

# **Special Economic Zones and Economic Corridors in the Mekong Region: Focusing on Thailand**

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# Today's Presentation

- Before “Zone System, 1987” in Thailand
- Zone System for Investment since 1987
  - Tax holiday Policies based on “Zone System” in Thailand
  - Provinces and Industrial sectors which succeeded in attracting FDI
    - Map Tha Phut: Petrochemical (gas-chemical) industries
    - Eastern Sea Board and Ayutthaya: Automotive and its supporting Industries
    - Chiang Mai & Lam Phun: Precision, semiconductors and jewelry processing
    - High value-added agricultural products
- Greater Mekong Subregion Economic Cooperation
- New Investment Policies (Post-Zone System)
- Industrial Cluster Policies (Post-Zone System)
- Comparing SEZ Policies and Evaluation of Industrial Clusters

# **Before Zone System, 1987 in Thailand**

# Regulation on Foreign Firm (1972) under Import Substitution Industrialization

- Industries A (Rice Crop, Accounting, etc.)  
to be imposed to localize until local majority
- Industries B (Rice Mill, Wood Curving, etc.)  
only existing foreign firms to keep majority
- Industries C (Others)  
to need permission for foreign firms majority



In 1983, 100 foreign capital with condition that  
100% of products are exported (1983)

**But, Foreign Direct Investment was still regulated**

# Deregulation of Foreign Capital in 1986

- 100% of Foreign Capital is permitted
  - if 80% of products are exported
  - 50% of products are exported in 1986 and in 1987
- Extension of Tax Exemption Period
- Import Duty Exemption of
  - production goods for export products
  - raw materials for export products
  - + spare parts for machines
- Minimum capital — Bh. 5 million → 1 million

