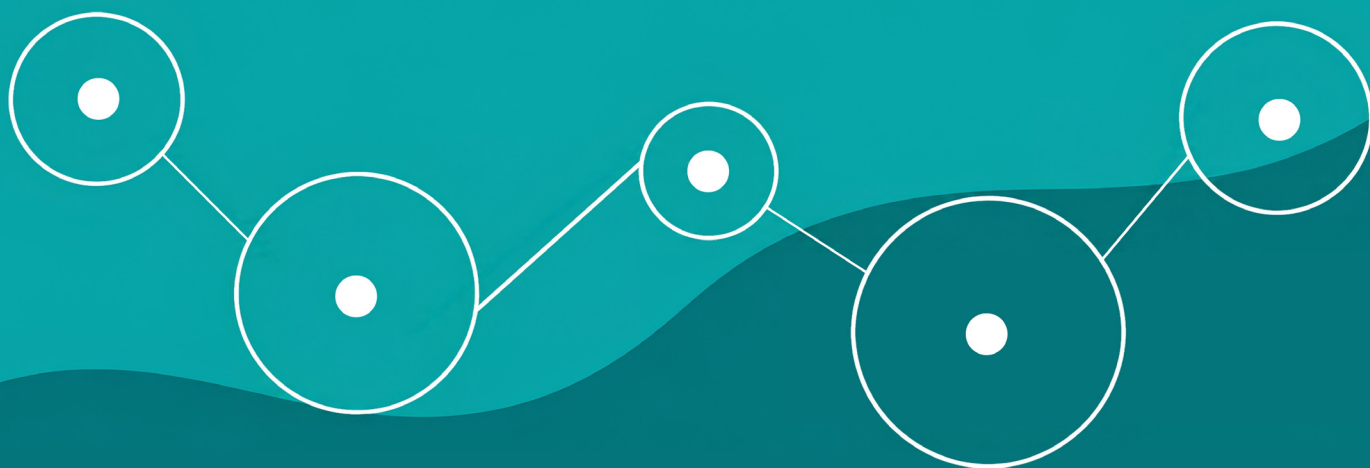


Thailand strategic research and policy framework for just and transformational climate adaptation

A national knowledge-to-action system for climate adaptation



KNOWLEDGE ● PARTNERSHIP ● ACTION

Summary

Thailand is entering a decisive phase of climate adaptation. Floods, droughts, extreme heat, coastal erosion, ecosystem degradation and health risks are no longer discrete environmental events; they are interacting development pressures that expose inequalities in housing, income, public services, land tenure and political voice. The central policy challenge is therefore not simply to expand the number of adaptation projects, but to build a durable national system capable of converting knowledge into equitable decisions, sustained finance and measurable reductions in vulnerability (IPCC, 2022a,c; Shaw et al., 2022).

This white paper presents a proposed national knowledge-to-action architecture for just and transformational climate adaptation. Its immediate policy instrument is the Thailand Adaptation Research Agenda (2026–2030), delivered through four linked outputs: the agenda itself; a mapping of institutions and capabilities; a pipeline of collaborative proposals; and a policy-relevant synthesis brief series. The Adaptation Research Alliance (ARA), hosted by the Chulalongkorn University Social Research Institute (CUSRI) and the Stockholm Environment Institute (SEI) at its Asia centre, would convene and support delivery.

The architecture complements – not duplicates – public mandates: the Department of Climate Change and Environment (DCCE) provides national climate policy leadership and serves as Thailand’s focal point for international climate processes, while the Office of the National Ministry of Higher Education, Science, Research and Innovation Policy Council (NXPO) connects the agenda to national higher education, science, research and innovation policy (DCCE, 2025; NXPO, n.d.).

The analytical framework integrates four mutually reinforcing perspectives. Climate justice identifies who is vulnerable, how vulnerability is produced, and whether adaptation benefits, burdens and decision-making power are distributed fairly. Transformational adaptation examines the structures, institutions and development pathways that must change when incremental responses are no longer sufficient. Adaptive governance provides the institutional conditions for coordination, flexibility, participation and learning. The research-to-policy interface ensures that evidence is co-produced, credible, salient and usable in real decisions.

