

# 27. Agriculture, Rice Production and Climate Change: Methods and Lessons from the Mekong River Delta, Vietnam


**VIỆN NGHIÊN CỨU BIẾN ĐỔI KHÍ HẬU  
- ĐÀI HỌC CẦN THƠ -  
DRAGON Institute - Mekong - CTU**

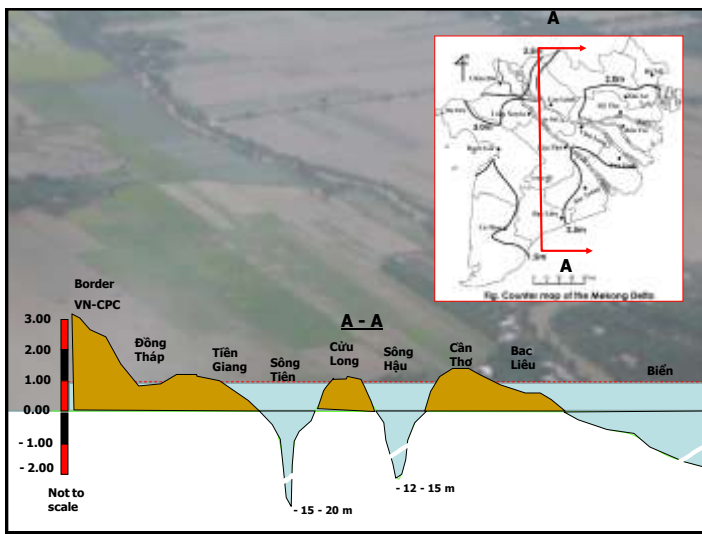
**Mekong Delta Climate Change Forum  
CanTho, 12-13 Nov. 2009**


**AGRICULTURE, RICE PRODUCTION  
AND CLIMATE CHANGE**





**METHODS AND LESSONS FROM  
THE MEKONG RIVER DELTA, VIETNAM**

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**1. Background**

**Bản đồ vị trí các tỉnh  
VÙNG ĐỒNG BANG  
SÔNG CỬU LONG**

The Mekong River Delta is a biggest agriculture and aquaculture production region of Vietnam (2,4 mil. ha of agricultural land/ 4 mil. ha total area)  
 The Delta supplies more than 50% rice, 65% fish and 70% tropical fruit for the country.

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**1. Background**

T.1	T.2	T.3	T.4	T.5	T.6	T.7	T.8	T.9	T.10	T.11	T.12
Dry season			Rainy season						Dry season		
☀️			☁️🌧️						☀️		
Spr. Wint.			Summer - Autumn						Spr. Wint.		
Veg. & crops			Veg. Crop						Veg. Crops		
									Autumn - Winter		

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## 1. Background

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### Rainfall in May in CanTho

Year	Rainfall (mm)
2000	250
2001	180
2002	150
2003	280
2004	150
2005	100
2006	100
2007	100
2008	80

In the early of rainy season, rainfall is decreasing trend but in the end of rainy season, it is increasing.

### Rainfall in September in CanTho

Year	Rainfall (mm)
2000	200
2001	150
2002	120
2003	180
2004	220
2005	300
2006	320
2007	350
2008	380

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## 1. Background

Yearly average temperature in CanTho (1978 - 2007)

