism



- Shifting from natural and climate-dependent tourist attractions and activities to man-made attractions
- Development of early warning system
- Development of climate-resilient infrastructure around the tourism sites
- Water conservation
- Closing tourism sites at certain times of the year
- Using weather forecasts to plan for different tourist activities



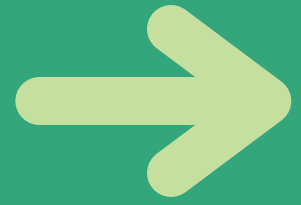
Examples of adaptation in human settlement



- Raising the floor of the house, building a flood prevention wall, having a second home



- Making a walkway along the riverbank
- Planning to allocate community areas to accommodate the impacts of climate change
- Dams and drainage systems

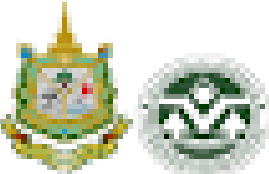


Examples of adaptation in natural resources

- Establishing protected areas both on land and at sea,
- Forecast and warning systems
- Modeling climate change long-term impacts on forest ecosystems
- Long-term resource monitoring
- Developing technological infrastructure to conserve and sustainably utilize biodiversity



Climate change related policies and plans




แผนแม่บทรองรับการเปลี่ยนแปลงสภาพภูมิอากาศ
พ.ศ. ๒๕๕๘ - ๒๕๗๓


สำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม
กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม
กรกฎาคม ๒๕๖๒

คณะรัฐมนตรีมีมติเมื่อวันที่ ๓๑ กรกฎาคม ๒๕๖๒

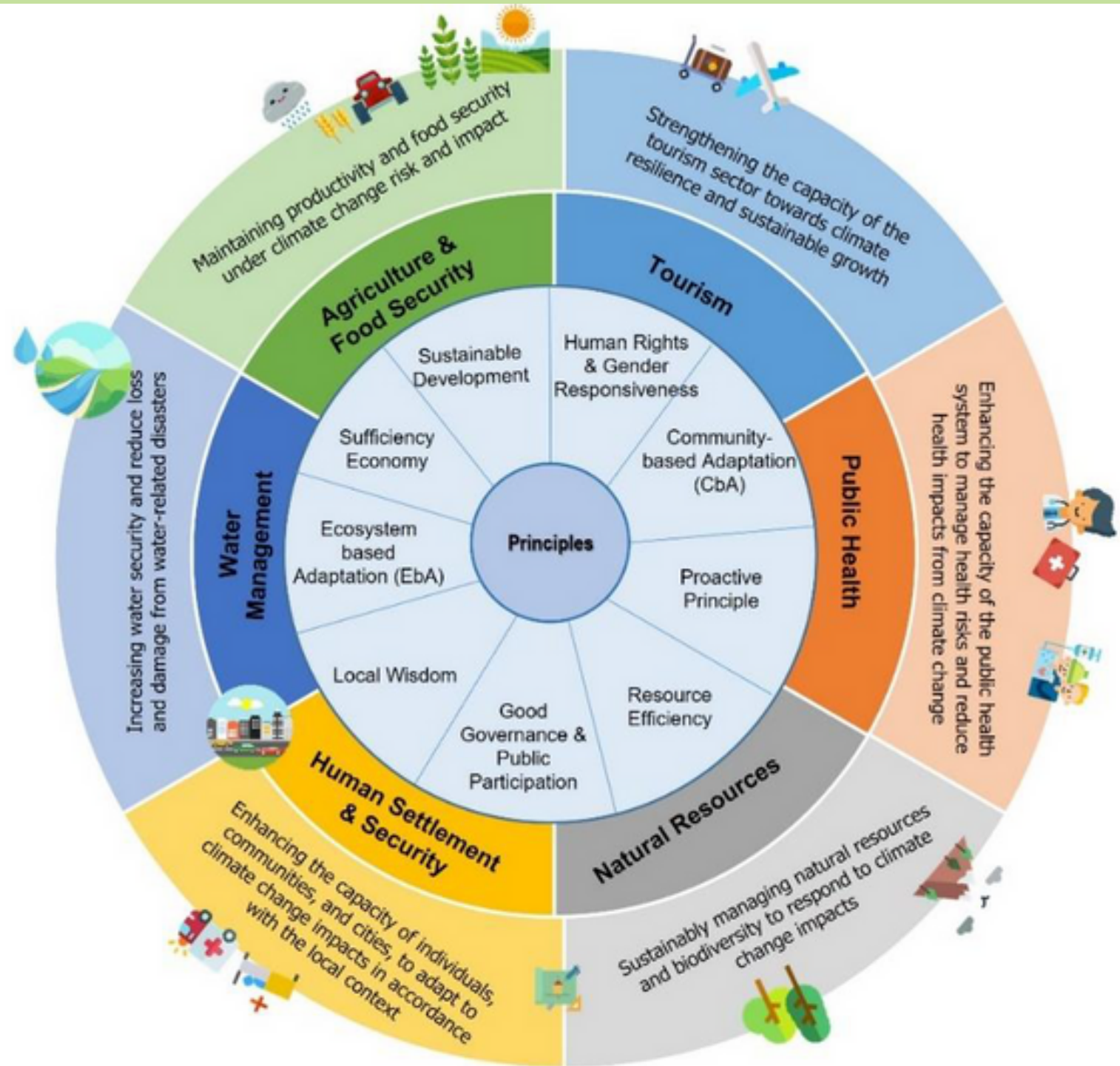
แผนการปรับตัวต่อ
การเปลี่ยนแปลงสภาพภูมิอากาศแห่งชาติ
THAILAND'S NATIONAL ADAPTATION PLAN



คณะกรรมการนโยบายการเปลี่ยนแปลงสภาพภูมิอากาศ
ประเทศไทย (พ.ศ.๒๕๖๒-๒๕๖๓)
สำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม
กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม



Key principles and goals in adaptation in each sector and focal points



Sectors	Sectoral Focal Points
Water management	Office of the National Water Resources
Agriculture and food security	Office of Agricultural Economics, Ministry of Agriculture and Cooperatives
Tourism	Department of Tourism, Ministry of Tourism and Sports
Public health	Department of Health, Ministry of Public Health
Natural resources management	Office of the Permanent Secretary of Ministry of Natural Resources and Environment, Ministry of Natural Resources and Environment
Human settlement and security	Department of Public Works and Town & Country Planning, Ministry of Interior



Key barriers for adaptation



“
Limitation
of knowledge
”

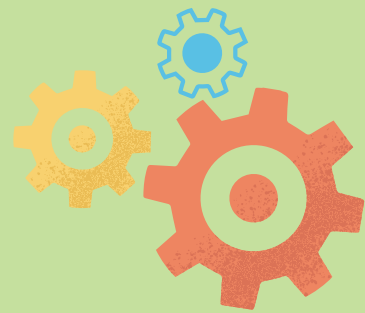
“
Lack of national
climate information
center
”

“
Lack of continued
financial supports
”

“
Lack of access to
adaptation
technologies
”



Recommendations and supports needed



- National M&E system
- Strengthening capacity building program



- Innovative financing measures
- fiscal and monetary instruments
 - private innovative financing scheme



- National data system for climate change adaptation across spatial scales and sectors



