



# TOWARDS A SUSTAINABLE DEVELOPMENT: SECURITY IN ENERGY, FOOD, WATER, AND AIR WITH A DEMOGRAPHIC PERSPECTIVE ON CLMV

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# Outline

- **FRAMEWORK OF ANALYSIS**
  - The Future We Want: Sustainable Development
  - Beyond GDP Growth
  - Energy, Food, Water, and Air
  - Natural Resources: Economic, Financial, and Political Commodities
  - Natural Resources Security: Between Free Trade and Self-Sufficiency
- **Some Conditions of Natural Resources in CLMV and other ASEAN Countries**
- **Population in CLMV as Market and Production Base**
- **Concluding Remarks**

# Framework of Analysis

A resolution of the General Assembly of the United Nations adopted on 12 July 2012

# THE FUTURE WE WANT

## **Economic, Social, and Environmental SUSTAINABLE DEVELOPMENT**

Inclusive, people centred,  
for all people regardless of age and gender

# BEYOND GDP GROWTH

- The **FUTURE WE WANT** focuses on **SUSTAINABLE DEVELOPMENT**, rather than the size and growth of the GDP.
- Economic Growth remains important, but not as an end in our **FUTURE**.
- Economic growth is seen as only one of many means to achieve Sustainable Development
  - For example, the **FUTURE WE WANT** does not target a double-digit economic growth.

# This is **NOT** What We Want

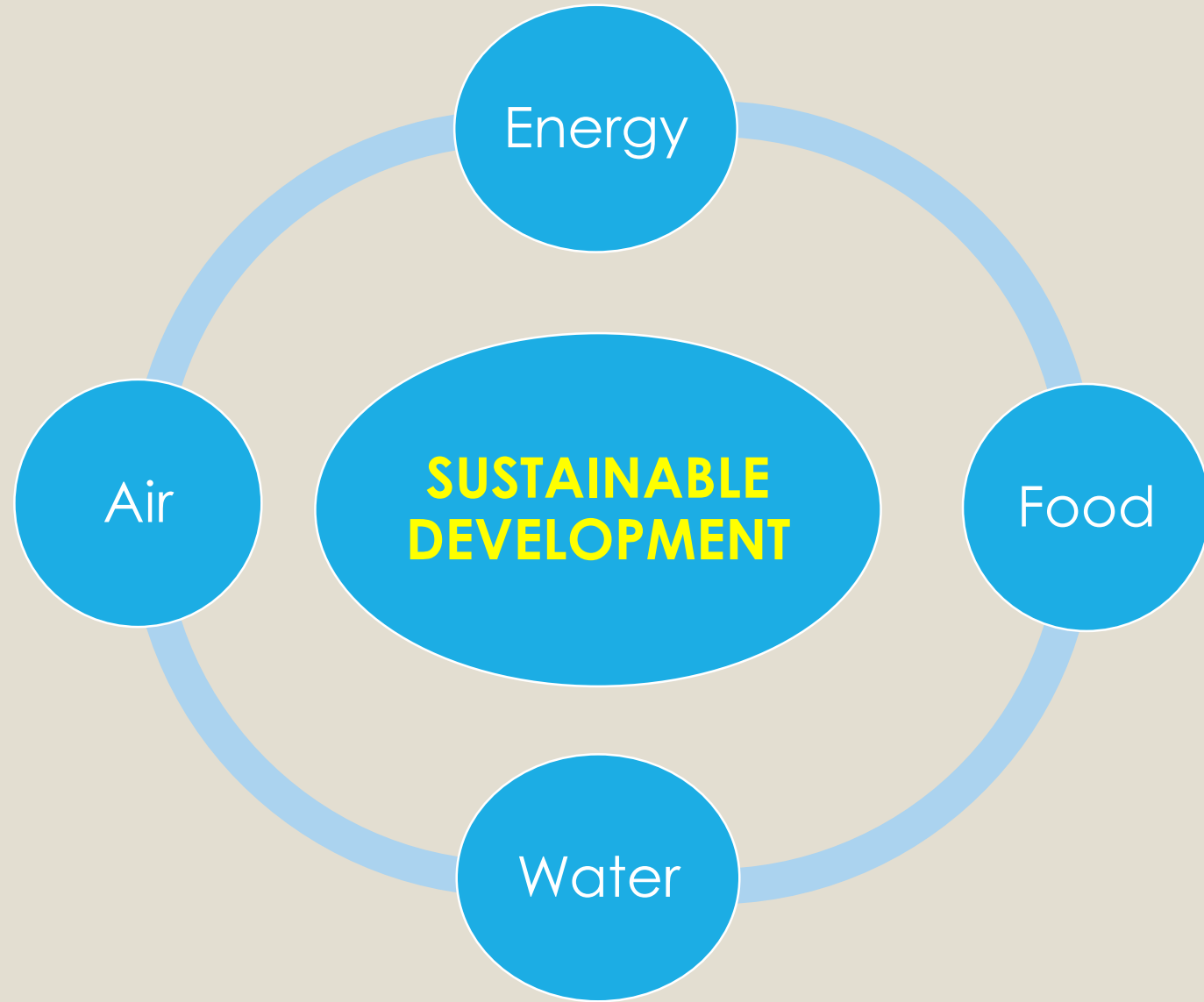
Providing future generation with greater GDP (more goods and services) to compensate for polluted air, dirty water, and unhealthy food they will consume.

