



Strategic Program for Climate Resilience in Cambodia

Tauch Chankresna, Ministry of Economy & Finance
Meas Sophal, Ministry of Environment
Royal Government of Cambodia



Outline

- **Rationale** for PPCR Support
- **SPCR Preparation Process**
- **SPCR Overview** and Proposed Investment Program Components
- **SPCR Projects** - Preliminary Details
- **Concluding Remarks**

Background



Area: 181,035 km²
Population: 13.4 M
(80% in rural areas)

Key sectors:
Agriculture, Tourism &
Garment industry

Seasons:
Wet (May- Oct) and
Dry (Nov-Apr)

**Climate change
projections:**

Rise in Temp: 0.3-
0.6oC by 2025;
Delayed onset of
monsoon; Wet season
rainfall increase, dry
season rainfall
decrease, More
intense flood pulses;

**Tonle Sap: Unique Hydrological System with
Great Implications for Livelihoods in Cambodia**



Key Vulnerabilities

- Growing food and water insecurity
- High economic losses to infrastructure
- Increasing exposure of communities, especially women and children, to disaster risks
- Growing salinity in coastal areas
- Increasing involuntary migration exacerbated by climate change

Key Challenges for Enhancing Climate Resilience in Cambodia



- Limited information on local impacts
- Low awareness at various levels of governance
- Limited institutional and technical capacities to mainstream adaptation into development planning
- Weak cross-sectoral coordination
- Lack of appropriate adaptation technologies
- Absence of credible disaster response and forecasting mechanisms
- Inadequate funding



Rationale for PPCR Support

- High added value in leading the country to a climate-resilient development path
- Empowerment and engagement of key stakeholders
 - Improved knowledge management
 - More effective integration of gender and private sector considerations in adaptation planning
 - Enhanced participation of civil society
- High leveraging potential
- Catalyst for transformation in climate-resilient planning at national and sub-national levels
- Upgraded and climate-proofed physical infrastructure
- Enhanced conservation of natural resources through ecosystem-based adaptation

