



The Sirindhorn International Environmental Park  
Foundation

Under the Patronage of Her Royal Highness Princess  
Maha Chakri Sirindhorn

Regional Centre of Expertise (RCE)  
on Education for Sustainable Development  
(ESD)

RCE Cha-am



UNITED NATIONS  
UNIVERSITY

## Certificate of Acknowledgement

This is to certify that

**RCE Cha-am**

was launched at

United Nations University, Tokyo, Japan

28 March 2008

Konrad Osterwalder  
UNU Rector

## RCE Cha-am Vision

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- RCE Cha-am envisions to be an International Center of Learning on Energy, Natural Resources as well as the central hub for Environment Sustainable Development in the southwest coastal region of Thailand. It will promote local innovation and appropriate technology and establish strong linkages in the spheres of science and technology, both within Thailand and with neighboring and international countries and organizations through the global learning space.
- All decisions of RCE Cha-am will be made by the consensus agreement of the local RCE network and will strongly align with HM the King's sufficiency economy philosophy and model.

# Key Regional Sustainable Development Challenges

## Economic Challenges

- Eco-tourism
- Agricultural products for export
- Fisheries
- Manufacturing (agricultural processing and canning)

## Environmental Challenges

- Soil Erosion
- Deforestation in the highlands
- Land encroachment into protected area
- Water management
- Restoration of Mangrove ecosystem
- Sedimentation
- Coastal Erosion
- Fishing practices

## Social Challenges

- Increasing Indebtedness of Poor
- Industrial pollution
- Budgetary Constraints
- Globalization's effect on Thai culture
- General Understanding of Sustainability



# RCE Cha-am Long-term Goals

The majority of people in the two provinces have a similar understanding of “Sustainability”

Development decisions are made which protect the natural ecosystem of the coastal and highland areas and are in-line with the King’s “sufficiency economy model”