Source: UNDP (2011)

# Sustainable Development

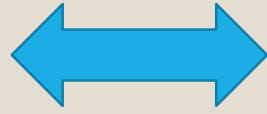
(The UN's definition)

**Development which provides the economic, social, and environmental needs of the current generation without sacrificing the ability of the future generation to produce their own needs.**



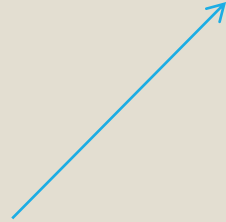


SUSTAINABLE  
DEVELOPMENT



CAPABILITY  
DEPRIVATION

POVERTY



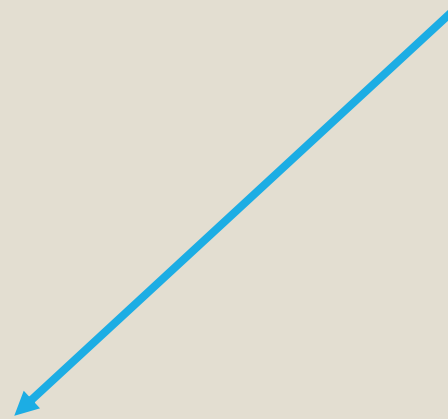
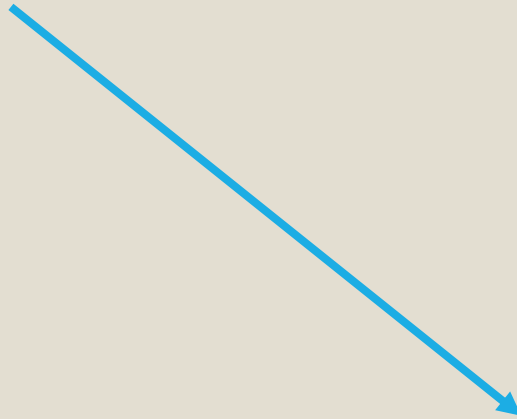
DISABILITY



Multi-dimensional Poverty Index (MPI)

FINANCIALISATION OF  
NATURAL RESOURCES

GLOBAL COMPETITION FOR  
NATURAL RESOURCES



Not only **Economic Commodity**,  
Natural Resources Have and Will Become  
**Financial Commodity** and  
**Political Commodity**

Security of Natural  
Resources

```
graph TD; A[Security of Natural Resources] --- B[Free Trade]; A --- C[Self Sufficiency];
```

Free Trade

Self  
Sufficiency

OR, a Combination of the Two

# **Some Conditions of Natural Resources in CLMV**

# Poverty

Countries	Multidimensional Poverty Index	Year
<b>CLMV</b>		
Cambodia	0.251	2005
Laos	0.267	2006
Myanmar	0.154	2000
Viet Nam	0.084	2002
<b>Other ASEAN Countries</b>		
Brunei	*	
Indonesia	0.095	2007
Malaysia	*	
Philippines	0.064	2008
Thailand	0.006	2005
Singapore	*	

# Degree of Sustainability

Countries	Adjusted Net Saving (% of GNI) 2005-2009	Ecological Footprint (hectares per capita) 2007	Environmental Performance Index (0-100) 2010
<b>CLMV</b>			
Cambodia	13.0	1.0	41.7
Laos	17.8	1.3	59.6
Myanmar	-29.2	1.8	51.3
Viet Nam	16.6	1.4	59.0
<b>Other ASEAN Countries</b>			
Brunei	-1.8	*	60.8
Indonesia	11.0	1.2	44.6
Malaysia	15.4	4.9	65.0
Philippines	28.0	1.3	65.7
Thailand	20.5	2.4	62.2
Singapore	33.0	5.3	69.6

Source: UNDP (2011)

# Primary Energy Supply, CO2 and GHG

	Primary Energy Supply		Per Capita Emissions	
	Fossil Fuels (% of total)	Renewables (% of total)	Carbon Dioxide (tonnes)	GHG (tonnes of carbon dioxide equivalent)
<b>CLMV</b>				
Cambodia	29.7	69.7	0.3	1.9
Laos	*	*	0.3	*
Myanmar	31.0	69.0	0.3	2.2
Viet Nam	54.0	45.6	1.5	1.3
<b>Other ASEAN Countries</b>				
Brunei	100.0	0.0	27.0	17.9
Indonesia	65.6	34.4	1.8	1.5
Malaysia	95.1	5.0	7.7	2.4
Philippines	56.9	43.1	0.9	0.8
Thailand	80.6	19.3	4.3	1.6
Singapore	100.0	0.0	7.0	1.4

Source: UNDP (2011)

## Natural Resources Depletion and Biodiversity

	Natural resources depletion (% of GNI)	Fresh water withdrawal (% of total renewable water resources)	Forest area (% of land area)	Change in forest area (%)	Endangered species (% of all species)
<b>CLMV</b>					
Cambodia	0.2	0.5	58.6	-20.0	13
Laos	-	-	68.9	-8.1	9
Myanmar	-	-	49.6	-17.4	8
Viet Nam	7.2	9.3	43.6	44.3	12
<b>Other ASEAN Countries</b>					
Brunei	-	-	72.8	-7.1	9
Indonesia	6.5	-	52.9	-19.2	16
Malaysia	7.9	-	62.8	-7.8	18
Philippines	1.0	17.0	25.3	15.0	19
Thailand	3.2	13.1	37.1	-3.1	14
Singapore	-	-	3.3	0.0	17

Source: UNDP (2011)



# Effects of Pollution on Human Development

Countries	DEATH DUE TO (per million people)			POPULATION LIVING ON DEGRADED LAND (%)
	Water Pollution	Indoor Air Pollution	Outdoor Air Pollution	
<b>CLMV</b>				
Cambodia	826	500	23	39.3
Laos PDR	406	459	<1	4.1
Myanmar	432	393	96	19.2
Vietnam	72	289	81	8
<b>Other ASEAN Countries</b>				
Brunei	.	.	.	.
Indonesia	141	202	144	3.1
Malaysia	35	<1	23	1.2
Philippines	182	86	54	2.2
Thailand	121	159	61	17
Singapore	.....	....	264	.....

