Economic Geography – Development Strategies

Manufacturing gravel in Trivandrum, India

Gravel factory near Point of the Mountain, Utah

Some Key Assumptions in Economic Geography

*Rational Behavior – people (and firms) seek to minimize costs to themselves and maximize benefits

*Geography of Supply – Costs of doing business vary from place to place (resources for production)

- availability for financing (capital outlays)
- natural resources (raw materials)
- labor (particular skills needed)
- transporting goods (to plant and to market)

*Geography of Demand – Markets vary spatially

- Location of consumers (size of market / population)
- Wealth (purchasing power)
- Tastes of consumers (cultural values, preferences)

Sectors of Economic Activity

<u>Primary Sector</u> - Activity that directly extracts or harvests resources from Earth.

Location partly dependent on where natural resources are.

<u>Secondary Sector</u> - Activity that transforms raw materials into usable products, adding value in the process.

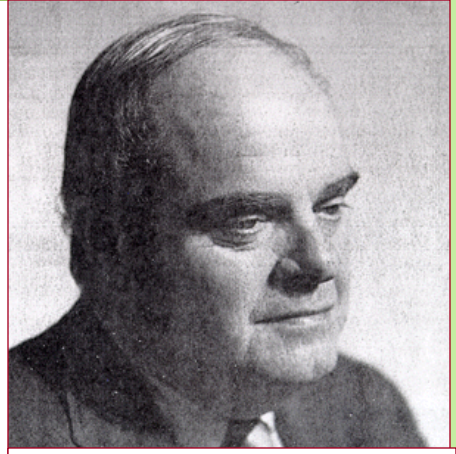
Sectors of Economic Activity

<u>Tertiary Sector</u> - Activity that links primary & secondary sectors to consumers and other businesses by selling goods or performing services; includes both retail and business (producer) services

<u>Quaternary Sector</u> - Highly skilled, information-based services; usually includes management

Ullman's Concepts of Spatial Interaction

(Principles of Economic Geography)



Edward Ullman
(1912-1976)

Complementarity

One area has surplus of a commodity needed by another area (mutual needs can be satisfied through trade)

Transferability *(key: accessibility, infrastructure)*

Ease with which commodity can be moved from producer to consumer (physical factors, transportation systems)

Intervening Opportunity

Potential trade between two partners develops only in absence of a closer, intervening source of supply

Comparative Advantage

Areas tend to specialize in products for which they have greatest relative advantage over other, competing areas

*Other Important Concepts in E*conomic Geography

Functional Areal Specialization

Regions specializing in particular goods or services emerge because of their comparative advantage

Spatial Division of Labor

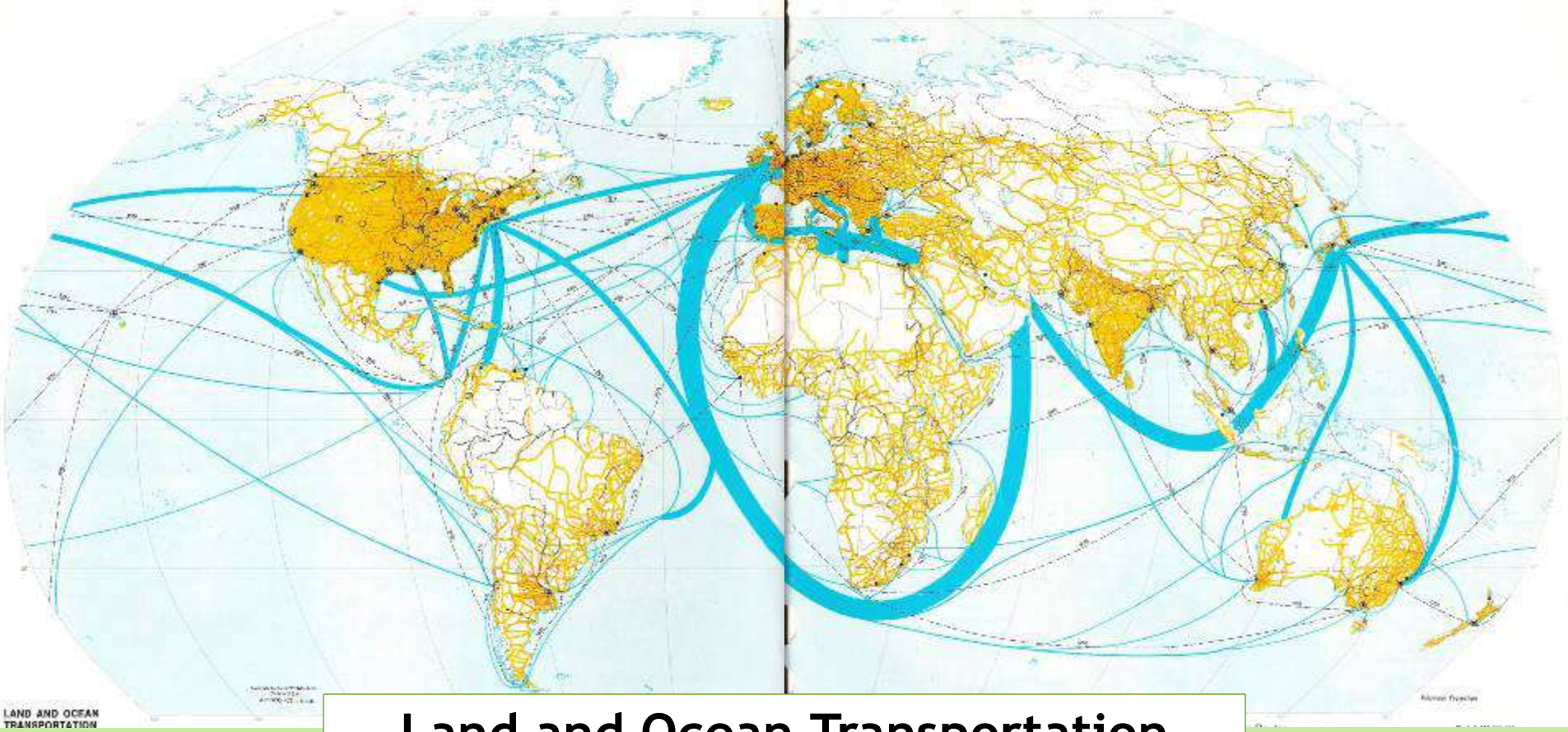
Specialization of different regions in different stages of the production process (sectors concentrate by area)

