

# CANTHO CITY CLIMATE CHANGE and URBAN PLANNING

SECRETARY OF STEERING COMMITTEE FOR 158 DECISION  
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## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING BRIEF INTRODUCTION

### Cantho In 2009

Area:	1400,96 km <sup>2</sup> , 3,5% of M.Delta
Administrative units:	9 Districts, 85wards+communes
Population:	1,189,000 people
Population density:	848 people/km <sup>2</sup> (~double the Mekong Delta average)
Key economic activities:	Rice, aquatic products
Mean altitude:	0,8-1,0 m

**No saline intrusion or deep inundation in the past,**

- On the south side of Hau river, a main stream of Mekong River
- The biggest city and in the center of MD (170km from HCMC)
- The main force for socio-economic development,
- The most important site for air-water-road traffic

## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING BRIEF INTRODUCTION

VIỆT NAM MAP

THÀNH PHỐ CẦN THƠ

## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING BRIEF INTRODUCTION

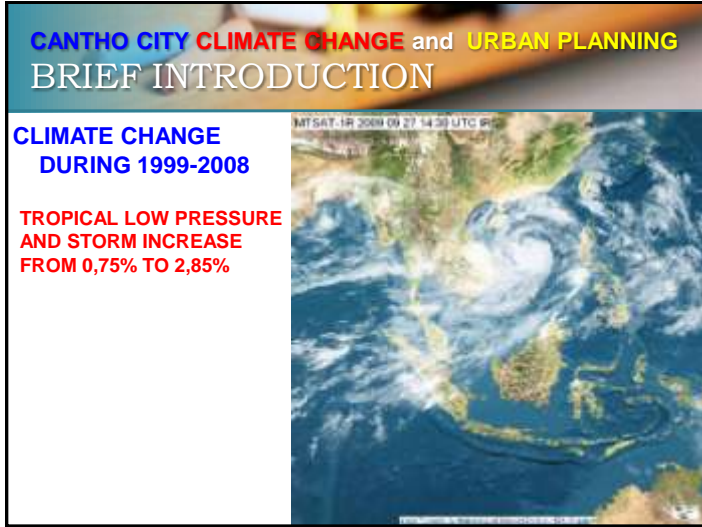
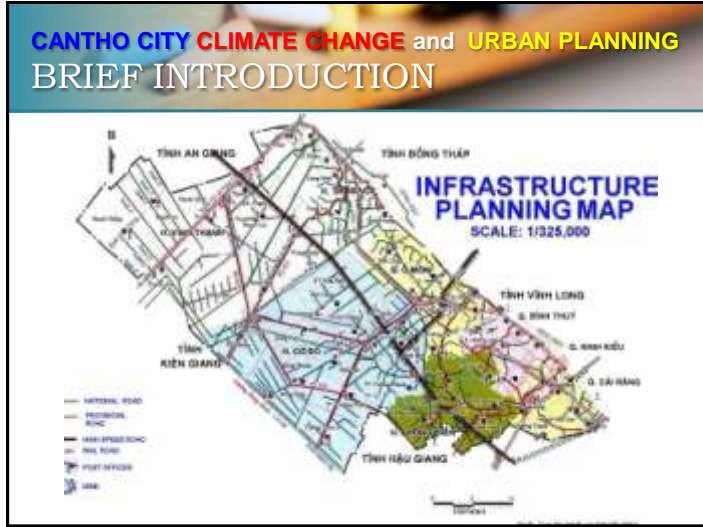
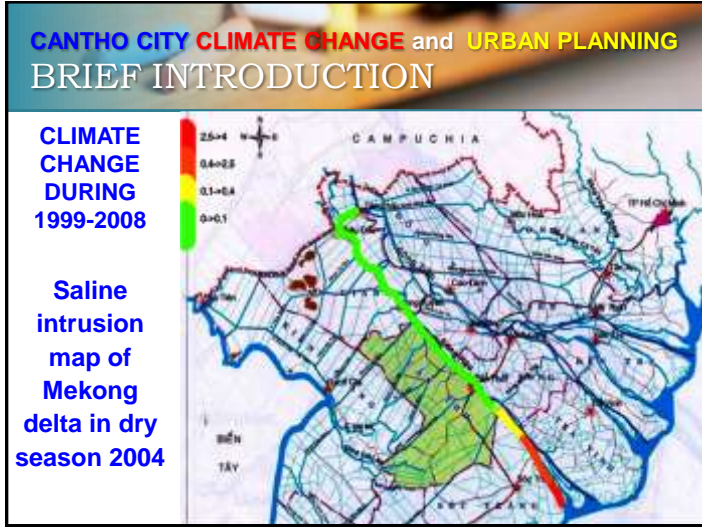
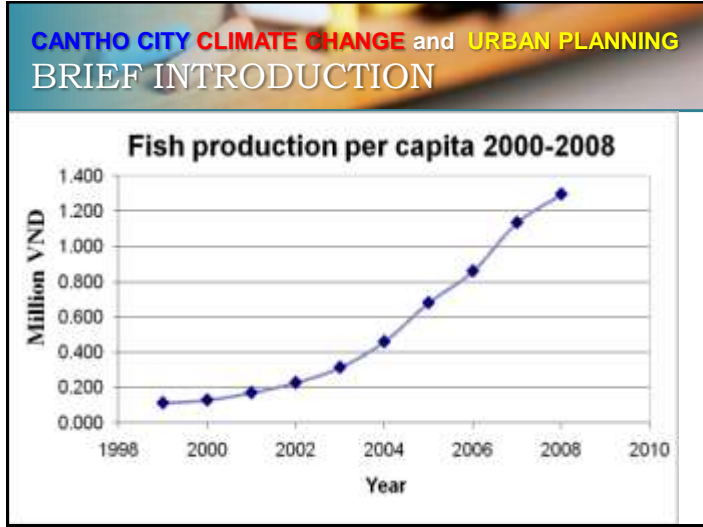
CANTHO CITY  
2020  
ECONOMIC  
MAP