The Thailand Adaptation Research Agenda (2026–2030) provides the first five-year operating cycle for the proposed national system. It organizes five strategic priorities (Table 1a) and 10 research themes (Table 2a) around the four core outputs (defined in Section 3). Delivery combines DCCE’s climate policy authority, NXPO’s policy-bridging function, ARA and CUSRI’s convening and knowledge-brokerage role, independent scientific advice, community participation and aligned finance. The agenda also establishes the evidence base for the longer pathway of foundational work in 2027–2029, scaling in 2030–2032 and catalysing change in 2033–2035.

Table 1a. Five national strategic priorities

PRIORITY	STRATEGIC DIRECTION
1. Climate justice	Allocate resources, opportunities and decision-making power fairly, with priority for populations facing intersecting vulnerabilities.
2. Transformational adaptation	Prepare structural changes in livelihoods, settlements, governance, economic systems and development pathways.
3. Adaptive governance	Strengthen coordination, participation, institutional learning, flexibility and accountability across levels.
4. Research–policy–practice	Co-produce user-driven evidence and link research directly to policy, finance, implementation and learning.
5. Long-term systems	Institutionalize integrated data; sustained finance; monitoring, evaluation and learning (MEL); and governance beyond political and project cycles.

Table 2a. 10 strategic research themes

	RESEARCH THEME	CORE SCOPE
1	Climate vulnerability and adaptation justice	Differentiated vulnerability, distributional/procedural/recognition justice and fair targeting.
2	Climate-resilient settlements and human security	Housing, infrastructure, land-use planning, displacement, relocation and managed retreat.
3	Climate, health and adaptive social protection	Physical and mental health, occupational heat, resilient health systems and social protection.
4	Livelihood transformation and inclusive green transitions	Livelihood viability, decent work, skills, resilient enterprises and just economic transition.
5	Community-based and locally led adaptation	Local knowledge, decision-making authority, direct finance, safeguards and scalable local models.
6	Transformational adaptation pathways	Scenarios, thresholds, tipping points, anticipatory governance and long-term pathways.
7	Adaptive governance and climate finance	Institutional coordination, law, budgets, accessible finance and public accountability.
8	Adaptation knowledge systems and data integration	Interoperable data, co-produced knowledge, communication and decision-support services.
9	Monitoring, evaluation, learning and accountability	Outcomes, justice, maladaptation, participatory MEL, learning and course correction.
10	Transboundary, regional and systemic climate risks	Mekong region, haze, food–water–energy systems, migration, health and regional cooperation.

Abbreviations

ARA	Adaptation Research Alliance
ASEAN	Association of Southeast Asian Nations
CUSRI	Chulalongkorn University Social Research Institute
DCCE	Department of Climate Change and Environment
MHESI	Ministry of Higher Education, Science, Research and Innovation
IPCC	Intergovernmental Panel on Climate Change
MEL	Monitoring, evaluation and learning
NXPO	Office of the National Ministry of Higher Education, Science, Research and Innovation Policy Council
OECD	Organisation for Economic Co-operation and Development
ONEP	Office of Natural Resources and Environmental Policy and Planning
SEI	Stockholm Environment Institute
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNFCCC	United Nations Framework Convention on Climate Change
WHO	World Health Organization
WRI	World Resources Institute

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Purpose

This white paper develops a policy decision framework for moving Thailand beyond fragmented, time-bound adaptation projects toward a permanent national system linking knowledge, policy, finance, institutions and implementation. It translates evidence from the Thailand Climate Adaptation Research Forum 2026 and the wider adaptation literature into an actionable research agenda, governance architecture, delivery pathway and accountability framework for 2027–2035, aligned with a long-term vision for 2050.

Collective knowledge for adaptation

Climate change is a cross-cutting development challenge affecting economic and social development, food and water security, public health, settlements, livelihoods and national competitiveness. Thailand must move beyond fragmented sectoral responses and build stronger connections among research, policy, finance and practice.

The Thailand Climate Adaptation Research Forum 2026 and the establishment of the ARA Secretariat in Thailand mark an important step towards this collective ecosystem. Hosted by the Stockholm Environment Institute (SEI) at its Asia centre and the Chulalongkorn University Social Research Institute (CUSRI), ARA is a global coalition that works to increase investment and build capacity for action-oriented research to adapt to climate change effectively, especially for most vulnerable communities. Its six Research for Impact Principles call for research that is measurable, co-produced, equitable, flexible, sustainable and driven by user needs (ARA, 2021).