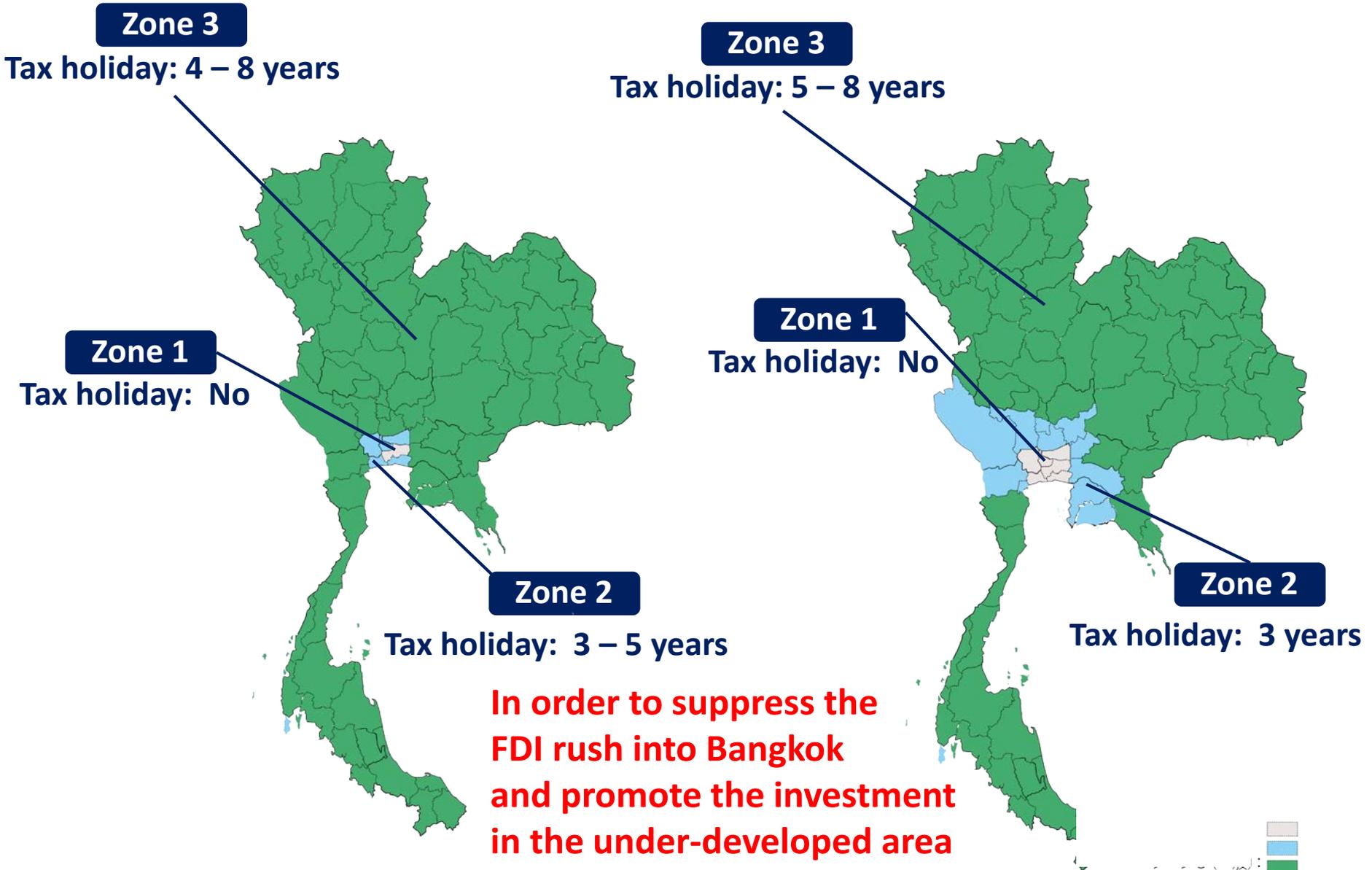


**Rush of FDI in Bangkok and Surrounding Provinces**

# **Zone System for Investment**

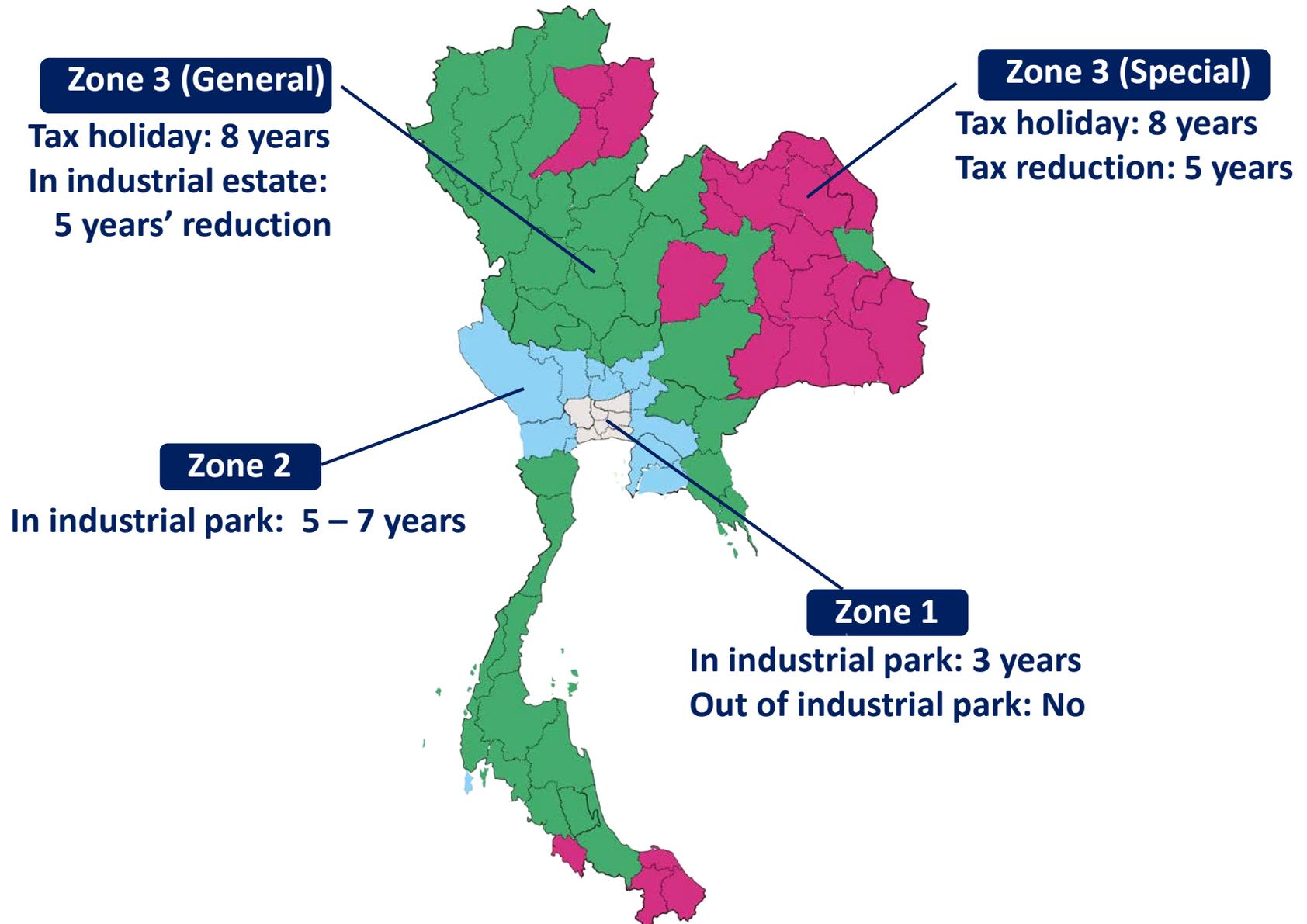
**In 1987**

**In 1988**



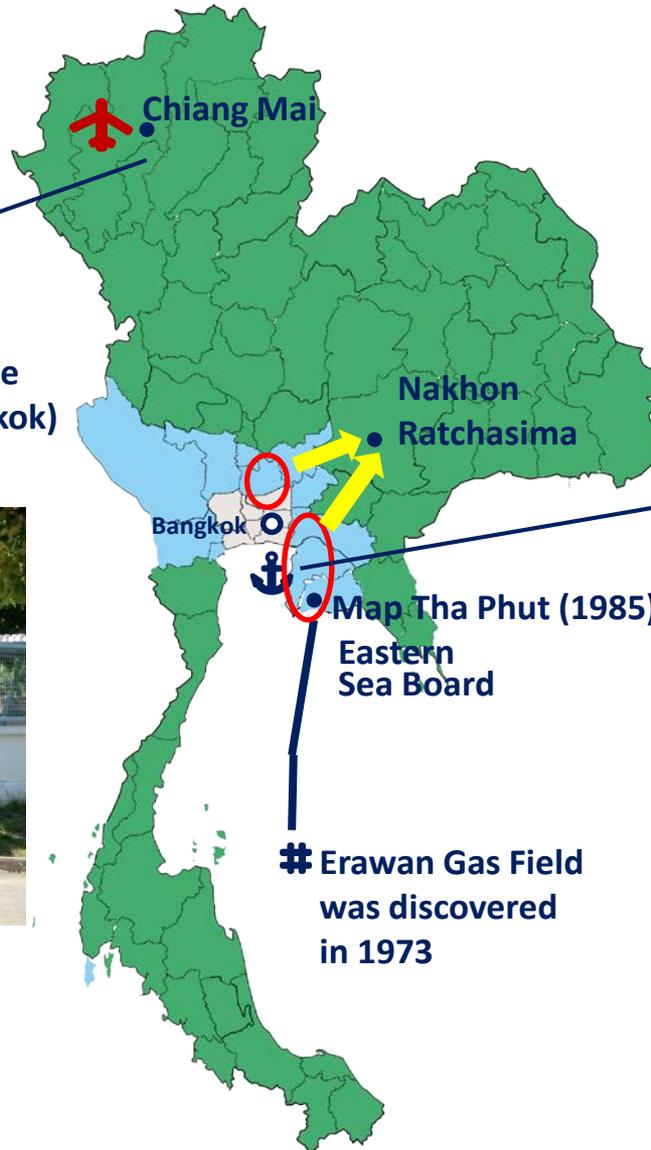
Source: Created by the presenter based on JETRO (1988) and JETRO (1999).

# between 2000 -2014



Source: Created by the presenter based on Website of ASEAN Center, Japan.

# Provinces Which Attracted FDI



Lamphun Province  
Northern Industrial Estate  
(689km away from Bangkok)

Precision Industry



Automotive Industry



1991  
Laem Chabang Port

Petrochemical Industry

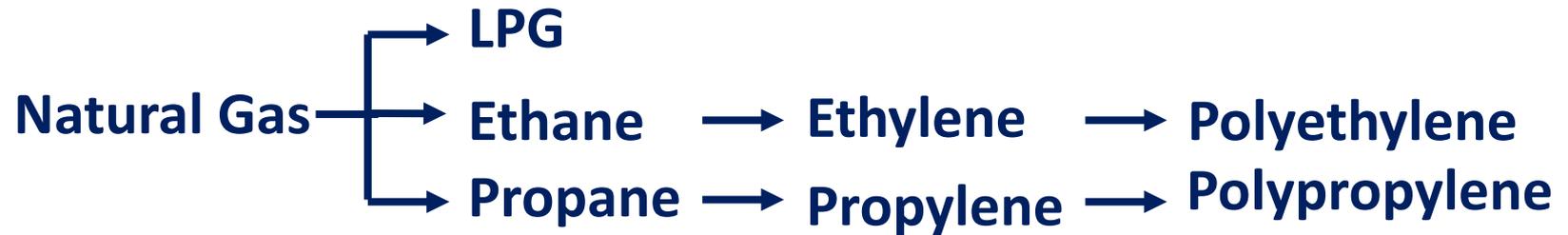


20 march 2006

# Petrochemical Industries

**1973** Erawan gas field was discovered

**1985** Ethylene Plant



**1990s** National Petrochemical Complex 2  
(based on imported naphtha)

**2000s** National Petrochemical Complex 3

**2007** Inhabitants around complex filed complaints on pollutions to Administrative Court

**2009** Administrative court ordered to stop 76 investment projects

**2010** Most of the Projects were restarted

# Contrasting Choice of Da Nang City



Nghi Son Refinery and petrochemical IIC

Da Nang City: in 2008  
Declaration of Environmental City



Formosa  
Ha Tinh Steel

Dung Quat Petroleum Refinery



POSCO

# Supporting Industries for Automotive

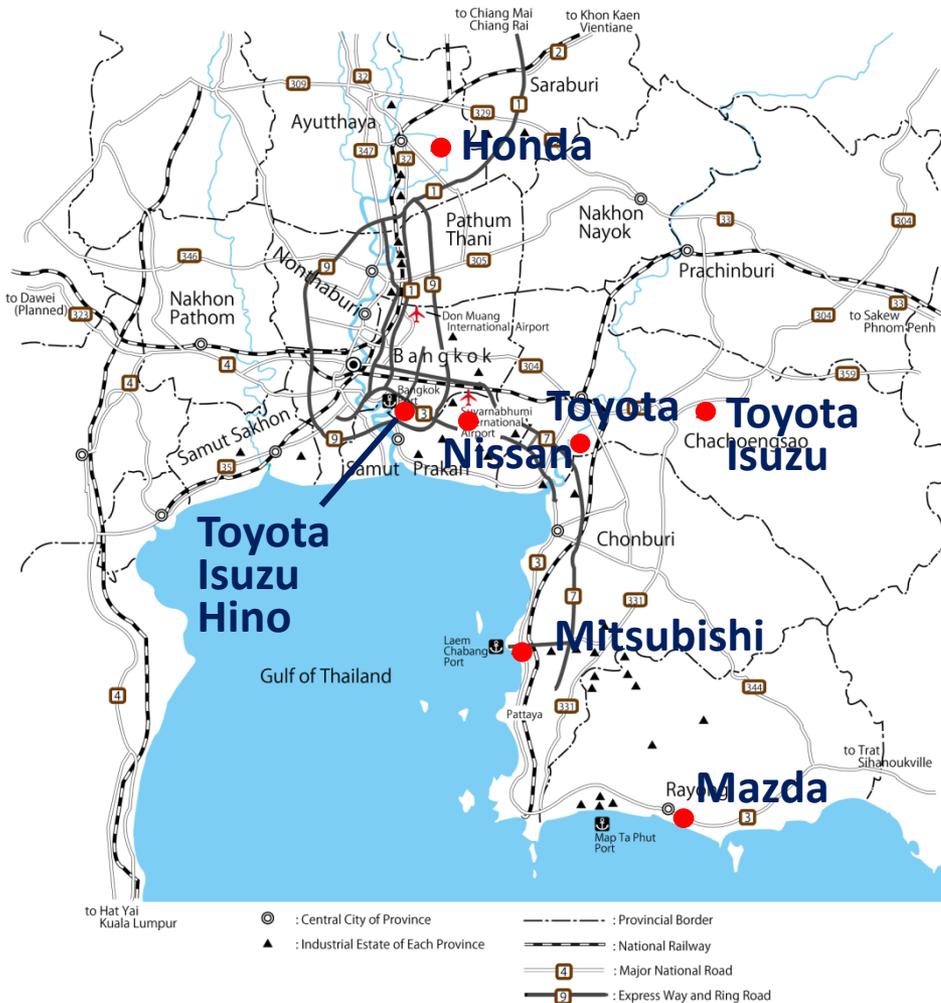
Lift of Regulation on Establishment of Automobile Assembly (1993)

8 years corporate income tax exemption even in Zone 1

Supporting Industries	Period	Supporting Industries	Period
1) Molding and Die-casting	1993-1999	13) Nickel-Cadmium (NI-CD) rechargeable battery	1994-1999
2) Jig	1993-1999		
3) Forging (Hammering)	1993-1999	14) Engineering plastic parts & components	1994-1999
4) Foundry	1993-1999		
5) Machine tool	1994-1999	15) Machine Producer	1997-1999
6) Cutting tool	1994-1999	16) Anti-lock brake system (ABS) components	1997-1999
7) Grinding tool	1994-1999		
8) Powdered metallurgy	1994-1999	17) Electronic-controlled fuel injection system	1997-1999
9) Surface preparation	1994-1999		
10) Heat treatment	1994-1999	18) Foundation for catalytic converter	1997-1999
11) Machining Center	1994-1999		
12) Connector	1994-1999	19) Industrial measurement machine	1997-1999

Source: JETRO (1995), JETRO (1997) and JETRO (1998).