Agglomeration

Clustering of producers or suppliers of a particular good or service in a given area maximizes efficiency

Multiplier Effect

Infrastructure tends to reinforce needs of clusters – although this can lead to spatially uneven development



Land and Ocean Transportation

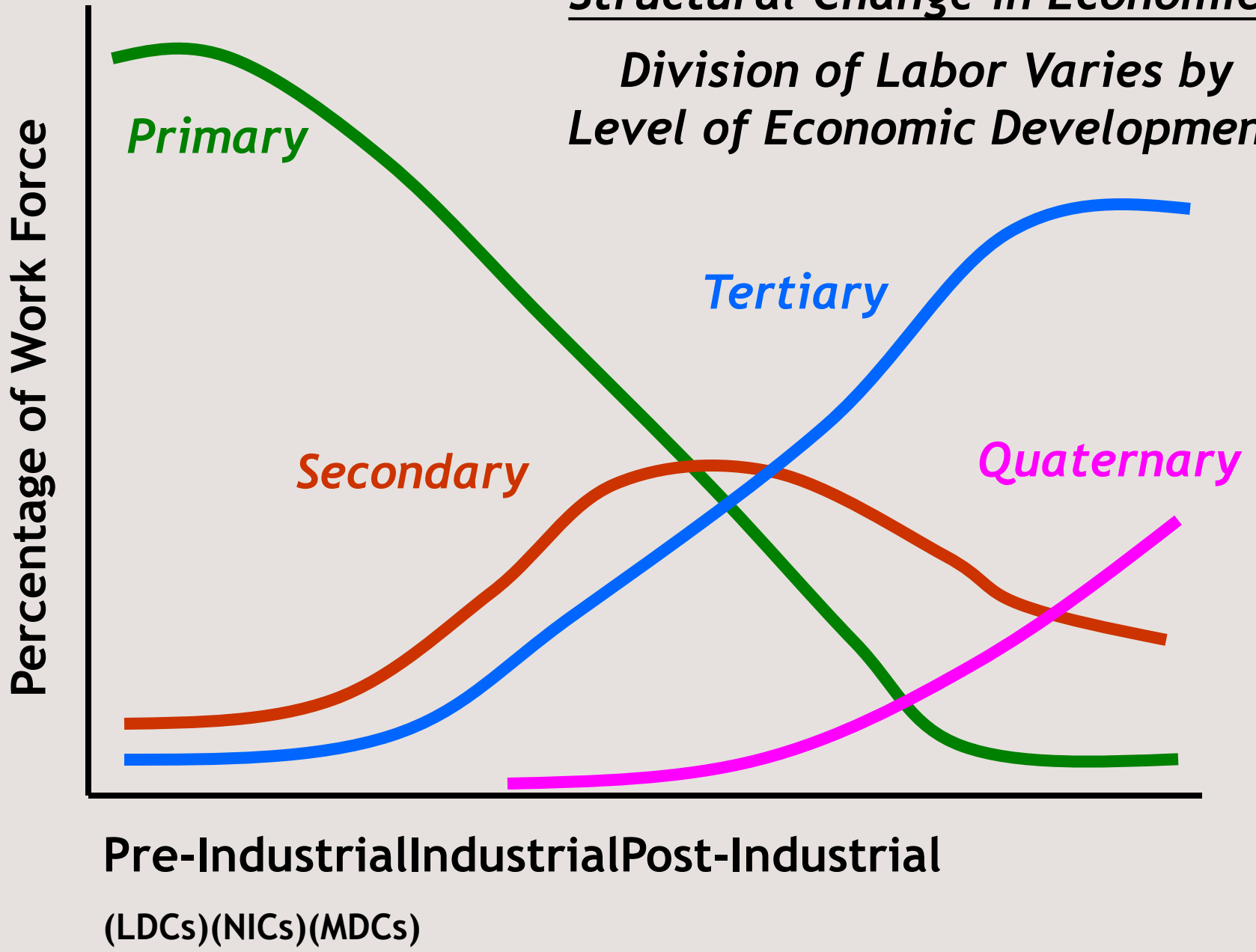
Goode's World Atlas, 17th ed. (1986)