Source: UNDP (2011)

Demographic  
Situation in  
CLMV

The diagram consists of a black rectangular background. Inside this background is a light blue rounded rectangle with a thin red border. This blue rectangle is divided into two equal halves by a vertical red line. The left half contains the text 'Demographic Situation in CLMV' and the right half contains the text 'Population as Market and Production Base'. Two blue curved arrows are positioned around the blue rectangle: one at the top pointing from left to right, and one at the bottom pointing from right to left, indicating a reciprocal relationship between the two halves.

Population  
as Market  
and  
Production  
Base

## Vital Statistics in ASEAN

Countries	Total Fertility	Life Expectancy at Birth
CLMV		
Cambodia	2.4	63.1
Lao PDR	2.5	67.5
Myanmar	1.9	65.2
Vietnam	1.8	75.2
Other ASEAN Countries		
Brunei	2.0	78.0
Indonesia	2.4	71.0
Malaysia	2.6	74.2
Philippines	3.1	68.7
Thailand	1.5	74.1
Singapore	1.4	81.1

POPULATION AS  
MARKET



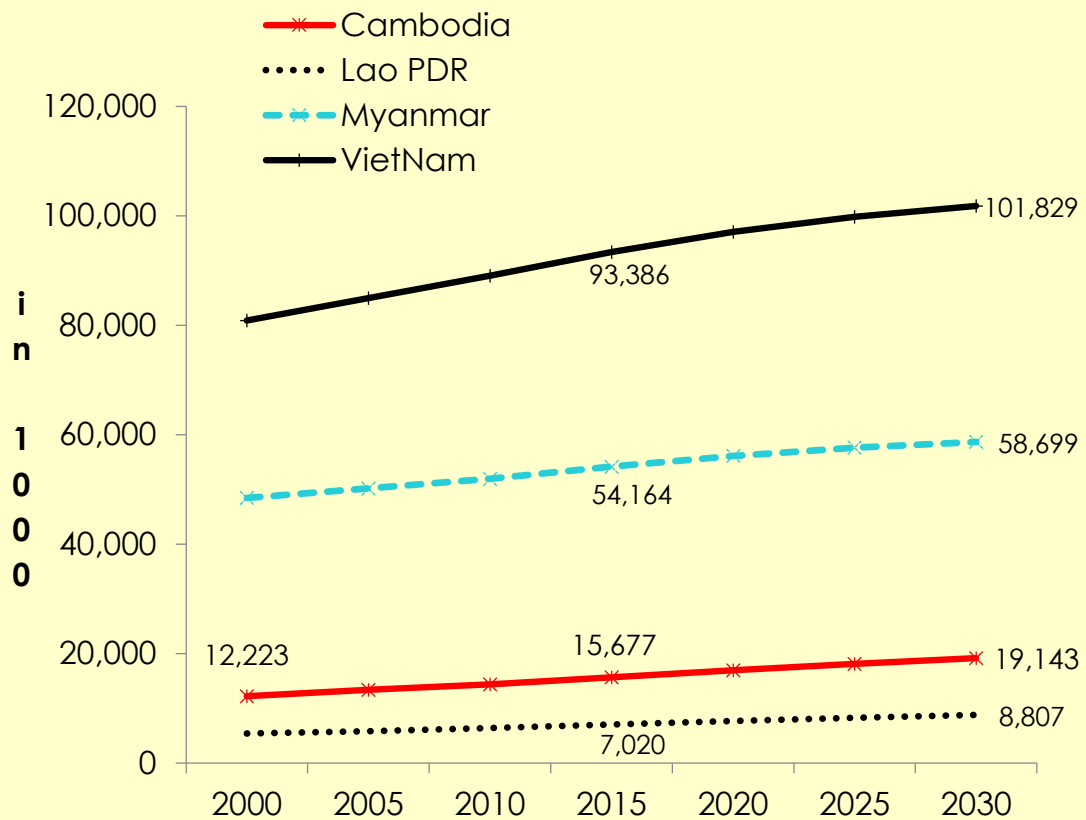
SUSTAINABLE  
DEVELOPMENT



POPULATION AS  
PRODUCTION BASE



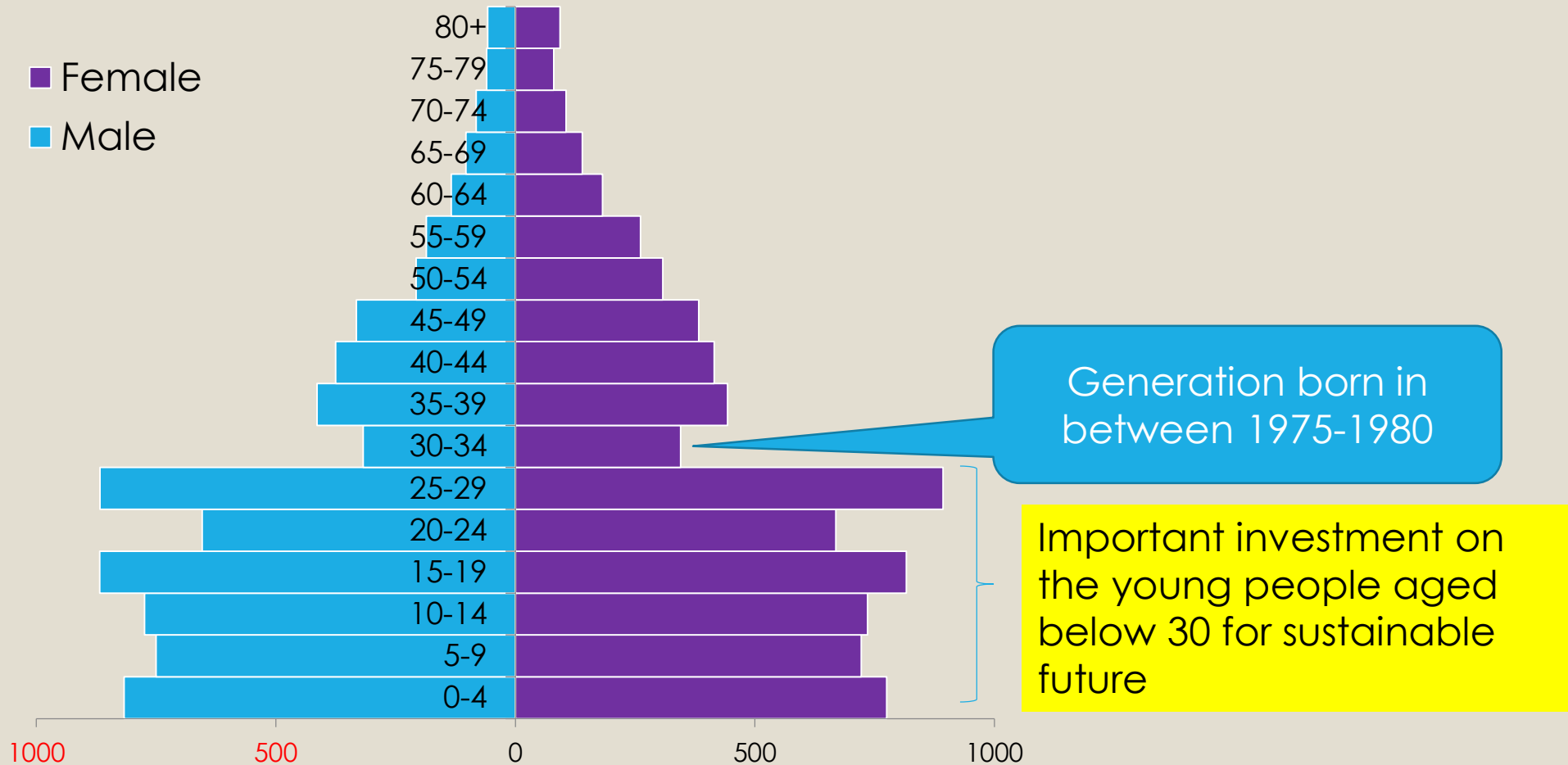
# Population: CLMV, 2000-2030



Source: Compiled and drawn from United Nations (2013)

- There will be about 3.7 million additional population of Cambodia by 2030.
- By 2030, Viet Nam will possibly pass 100 million population.
- Lao PDR will remain the smallest population

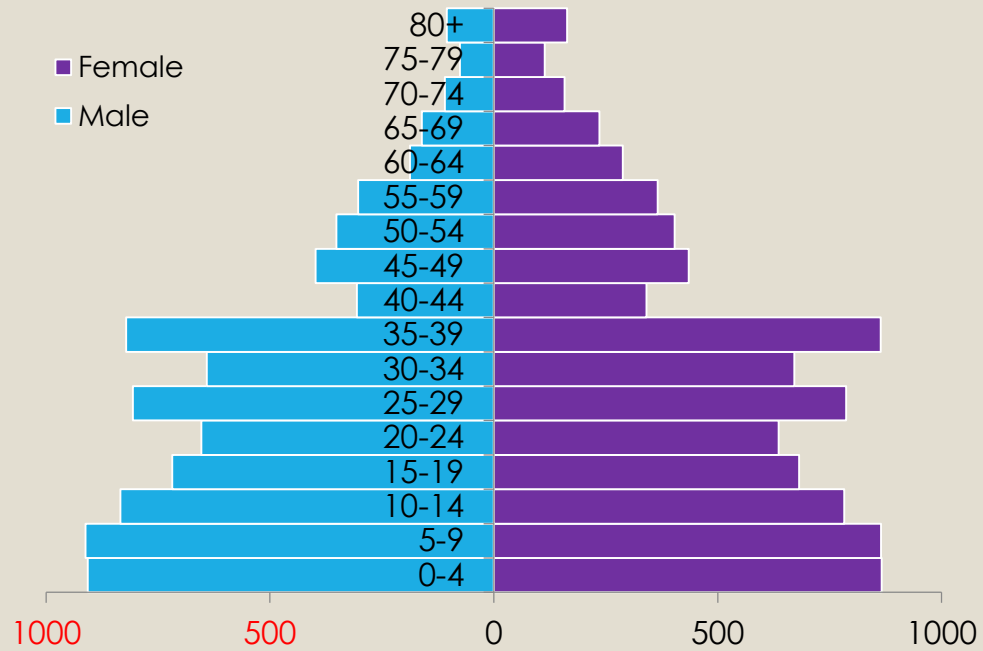
# Age Structure of Cambodia's Population in 2010