# Current Automotive Industries in Thailand



Source: Produced by Presenter based on Kasuga (2014).

## • Production of automobiles in 2016

	Sales	Production
• Toyota	244,317	
• Isuzu	143,170	
• Honda	107,342	
• Mitsubishi	55,409	
• Nissan	42,677	
• Others	175,873	
<b>Total</b>	<b>768,788</b>	<b>1,944,417</b>
• Production in 2012 was 2,453,717 (The exports were 1,026,671, because of “First Car Policy”)		

## • Number of Suppliers

• Tier 1 + Tier 2: Foreign	299
Joint Venture	190
Local	146
Total	635
• Tier 3	More than 1,700

# Automotive Production in the World

	2015		2016	
	Production	Sales	Production	Sales
1. China	24,567,250	24,661,602	28,118,794	28,028,175
2. U.S.	12,105,988	17,845,624	12,198,137	17,865,773
3. Japan	9,278,238	5,046,510	9,204,590	4,970,260
4. Germany	6,033,364	3,539,825	6,062,562	3,708,867
<b>5. India</b>	<b>4,160,585</b>	<b>3,424,836</b>	<b>4,488,965</b>	<b>3,669,227</b>
6. South Korea	4,555,957	1,833,786	4,228,509	1,823,041
7. Mexico	3,565,218	1,389,474	3,597,462	1,647,723
8. Spain	2,733,201	1,277,059	2,885,922	1,347,344
9. Canada	2,283,307	1,939,517	2,370,271	1,983,745
10. Brazil	2,429,421	2,568,976	2,156,356	2,050,321
11. France	1,972,000	2,345,092	2,082,000	2,478,472
<b>12. Thailand</b>	<b>1,909,398</b>	<b>799,632</b>	<b>1,944,417</b>	<b>768,788</b>
13. U.K.	1,682,156	3,061,406	1,816,622	3,123,755
14. Turkey	1,358,796	1,011,194	1,485,927	1,007,857
15. Czech Republic	1,246,533	260,070	1,349,896	291,008

Source: International Organization of Motor Vehicle Manufacturing (OICA).

# Lamphun in Thailand

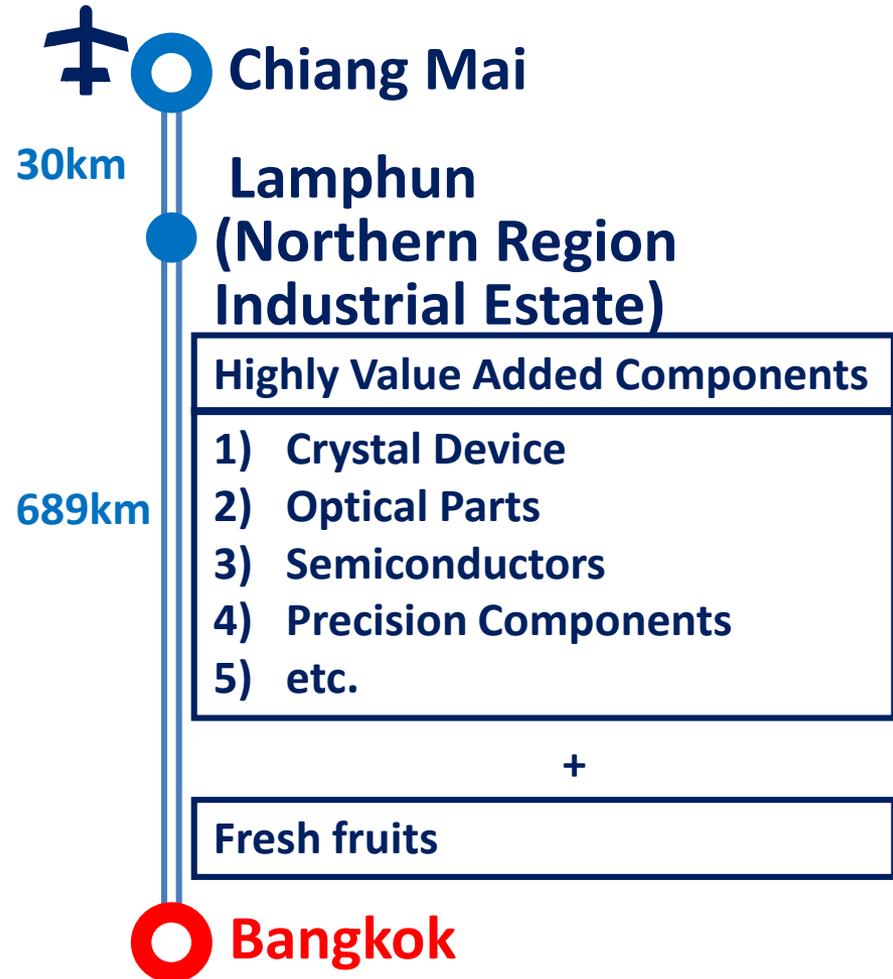
- **Chiang Mai**

- 1) Population: 1,728,242
- 2) Former capital of *Lanna* Kingdom from the 13<sup>th</sup>-18<sup>th</sup> C
- 3) Regarded as the second city in Thailand (the 5<sup>th</sup> largest )

- **Northern Region Industrial Estate (Lamphun)**

- **Choices for companies**

- a) air transport: good airport
- b) Well-paved road to Bangkok



# Northern Industrial Estate in Lamphun

	Thai	Japan	Swiss	France	USA	Taiwan	Others	J. V	Total
Electronics		14	2				1	6	23
Agro	6				1	1		2	10
Jewelry		1		1			1	3	6
Ornament	1	3					1		5
Cosmetics	2				1			1	4
Machinery			2					1	3
Motorcycle part		2							2
Other Manufac.	3	2						3	8
Services	2	1						1	4
<b>Total</b>	<b>14</b>	<b>23</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>17</b>	<b>65</b>

Source: Classified by the presenter with the material supplied by Northern Industrial Estate.

# Simple Formula

**Unit Price per weight**

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**Transportation Cost**

If it is higher,  
disadvantages can  
be reduced

Ex) Swiss Watch

**Transportation Cost**

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**Total Cost**

If it is Lower,  
disadvantages can  
be reduced

Ex) Swiss Watch

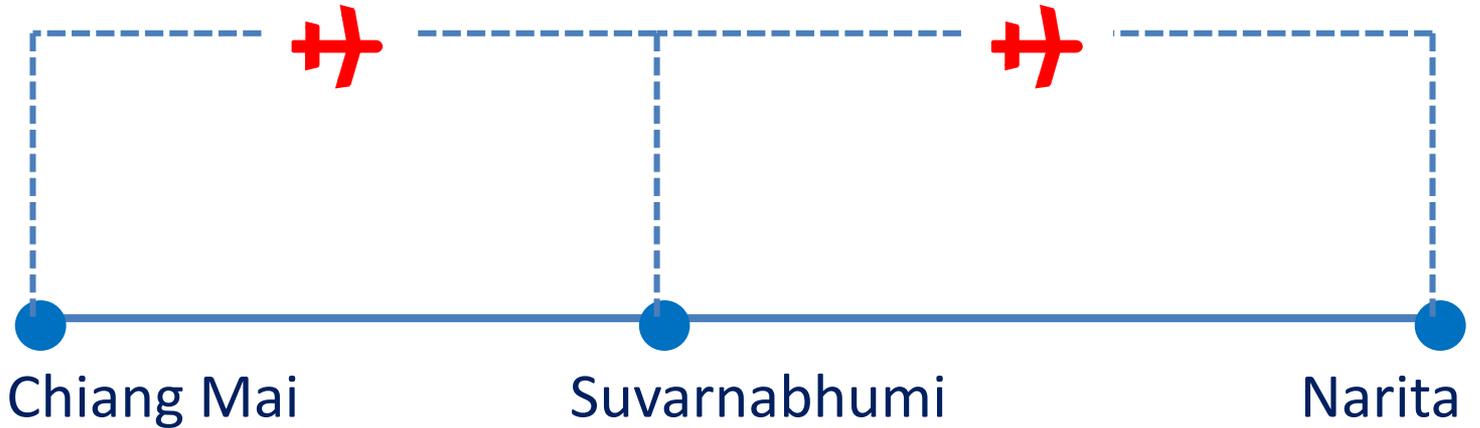
**OR**

# Truck or Air Cargo?

Less Competition

More Competition

15%



85%



# Climate Similar to Sub-tropical Area

- **Height above sea level**

Chiang Mai:

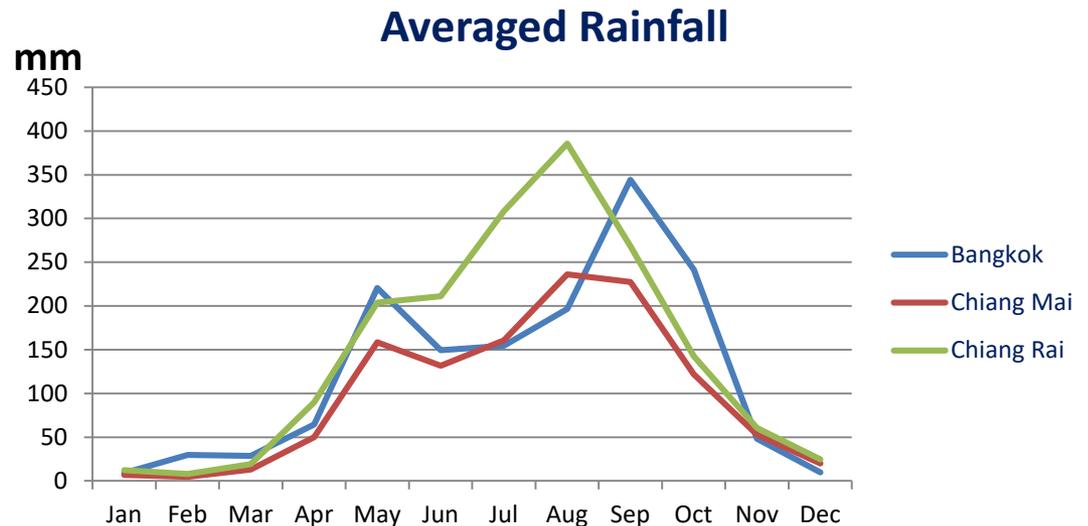
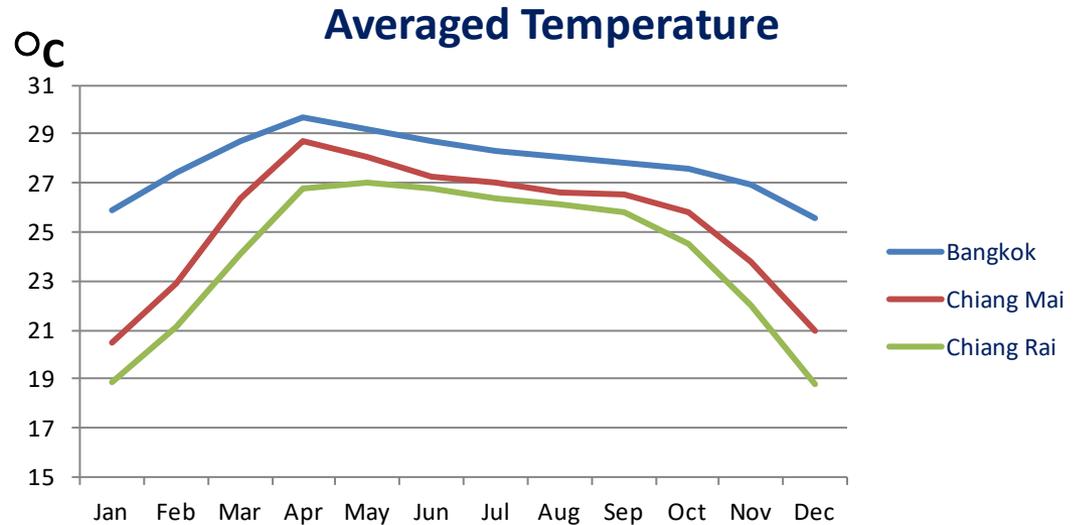
City: 300m

Highest: 2,565m

Chiang Rai

Average: 580m

Highest 1,389m



Source: Thai Meteorological Department and other materials.

# High-Value-added Agricultural Products

## <Examples>

- Doi Tung Coffee in Chiang Rai
- High land vegetables such as lettuce and carrot (Royal Project in Chiang Rai)
- Tea leaf plantation as well as barley and nutmeg in Chiang Rai (see photos on the left)
- Frozen vegetables in Chiang Mai and Chiang Rai
- Fruit and vegetable juice in Chiang Mai and Chiang Rai
- Cut flowers in Chiang Mai



Taken by Prof. Y. Yamada in Sep. 2013.



Taken by Prof. Y. Yamada in Sep. 2013.

# Larger Aircrafts Give More Opportunities

- **Space at Lower Deck**

Boeing 777: 264.9m<sup>3</sup>  
 A320: 37.5m<sup>3</sup> } 7 times

- **Thai Air (Bangkok <--> Chiang)**

Boeing 777-300: 5 round trips

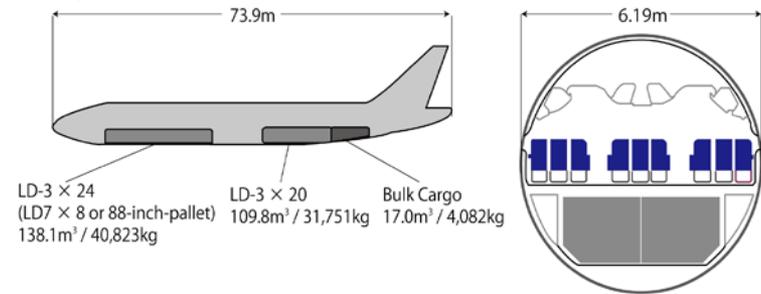
A300: 3 round trips

(but not enough be utilized)

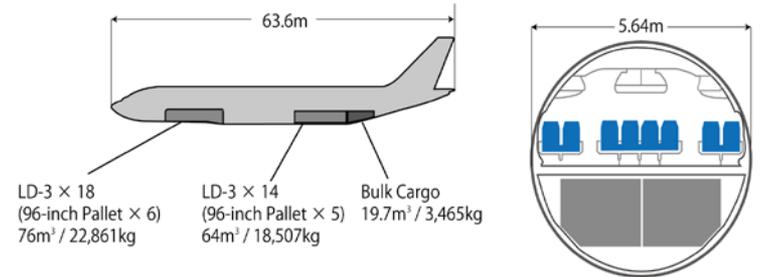
- **For larger air crafts**

Co-development of tourism

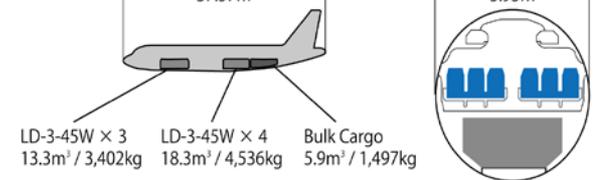
Boeing 777-300



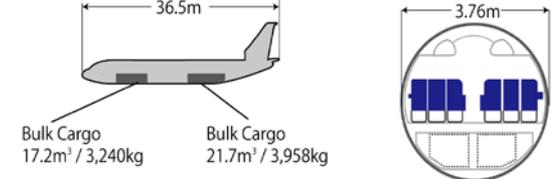
Airbus A330-300



Airbus A320



Boeing 737-400



Source: Ishida (2015).