Key messages for decision-makers

Thailand faces intensifying floods, droughts, extreme heat, water scarcity, coastal erosion, ecosystem degradation, biodiversity loss, air pollution and transboundary risks. These hazards interact with inequality, insecure livelihoods, uneven public services and fragmented institutions, producing unequal impacts on low-income households, smallholder farmers, informal workers, elderly people, children, Indigenous peoples and climate-exposed communities (IPCC, 2022a).

Thailand possesses substantial research capacity, established policy frameworks and deep local adaptive knowledge. Yet these assets do not consistently operate as a coherent system. Evidence is often produced outside decision cycles; budgets remain sectorally fragmented; local knowledge is weakly recognized; and lessons from implementation are rarely converted into institutional change. The strategic deficit is therefore connective capacity: the ability to align knowledge, authority, finance and accountability around shared adaptation outcomes.

1. The policy challenge

The Paris Agreement, the Global Goal on Adaptation, the UAE Framework for Global Climate Resilience, the 2030 Agenda and the Sendai Framework collectively require stronger adaptive capacity, resilience, risk governance and measurable outcomes (United Nations, 2015; UNFCCC, 2015, 2023, 2024; UNDRR, 2015). The IPCC concludes that climate risks are emerging faster and with greater intensity than previously anticipated, while adaptation remains insufficient (IPCC, 2022a, 2023).

Thailand's national policies provide an enabling base, including the National Adaptation Plan and climate commitments (ONEP, 2018, 2022). Nevertheless, consultations by the Thailand Climate Adaptation Research Forum identified six persistent barriers: risks to informal housing settlements; physical and mental health impacts; livelihood insecurity; gaps in locally relevant knowledge; weak institutional coordination and participation; and implementation of disconnected policy and finance measures.

The required paradigm shift to overcome these barriers would treat adaptation as a part of a national development, justice and governance agenda. It would combine risk reduction with structural change and would use scientific, practitioner, local and Indigenous knowledge to shape legitimate action. Knowledge is more influential when it is credible, salient and produced through legitimate processes (Cash et al., 2003; Norström et al., 2020).

2. Evidence and analytical frame

This white paper uses an integrated conceptual framework to connect observed climate and development risks with the institutional processes required for systems transformation (see Figure 1). The framework synthesizes established scholarship on climate justice, transformational adaptation, adaptive governance and knowledge co-production; these four perspectives are applied to Thailand's policy and research context (Cash et al., 2003; Folke et al., 2005; O'Brien, 2012; Norström et al., 2020; Schlosberg, 2012).

Table 1. Four analytical perspectives and their application in the framework

PERSPECTIVE	PURPOSE IN THE FRAMEWORK
Climate justice	Identifies who is vulnerable, why vulnerability is present, and how benefits, burdens, recognition and influence should be distributed (Schlosberg, 2012; Schlosberg & Collins, 2014).
Transformational adaptation	Identifies which underlying structures, institutions, values and development pathways must change when incremental responses are insufficient (Pelling, 2011; O'Brien, 2012).
Adaptive governance	Supports polycentric coordination, learning, flexibility, participation and accountability under changing conditions (Folke et al., 2005).
Research-to-policy interface	Ensures evidence is co-produced, usable and connected to real policy and implementation processes (Cash et al., 2003; Norström et al., 2020).
Systems transformation	Connects social, economic, ecological, institutional and knowledge change to climate-resilient development.