Width of blue lines is proportional to tonnage of cargo carried by ship

Orange lines denote all areas within 25 mi of a motorable road

Structural Change in Economies

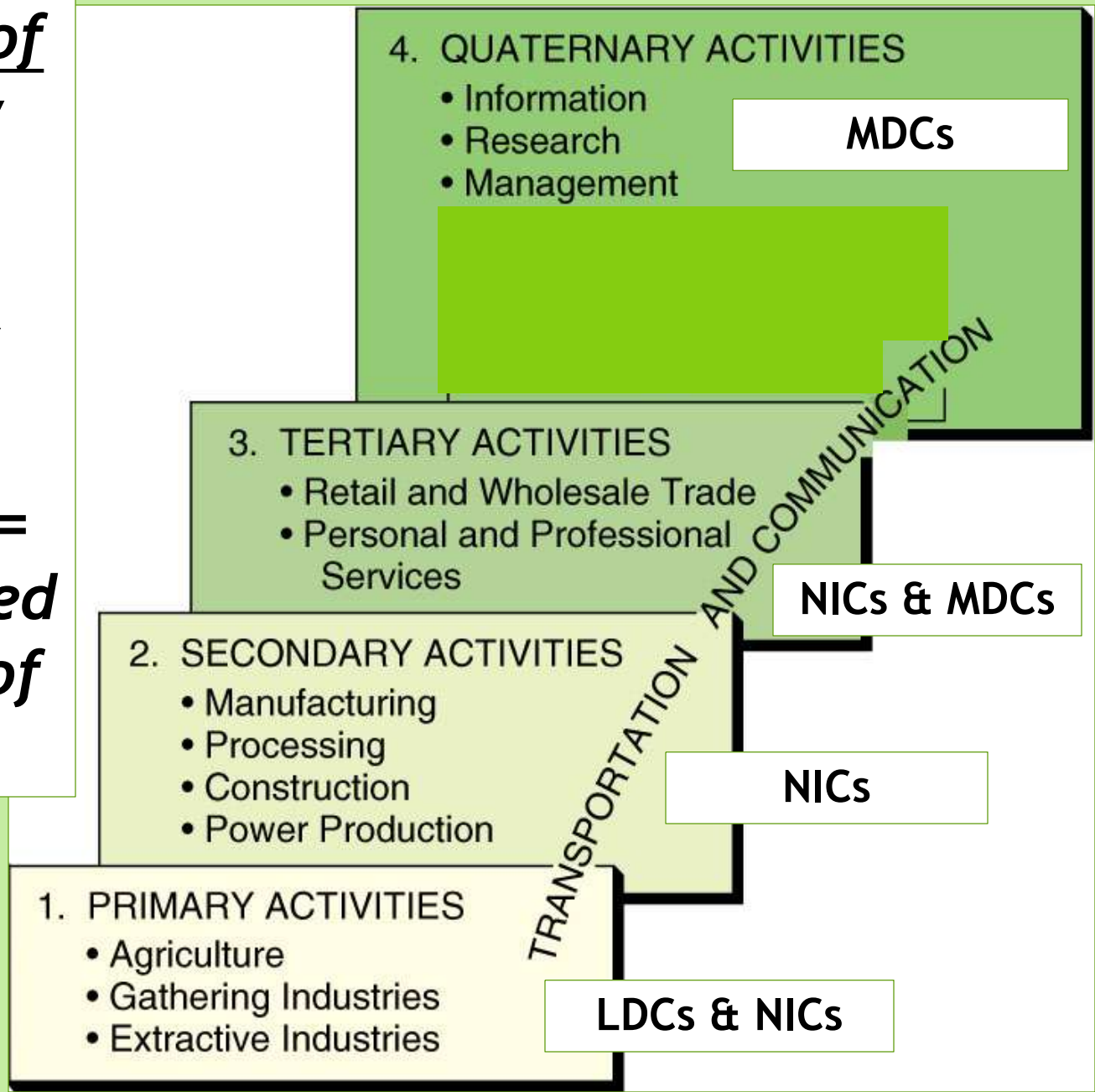
Division of Labor Varies by Level of Economic Development



The Sectors of Economic Activity

***Spatial division of labor** = tendency for sectors to concentrate in different regions*

***Global Economy** = "internationalized spatial division of labor"*



Industrial Economy

Mode of production/consumption in late 19th thru mid- 20th centuries

Features:

Large domestic corporations

Manufacturing base: food processing, heavy equipment manufacturing, and energy products