$y = 0.0004x + 0.056$   
 $R^2 = 0.562$

Trends of the increasing of average temperature in Can Tho last 30 years

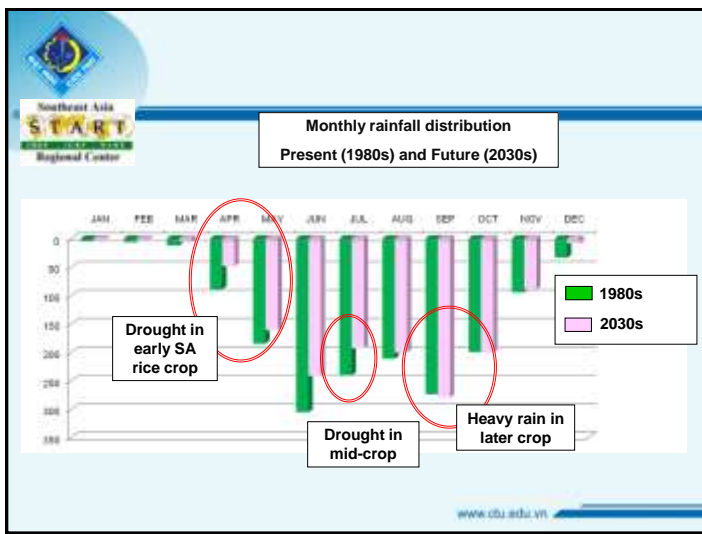
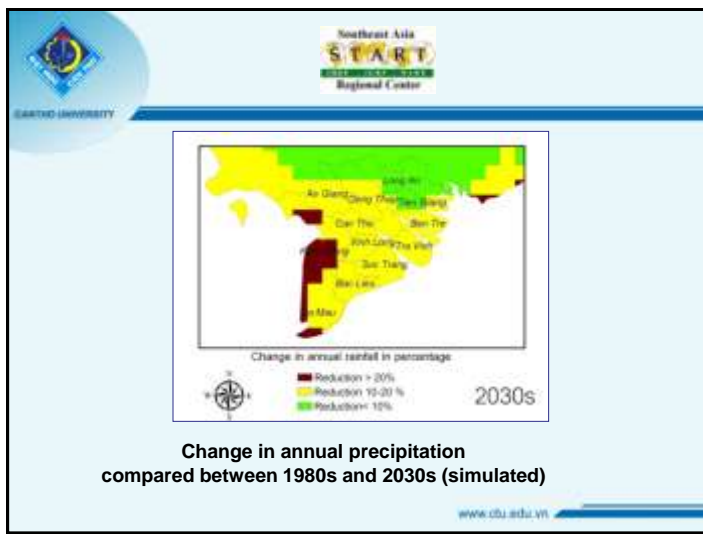
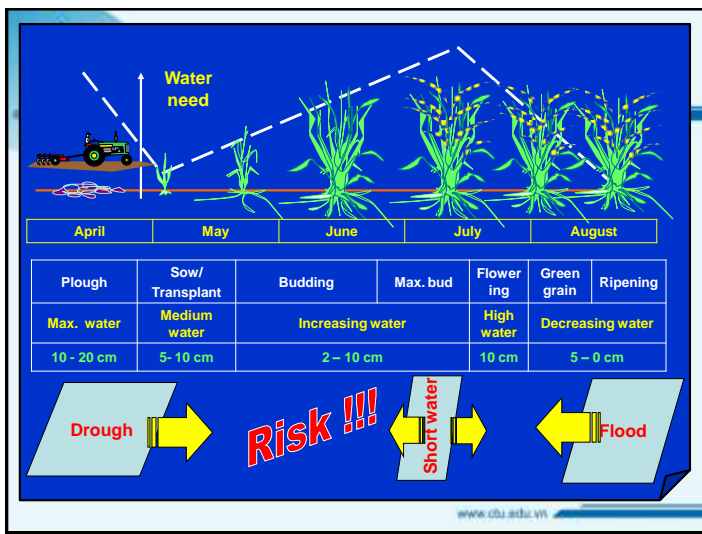
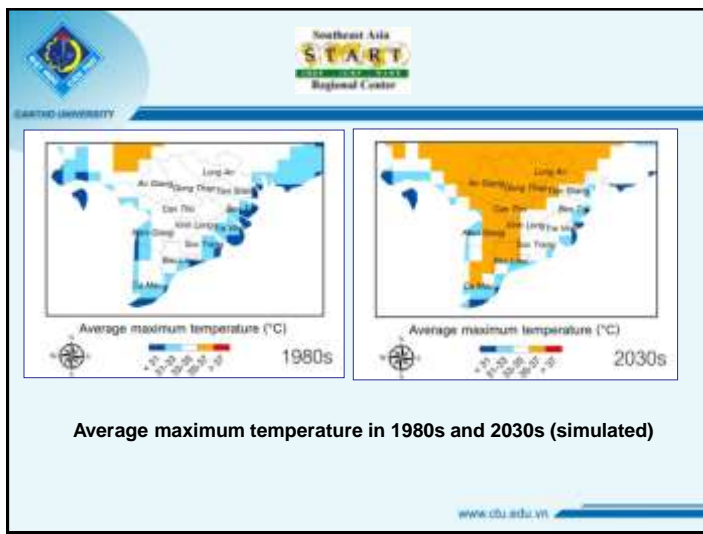
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### Flood peaks Tân Châu (1926 – 2002)