Key Institutions & Strategies

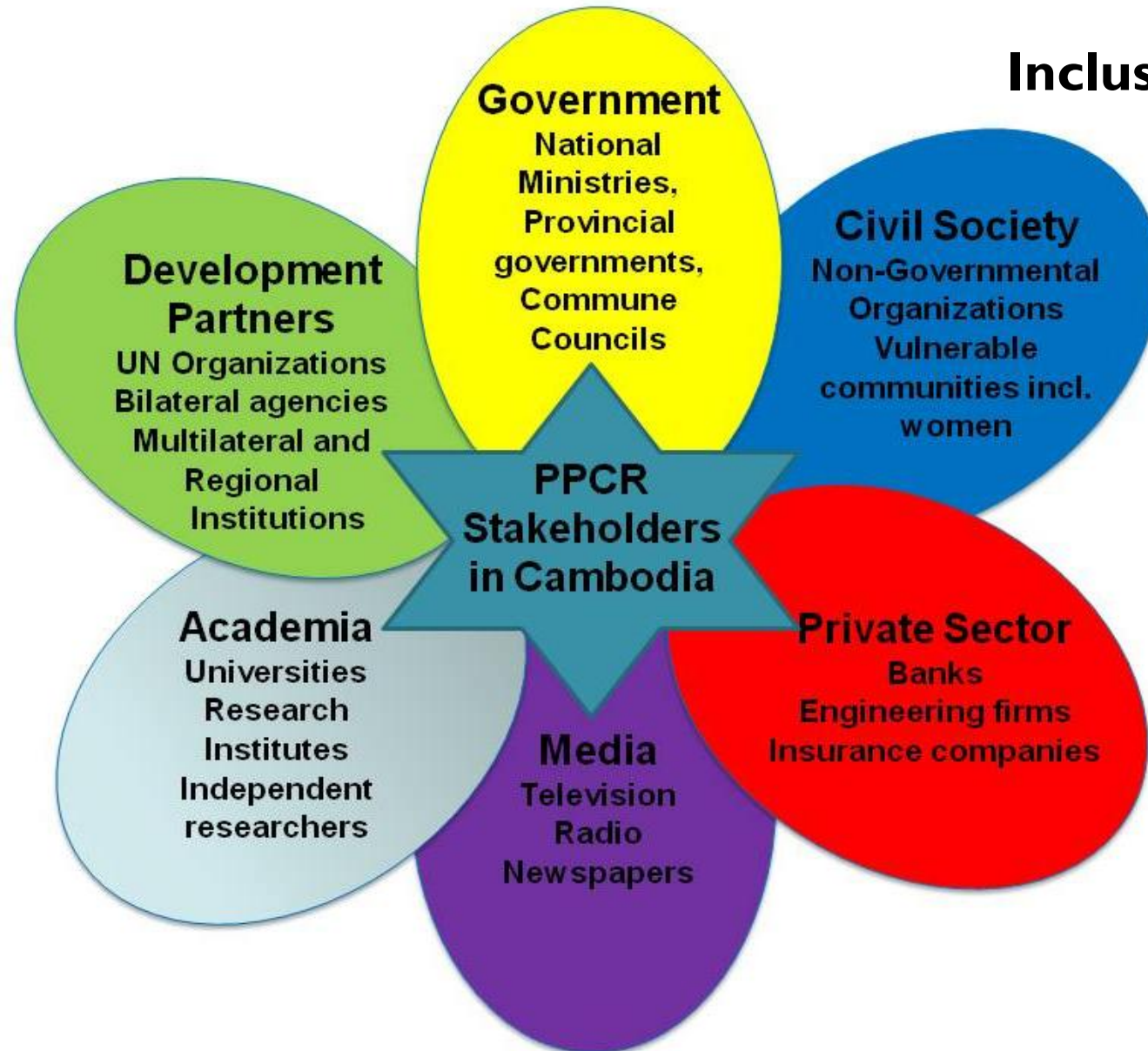


- National Climate Change Committee
- Department of Climate change at MOE
- National Committee for Disaster Management

Strategies:

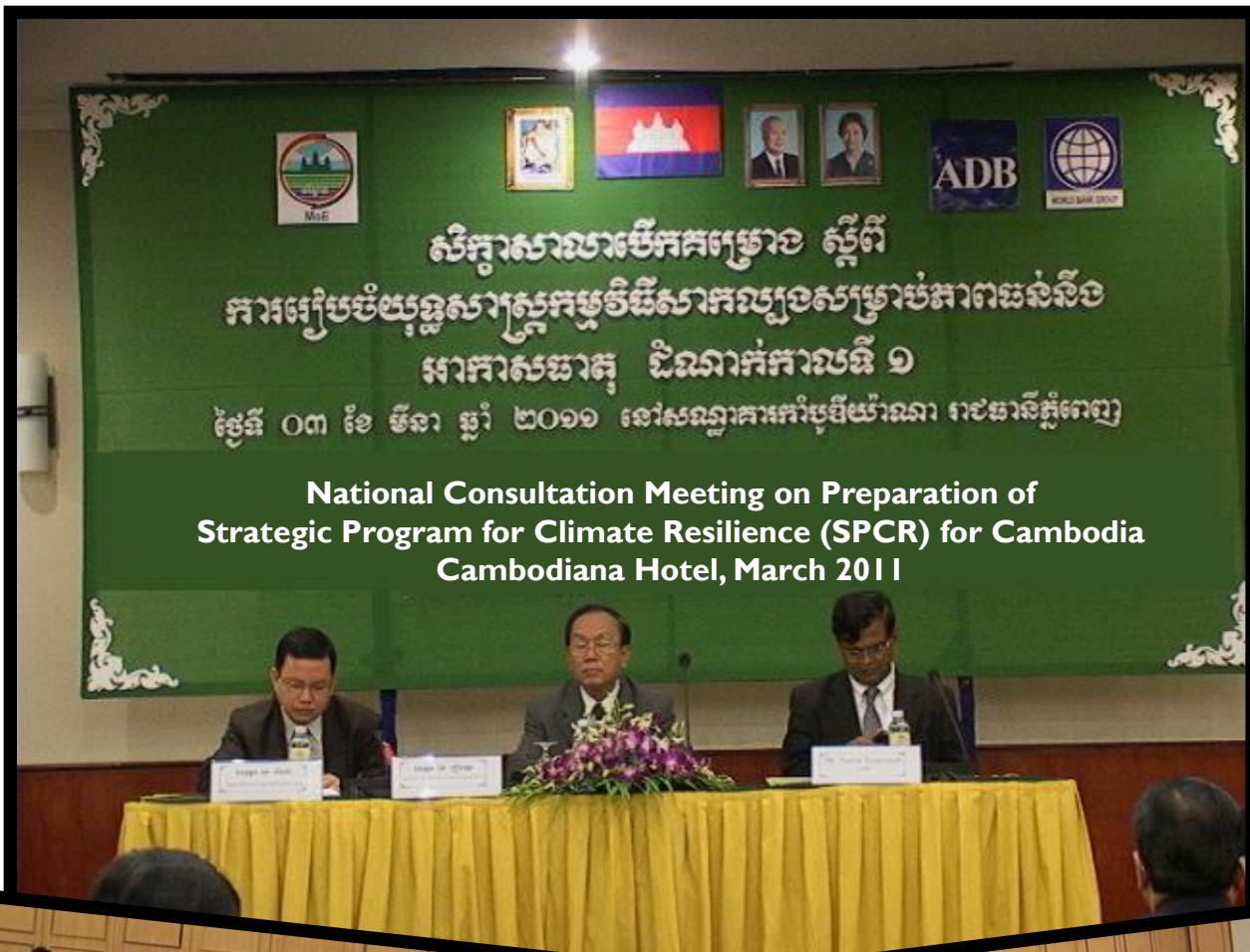
- NAPA 2006 (20 high priority projects - \$130 million)
- Strategic National Action Plan for Disaster Risk Reduction, 2008-2013 (SNAP)
- Rectangular Strategy for Growth, Employment, Equity and Efficiency
- National Strategic Development Plan (NSDP)
- National Program for Sub-National Democratic Development (NP-SNDD) 2010-2019
- Strategy on Agriculture and Water

