



## A Designing of Low Carbon Development Plan for Cambodia toward 2050

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### 1. Introduction

#### Cambodia:

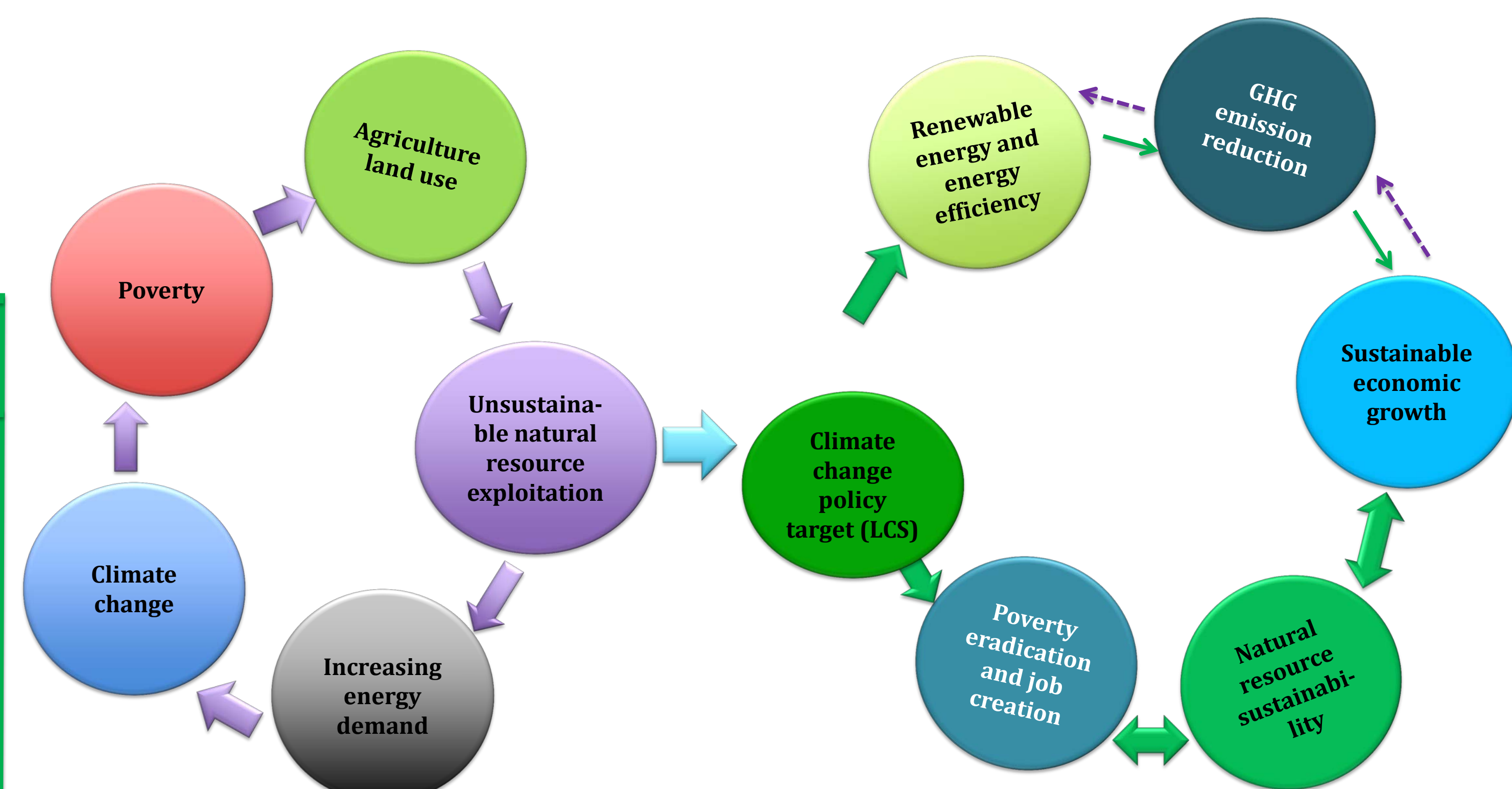
- Total land area: 181 035km<sup>2</sup>
- Population: about 15 million
- An agricultural country with more than 80% of the population living in the rural area
- More vulnerable to the impacts of climate change which caused a lot of human lives, properties, infrastructures, agriculture products, animals, and human health.
- Increasing demand for economic development
- Some structural adjustments are needed to keep increasing economic growth with low greenhouse gas (GHG) emissions, thus adopt Low Carbon Development Plan

#### Cambodia's Natural Disasters



### 2. Purpose

The Low Carbon Development Plan (LCDP) is developed with the objective to reduce GHG emission and at the same time to ensure economic growth, poverty eradication, natural resource sustainability, sound waste management, and green investment attraction and green job creation.