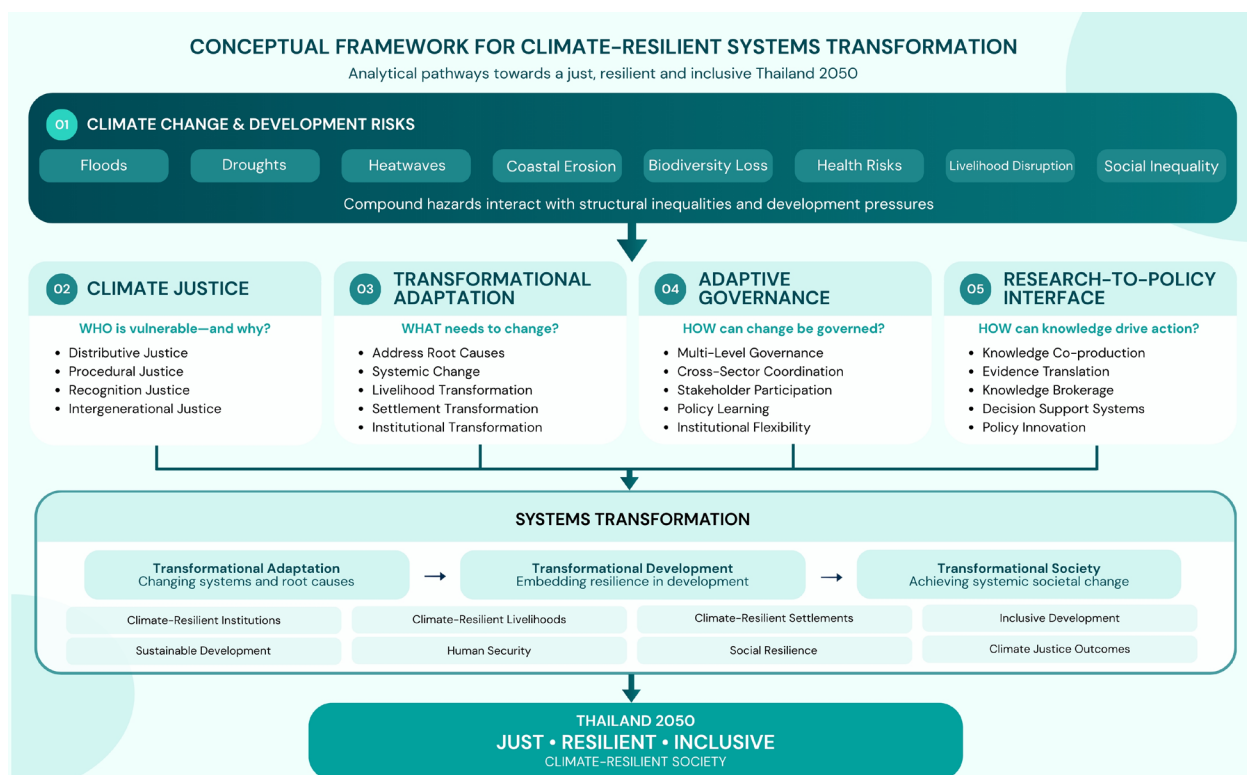
The four analytical lenses (or perspectives) are applied in this white paper (see Table 1). Taken together, these perspectives form a decision-oriented sequence: diagnose differentiated vulnerability and injustice; identify the systems and development pathways that must change; govern and finance change across levels and sectors; and institutionalize the production, translation and use of knowledge. The framework is not linear in practice – learning and accountability should feed back into every stage – but it clarifies the distinct questions that a national adaptation system must answer.

Thailand's systemic adaptation gaps are listed in Table 2 below, followed by a SWOT synthesis (strengths, weaknesses, opportunities and threats; Table 3). The seven connected gaps are exposed and insecure settlements; escalating climate-health risks; vulnerable livelihoods and uneven green-transition opportunities; fragmented knowledge systems; overlapping mandates and weak institutional continuity; insufficient and inaccessible adaptation finance; and transboundary risks that exceed local and national jurisdictions. These gaps reinforce one another. Consequently, isolated sectoral interventions may reduce one risk while shifting costs to another population, territory or future period – a pattern that must be explicitly screened as maladaptation (Eriksen et al., 2021).

Table 2. Systemic adaptation gaps in Thailand

SYSTEM	KEY DIAGNOSIS	PRIORITY RESPONSE
Informal housing	Insecure tenure, exposed infrastructure and compounded hazards.	Place-based planning; resilient infrastructure; ecosystem-based adaptation; fair relocation safeguards.
Health	Extreme heat , disease, air pollution, food insecurity, mental stress and disrupted health services.	Climate-health surveillance, resilient facilities, occupational protection and adaptive social protection (WHO, 2015, 2023a).
Livelihoods	Climate-sensitive agriculture, fisheries, tourism and informal work; debt and migration risks.	Diversification, skills, green jobs, social enterprise and just transition pathways.

