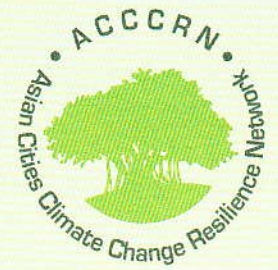


# Asian Cities Climate Change Resilience Network

## ACCCRN - Thailand

### Hat Yai City



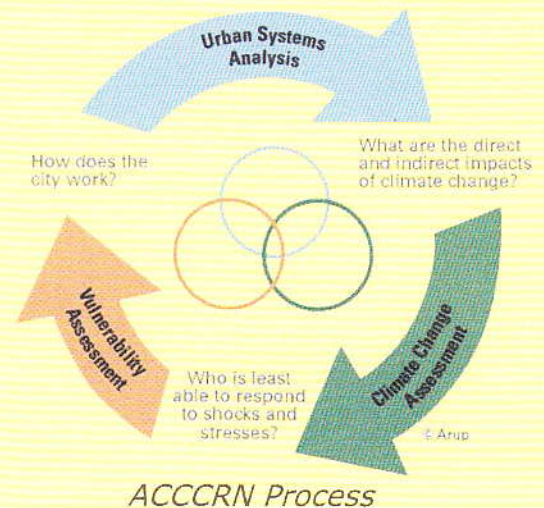
มูลนิธิสถาบันสิ่งแวดล้อมไทย  
Thailand Environment Institute Foundation

THE  
ROCKEFELLER  
FOUNDATION



# What is ACCCRN ?

ACCCRN is a network of cities in *Thailand, India, Indonesia and Vietnam* which was launched in January 2009 and is supported by the Rockefeller Foundation as part of a US\$59 million, 7-year climate change resilience initiative. The objective is to help selected cities develop climate change risk and vulnerability strategies that will be followed by the development of a range of resilience-building interventions such as climate-resilient housing and more effective water management. ACCCRN began rolling out tangible projects on the ground in late 2010 and many initiatives are now underway. ACCCRN involves 18 partner organizations.



## ACCCRN in Thailand

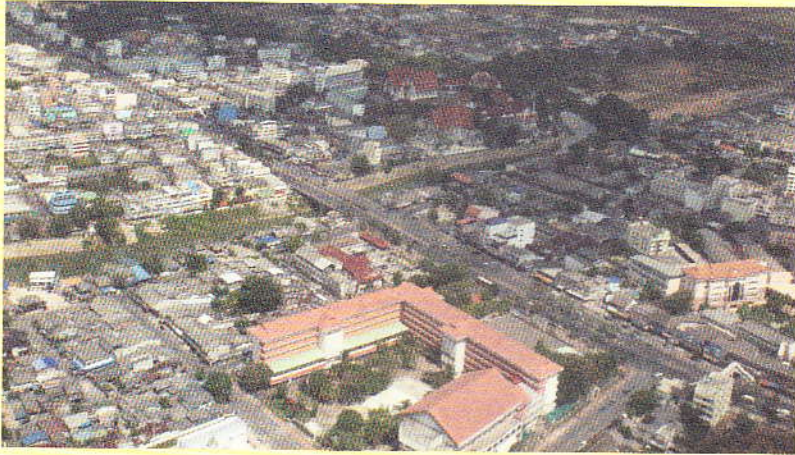


Map of Thailand marking Chiang Rai & Hat Yai

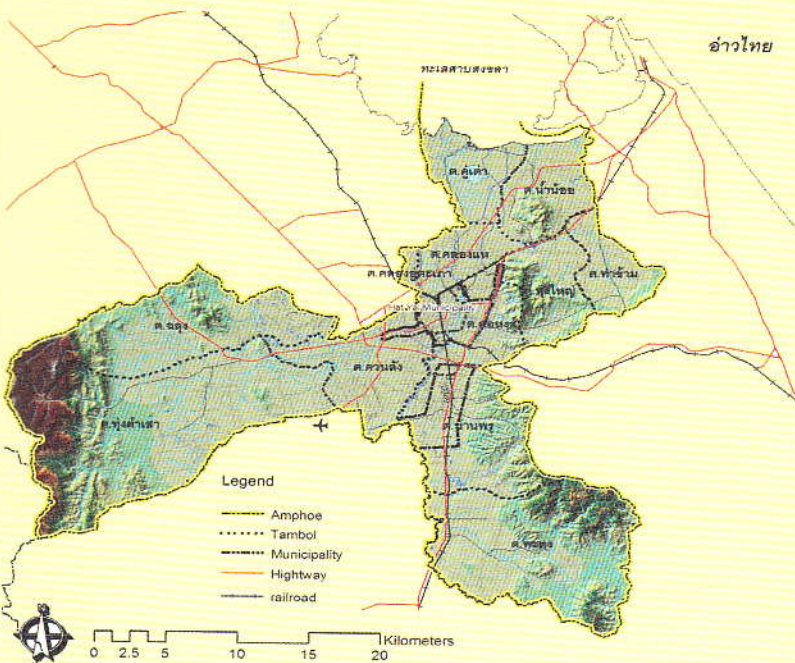
Over the last few decades, Thailand has undergone considerable urbanization. The effects of climate change including higher surface temperatures, extreme weather events and changes in rainfall pattern put Thailand's large agricultural and food sector at risk. In addition, sea-level rise and seawater encroachment increase flood risks and threaten to submerge coastal areas. The 2011 flood disaster that inundated a number of provinces in the north and central parts of Thailand for several months and parts of the capital city of Bangkok for several weeks, causing over US\$ 45 billion in economic damages, has brought into focus the significance of the impacts of urbanization and climate change for governments and policy makers at all levels.