Restoration of the coastal mangrove ecosystem to a sustainable state

## Short-term Objectives

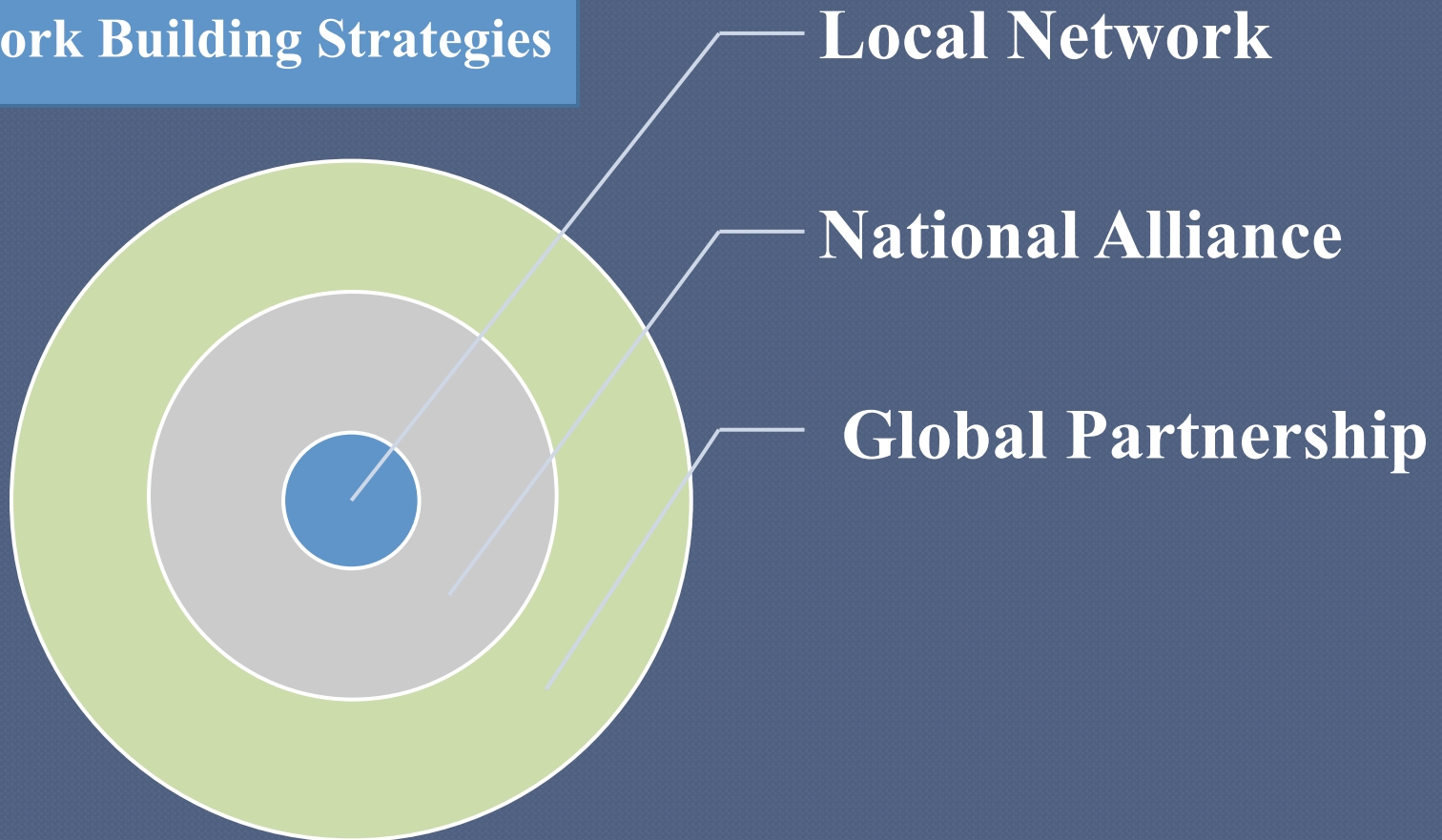
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- Conduct training on general understanding of sustainable development and sufficiency economy to teachers, local community leaders
- Organize and conduct youth camps on environment and natural resources
- Demonstration of research findings
- Exhibitions on energy conservation and renewable energy technology
- Training on biodiversity and reforestation of forests

# Strategies for Achieving the Goals and Objectives

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## Network Building Strategies



# Strategies for Achieving the Goals and Objectives

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## Additional Strategies will include:

- Promoting and developing appropriate and alternative energy technology on addition to natural resource management which lining with local communities and local traditional knowledge
- Rehabilitation of degraded ecosystems that will be used as real life learning classrooms
- Promotion of eco-tourism by participation of the local community and partnership network
- Developing public relations and dissemination of partners 'work on ESD, energy conservation, natural resource management and environmental conservation.

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- Building the knowledge and skills capacity of RCE partners and the community on ESD and sustainable development, as well as skills needed for achieving sustainability
  - Encouraging the development and dissemination of information and learning from the Royal Projects for honorable HRH Princess Maha Chakri Sirindhorn
  - Investing generated incomes within the region and abroad for continuous sustainable development, and maintain budgets efficient and transparent.