Figure 1. Conceptual framework for climate-resilient systems transformation towards a just, resilient and inclusive Thailand 2050



SYSTEM	KEY DIAGNOSIS	PRIORITY RESPONSE
Knowledge	Fragmented databases, macro-level evidence and weak integration of local knowledge.	Interoperable data, co-production, citizen science and accessible decision tools.
Institutions	Overlapping mandates, short budgets, policy discontinuity and weak local authority.	Adaptive governance, stable mandates, multilevel coordination and accountability.
Finance	Insufficient, discontinuous and difficult-to-access adaptation finance.	Long-term public finance, direct local access, blended finance safeguards and transparent tracking.
Regional risks	Haze, shared rivers, mobility, disease and supply-chain disruptions cross borders.	Joint assessment, early warning, research diplomacy and ASEAN/Mekong cooperation.

Table 3. SWOT (strengths, weaknesses, opportunities and threats) analysis for the agenda in Thailand

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Existing mandates, policies, finance mechanisms, research base and strong local adaptive capacity.	Fragmented coordination and data; uneven implementation; policy discontinuity; limited public support for locally led action.	Inclusive resilient development, green jobs, entrepreneurship, smart farming, international partnerships and climate finance.	Declining international funding and transboundary risks that cannot be managed locally.

3. Policy proposition: a national knowledge and research agenda

We determined that there are 10 research themes that should operate as a single national research architecture, rather than as an inventory of disconnected topics (see Table 4). We cluster these themes in relation to each other, corresponding to four system functions (Table 5).

When seeking research funding, programs should specify the decision problem, intended evidence users, research questions, methodological approach, policy pathway, implementation partners, finance strategy, ethical standards and justice safeguards. Portfolio management should reward integration across themes where risks are compounded – for example, where extreme heat , health, informal work, urban living and social protection interact.

Table 4. 10 strategic research themes

	RESEARCH THEME	CORE SCOPE
1	Climate vulnerability and adaptation justice	Differentiated vulnerability, distributional/procedural/recognition justice and fair targeting.
2	Climate-resilient settlements and human security	Housing, infrastructure, land-use planning, displacement, relocation and managed retreat.
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9	Monitoring, evaluation, learning and accountability	Outcomes, justice, maladaptation, participatory MEL, learning and course correction.
10	Transboundary, regional and systemic climate risks	Mekong region , haze, food–water–energy systems, migration, health and regional cooperation.

Table 5. Four system functions

CLUSTER	THEMES	SYSTEM FUNCTION
Risk, vulnerability and justice	1–3	Diagnose differentiated vulnerability and protect human security, health and well-being.
Transformational and locally led adaptation	4–6	Strengthen local agency, transform livelihoods and prepare for thresholds and limits.
Adaptive governance, finance and regional risk	7 and 10	Coordinate authority and finance across institutions, scales and borders.
Knowledge, innovation and MEL	8–9	Convert evidence into decisions, learning, accountability and correction.

3.1 Four core outputs for 2026–2030

Four mutually reinforcing products will be delivered by the Thailand Adaptation Research Agenda (2026–2030): (1) setting national priorities, research questions, users, pathways and justice safeguards; (2) a living map of institutions and capabilities, covering mandates, expertise, geographic reach, infrastructure, data assets, finance and capacity gaps; (3) a pipeline of collaborative proposals, converting priorities into partnership-ready and fundable concepts with lead institutions, implementation partners, budgets, timelines and intended policy uptake; and (4) policy-relevant synthesis briefs, to translate emerging evidence into concise options, trade-offs and decisions for national and subnational authorities. Together, these products connect diagnosis, coordination, investment and policy use.

3.2 Delivery pathway 2027–2035

Implementation principles are justice-centred, user-driven, co-produced, locally led, transdisciplinary, future-oriented, adaptive, policy-relevant and accountable, as aligned with the ARA. Adaptation pathways should use sequences, decision points and thresholds rather than a single fixed solution (Haasnoot et al., 2013; Wise et al., 2014). The three phases of delivery, their core priorities and major expected milestones can also be used to evaluate progress, as shown in Table 6.

Table 6. Delivery pathway for the agenda, 2027–2035

PHASE	CORE PRIORITIES	MAJOR MILESTONES
I. Foundations 2027–2029	Vulnerability mapping; climate justice assessment; knowledge platform; baseline indicators; partnerships and governance.	National inventories and methodologies; initial pilots; an established secretariat and working groups; Phase I evaluation.
II. Scaling 2030–2032	Locally led adaptation; climate and health; livelihood transition; resilient settlements; finance; evidence-based scaling.	Validated models expanded across regions; finance and MEL integrated in all programs; institutional learning strengthened.
III. Catalysing action 2033–2035	Adaptation pathways; institutional reform; climate-resilient development; anticipatory governance and systemic risk.	Pathways 2050; governance framework operational; development policy integration; post-2035 strategy.