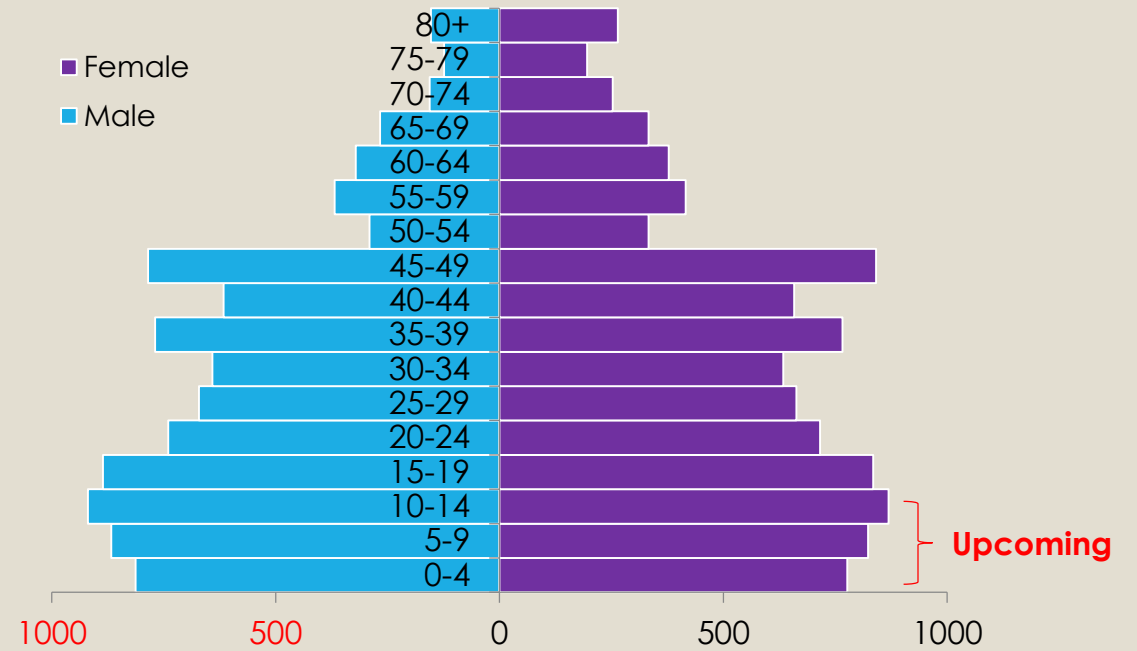
Source: Compiled and drawn from United Nations (2013)