Postindustrial Economy

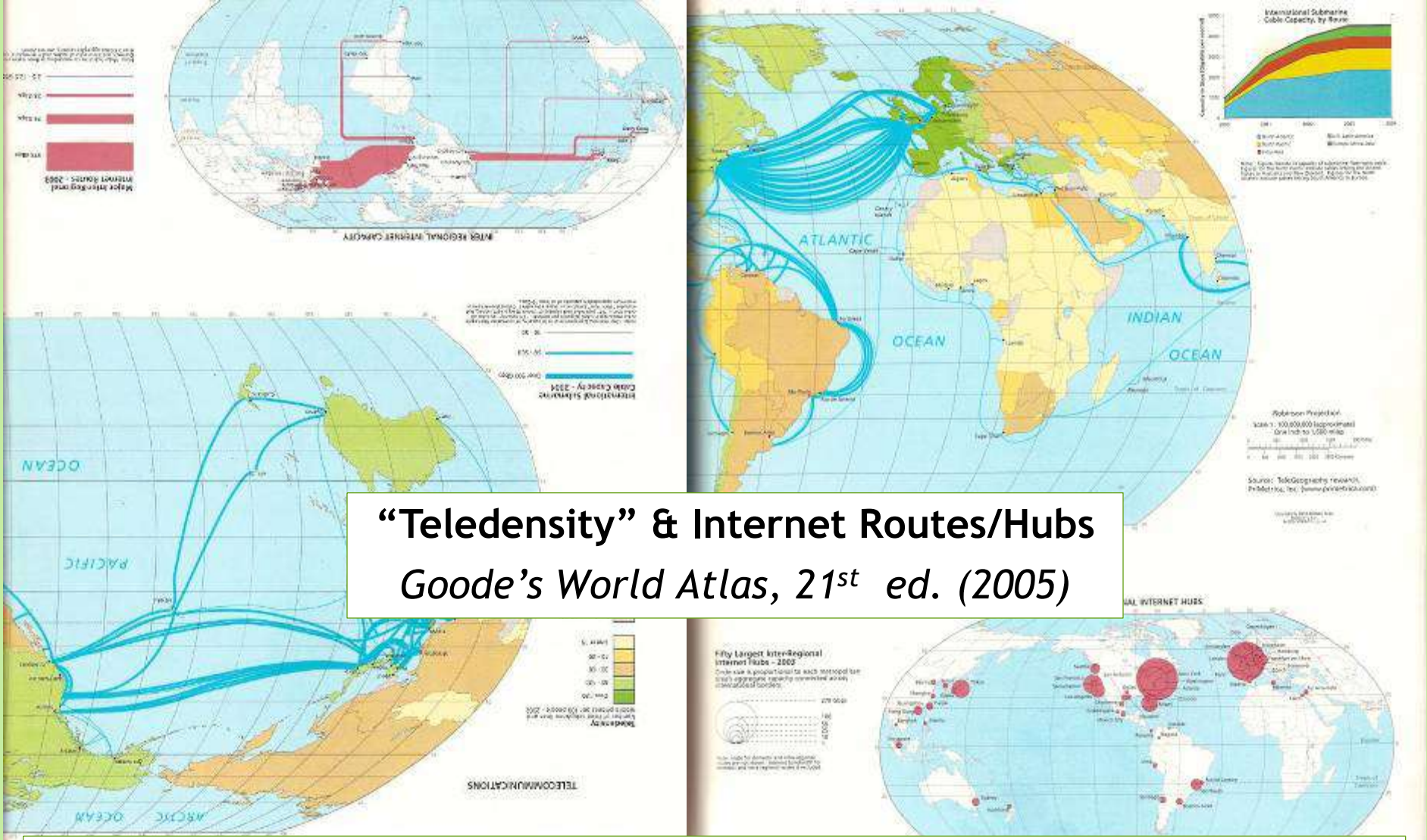
Emerging mode of production/consumption of late 20th- 21st centuries

Features:

Huge transnational corporations

Localized agglomerations producing and/or using IT and telecom

Greater employment in tertiary and quaternary services



"Teledensity" & Internet Routes/Hubs

Goode's World Atlas, 21st ed. (2005)

Measures of telecommunications connectivity

As critical today to the growth and destiny of cities and regions as rails in the 19th century and highways & shipping in the 20th century

Development: Ideas and Strategies

Modernization (Take-Off) – 1940s-1960s

Dependency Theory – 1970s +

Neoliberalism – 1980s +

Sustainable Development – 1990s +

Summarized from Kuby et al., Human Geography in Action, 4th edition

Modernization Theory

The change from traditional to modern ways of life – based on greater investment in specialization, technology, and capital.