SPCR Preparation Process



Inclusive & consultative

- 06/2009 – 05/2011
- 2 joint missions
- 2 technical missions
- > 50 consultation meetings
- > 200 comments



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National Consultation Meeting on Preparation of
Strategic Program for Climate Resilience (SPCR) for Cambodia
Cambodiana Hotel, March 2011





Consultations with Civil Society Organizations May 2011



Commune-level Consultations October 2009



Key Features of Cambodia's SPCR



- **Prioritization** based on needs and capacities
- Strong **linkages to NAPA** priorities
- Synergies **with disaster risk reduction** efforts
- High potential for **leveraging** MDB funds
- Effective **linkages to Phase I PPCR** activities
- More effective **cross-sectoral coordination**
- Strong **stakeholder engagement & empowerment**
 - **Gender** mainstreaming
 - **Civil society** support mechanism
 - **Private sector** participation
- **Knowledge management** and learning platform
- Benefits to the much larger **Greater Mekong Sub-region**
- Accelerated **poverty reduction** efforts
- Consistency with **PPCR Results Framework**

SPCR Overview



Soft Interventions (GRANT)

- Adaptation frameworks
- Vulnerability and adaptation Assessments
- Community-based disaster risk reduction and adaptation
- Ecosystem-based adaptation
- Risk sharing schemes

Hard Interventions (CONCESSIONAL CREDIT)

- Climate-resilient irrigation infrastructure, roads, post-harvest and sanitation facilities
- Hydro-meteorological monitoring, data collection and early warning systems
- Strengthened river banks & flood protection structures