# Future Cambodia

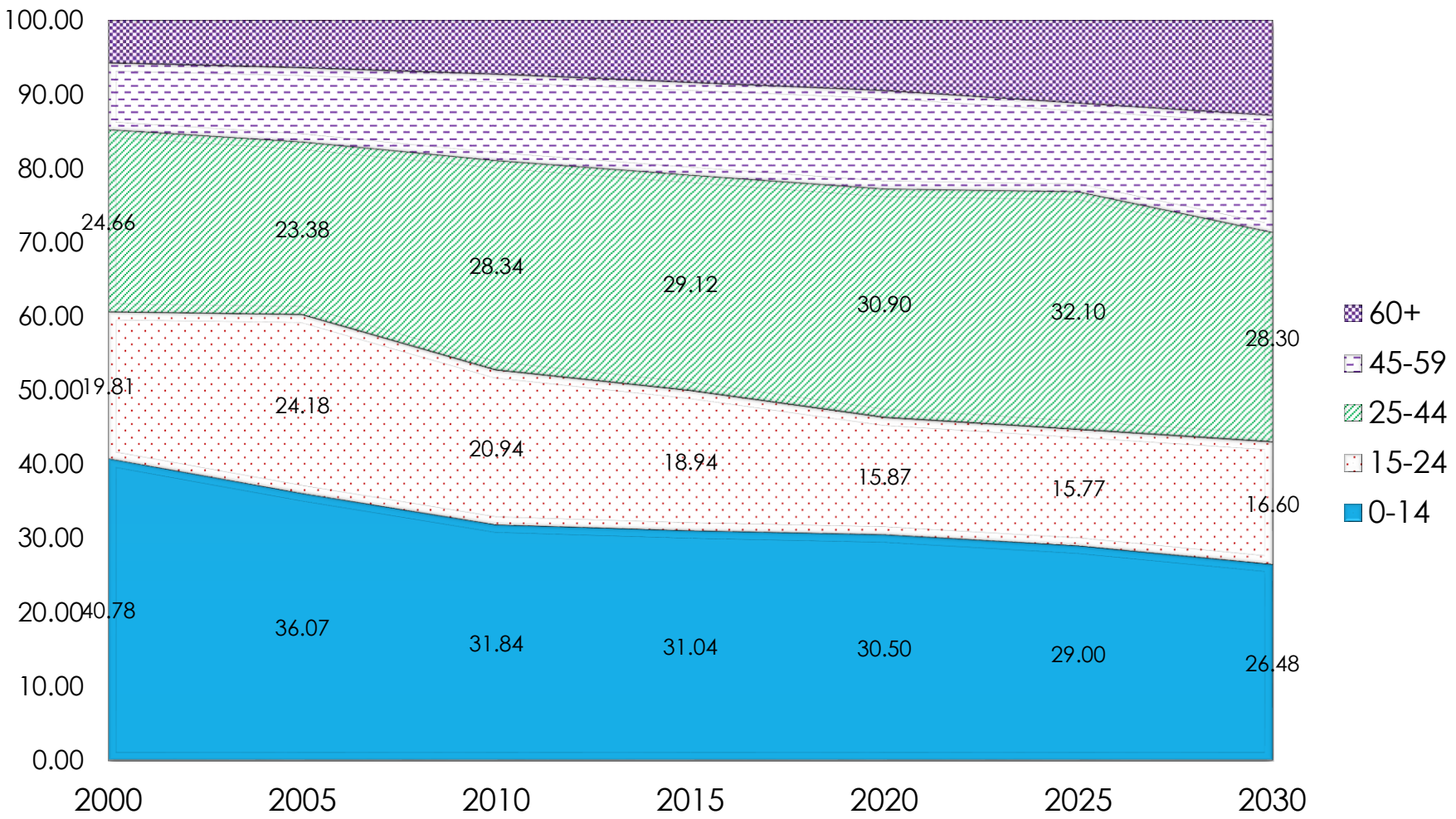
2020



2030



## Age Structural Changes: Cambodia, 2000-2030



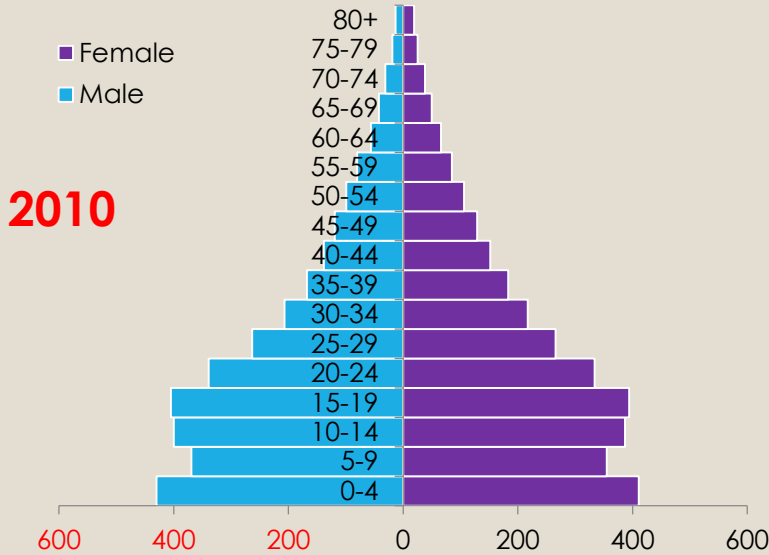
Decreasing young people vs Increasing older people

In 2000  
Young people below 25 years old was 60.1%

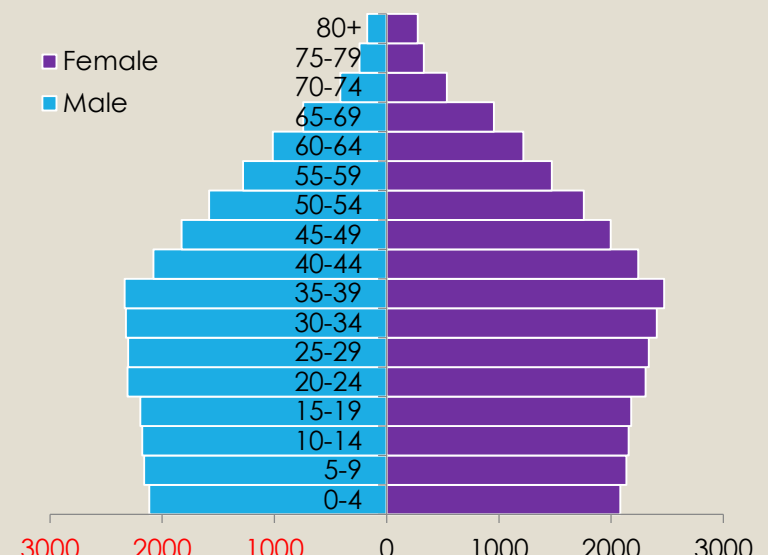
In 2030  
People aged above 25 years old was 56.9%



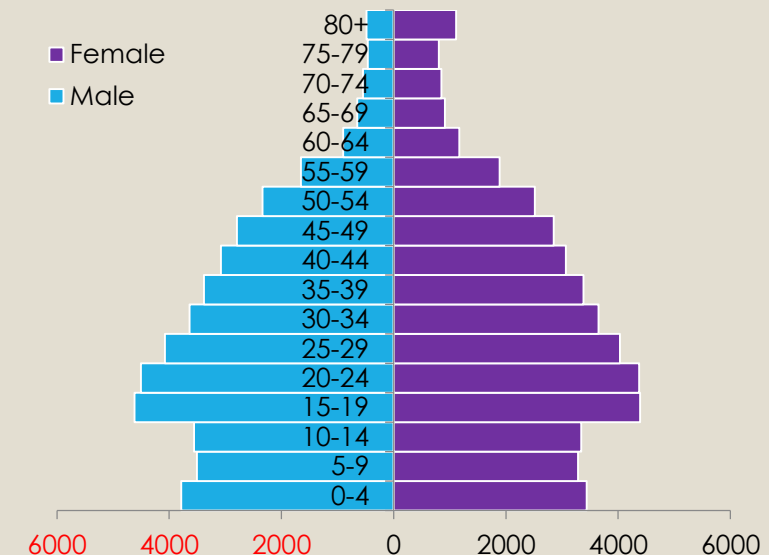
# Lao PDR, Myanmar, and Viet Nam Population: 2010 & 2030