ACCCRN offers a new approach to address these new multiple stresses. *Chiang Rai and Hat Yai* were selected as pilot cities to implement urban climate change resilience initiatives. Thailand Environment Institute is the main country coordinator.

# Hat Yai



- Hat Yai City is located in the Hat Yai district of Songkhla Province, which borders with Malaysia
- Population of Hat Yai district is estimated at 393,455 people or 155,014 households (2011)
- Hat Yai city is highly urbanised and is a significant commercial, trade and tourism hub in the southern region of Thailand, popular among Malay and Singaporean tourists for food and shopping
- Hat Yai is already susceptible to seasonal floods due to its geographical characteristics, but rapid urbanisation and unplanned city growth contribute to more frequent and severe floods, caused by drainage blockage, encroached floodways and the resulting reduced water retention areas, leading to more flood disasters



## Key vulnerability

- Key issue is **floods and flood disasters**
- The lack of effective early warning system and emergency responses of local authorities and of awareness and preparedness across sectors exacerbate flood impacts
- Ineffective coordination and sharing of flood and weather information between relevant organisations to issue early warnings
- Lack of clear evacuation plan and shelter areas
- Urban poor in flood prone areas are most affected, unable to recover quickly or recover at all
- Business and commercial areas, including hotels, are susceptible to floods leading to great economic losses
- Rapid urbanisation, population growth – more housing and construction in water retention areas and floodplains – further reducing flood drainage



Hat Yai flood 2011

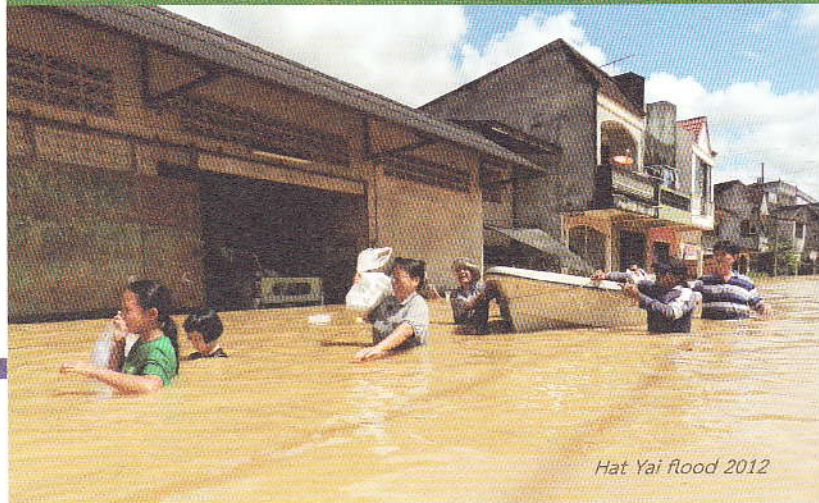
# ACCCRN Project In Hat Yai

## Building resilience to floods

- Hat Yai Working Group planned and developed Resilience Strategy, which focused on building resilience to floods, using findings of vulnerability assessment
- *Real-time flood monitoring* for Hat Yai city using CCTV and website ([www.hatyaicityclimate.org](http://www.hatyaicityclimate.org)) – several CCTV were installed in strategic areas along the main drainage canal of *U-Tapao* system from upstream area to Hat Yai city, using a flood model to calculate flood respite time, residents are able to monitor water level along the canal and prepare to evacuate or move their belongings to higher grounds, the website provides both weather information and forecast and flood information

## Community capacity building

- Strengthening capacity of local communities in flood preparedness – the Songkhla Community Foundation together with other local NGOs selected and engaged with 2 most vulnerable urban poor communities in flood prone areas, improved their understanding of floods and flood impacts and practices of emergency responses
- Development of climate-informed flood plans – updating flood modelling system for better flood prediction and early warning and understanding urban land use change in order to improve flood modelling system and to integrate climate into urban-flood plans



Hat Yai flood 2012



Kutao Community - Hat Yai