Based on Rostow's model of progressive stages of econ growth

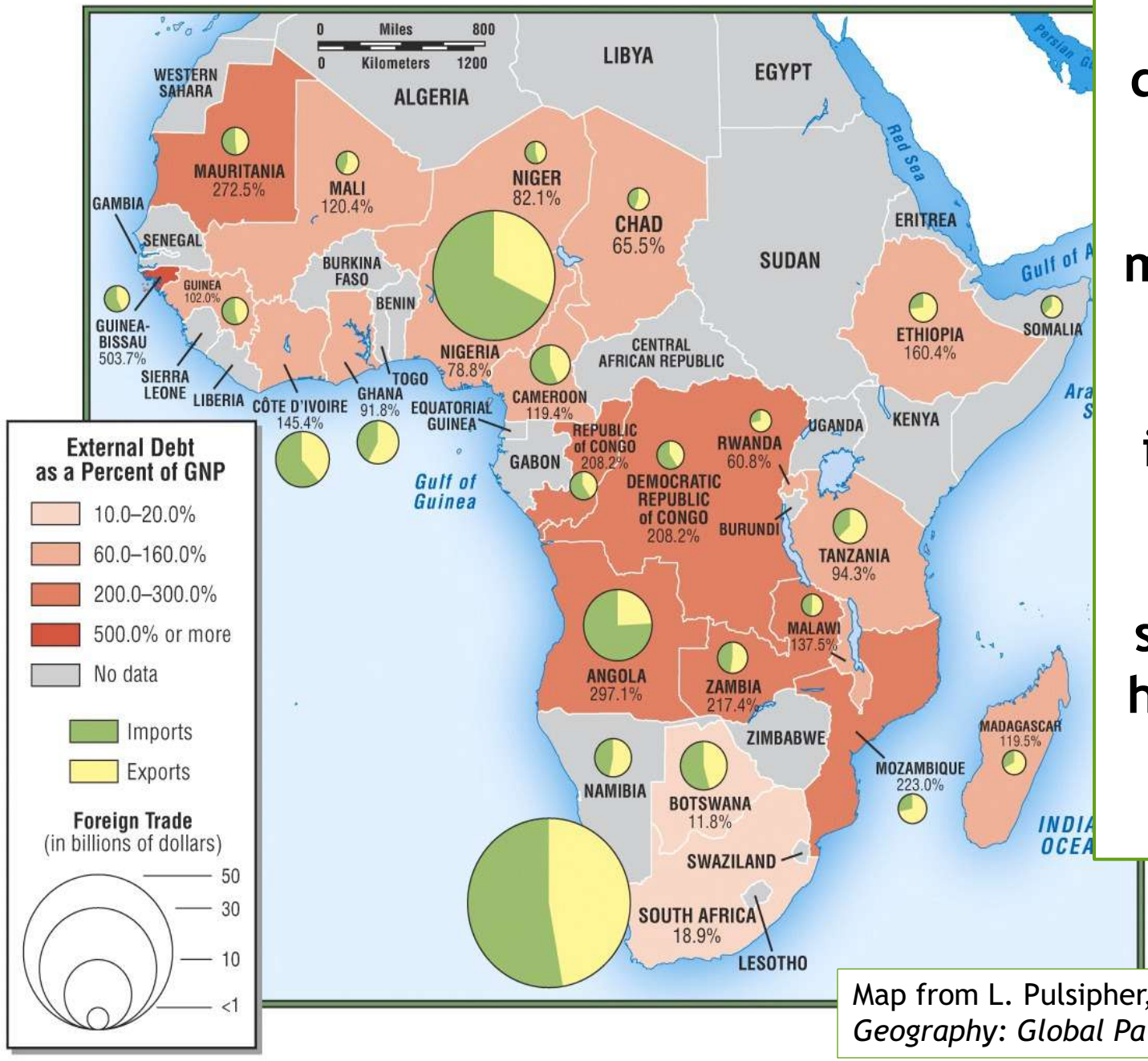
1. Traditional subsistence
2. Preconditions for take-off (investment)
3. "Take-Off" (sustained industrial growth)
4. Drive to maturity (increased tech; rise of services)
5. Age of mass consumption (consumer goods)

Real-World Strategies of 1950s-1960s

- Investment in infrastructure is critical
- Technology transfer from MDCs to LDCs
- Large-scale development projects

Akosombo Dam, Volta River, Ghana

Volta Lake is the world's largest man-made lake with a surface of 8,515 square kilometers (3,861 square miles). It came into being with the construction in 1964 of the Akosombo Dam, a 768,000-kilowatt hydroelectric project managed by the Volta River Authority (VRA) that supplies hydroelectricity to Ghana and neighbouring Togo and Benin. The flooding submerged vast tracts of forest and forced the relocation of 78,000 people to newly created townships on the lake's higher banks. The lake is now a transportation corridor for the residents of the various lake-side communities as well as a thriving source of fish and water-related wildlife (www.csrdevelopments.com).



Large scale development projects required massive loans from world lending institutions; numerous LDCs are saddled with high external debt payments

Map from L. Pulsipher, *World Regional Geography: Global Patterns, Local Lives*

Dependency Theory

Introduced by Wallerstein (1970s) - Explains low development levels as result of LDCs' continuing economic dependency on MDCs ("neo-colonialism).

Measures of development with human welfare indicators as well as economic indicators.