# Availability of Industries with Conditions

## Access to port

- Heavy industries like petrochemical and/or steel industries
- Or development of coastal resorts and supporting fisheries are another choices

- All industries are available
- In Thailand, automotive electric, electronics industries are agglomerated
- Wages and land prices are likely to be higher

## Population

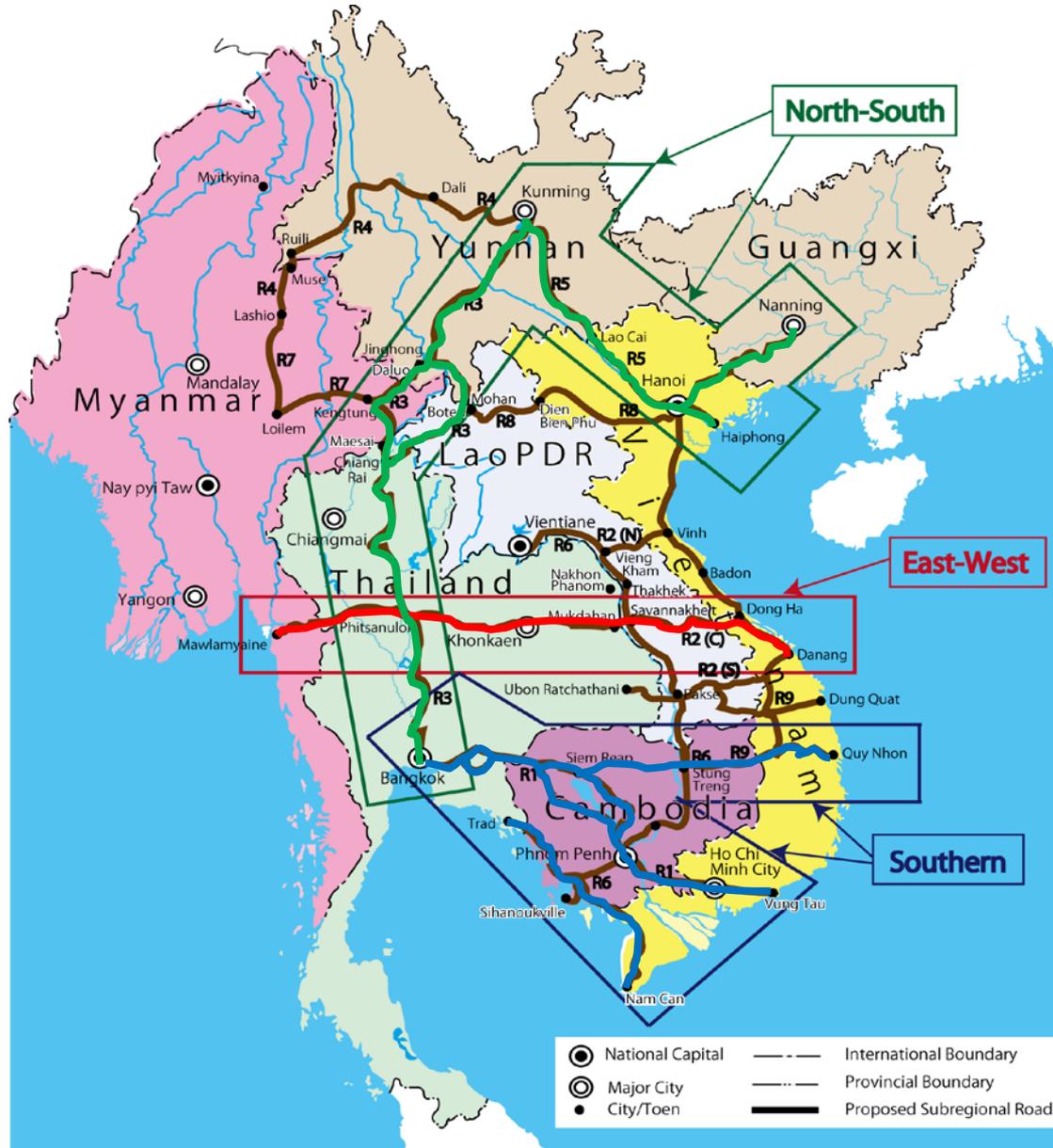
- Cement, rubber factories sugarcane factories
- Rice, maize, cassava, fruits, tea, coffee, beans, pepper, etc.

- Precision industries and semi-conductors
- Semi-tropical agricultural products in Thailand

## Inland area

# **Greater Mekong Subregion Economic Cooperation**

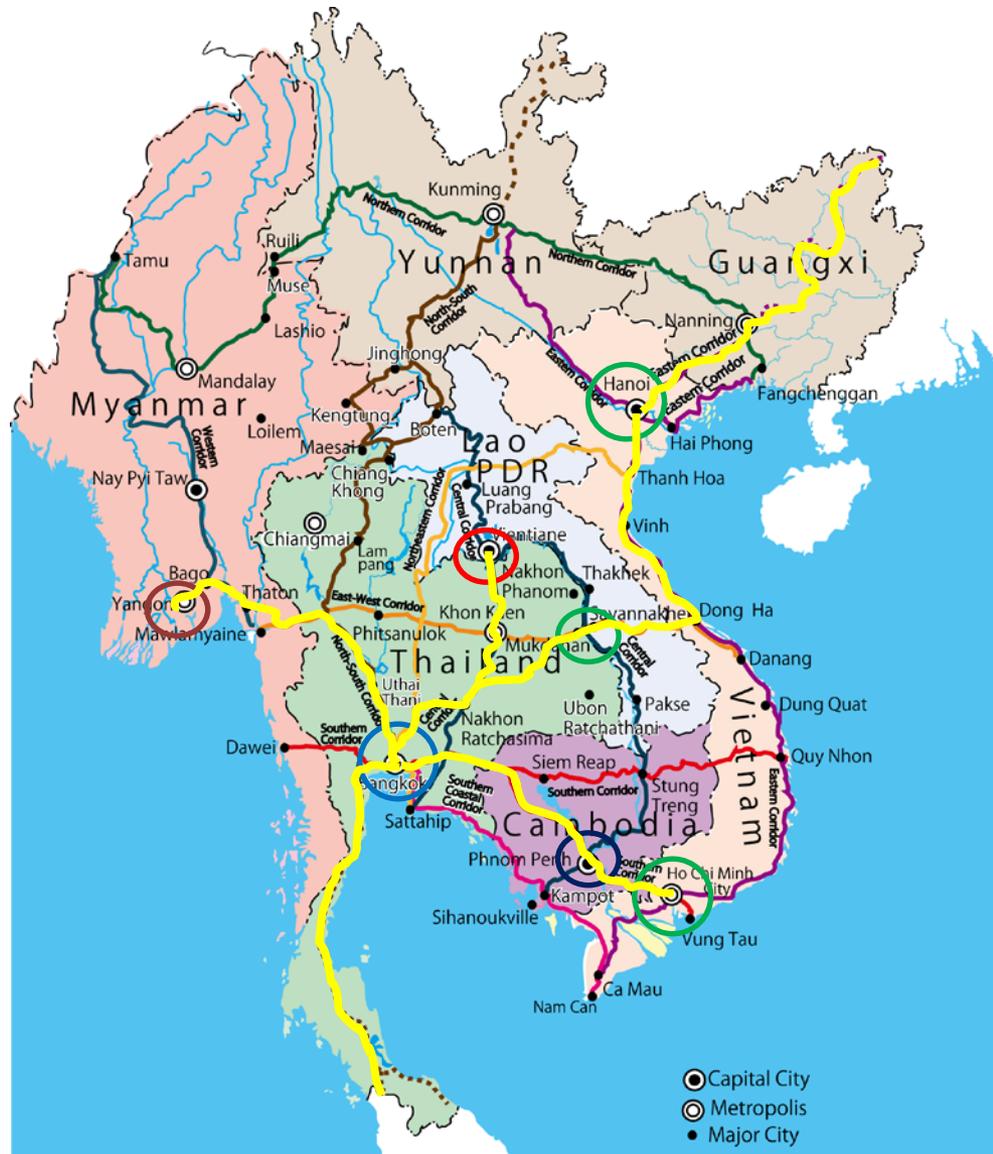
# Three Economic Corridors



Main components Economic corridors are cross-border transport Infrastructures !

Source: Created by the presenter in accordance with website of ADB in the past.