3.3 How change is expected to happen

If Thailand invests in coordinated research, knowledge co-production, institutional capacity, policy engagement, finance, innovation and participatory MEL – and if affected populations have meaningful influence – then evidence will become more usable, institutions will coordinate and learn, effective models will scale, maladaptation will be corrected, and vulnerability will decline. (Table 7 describes the levels from inputs to potential transformation, and results at each level of action.)

Table 7. Level of change, with synopsis of expected results

LEVEL	CONDENSED RESULT
Inputs	Research, local knowledge, institutions, finance, partnerships, data and political commitment.
Activities	Co-produced research, synthesis, innovation labs, capacity building, policy engagement, finance facilitation and MEL.
Outputs	Assessments, platforms, pathways, tools, pilots, standards, policy proposals and funding pipelines.
Intermediate outcomes	Improved evidence use, local agency, institutional capacity, coordination and access to finance.
System outcomes	Adaptive institutions, equitable investment, scaled solutions, reduced maladaptation and stronger regional cooperation.
Impacts	Just adaptation, resilient livelihoods and settlements, improved health, lower vulnerability and systems transformation.
Long-term transformation	A just, inclusive, adaptive and climate-resilient Thailand by 2050.

The causal chain depends on sustained finance, institutional continuity, scientific integrity, genuine local participation, evidence uptake and willingness to learn. These assumptions must be tested through the MEL system rather than treated as guarantees.

3.4 Governance and accountability architecture

Government agencies and national entities are key responsibility holders for the processes described here, as summarized Table 8. Governance must publish terms of reference, membership, funding sources, conflict-of-interest rules, annual reports and evaluation findings. Ethics and data governance should protect privacy, recognize community knowledge and prevent extractive research.

A grievance and review mechanism should allow communities, researchers and other stakeholders to raise concerns about exclusion, unethical research, conflicts of interest, misuse of knowledge or finance, and community harms. Independent review of grievances should require documentation of institutional responses and corrective measures.

Table 8. Key entities and their responsibilities

BODY	CORE RESPONSIBILITY
National Steering Committee	Set strategy, approve priorities, align with national policy and ensure public accountability.
Research Advisory Panel	Safeguard quality, interdisciplinarity, ethics and strategic coherence.
Community Knowledge Platform	Give communities and affected groups continuing influence over priorities, interpretation and evaluation.
ARA Secretariat at CUSRI and SEI Asia	Coordinate the Roadmap, partnerships, finance, knowledge services, communications and MEL.
Four thematic working groups	Advance risk/justice; transformational and locally led adaptation; governance/finance/regional risk; knowledge/innovation/MEL.
Funders and Strategic Partners Forum	Align funding portfolios, identify gaps and mobilize long-term equitable finance.
Department of Climate Change and Environment (DCCE)	Anchor alignment with national climate policy; connect Thailand Adaptation Research Agenda outputs to adaptation planning and reporting; and exercise Thailand's focal-point responsibilities in international climate processes.
Office of the National Ministry of Higher Education, Science, Research and Innovation Policy Council (NXPO)	Bridge the Thailand Adaptation Research Agenda to national higher education, science, research and innovation policy; support policy coherence, strategic intelligence and evidence uptake across the research system.

4. A national delivery mechanism in Thailand

As the co-hosts of the ARA, CUSRI and the Stockholm Environment Institute (SEI) Asia centre can take on important roles in reaching the goals described here. In Table 9, we summarize the functions of each expected role and the outputs. Success should be assessed through changes in decisions, institutional behaviour, local agency, finance access and vulnerability – not merely membership, events or publication counts.