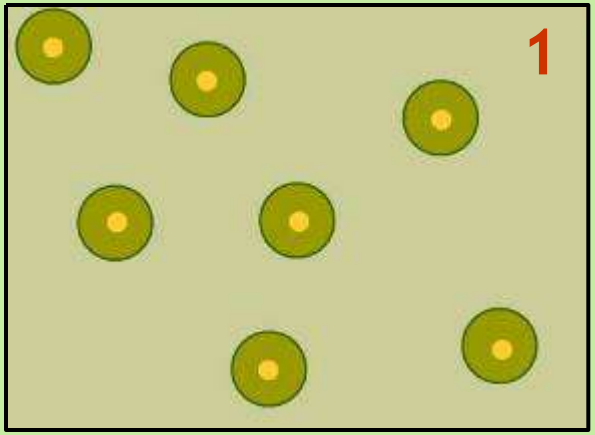
Real-World Strategies for LDCs:

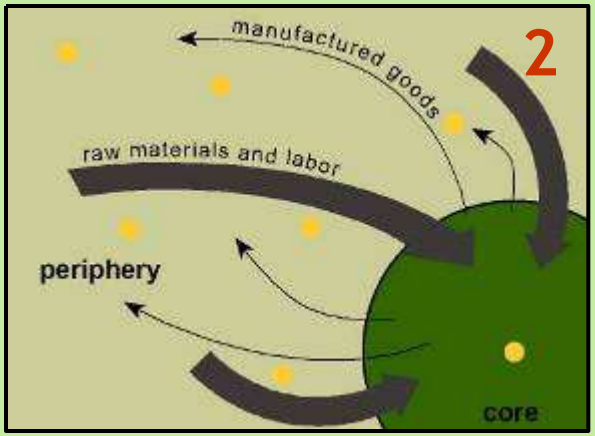
- Small-scale and rural enterprises
- Import substitution
- Nationalization of industry

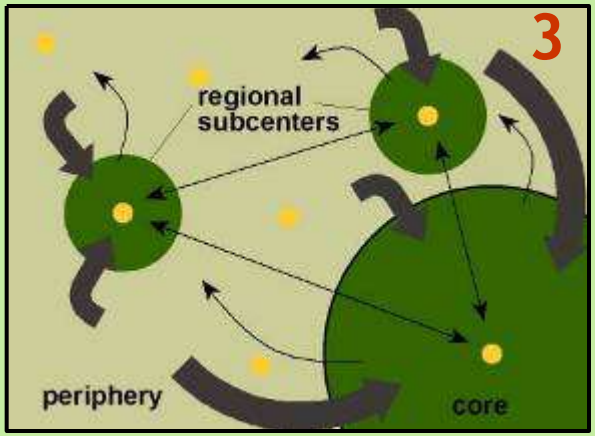
Core-periphery model is central to Dependency Theory

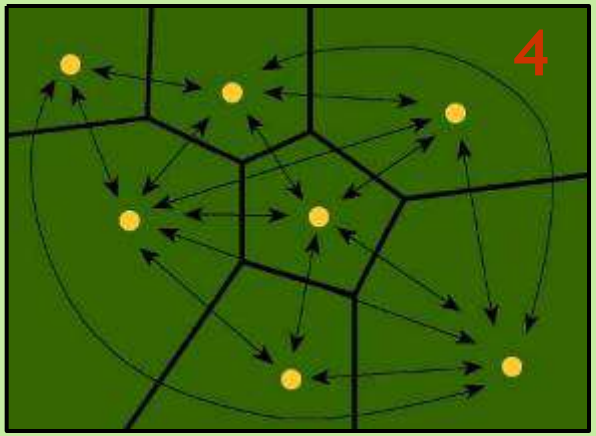
Model of economic development over time and space consisting of an uneven power relationship between a rich, productive, innovative core region and a poor, dependent periphery.

Wallerstein predicted the development of a "semi-periphery" - a middle-income regional subcenter that the core expands to and gradually encompasses the periphery