# Key areas of evaluation

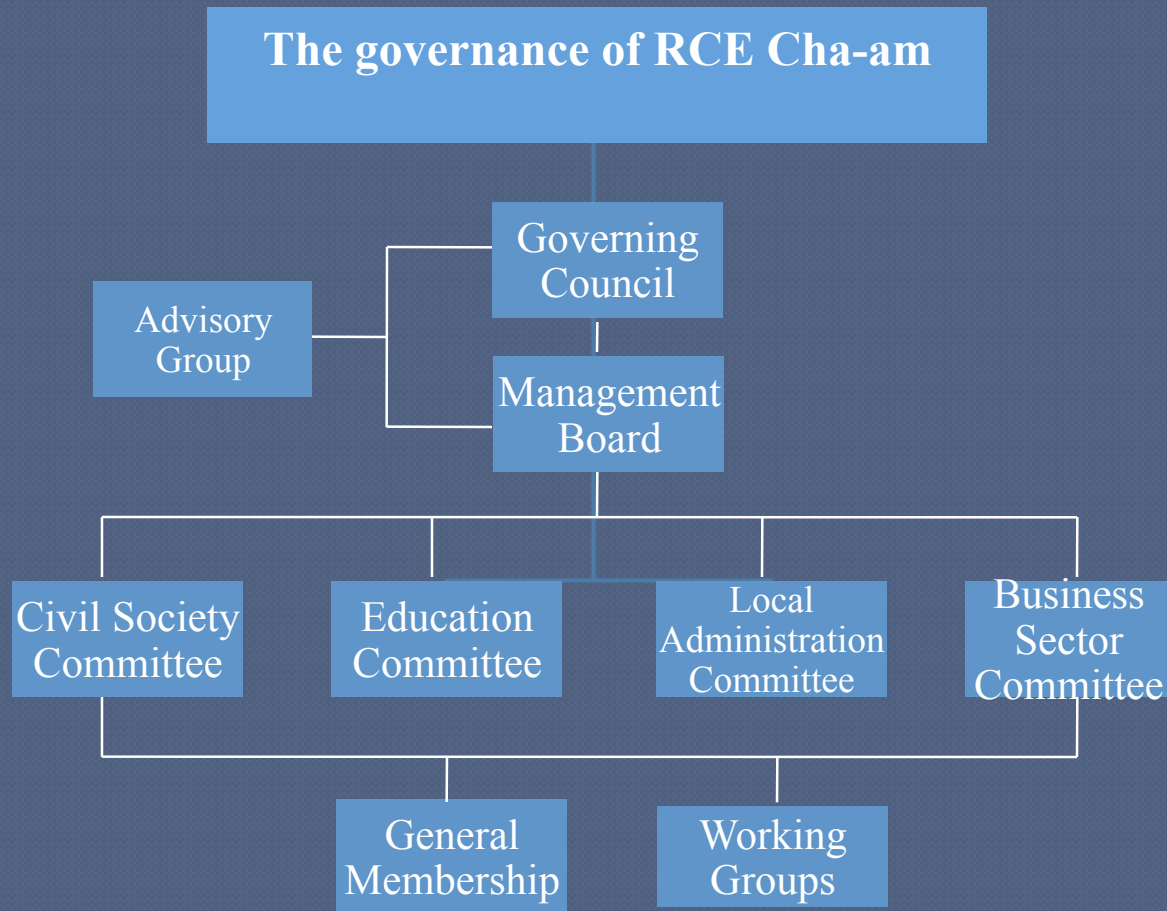
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- Evaluation of targets against national sustainable development targets as well as ESD targets established by MoNRE and MoE.
- Research on environmental sustainability, education for sustainable development and sufficiency economy strategies, actions and outcomes
- Evaluation of development of network and of both human and institutional capacity in the region



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- Evaluation of engagement of RCE Cha-am with other organizations in the UNU-IAS RCE network
  - Evaluation of impact of ESD on decision-making at the local and regional level by government and by individuals

# Governance / Management Structure



# Development of RCE Cha-am Partnerships

## ◉ Networking Strategies

- (1) As a focal point of linking research knowledge, innovations among networks and communities, RCE should know the key person to contact as well as, some sources of knowledge should be identified.
- (2) The information and electronic system should be used for linking information.
- (3) RCE located at the foundation should be well known by local people. So that public relation and communication are needed for disseminating location, roles and responsibilities of the center, including clarification of coordination system.

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- (4) There has been sub-networking system of educational groups splitting by roles and functions. These are basic education, university, vocational and non-formal education.
  - (5) Network's representative are appointed in steering committee of RCE, and cooperated among their network.