Table 9. The roles and their functions that are necessary to complete outputs

ROLE	FUNCTION	FLAGSHIP OUTPUT
Knowledge broker	Translate and connect evidence	Adaptation evidence service
Research convenor	Align research and partnerships	Thailand Adaptation Research Agenda (2026–2030)
Capacity builder	Strengthen people and institutions	Thailand Adaptation Academy
Innovation platform	Test and evaluate solutions	Adaptation innovation laboratories
Policy catalyst	Turn evidence into policy reform	Policy-relevant synthesis briefings
Funding facilitator	Connect priorities with finance	Pipeline of collaborative proposals
International gateway	Connect Thailand regionally and globally	South–South and global partnerships
Adaptation observatory	Monitor risk, action, finance and outcomes	Mapping of institutions and capabilities

4.1 Positioning Thailand regionally and globally

Thailand can become a regional hub for adaptation knowledge by linking national priorities with reciprocal partnerships and amplifying Global South evidence. Collaboration should be demand-led and produce shared research, capacity, finance or policy outcomes. Partners will be international institutions, working closely with ARA Thailand and CUSRI (Table 10).

Table 10. Partners (proposed and already engaged) and their contributions

PARTNER PATHWAY	STRATEGIC CONTRIBUTION
ARA	Research-to-action principles, global platform and South–South exchange
SEI	Systems transformation, pathways, foresight and regional studies
UNDP and UNEP	Governance, implementation, ecosystem adaptation and global science
Green Climate Fund and development banks	Readiness, project preparation and resilience investment
OECD	Governance, evaluation, indicators and finance tracking
ASEAN and Mekong institutions	Regional policy, shared risks, data and capacity
Future Earth and the IPCC	Sustainability science, assessments, and Thai and Global South evidence

4.2 Measuring progress, learning and accountability

The MEL framework follows the ARA's theory of change and measures inputs, outputs, outcomes, impacts and transformation. It should combine quantitative indicators with qualitative and participatory evidence because adaptation outcomes are long-term, context-dependent and difficult to attribute (OECD, 2024b; UNFCCC Adaptation Committee, 2023).

- Measure changes in risk and vulnerability, not only activities and expenditures.
- Track adaptive capacity, effectiveness, equity, participation and distributional outcomes.
- Screen for maladaptation, risk transfer, exclusion and unintended harm.
- Align national, sectoral, provincial, local, program and community indicators while retaining context-specific measures.
- Conduct independent evaluations in 2029, 2032 and 2035 and use findings for budget and policy correction.
- Publish an annual State of Adaptation Knowledge Report, as well as finance tracking, justice reporting and a public accountability dashboard.

4.3 Public outcomes for 2050

The pathway extends from foundations (2027–2029), to scaling (2030–2032), to transformation (2033–2035), to institutionalized climate-resilient development (2036–2050). See Table 6 above. Following the proposed national research agenda for Thailand will set in motion the right actions to create a just, inclusive, adaptive and climate-resilient society in which vulnerability is substantially reduced, adaptive capacity is equitably strengthened, institutions can learn and transform, and people can live secure and dignified lives under changing climatic conditions. We list the outcomes for each characteristic in Table 11.

Table 11. Necessary characteristics mapped to planned outcomes, based on Thailand Adaptation Forum discussions (8 July 2026)

CHARACTERISTIC	2050 OUTCOME
Resilient	Settlements, services, ecosystems, livelihoods and infrastructure withstand and recover from compound risks.
Inclusive	Adaptation resources, services and opportunities reach marginalized populations and territories.
Adaptive	Institutions anticipate change, learn, coordinate and revise decisions as evidence evolves.
Low vulnerability	Structural drivers such as poverty, insecure tenure, weak services and exclusion are reduced.
High adaptive capacity	People and institutions possess knowledge, finance, rights, networks and decision authority.
Climate-just	Benefits, burdens, recognition and participation are fair across social groups, regions and generations.

5. From proposition to decision and action

Thailand needs a durable public-interest system in which evidence, authority, finance and accountability meet at defined decision points in order to implement adaptation well. Above we introduce the specifics for what the system should produce and how responsibilities should be distributed. This final section converts that proposition into an initial action sequence, verifiable three-year results, and the formal decisions required to proceed (see Table 12).

Table 12. First 12-month action plan

PERIOD	ACTION
Months 1–3	Confirm governance and host arrangements; convene DCCE, NXPO and key partners; establish an interim steering group; approve terms of reference; and define the production protocol for the core outputs mentioned in section 3.1 above.
Months 4–6	Conduct regional consultations and complete the first Mapping of Institutions and Capabilities; validate priority gaps; appoint the Research Advisory Panel; and agree data and governance standards.
Months 7–9	Finalize the Thailand Adaptation Research Agenda (2026–2030); develop the first portfolio of collaborative concept notes; identify consortium leads, implementation partners and funding routes; and establish the MEL baseline.
Months 10–12	Publish the agenda and institutional mapping; launch the pipeline of collaborative proposals; issue the first policy-relevant synthesis brief; and publish the annual work plan and accountability statement.

