

Designing and Establishing
Cambodian Low Carbon Development Plan

29 May 2012

**Low Carbon Related Activities and Projects
Implemented by Department of Environment,
RUPP**

Va Dany

RUPP Missions



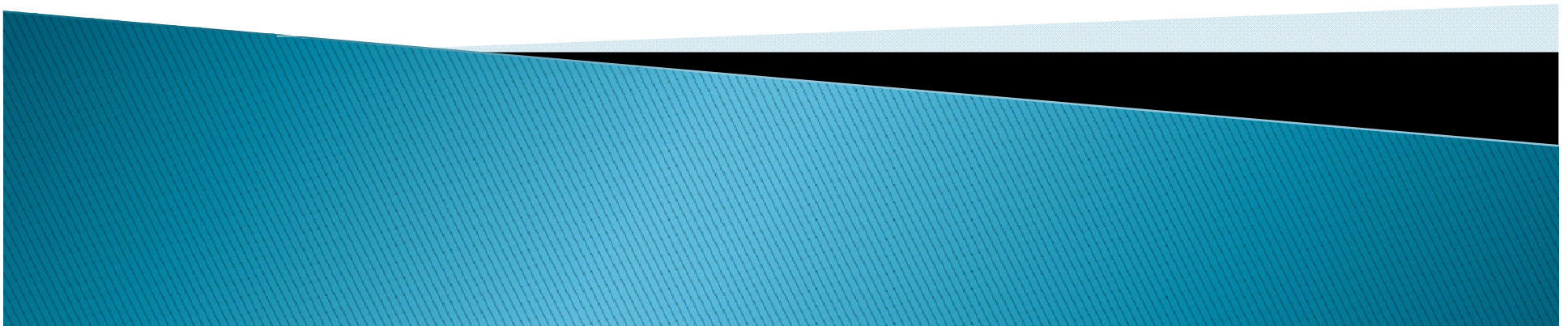
- ▶ **Produce** qualified graduates with relevant abilities and skills,
- ▶ **Promote research** for academic advancement and national development,
- ▶ **Enhance knowledge and technological transfer and development** towards national self-reliance,
- ▶ **Provide service** to public and private sectors, and community development, and
- ▶ **Promote cultural** preservation, exchange and development.



▶ Source: www.rupp.edu.kh/about_rupp.php

Environmental Program

- 4 years program (undergraduate),
- Two streams:
 - Pollution and urban environmental studies,
 - Natural resources management,
- The curriculum are offered consecutively

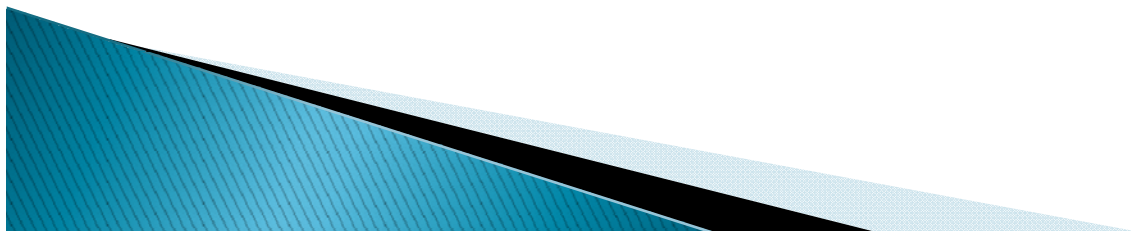


Relevant Curriculum – Low Carbon

- ▶ Energy and environment,
- ▶ Solid waste management,
- ▶ Wastewater pollution controls,
- ▶ Cleaner production,
- ▶ Environmental pollution and public health,
- ▶ Air pollution,
- ▶ Environmental economics,
- ▶ Agriculture and environment.



Selected projects that contribute to low carbon development



Training and Capacity Building to Utilize the Ground Water Resource in the Arsenic Affected Area of Cambodia

- Executed by DES (2010-2013)
- Key activities:
 - Integrated Arsenic related knowledge into DES curriculum,
 - Capacity building on As related issues to community and RUPP students,
 - Pilot a community-scale Arsenic removal plant called SAR: *a low cost treatment system with chemical free and equipped with the solar roof for water pumping.*



Energy Savings Siem Reap – Promoting and Demonstrating Energy Conservation in Siem Reap, Cambodia (Energy and Environmental Partnership –Mekong)

- Executed by CCD (2011-2012)
- **Overall objective:** Improved awareness on energy efficiency and energy conservation,
- **Development of IEC materials (DES)**

HVWSHE Project (Human Valued Based on Water, Sanitation and Hygiene Education)

Executed by DES (2008-2009)

Key activities:

- Introduction of HVWSHE concept into DES curriculum,
- Demonstration – awareness,
 - water saving and purification models: Korean Filter, Bio-sand Filter, Rabbit Filter, Sodis and Boiling,
 - Construction a rain water harvesting tank for the primary school 'Toul Key Primary school'.
- Development of teaching module on rainwater harvesting for an ad-hoc school curriculum.