# GMS new corridors connect big cities

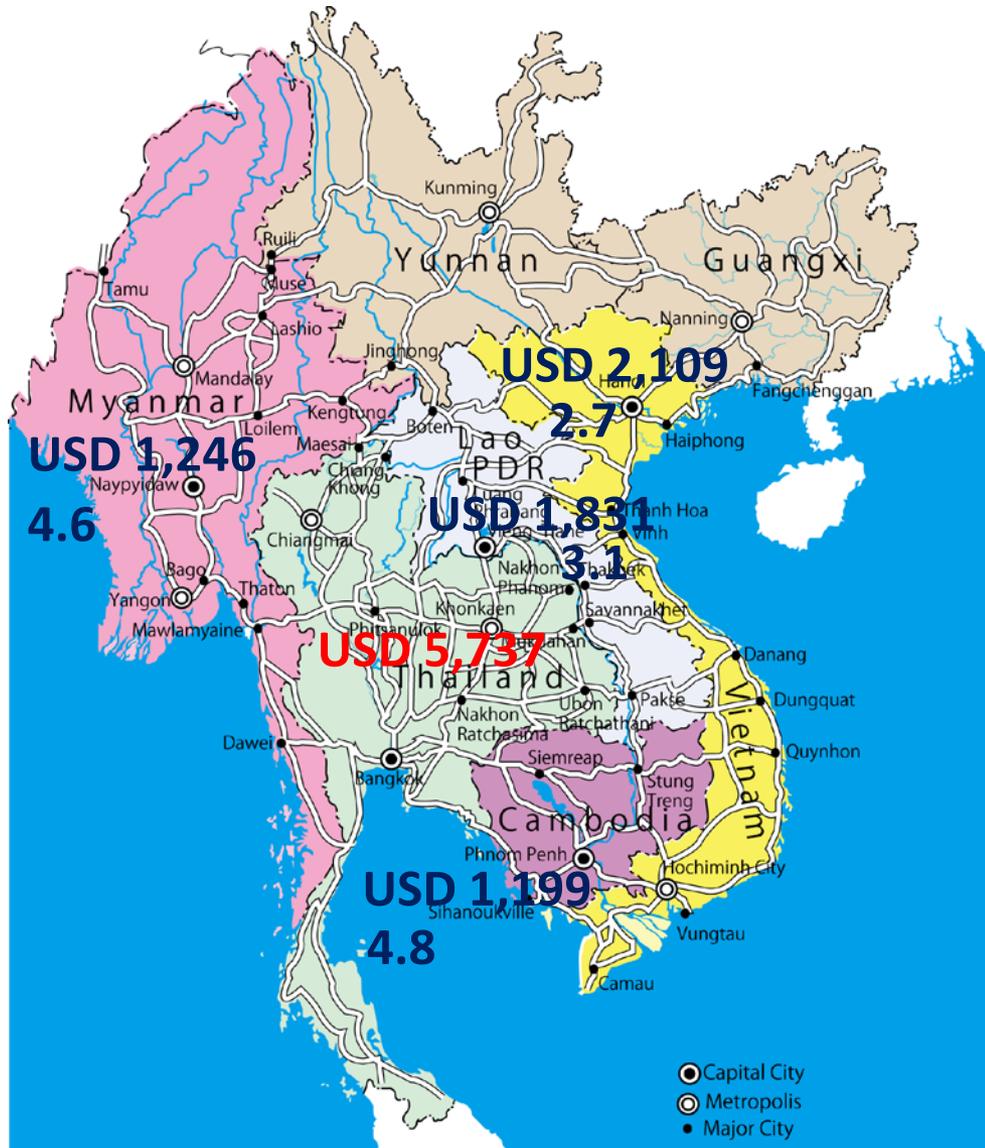


Big cities are connected by economic corridors !

Border areas are also developed !

Source: Created by the presenter in accordance with website of ADB in the past.

# GDP per Capita in Mekong Region



For Thai firms, there are incentives to move labor-intensive industries to CLMV countries

# Manufacturing Industries at Border Areas

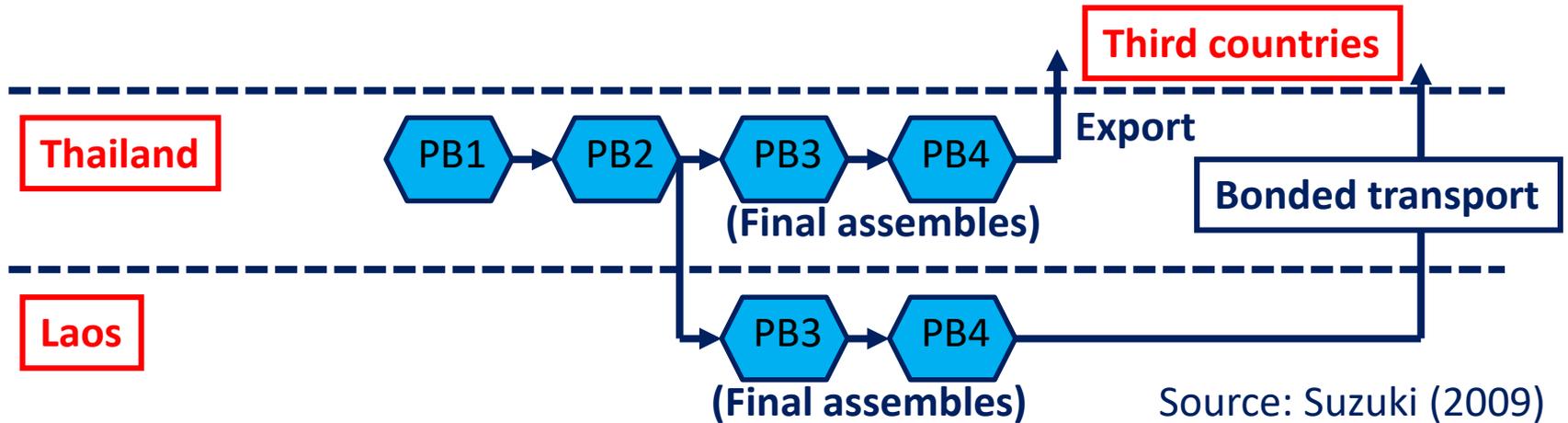
- Advantages of Lower Income Countries
    - ➔ Lower wage of labor
    - ➔ Generalize system of preferential tax
  - Advantages of Higher Income Countries
    - ➔ Better Electricity Infrastructure
    - ➔ Better Transport Infrastructure
  - Supporting Soft Policies
    - ➔ One Stop Service
    - ➔ Bonded cross-border customs clearance
    - ➔ Working visas of both countries for foreign managers
- Double Advantages**



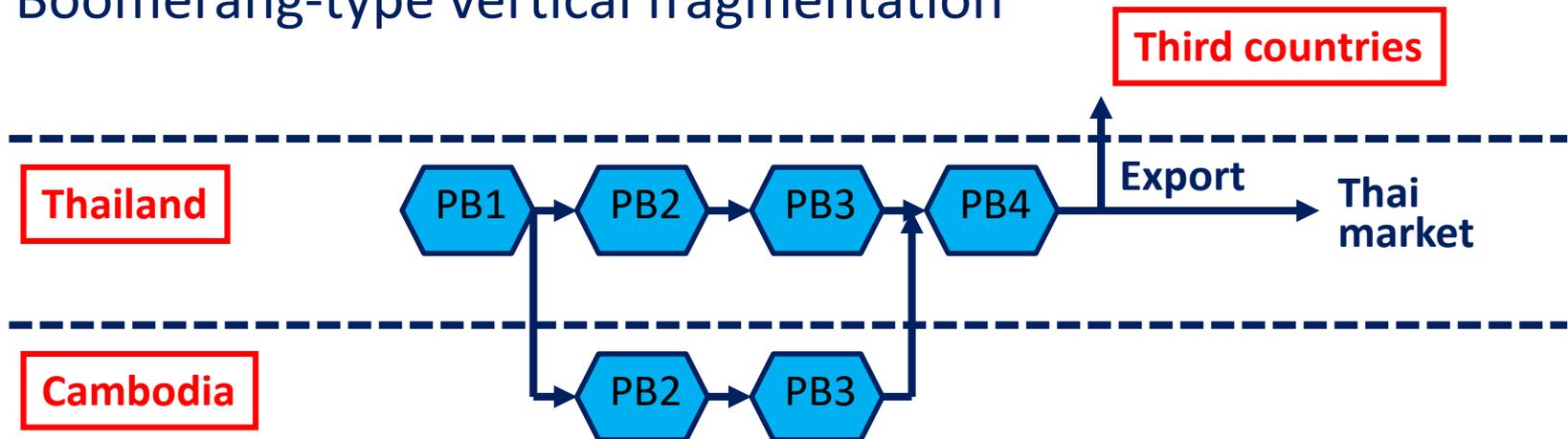
These policies are effective for remote areas along corridors

# Examples of “Thailand Plus One”

## 1. Vertical fragmentation between pre-and final- assemblies



## 2. Boomerang-type vertical fragmentation



Source: Suzuki (2014)

# Connecting mother plant & subsidiaries



Source: Created by the presenter in accordance with website of ADB in the past.

