CAN THO URBAN DEVELOPMENT AND RESILIENCE PROJECT

Can Tho city, Viet Nam,
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1. City Introduction

- Can Tho city locates in the central of South-West Viet Nam.
- The economic center of Mekong Delta Region (Viet Nam) with over 1.2 millions people on the area of 1,400km$^2$
- 9 districts, this project focus on 2 old central district (Ninh Kieu and Binh Thuy) with total area of about 26,75km$^2$
- Can Tho city has seriously been and regularly affected by flooding: Up to 20km$^2$ and over 200,000 people are affected each year. And if sea level has risen by 1m, about 38% of this delta region shall have been below sea level.
- Causes of flooding in Can Tho: higher rainfall intensity; higher river levels; inefficient urban drainage system; rapidly and poorly-controlled urbanization.
2. **Infrastructure Project Overview**

- To enhance the city’s adaptation capacity against extreme weather events, minimizing human and asset losses.
- Conducting flood risks management activities and enhancing connection between central area and new urban areas.
- The main area to be protected is Can Tho city’s core urban area (Ninh Kieu and Binh Thuy districts) with total area of about 26,75km$^2$ with 423,400 people.
- Include 3 components:
  - Flooding control and environmental sanitation
  - Urban corridor development
  - Urban management strengthening for resilience
3. Technical Description

- The project consist of some sub-projects:
  - 2 river embankmenst: 6,14km and 3,9km
  - 3 Ship-locks
  - 9 Tidal gates
  - Rehabilitation of 14 inner city canals: 15,5km
  - Two regulatory lakes: 150,000m$^2$ and 48,000m$^2$
  - Two flooding PS: 2m$^3$/s and 1,6m$^3$/s
  - Upgrading 12km drainage system in central district
  - Road and bridges
  - Resettlement area

- Consistency: National strategy; Master Plan, Construction Planning, Water resource planning in Mekong River Delta vision to 2050; and Master Plan, Construction Planning, Water resource Planning, Urban drainage planning of Can Tho city vision to 2050
4. **Anticipated Socio-Economic Impacts (Positive & Negative)**

- **Economic impacts:**
  - Reduction of flooding helps: Not interrupt to living activities and production of people; Not-cause to traffic jam; Prevention from disease.
  - Increase land value: when the embankment is constructed, the land on it has more uses: parking lots, amusement parks, restaurants. Also improve waterway tourism and transport.
  - Total project investment: 322 millions USD. City investment is 89 millions USD (25%), mostly for indirect cost, compensation and site clearance.

- **Social impacts:**
  - Resettlement and permanent homes to people that used to live illegally along to river banks.
  - Reduce social cost caused by disease and traffic jams.
5. Anticipated Environmental and Climate [Resilience] Impact (Positive & Negative)

- Waste-water is collected and treated better.
- Fresh air, less dust & noise caused by reduction of traffic congestion. No stench rises due to flooding and poor sanitation.
- Landscape, trees, water and green spaces create harmony between natural ecological environment and urban environment.
- The negative environmental impacts are inevitable which may affect the elements and components of the environment resulting in change in the landscape, public health and natural resources around the project area.
Hình ảnh minh họa: Cửa van tự động (động mở 2 chiều)

Hình ảnh minh họa: Cửa van phẳng kéo đứng (Lifting gates)

Hình ảnh minh họa: Cửa van sập trực đứng (Flap gates)
5&6. Rehabilitation of canals and addition of reservoirs/lakes

- Rehabilitate 14 canals, total: 15.4 km
- Lake for the college village: 15 ha,
- Long Hoa lake: 4.8 ha

Soft ecological embankment (lakes and small canals)

Hard embankment (Hang Bai, Ba Bo)
SOLID WASTE MANAGEMENT
Total: 1,200 tons/day.
Can Tho Solid waste management plan: there are 02 area are reserved for constructing solid waste treatment plant.
1. 47 ha: Municipal solid waste (Phuoc Thoi, O Mon district).
2. 60 ha: Municipal and hazardous solid waste (Truong Xuan, Thoi Lai district).
THANK YOU!