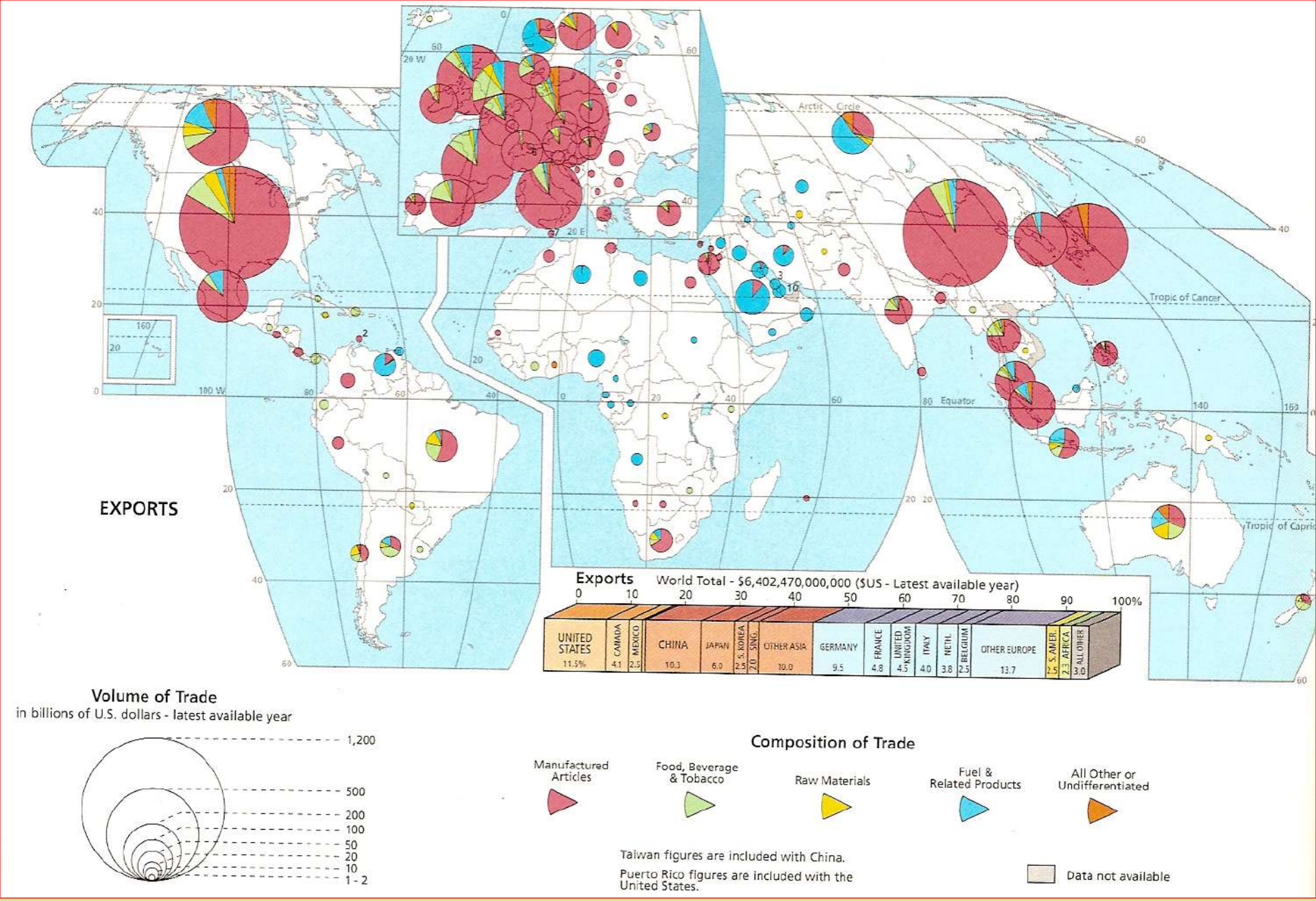








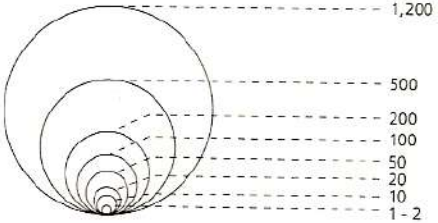
Graphics from Kuby et al., *Human Geography in Action*



Exports and Imports maps from *Goode's World Atlas*, 21st edition (Rand McNally)

Volume of Trade

in billions of U.S. dollars - latest available year



If volume of trade is less than 15 billion dollars, color indicates major class only. If no symbol is shown, volume of trade is less than 1 billion dollars.

Composition of Trade

Manufactured Articles

Food, Beverage & Tobacco

Raw Materials

Fuel & Related Products

All Other or Undifferentiated

Taiwan figures are included with China.

Puerto Rico figures are included with the United States.

Data not available

Country Key

1 Andorra
2 Aruba
3 Bahrain
4 Gaza Strip and West Bank
5 Guadeloupe
6 Liechtenstein
7 Malta
8 Martinique
9 Netherlands Antilles
10 Qatar

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A-GDS-10000-03-

Arctic Circle

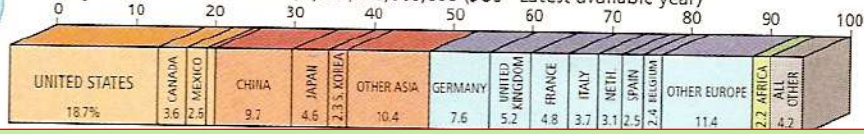
Tropic of Cancer

Equator

Tropic of Capricorn

IMPORTS

Imports World Total - $6,388,329,000,000 ($US - Latest available year)