Climate change?

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**Water?!?**

**Higher risk in shortage of water at beginning of Summer – Autumn rice crop**

In general, compared 1980s, the rainy season in 2030s:

- + starts late about 2 weeks (15/4 – 30/5)
- + total yearly rainfall amount reduces about 20%
- + in the future the farmers have to pay more for pumping water

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**Mushroom cultivation**

**Subsidiary crop**

**Eel raising**

**Swimming training**

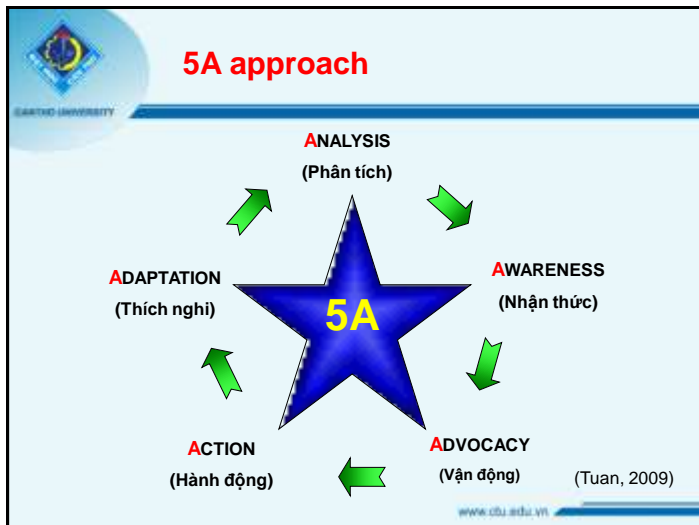
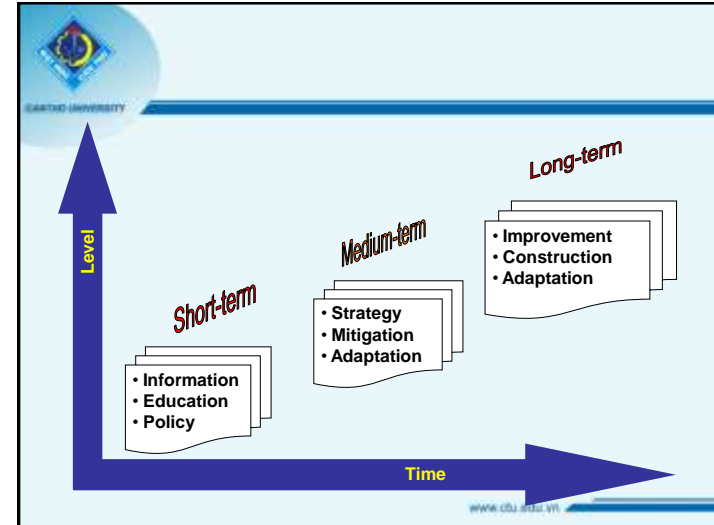
**Flower planting**

**Building dyke**

**ADAPTING TO NATURE**

**ADJUSTING CROPPING CALENDAR – PRODUCTION WAYS**

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- ## LESSONS
- MD's people know how best to adapt to the change of nature with available resources
  - Need to raise the awareness to the people and local government on climate change.
  - Should have a close cooperation among scientists – policy makers – GOs and NGOs – local people on building a strategy and action plan for climate change coping and adaptation,
- www.cdi.edu.vn