Capacity

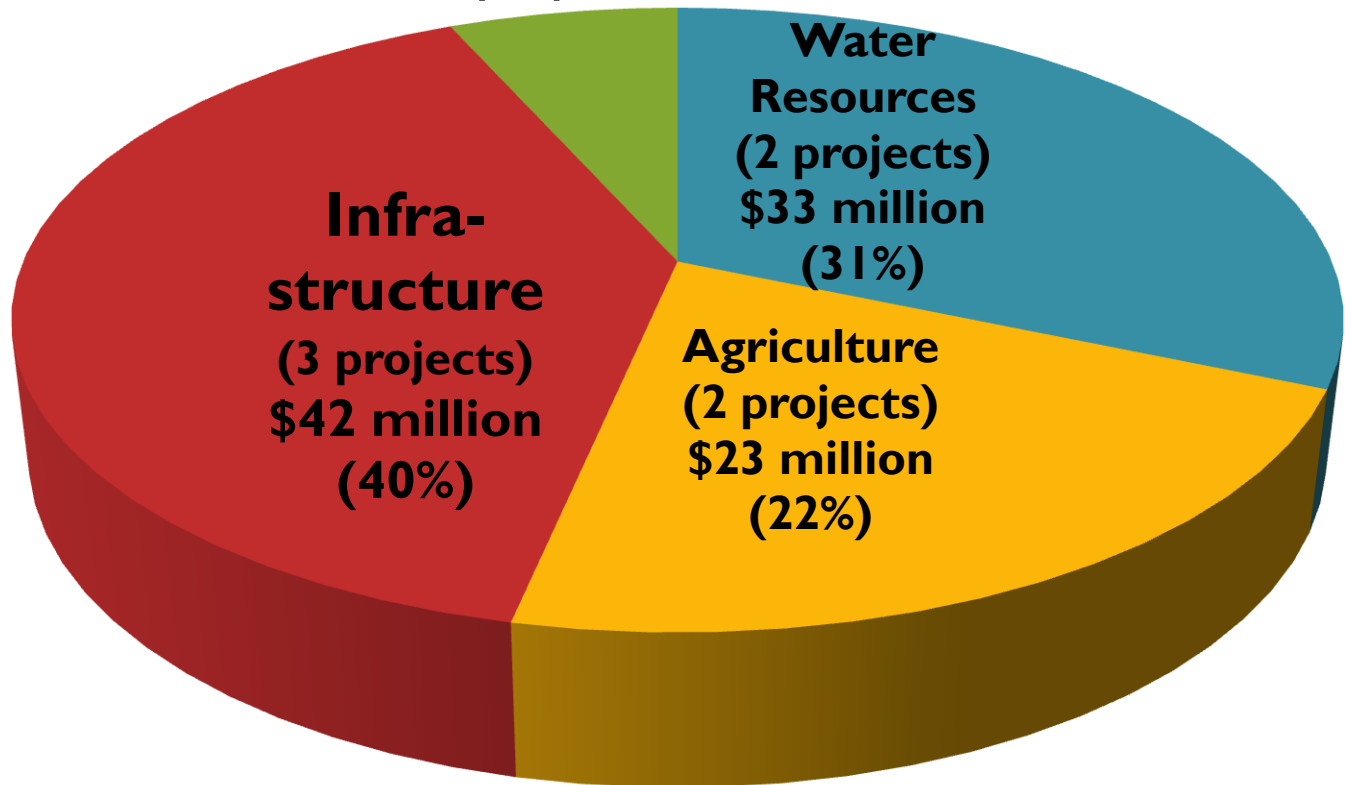
Strengthening (GRANT)

- Cross-sectoral coordination & technical backstopping
- Knowledge management platform
- CSO support, NAPA Support, gender equity and private sector
- Coordination with development partners