## Strategies for strengthening and utilizing collaboration among the various stakeholders

- (1) Strengthening communication channels that are most locally appropriate
- (2) Roving meetings held at different areas in the two provinces
- (3) Capacity building training for youth about sustainable development and some general networking and communication skills
- (4) Hosting of periodic networking events (social type for building relationships and understanding between different groups)

## Academic Sector

Implementation for Sustainable Development either completed or ongoing plan

Participation on sustainable development linked to RCE

Limitation and recommendation in linkage between networks and RCE

Ways to link with community and RCE

Further educational networks and learning centers

## Local Administrative representatives and Phetchaburi Province's representatives

Conservation of natural resources and environment

Social and cultural area

Economic area

## Central Government, Broad of Trustees, and State Enterprise

Activities and projects

- Herb organic farm
- Solar cell and renewable energy
- GMS Information Technology for conservation of natural resources
- Protection and resolve of disaster
- etc.



# Academic Sector

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- ◉ Implementation for Sustainable Development either completed or ongoing plan
- ◉ Participation on sustainable development linked to RCE
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- ◉ Ways to link with community and RCE
- ◉ Further educational networks and learning centers

# Local Administrative representatives and Phetchaburi Province's representatives

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- Conservation of natural resources and environment
  - Conservation of mangrove
  - Forest plantation
  - Natural conservation Camp in schools, etc.
- Social and cultural area
  - Projects on Museum of 10 technicians in Phetchaburi
  - promoting local careers related to traditions and life style
  - Promoting local festivals, etc.
- Economic area
  - Promoting organic farm
  - Arranging Shell Feast, Bird Watch, Squid fishing Festival, etc.

# Central Government Agencies and State Enterprises

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- Presentation activities and projects as follows:
  - Herb organic farm
  - Solar cell and renewable energy
  - GIS Information Technology for conservation, rehabilitation of natural resources and environment
  - Protection and resolve of disasters
  - Water treatment by natural system
  - Development of model
  - Mangrove plantation
  - Knowledge of Production of Economic Aquatic Animals
  - etc.



REGIONAL CENTRE OF EXPERTISE  
ON EDUCATION FOR  
SUSTAINABLE DEVELOPMENT



ACKNOWLEDGED BY



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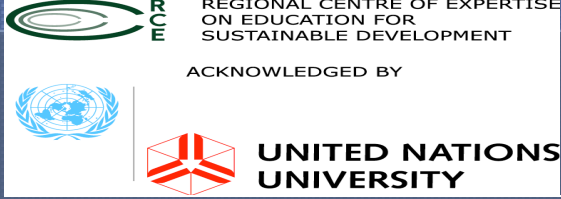
# Education for Sustainable Development (ESDC) The Sirindhorn International Environmental Park



# RCE Cha-am Thailand







ศูนย์ศึกษาเพื่อการพัฒนาอย่างยั่งยืน  
อุทยานสิ่งแวดล้อมนานาชาติสิรินธร

Supported by  TOYOTA

# Education for Sustainable Development Center – ESDC The Sirindhorn International Environmental Park



**MOU signed on 29 April 2008**

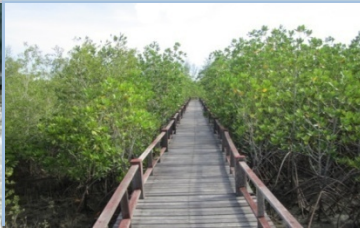
- **The Sirindhorn International Environmental Park Foundation**
- **Ministry of Natural Resources and Environment**
- **TOYOTA Motor Thailand Co., Ltd.**
- **World Wildlife Fund (WWF Thailand)**





## **Education for Sustainable Development Center – ESDC The Sirindhorn International Environmental Park**

- **ESDC is a new facility for biodiversity education for RCE Cha-am, located in The Sirindhorn International Environmental Park, Cha-am, Phetchaburi, Thailand.**
- **ESDC was opened in 2009 with the cooperation between The Sirindhorn International Environmental Park and WWF (Thailand), and sponsored by Toyota Motor Thailand Co., Ltd.**
- **ESDC provides knowledge on environmental study especially on “Biodiversity” to teachers and students of primary and secondary schools.**
- **The “Biodiversity” curriculum exercised knowledge on ecosystem, in terms of number and diversity, life relations, food chains and so on, using abundant natural resources in The Sirindhorn International Environmental Park including mangrove, beach & mixed-deciduous forests, coastal area, aquatic life, territorial animals including more than 100 bird species in the park.**