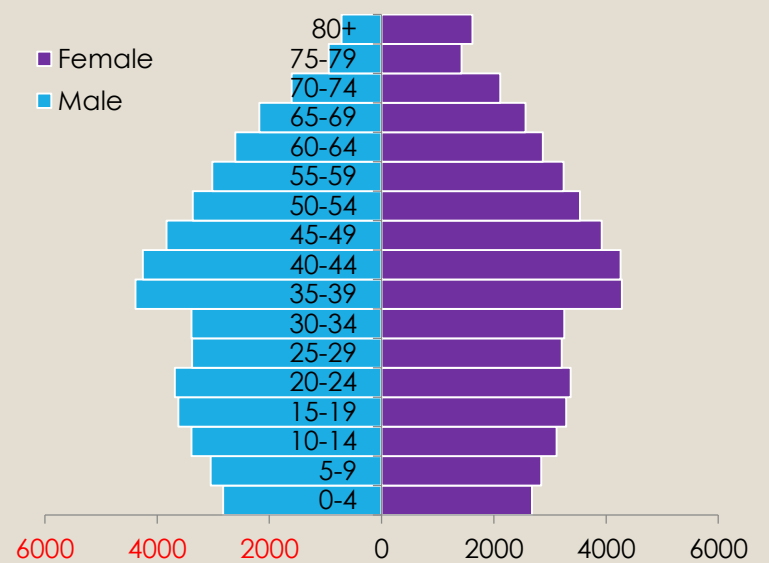
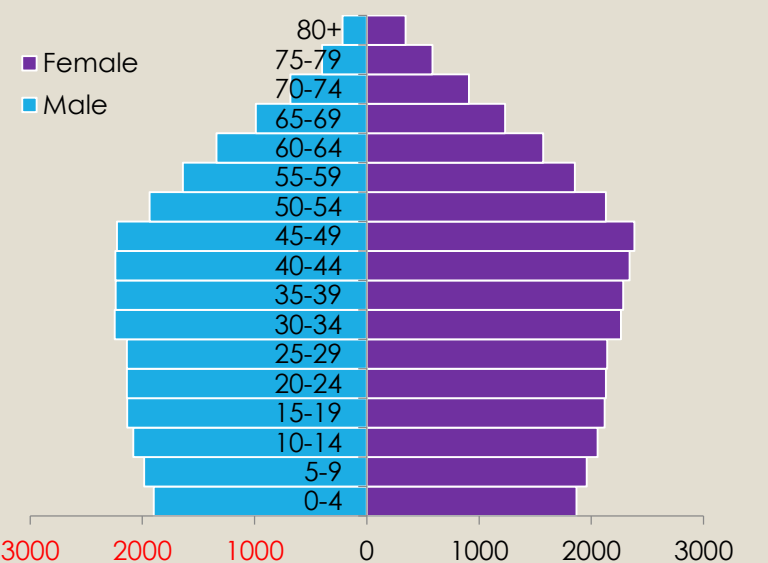
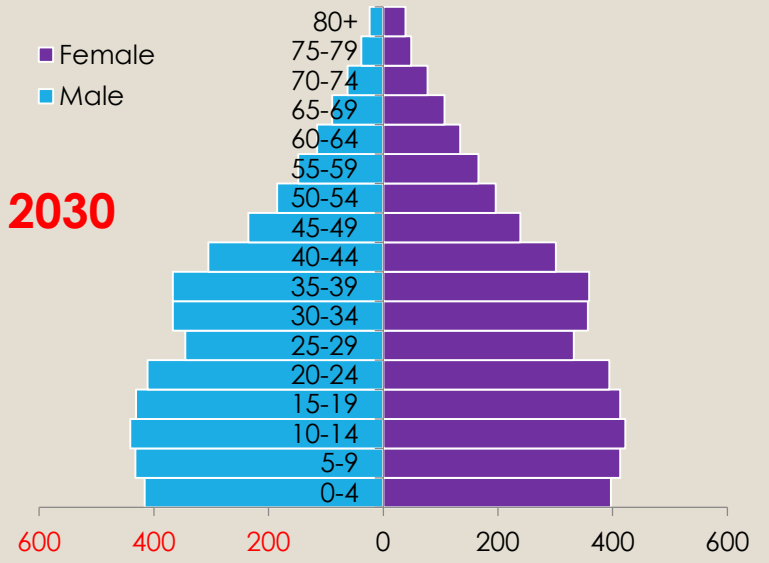
**Lao PDR**



**Myanmar**



**Viet Nam**



Source: Compiled and drawn from United Nations (2013)