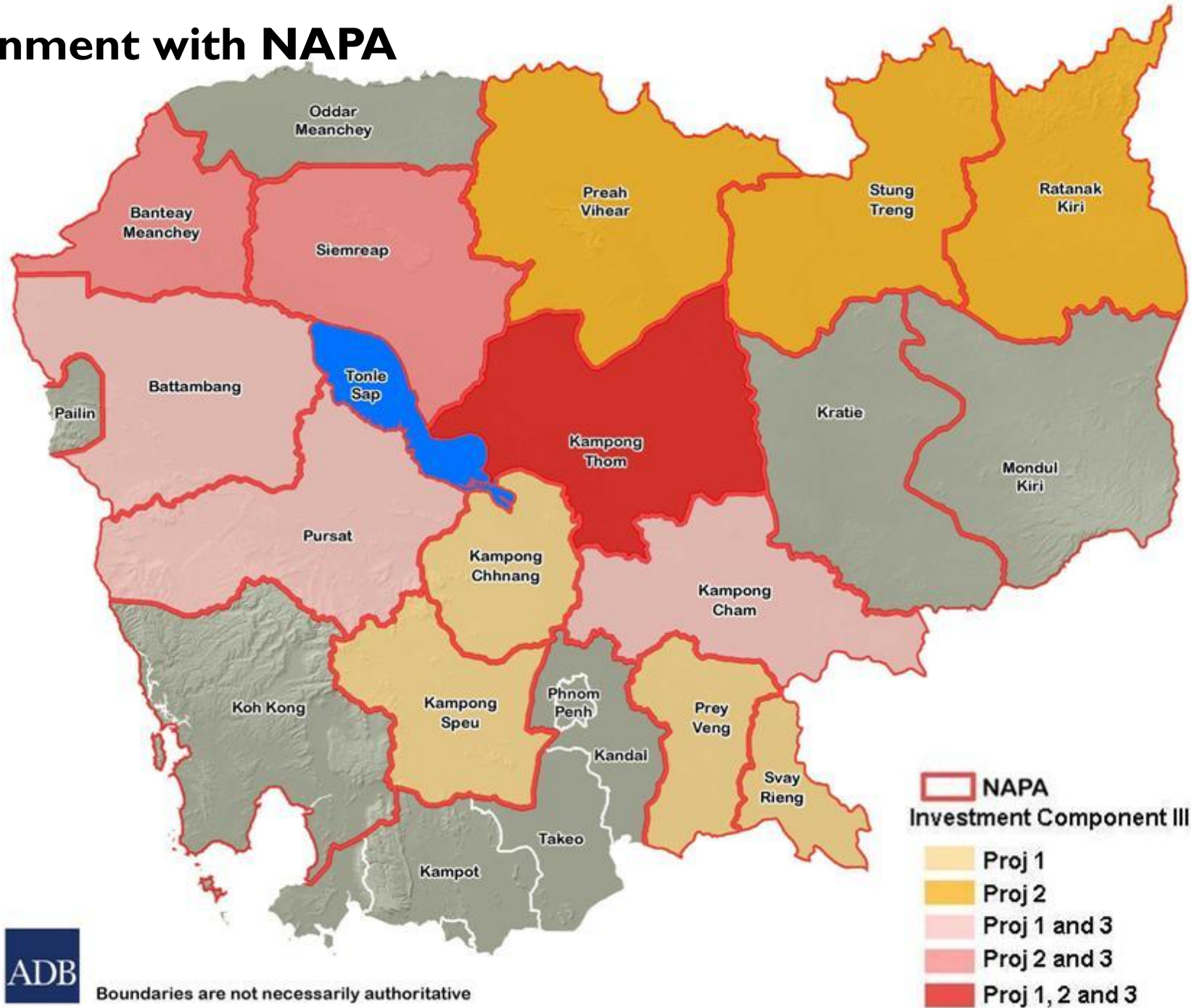
Proposed SPCR Investment Program Components

Technical assistance
\$7 million
(7%)

Four Components
\$105 million



Alignment with NAPA



Boundaries are not necessarily authoritative

Component I: Climate-Resilient Water Resources – Project I



Title: *Climate Risk Management and Rehabilitation of Small- and Medium-scale Irrigation Schemes in the Tonle Sap Basin* (as part of the *Water Resources Management Sector Development Program (WRMSDP)*)

Objectives:

- Rehabilitate irrigation systems and improve management of water resources to cope with impacts of climate change
- Strengthen infrastructure and water resources management for irrigation systems in Kampong Thom, Banteay Meanchey, and Siem Reap provinces

Outcome: Enhanced food & water security for rural communities

Component I: Climate-Resilient Water Resources - Project 2



Title: *Flood and Drought Management in Pursat and Kratie Provinces* (as part of the Greater Mekong Sub-region (GMS) Flood and Drought Management Project)

Objectives:

- Support additional irrigation and river bank protection infrastructure costs for increased resilience to climate change
- Strengthen capacity of communities to better manage and reduce risks associated with extreme climate events
- Strengthen regional coordination for management of climate extremes – including design standards for climate resilient infrastructure

Outcome: Reduction of economic losses from flood and drought events.

Component II: Climate-Resilient Agriculture – Project I



Title: *Promoting climate-resilient agriculture in Koh Kong and Mondulhiri provinces* (as part of the *GMS Biodiversity Conservation Corridors Project*)

Objectives:

- Pilot flood protection dikes to reduce salinity and regain rice growing land for selected communes (from sea level rise)
- Restore and conserve mangrove and non-mangrove species to reduce the impacts of sea level rise and coastal flooding
- Improve rainwater harvesting system and enhance resilience of community water supply
- Enhance resilience of small scale agriculture through introduction of drought/ flood tolerant crop varieties and small scale irrigation