5.1 Three-year deliverables

- Agenda adopted and operational: priorities have named owners, research questions are linked to evidence users, and justice safeguards are applied to funded programs.
- Institutional map functioning as shared infrastructure: records are validated by participating organizations, capability gaps are visible, and updates follow an agreed annual cycle.
- Collaborative pipeline producing investable programs: proposals demonstrate cross-institutional leadership, local implementation partnerships, credible budgets and identifiable funding routes.
- Synthesis brief embedded in decision processes: DCCE, NXPO and other authorities receive time-bound options before relevant planning, program and budget decisions.
- Governance and learning system operational: responsibilities are formally assigned, participation and conflict-of-interest safeguards are applied, and MEL findings trigger documented corrections.

CENTRAL POLICY PROPOSITION

Thailand should establish a permanent national adaptation knowledge-to-action system, with ARA Thailand connecting evidence, research users, finance and policy processes, and with climate justice, locally led adaptation and continuous learning embedded as operating standards.

5.2 Policy decisions required

- Recognize climate adaptation as a national development and justice agenda, not solely an environmental or disaster-management function.
- Approve the proposed division of responsibilities among DCCE, NXPO and ARA Thailand/CUSRI, subject to formal inter-agency terms of reference and public accountability provisions.
- Endorse the Thailand Adaptation Research Agenda (2026–2030) as the common framework for coordinating adaptation research priorities and evidence use.
- Authorize participating institutions to share and maintain the minimum data needed for the institutional map and Adaptation Knowledge Platform, with appropriate data governance safeguards.
- Create a transparent mechanism for selecting, developing and financing proposals from the collaborative pipeline, including access for local and community partners.
- Require the synthesis brief, MEL findings and substantiated community concerns to be considered at specified policy, programme and budget review points, with responses and corrective actions publicly documented.

5.3 Evidence base for the proposition

The proposition is grounded in evidence on climate risk and climate-resilient development (IPCC, 2022a,c; Shaw et al., 2022), justice and transformational adaptation (Eriksen et al., 2021; Pelling, 2011; O'Brien, 2012; Schlosberg, 2012), adaptive governance and knowledge co-production (Cash et al., 2003; Folke et al., 2005; Norström et al., 2020), locally led adaptation (World Resources Institute, 2021; Cogger et al., 2022), adaptation pathways (Haasnoot et al., 2013; Wise et al., 2014), and monitoring and evaluation (Dinshaw et al., 2014; OECD, 2024b; UNFCCC Adaptation Committee, 2023).

Key actors will be engaged to enhance the agenda. The DCCE already provides national climate policy leadership and serves as Thailand’s focal point for international climate processes, while the NXPO connects the agenda to national higher education, science, research and innovation policy (DCCE, 2025; NXPO, n.d.). Funders, private sector actors, local governments and civil society also must commit to various roles for success. See Table 13.

The near-term test is institutional rather than rhetorical: whether the four outputs are jointly owned, routinely updated, financed and used in real decisions. Progress should therefore be assessed through evidence uptake, coordination, local agency, access to finance and reductions in vulnerability – not through activity counts alone. The intended 2050 outcome is a Thailand in which institutions anticipate and learn, livelihoods and settlements are climate-resilient, and climate justice is a demonstrable public outcome.

KNOWLEDGE SYSTEM PROPOSITION

Establish a permanent national adaptation knowledge-to-action system that connects evidence, finance, institutions and affected communities, and holds delivery accountable for justice and measurable reductions in vulnerability.

Table 13. Commitments required from key actors

ACTOR	REQUIRED COMMITMENT
DCCE and climate policy authorities	Name a policy lead; identify decisions requiring evidence; validate synthesis findings; and document evidence uptake.
NXPO and the MHESI policy system	Convene an annual MHESI dialogue; identify policy and funding windows; and track mapped capability gaps.
Funders	Fund multi-year portfolios, reduce local access barriers and track justice outcomes.
Business and finance	Disclose risk, invest responsibly and protect workers and communities.
Local government	Lead place-based planning, integrate community knowledge and monitor local outcomes.
Communities and civil society	Share decision authority, define success and scrutinize impacts.

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