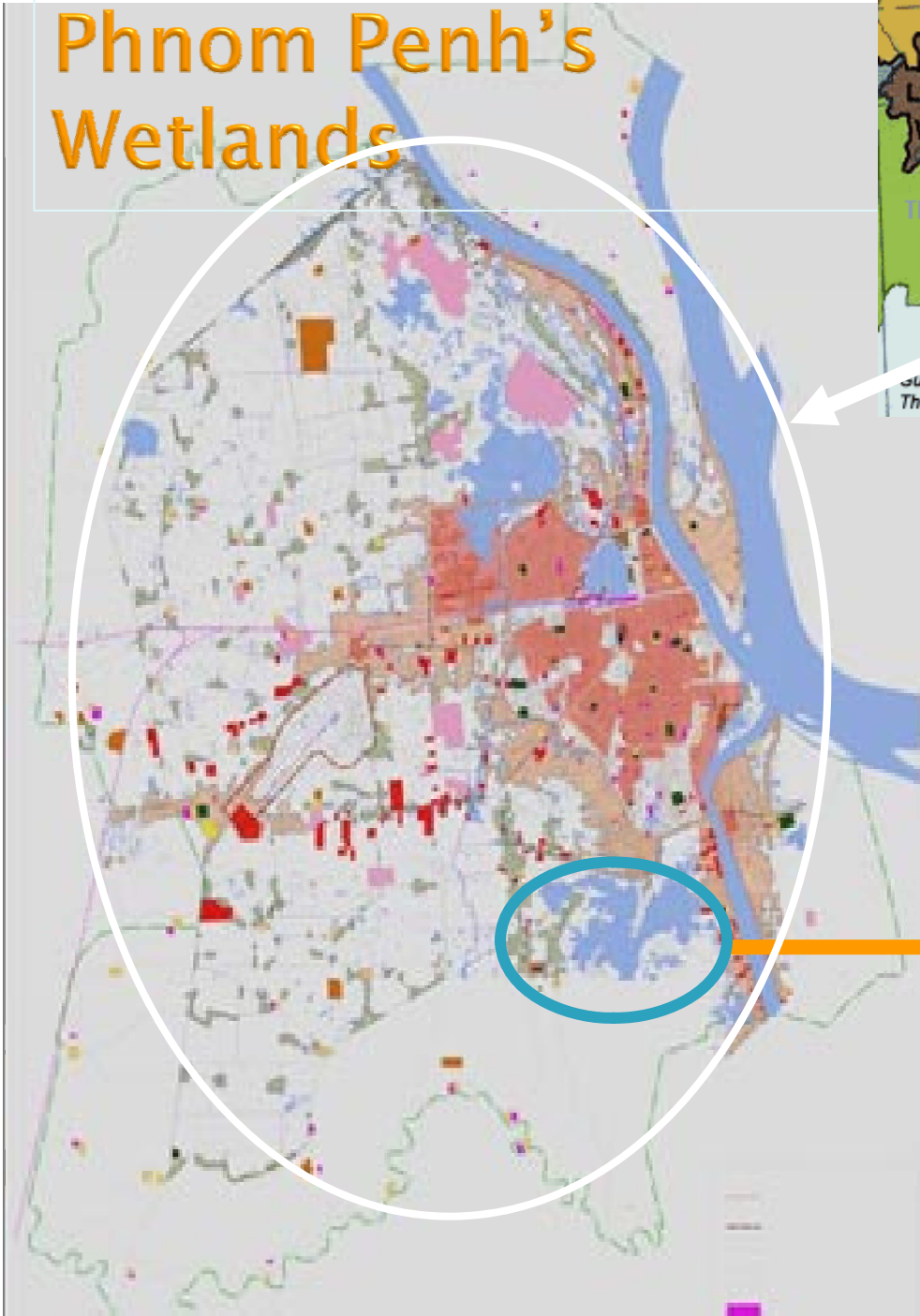
The Roles of Phnom Penh's Wetlands in Sustainable Treating Sewage Discharges to the Mekong/Bassac River System

Executed by DES (2007-2009)

Sub-studies:

- Contaminant level assessment and trackdown in the Phnom Penh sewer system,
- Effectiveness of Phnom Penh's wetlands in reducing contaminant loads to the Mekong/Bassac river system,
- Phnom Penh sewer modeling and contaminant load estimates,
- Health related issues and public outreach for Phnom Penh's wetlands communities,
- Emerging *Opisthorchis viverrini* infection in snails and cyprinoid fishes in sewage treatment wetlands and natural waters in Cambodia (Chheng Mai University).

Phnom Penh's Wetlands



Choueng Ek Lake

Outreach Activities:

- ▶ Short course training,
- ▶ Seminars,
- ▶ Involved in relevant networks,
- ▶ Involved in community projects.

In Summary,

DES has been working for years on many related projects that contribute to low carbon development; however, the activities, except the curriculum, still project based and limited.

Promoting research activities is of particular important , followed by outreach services.

Thank you!