Low Carbon Development Plan for Cambodia

### 3. GHG Inventory 1994 and 2000 (SNC)

GHGs by Source and Sink	Total CO <sub>2</sub> eq. (Gg)	
	GHG Inventory 1994	GHG Inventory 2000
Energy	1,881	3,444
Agriculture	10,560	21,112
Land Use Change & Forestry	-17,907	-24,565
Waste	273	229
Industry (Cement)	50	-
<b>TOTAL NAT'L CO<sub>2</sub>-eq.</b>	<b>-5,142 (Net sink)</b>	<b>220 (Net emitter)</b>

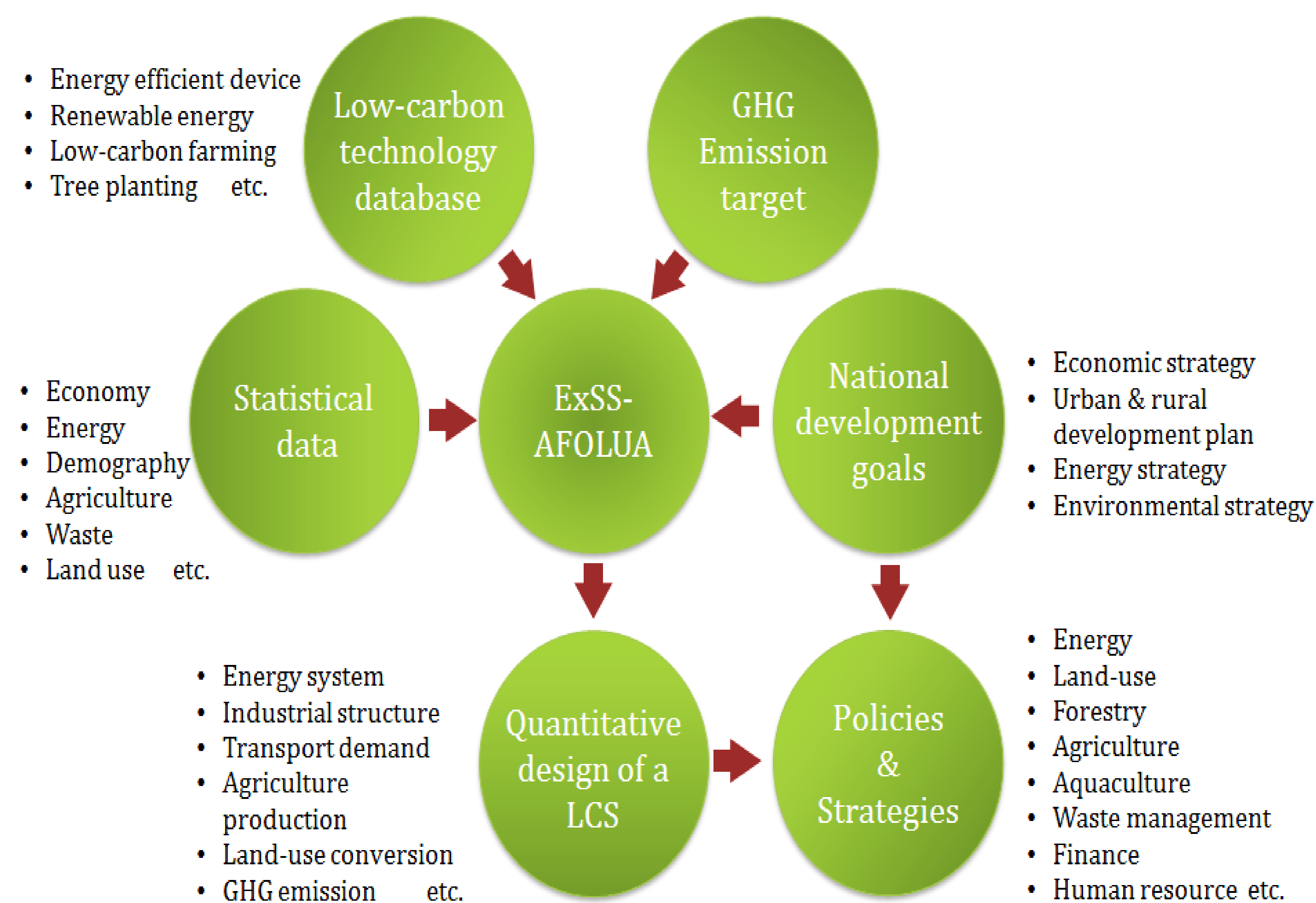
### 4. LCDP toward 2050

Four Policies	Dozen Strategies	Model Use
Green environment	Sustainable forest management	AFOLU
	Sustainable waste management	ExSS/Waste
Harmonization of green economy, society and culture	Green agriculture	AFOLU
	Green transport	ExSS
	Green energy	ExSS
	Green tourism	ExSS
	Green human resource development	ExSS
	Green financial mobilization	ExSS/Waste
	Green technology and investment	ExSS
Blue economy	Green merchant marine and sustainable coastal zone management	ExSS/AFOLU
Eco-village	Low carbon infrastructure	ExSS
	Green building	ExSS

### 5. Methodology

LCDP identified four tangible policies and a dozen strategies. In order to conduct quantitative analysis of these strategies, a couple of numerical models: Extended Snapshot Tool (ExSS) and Agriculture, Forestry and other Land Use Activity model (AFOLUA), and Waste Model developed and applied. The models project quantitative future activities and environmental loads, and identify measures to be implemented in order to achieve certain environmental and other targets.

#### Low Carbon Development Tool



### 6. Conclusion

LCDP can bring Cambodia to achieve certain targets:

- GHG emission reduction
- Economic growth, poverty reduction, human resource development, effective natural resource management and environmental sustainability and sound waste management.