CONCLUDING  
REMARKS

# Depend More on Long-term Domestic Capacity

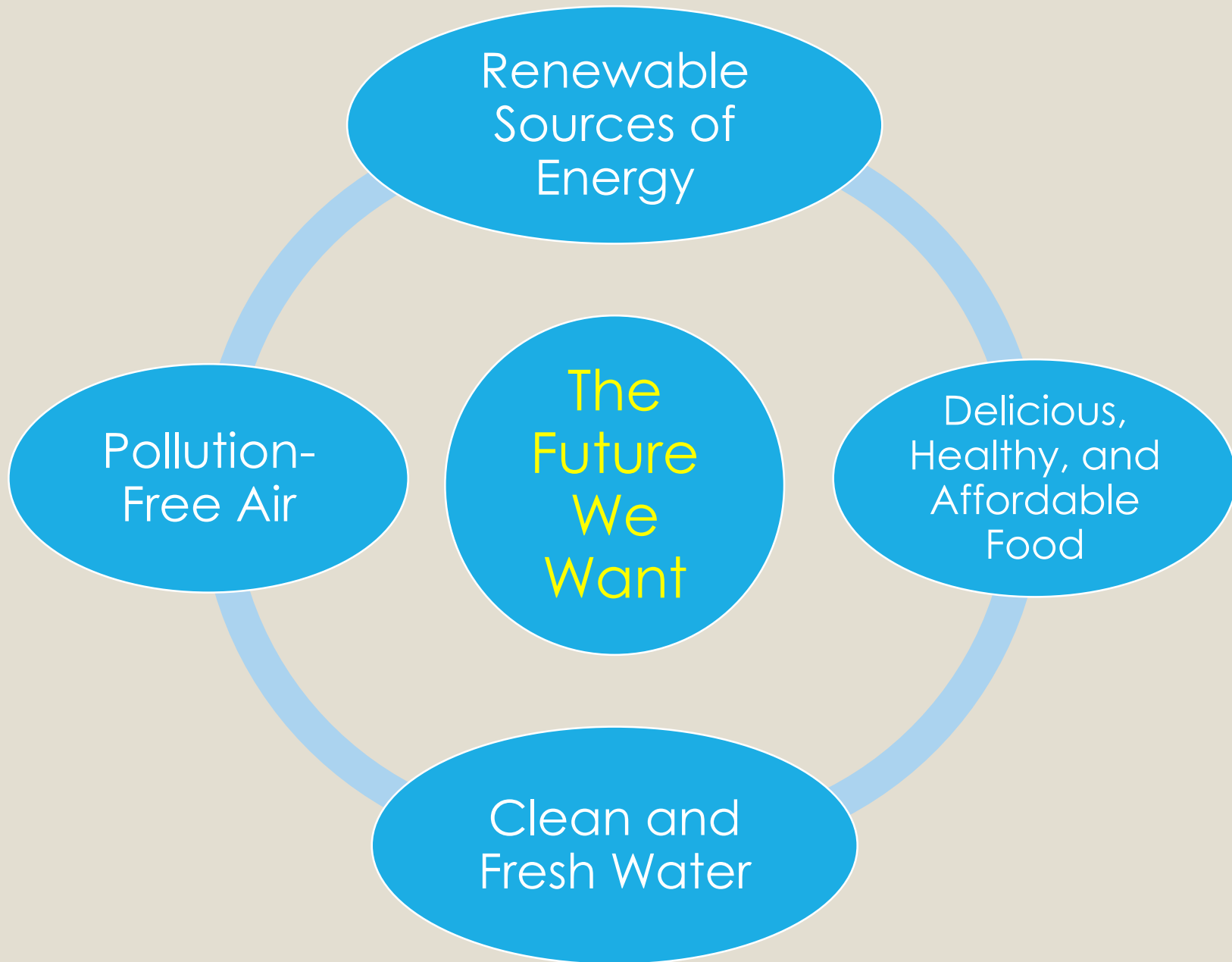
- Free Trade is not a taboo.
- Free Trade should be used as long as a country cannot produce sufficiently from its natural resources.
- Because of the nature of natural resources as financial and political commodities, security in natural resources is too risky to depend much on international market.
- The supply side of a country should be enhanced.

# Natural Resources for Sustainable Development

- Natural resources should not be exploited to promote high GDP growth.
- The utilization of natural resources should be promoted to obtain sustainable development by reducing capability deprivation; producing energy from renewable resources; supplying healthy, delicious and cheap food; providing clean water and sanitation; and creating pollution-free air.

# Promote Trendy and “Cool” Behaviour

- Behaviour in line with sustainable development should be marketed as a new trendy and “cool” behaviour.
- By doing so, the population, as consumers, will demand only goods and services that are sustainable. Producers will then produce following the consumers’ demand
- From the business point of view, this behaviour can be a new, promising, market;
- and the business will be racing to provide sustainable goods and services



Renewable  
Sources of  
Energy

Pollution-  
Free Air

The  
Future  
We  
Want

Delicious,  
Healthy, and  
Affordable  
Food

Clean and  
Fresh Water

# Population as Market and Production Base

- Changing the supply and demand of natural resources to produce sustainable development needs a better understanding on the size and composition of population in each a country. A different country may have different number and quality of consumers of natural resources and potential producers of services from natural resources.
- Marketing the behaviour of “sustainable development” depends much on the understanding on population and its dynamics.
- Cambodia and Lao: a young “productive” population
- Myanmar and Vietnam: towards an old population
- The number of population will keep growing in each country

THANK YOU VERY MUCH