Outcome: Improved resilience of agriculture to floods and droughts

Component II: Climate-Resilient Agriculture – Project 2



Title: *Climate proofing of agricultural infrastructure and Business-focused Adaptation* (as part of the *Agricultural Commercialization and Resource Conservation Project*)

Objectives:

- Enhance demand side water use efficiency through piloting water-saving technologies
- Pilot crop insurance using the weather-based index
- Strengthen climate-resilience of post-harvest infrastructure

Outcome: Improved resilience of agriculture to floods and droughts through enhanced private sector participation

Component III: Climate Proofing of Infrastructure - Project I



Title:

Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces (as part of the Provincial Roads Improvement Project)

Objectives:

- Improve adaptation planning for national and provincial road development and implement Green planning and Emergency planning (Grant component)
- Protect the road infrastructure from the impacts of climate change through adopting improved design standards (Credit component)

Outcome: Enhanced connectivity even under climate extremes

Component III: Climate Proofing of Infrastructure – Project 2



Title:

Climate proofing infrastructure in the Southern Economic Corridor (SEC) towns (blended with the GMS Corridor Towns Development Project)

Objectives:

- Mainstream adaptation concerns into urban infrastructure planning
- Strengthen climate resilience of sanitation systems including drainage channels, sewerage, sanitary landfills to minimize the impacts of floods

Outcome: Improved resilience of urban infrastructure to floods

Component III: Climate Proofing of Infrastructure – Project 3



Title:

Flood-resilient infrastructure development in Sisopohon, Siem Riep, Kampong Thom, Battambang, Pursat and Kampong Chhnang (as part of the Sustainable Urban Development in the Tonle Sap Basin Project)

Objectives:

- Mainstream adaptation concerns into urban infrastructure planning in selected provinces
- Strengthen climate resilience of urban areas by strengthening river banks, solid waste disposal and other sanitation systems, to minimize the impacts of floods

Outcome: Improved resilience of urban infrastructure to floods

Component IV: Cluster Technical Assistance Project



Title: Mainstreaming climate resilience into development planning of key vulnerable sectors

Objectives:

- Establish PPCR Coordinating and Technical Backstopping Unit (based at MoE) with administrative oversight by MEF
- Conduct feasibility studies for selected NAPA projects
- Strengthen engagement and empowerment of civil society, women and the private sector
- Disseminate knowledge on climate resilience in Cambodia and across the GMS region

Outcome: Sustained institutional and technical capacity to integrate adaptation concerns into development

SPCR Financing & Co-Financing



Project	Provinces/ Sites	PPCR Request			Expected co-financing (\$ Million)
		Grant (50 M)	Credit (55 M)	Total (105 M)	
<i>1. Climate risk management and rehabilitation of irrigation schemes</i>	Kampong Thom, Banteay Meanchey, and Siem Reap	7.00	12.00	19.00	63.00
<i>2. Flood and drought management</i>	Pursat and Kratie	6.00	8.00	14.00	35.00 (79.50 for GMS)
<i>3. Promoting climate-resilient agriculture</i>	Koh Kong and Mondulkiri	8.00	0.00	8.00	20.40 (76.77 for GMS)
<i>4. Climate proofing of agricultural infrastructure and business-focused adaptation</i>	Banteay Meanchey, Kampong Cham, Kampong Thom, and Siem Reap	5.00	10.00	15.00	60.00

SPCR Financing & Co-Financing



Project	Provinces/ Sites	PPCR Request			Expected co-financing (\$ Million)
		Grant (50 M)	Credit (55 M)	Total (105 M)	
5. Climate proofing of roads	Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu	7.00	10.00	17.00	61.00
6. Climate proofing of infrastructure in the Southern Economic Corridor	Poipet, Battambang, Neak Leung and Bavet	5.00	10.00	15.00	20.00 (290.20 for GMS)
7. Flood-resilient infrastructure development	Sisophon, Siem Reap, Kampong Thom, Battambang Pursat, Kampong Cham	5.00	5.00	10.00	40.00
8. Cluster Technical Assistance	National	7.00	0.00	7.00	TBD

Concluding Remarks



- PPCR support is timely and crucial to protect the livelihoods and ecosystems against the impacts of climate change in Cambodia.
- PPCR support is critical to catalyze our country's efforts to transition to a 'climate-smart' development pathway.
- SPCR investments in Cambodia will leverage substantial funds and reduce poverty through empowering and engaging all stakeholders.