THỊNH VIÊN LƯƠNG

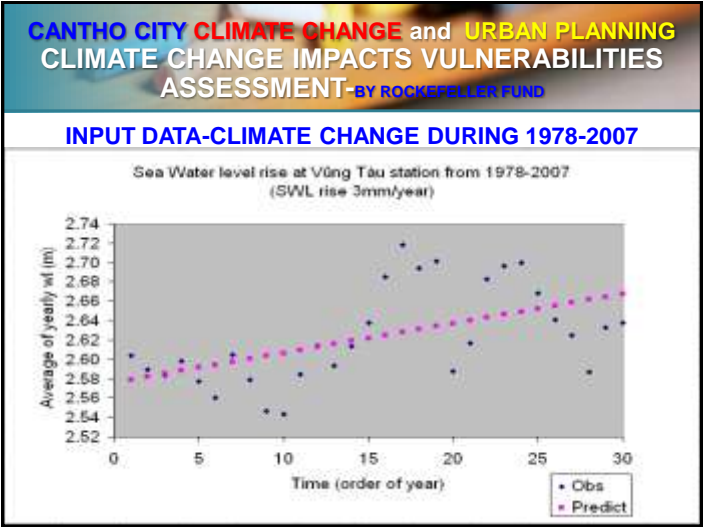
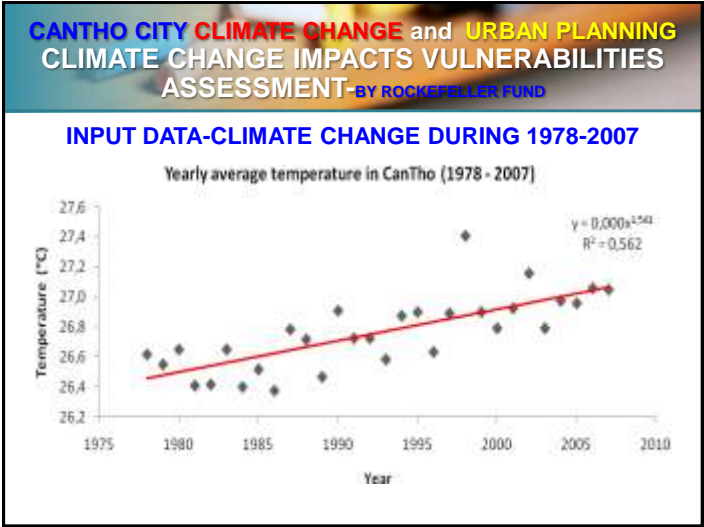
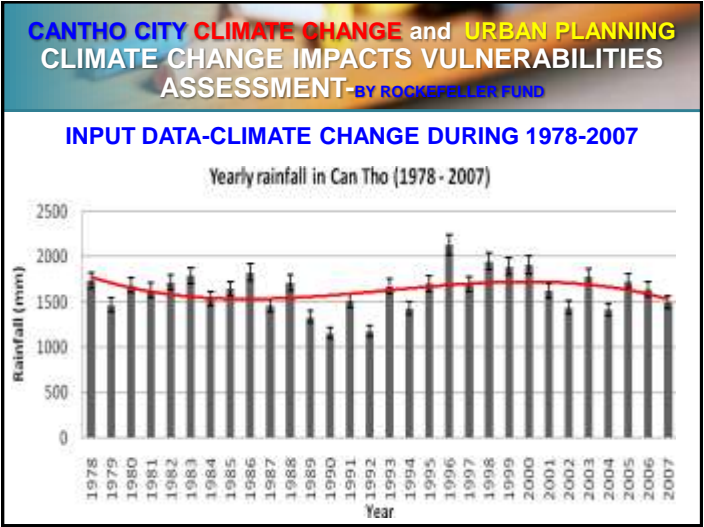
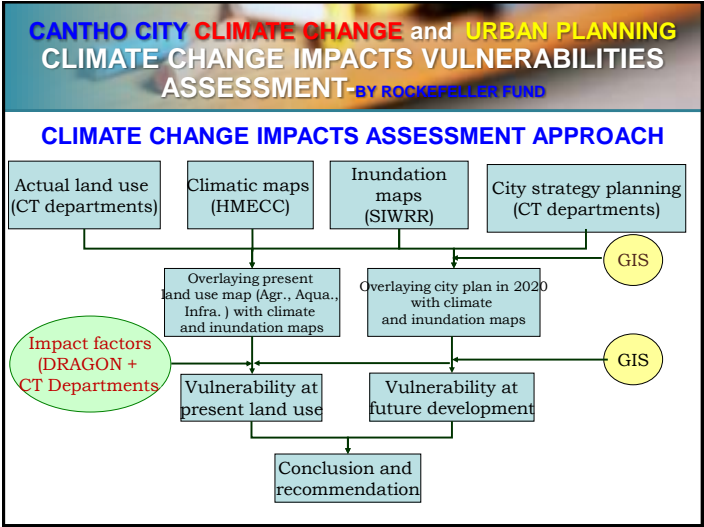
■ RICE  
■ URBAN  
■ INDUSTRY