# **New Investment Policies**

# New Investment Policies

## ■ Investment Incentive Policies after Zone System

1 Jan. 2015 New Investment Policies

A1: Promote national competitiveness through **R&D, innovation, value creation** in the agricultural, industrial, and services sectors, SMEs, fair competition, and inclusive growth → **8 years exemption + 5 years reduction**

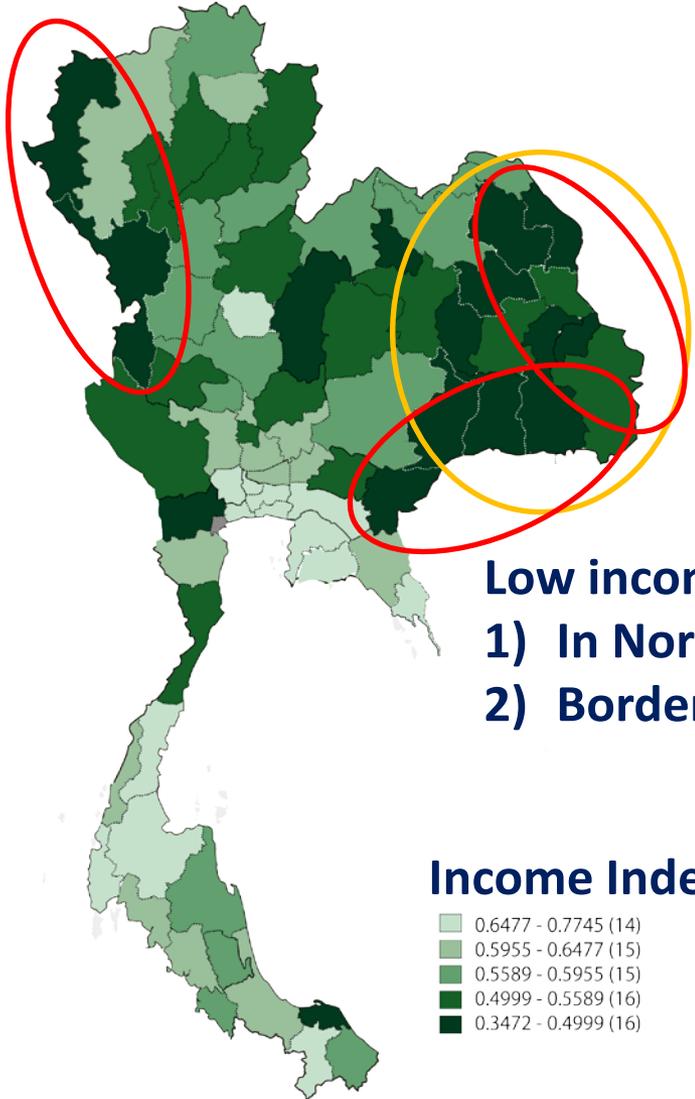
A2:**Infrastructure** necessary for economic development in Thailand and activities creating **scarce value-added** with advanced technologies → **8 years exemption**

A3: Hi-tech activities necessary for economic development in Thailand which are scarce while they are existing → **5 years**

A4:Activities which add values to domestic resources and **enhance supply-chain** while the technological levels are lower than A1 – A3 → **3 years exemption**

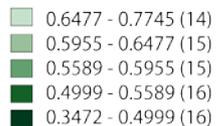
# Income Gap in Thailand

Income index of provinces

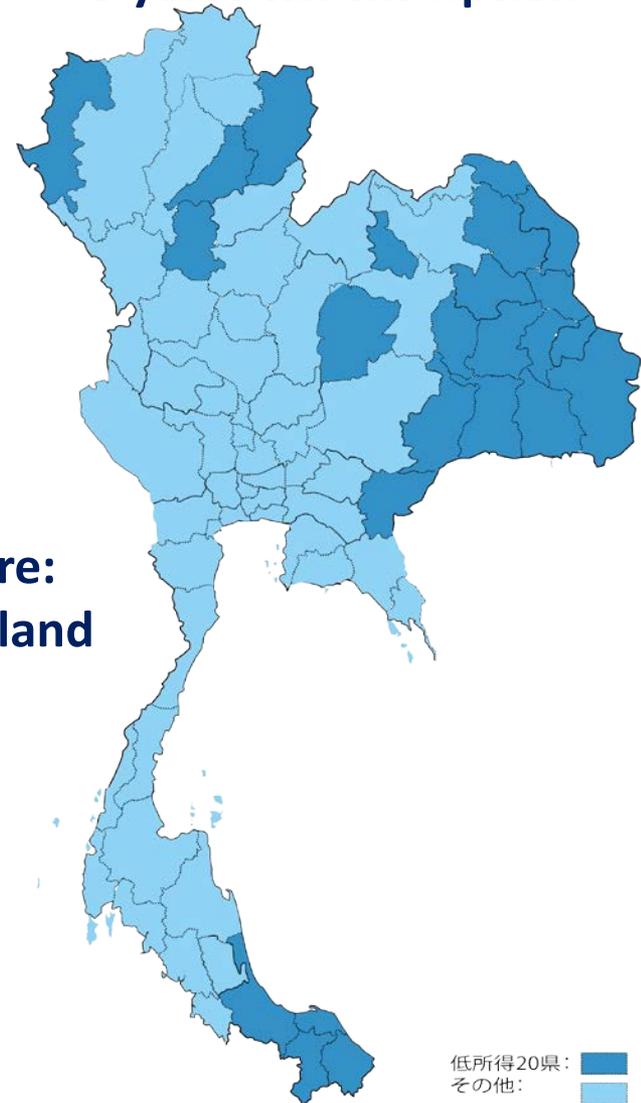


Low income provinces are:  
1) In Northeastern Thailand  
2) Border Provinces

Income Index



20 Provinces with lower Income  
→ 3 years tax exemption



# Border SEZs

- **Tax Incentives**

- 8 years exemption + 5 years reduction  
(if invest in the sectors designated by border)

- **Employing workers of neighboring countries**

- **Tax deduction for expenditure for transportation, electricity and constructing infrastructure**



# **Industrial Cluster Policies**

# Industrial Cluster Policies

## ■ Industrial Cluster Policies announced on 16 Sep., 2015

**Super Clusters** : 8 years exemption + 5 years reduction  
if invest in eligible economic activities

- (1) Automotive and parts cluster
- (2) Electrical appliance, electronic & telecommunication cluster
- (3) Digital economic cluster
- (4) Eco-friendly petrochemicals & chemical products cluster

**Other Clusters** : 5 years exemption  
if invest in eligible economic activities

- (5) Textile & garment cluster
- (6) Agro-processing industrial cluster

# Automotive & Electric Clusters

## Automotive and Parts Cluster

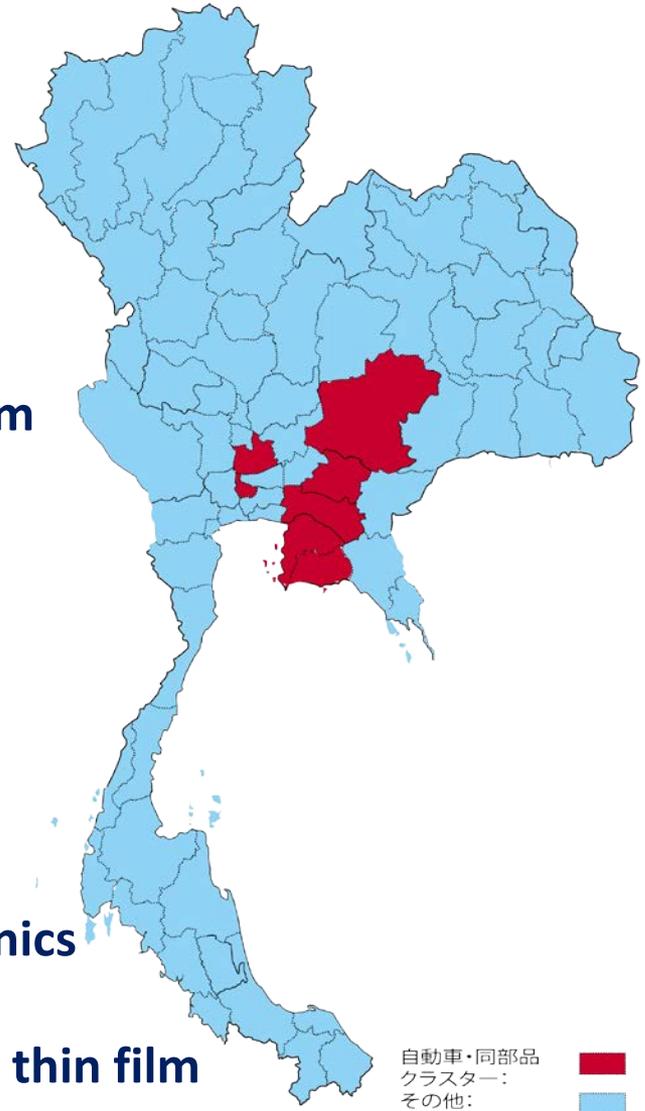
### Important Parts and Components

- 1) Parts using advanced technologies
- 2) Safety and energy efficient system
- 3) Equipment for Hybrid, EV, PHEV cars
- 4) Fuel injection parts/transmission/engine system
- 5) Manufacture of automobile tires