# Education for Sustainable Development Center – ESDC The Sirindhorn International Environmental Park





# Education for Sustainable Development Center – ESDC The Sirindhorn International Environmental Park

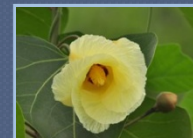




# ESDC's Biodiversity Study The Sirindhorn International Environmental Park



- **97 Species of Strand Vegetation**
- **23 Species of Mangrove Vegetation**
- **38 Species of Mixed Deciduous Forest**
- **105 Species of Birds in 2009, and increased to 115 Species in 2010**
- **83 Species of Benthos**





# • Academic Center for the Nature Conservation and Restoration

★ Provide database related to SIEP

**- Royal Projects**

- Biodiversity
- Mangrove Forest Ecosystem
- Restoration Forest
- Animal species



- Community
- School, Education Institution
- Environmental Organization



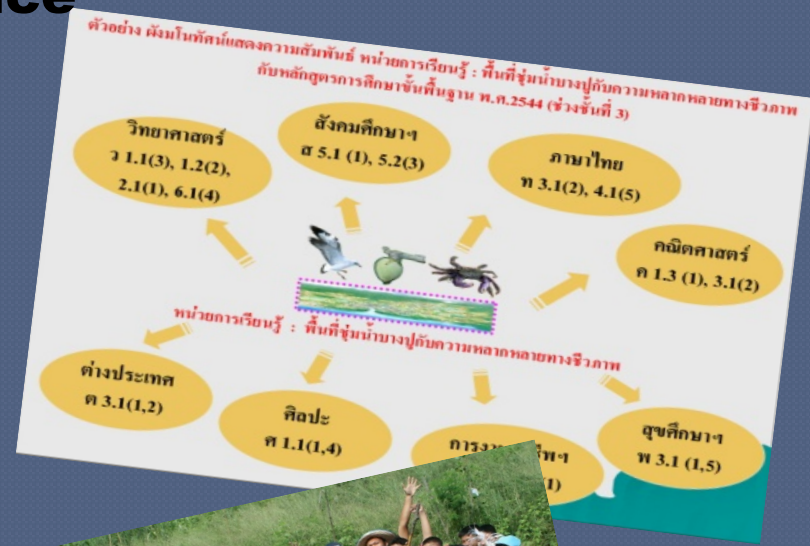
# • Learning and Training Center along the Royal Projects (Sustainable Development Method)

★ Develop curriculum, activities, learning methods and provide natural learning service

**Integrated curriculum for all levels**

**Youth camp on natural and environment conservation**

**Training curriculum for teachers, community leaders, volunteers and general public**





• Provide public release and study tools for learning

★ Publicize and disseminate activities to schools and community

Activities in schools and community

Provide useful learning tools and method



โลกของสัตว์หน้าดิน และสัตว์อื่นๆ ในพื้นที่ชุ่มน้ำบางปู

ปลากระ-จี่	ปลาตีน	ปลาทุบระด	ปลาเสือ
ปลาหัวเขิน	ปลาหมอสี	ปลาตุ๊กตา	ปลาไหล
ปลาหัวสิง	ปลากระบอก	ปลาหัวตะกั่ว	ปลากระเบน
ปลาหมึก	ปลาหมึกแดง	ปูเสฉา	ปูม้า
ปูทะเล	ปูเป็ด	ปู	ปูกระดอง



Strategies in using medias as radio, TV, exhibition



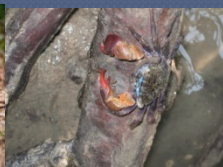
**Disseminate activities on natural & ecosystem restoration and conservation at local, national and international levels**

**★ Expanding activities & shared experience**

**Expanding knowledge and experience widely**

**Provide staging various academic forum debate at all levels**

**Study tours and potential development of ESDC & SIEP staff**





## Organized special activities with **TOYOTA**







**-Thank you-**