### GOP STRUCTURE

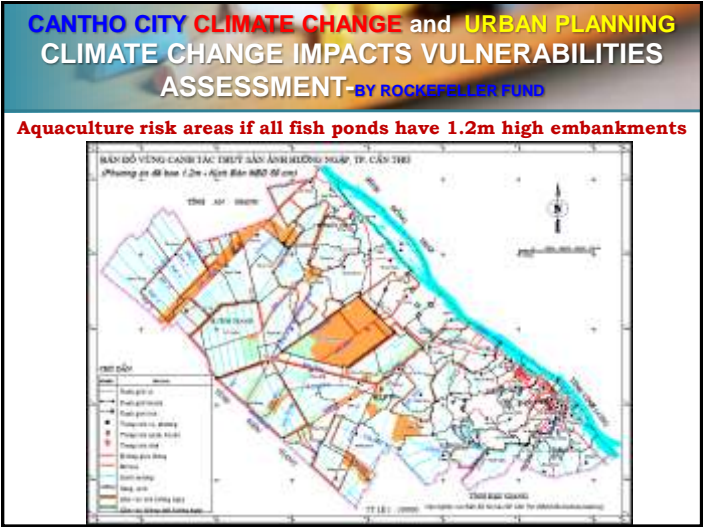
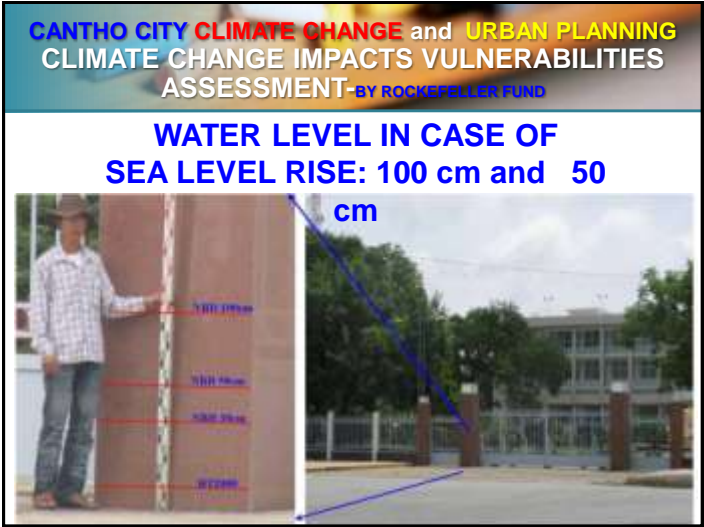
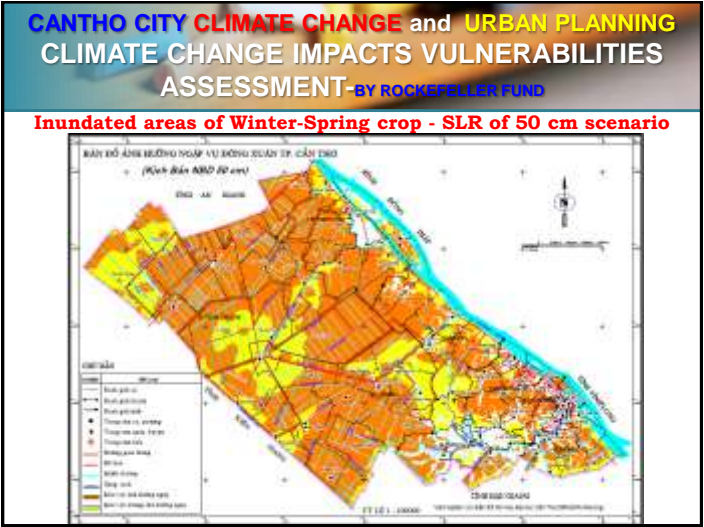
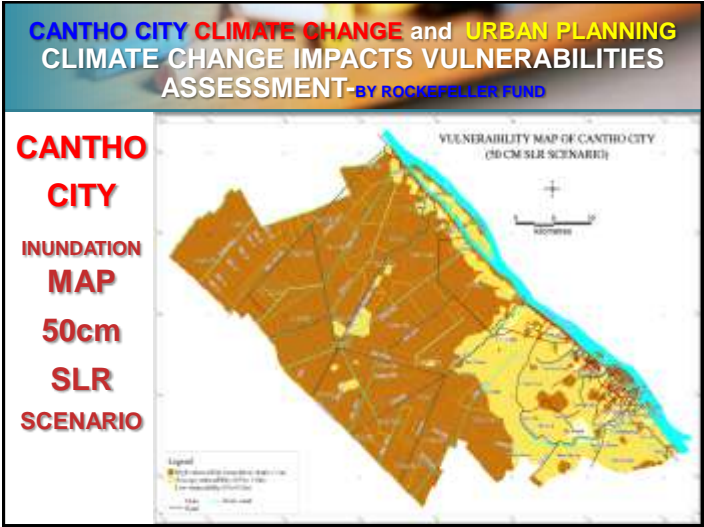
District	% Agriculture sector in GDP	% Industry sector in GDP	% Services sector in GDP
Cần Thơ	~15%	~35%	~50%
Hố Chi Minh	~15%	~35%	~50%
Hố Chi Minh	~15%	~35%	~50%
Đa Phước	~15%	~35%	~50%
Đa Phước	~15%	~35%	~50%



# 22. Can Tho City Climate Change and Urban Planning



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## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING CLIMATE CHANGE IMPACTS VULNERABILITIES ASSESSMENT-BY ROCKEFELLER FUND

Inundation effect map on built environment, SLR 50 cm scenario



## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING CLIMATE CHANGE IMPACTS VULNERABILITIES ASSESSMENT-BY START CENTER OF CHULALONGKORN UNIVERSITY

### WATER LEVELS IN MEKONG DELTA WILL RISE TWICE HEIGHT OF SEA LEVEL RISE

Due to 5 Contributing factors:

- » FLOOD FROM UPPER STREAM
- » LOCAL RAINFALL
- » SEA LEVEL RISE
- » NORTHEAST WIND
- » SPIN FROM EQUATOR

## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING CLIMATE CHANGE IMPACTS VULNERABILITIES ASSESSMENT-BY ROCKEFELLER FUND