## Electrical Appliance, Electronic & Telecommunication Cluster

### Important Parts and Components

- 1) Electronic design e.g. microelectronics design
- 2) Electronic products & parts using advanced technologies such as telecom equipment, electronics parts for medical devices, automotive, HDD, etc.
- 3) Materials for microelectronics such as wafers & thin film
- 4) Advanced technology electrical appliances like IoT



# Digital Economy Cluster

# Eco-friendly Petrochemicals & Chemical Products Cluster

Chiang Mai

Eligible Activities

- 1) Software
- 2) Cloud service
- 3) Data center
- 4) Software park
- 5) Movie town
- 6) Motion picture

Phuket

- 1) Eco-friendly chemicals or polymers
- 2) Bio-plastic-coated paper packaging

Chonburi

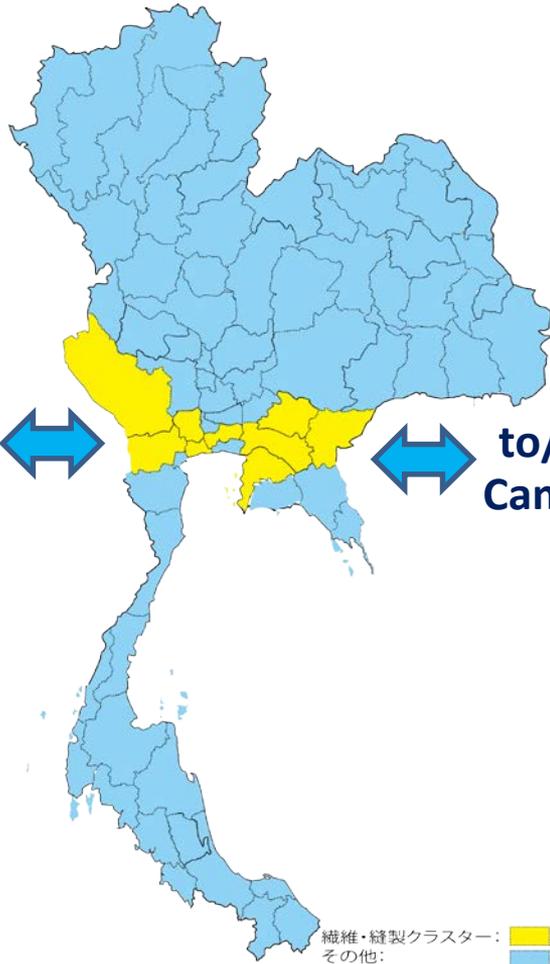
Rayon

デジタル・エコノミー  
クラスター：  
その他：

エコ・フレンドリー  
化学クラスター：  
その他：

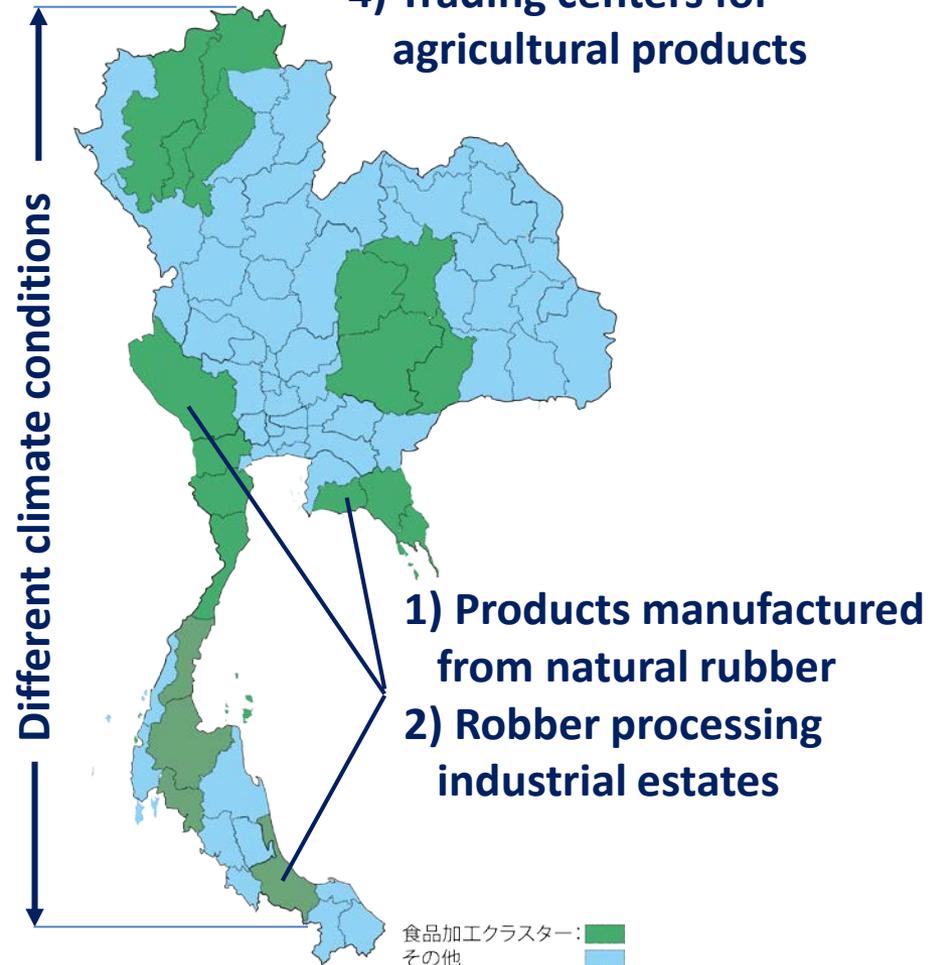
# Textile & Garment Cluster

- 1) Functional fiber / recycled fiber
- 2) Functional yarn or fabric
- 3) Bleaching, Dyeing and finishing
- 4) Garments, clothing accessories & household textiles
- 5) Creative products design & development center



# Agro-processing Industrial Cluster

- 1) Plant & Animal Breed
- 2) Natural extracts
- 3) Medical food or food supplement
- 4) Trading centers for agricultural products



# **Comparing SEZ Policies and Evaluation of Industrial cluster**

# SEZ Rules in Five Mekong Countries

Country	Rule on Area	Incentives	Related Law and Regulation
Cambodia	Area $\geq$ 50 ha Has to be fenced	One Stop Service, Bonded Customs Clearance	Sub-Decree No. 148 on the Establishment and Management of the Special Economic Zone, Dec. 29, 2005
Laos	Area $\geq$ 1,000 ha	Own Incentive Policy	Law on Investment Promotion, No.2 2009, Jul. 8, 2009
Myanmar	Sufficient Land Area (400-25,000 ha), have Inter- national Gates	Tax holidays • 5 years (FDI Law) $\rightarrow$ • 5-7 years exemption + 5 years reduction	Special Economic Zone Law, No. 1, 2014, Jan. 23, 2014
Thailand		Tax holidays (8 years exemption + 5 year reduction), One Stop Service, Employment of Migrant Workers	National Committee on Special Economic Zone Development (NC- SEZ)
Vietnam	Area $\geq$ 10,000ha	Financial Support for Provinces, Bonded Customs Clearance	Decree No. 29 on Industrial Parks, Export Processing Zones and Economic Zones, Mar. 14, 2008

# Differences by Country

- **Locations of SEZ**

- 1) CLM Countries: metropolitans, ports or borderlands

→ Higher motivation to stimulate industrialization by connecting to the production networks and global value chain (GVC)

- 2) Vietnam: coastal areas except metropolitans and borderlands

- 3) Thailand: Only borderlands, but clusters are another type of SEZ

→ Higher motivation to reduce domestic development gaps and stimulate under-developed areas (Bangkok, Hanoi and HCMC have already received a lot of investment)

- **Major Players**

- 1) Cambodia: all the developers are private and they apply to the government

- 2) Laos: government, JV with government & private and pure private

- 3) Myanmar: designated by the government and government & private operate

- 4) Thailand: designated by the government and provinces call for investors

- 5) Vietnam: each province applies for her own SEZ, the Central government designates and the SEZ calls for investors

→ In case of rural areas, private sectors do not have incentives to develop

# Evaluation of Industrial Cluster Policy

- Industrial Cluster Policy

SEZ in broader meanings as well as High Tec Parks in Vietnam

- Existing Tax Incentive Systems

Tax incentives in accordance with specific industries

Tax incentives in accordance with distances with capital



- Industrial Cluster Policy

Tax incentives in accordance with good combination of specific industries based on provincial geographical characteristics and population.

**Thank you !**