Estimated inundation (cm) to some construction, scenario SLR 50 cm

Construction	Elev.	y	x	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Can Tho Airport	2.27	577866	1114610	-0.47	-0.67	-0.87	-1.37	-1.47	-1.27	-0.97	-0.87	-0.37	-0.27	-0.37	-0.57
Binh Thuy Party Office	2.57	581109	1113942	-0.77	-0.87	-1.17	-1.57	-1.77	-1.47	-1.27	-1.17	-0.57	-0.57	-0.57	-0.77
Can Tho Harbor	2.53	581966	1114283	-0.33	-0.53	-0.83	-1.23	-1.33	-1.13	-0.93	-0.73	-0.23	0.27	-0.23	-0.43
Cai Cui Harbor	2.80	591546	1103660	-0.50	-0.80	-1.00	-1.40	-1.50	-1.30	-1.10	-1.00	-0.50	-0.40	-0.40	-0.60
Binh Thuy Temple	1.75	582423	1113495	0.75	0.55	0.25	-0.05	-0.25	0.05	0.25	0.35	0.85	0.95	0.95	0.75
Tà Nóc Industrial zone	2.30	577710	1116946	-0.90	-1.00	-1.30	-1.70	-1.90	-1.60	-1.40	-1.20	-0.70	-0.70	-0.70	-0.90
Cái Lân Oil Plant	2.30	590643	1104320	-0.70	-1.00	-1.30	-1.60	-1.70	-1.50	-1.30	-1.20	-0.70	-0.60	-0.70	-0.80
People's Committee	1.64	586333	1109559	0.36	0.06	-0.24	-0.54	-0.64	-0.44	-0.34	-0.14	0.36	0.46	0.46	0.26
Gate C of CTU	2.05	584401	1108577	-0.15	-0.35	-0.65	-0.95	-1.15	-0.85	-0.75	-0.45	-0.05	-0.05	-0.05	-0.25
Museum of MZ.9	1.65	586136	1109409	0.25	0.05	-0.25	-0.55	-0.75	-0.55	-0.35	-0.15	0.35	0.35	0.35	0.25
Lau Hâu Phuoc Park	1.65	585661	1109059	0.15	-0.05	-0.35	-0.65	-0.85	-0.65	-0.45	-0.35	0.25	0.25	0.25	0.15
Can Tho Bus Station	1.74	583498	1108215	-0.24	-0.34	-0.64	-1.04	-1.14	-0.94	-0.74	-0.64	-0.14	-0.14	-0.14	-0.24
Metro Supermarket	2.53	583375	1108121	-0.93	-1.03	-1.33	-1.63	-1.83	-1.63	-1.43	-1.33	-0.83	-0.83	-0.83	-0.93
CT Central General Hospital	2.12	582773	1108707	-0.32	-0.42	-0.82	-1.22	-1.22	-1.12	-0.82	-0.72	-0.22	-0.22	-0.32	-0.42

## CANTHO CITY CLIMATE CHANGE and URBAN PLANNING CLIMATE CHANGE IMPACTS VULNERABILITIES ASSESSMENT-BY START CENTER OF CHULALONGKORN UNIVERSITY

### Causes of change:

1. Climate change
2. Downstream impacts from development in upper region countries

### Impacts facing Can Tho:

- **Polarised extremes in hydrology regime**
  - deep inundation in rain season
  - extreme drought in dry season
- **Saline intrusion**
  - **Deep inundation** by saline intrusion
  - **Built environment** under threat due to the low elevation of cantho city (0.8-1m above sea level),
  - Threats will also affect **livelihoods**, mobility and ability of city population to earn a living,
  - **food security** of can tho city (and the entire mekong delta) is threatened by the threats of climate change

### Can Tho City Climate Change & Resilience Works RESILIENCE WORKS

#### MACRO LEVEL

- Research to build sea dyke and rivers system dyke,
- Research to build fresh water reservoirs for dry season utilities
- Research to recharge groundwater for supply purpose.

### Can Tho City Climate Change & Resilience Works NEXT STEP WORKS

#### MAIN MEASURES

- Cantho CC works must be in the context of Mekong delta,
- Mobilize and Strengthen local people and staff's capacities on resilience climate change works,
- Call for climate change resilience studies, research and financial support from foreign organizations and institutes.

### Can Tho City Climate Change & Resilience Works RESILIENCE WORKS

#### MICRO LEVEL

- Public climate change awareness and adaptive works,
- Research to build climate change resilience houses,
- Research and build capacity in climate change resilience production systems,

### Can Tho City Climate Change & Resilience Works NEXT STEP WORKS