Neoliberalism

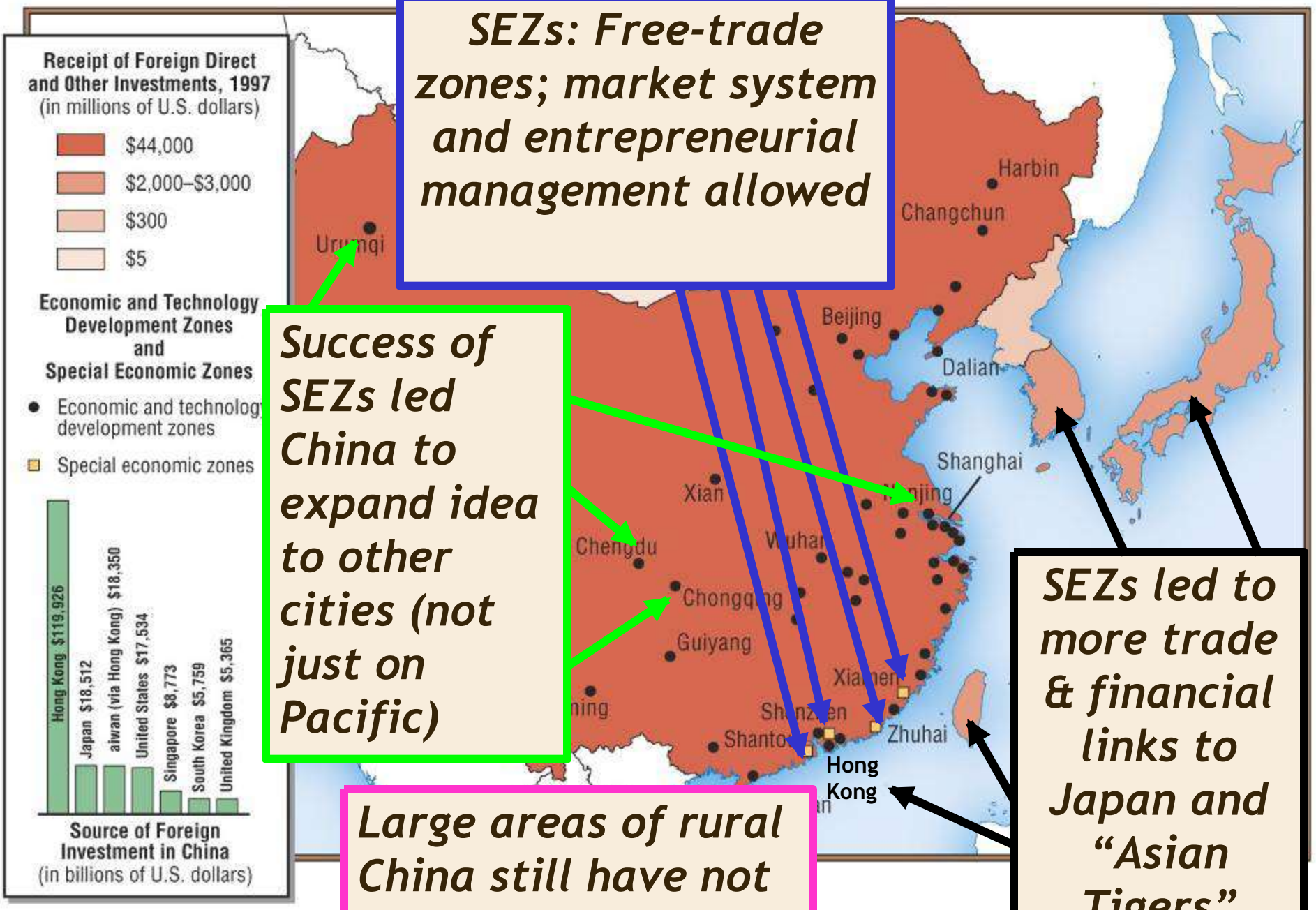
Introduced 1980s (Reagan, Thatcher) - School of development emphasizing free-market approaches and globalization of trade, especially expansion into transitional (post-communist) economies and newly emerging industrializing states

Real-World Strategies for LDCs:

- Privatization of industry (reduced state role)
- Encourage foreign direct investment by MNCs
- Encourage free trade
- Currency devaluation (to encourage exports)

Note trends in measures of socio-economic development (LDC→NIC→MDC) - data from CIA Factbook 2002

	LDCs		NICs		MDCs	
	Nigeria	India	China	China 2005	South Korea	Sweden
GDP/PPP per cap	$840	$2,500	$4,300	$6,300	$17,900	$24,700
Urbanization	36%	28%	38%	38%	79%	84%
Pop Growth	2.5%	1.5%	0.9%	0.6%	0.9%	0.0%
Infant Mortality	72	61	27	23	8	3
Life Expectancy	51-51	64-63	74-70	75-71	79-71	83-77
Literacy	57%	52%	82%	91%	98%	99%
Labor-Agric	70%	60%	50%	49%	9%	2%
Labor-Industry	10%	17%	23%	22%	22%	29%
Labor-Services	20%	23%	27%	29%	69%	69%
Electric Consump	115	490	940	1650	5,250	15,800
People/Phone	185	28	6.4	2.1	0.9	0.9
Pop Using I-net	0.1%	0.5%	2.1%	8.5%	46.0%	64.1%


Receipt of Foreign Direct and Other Investments, 1997
(in millions of U.S. dollars)
$44,000
$2,000–$3,000
$300
$5
Economic and Technology Development Zones and Special Economic Zones
Economic and technology development zones
Special economic zones
Hong Kong $119,926
Japan $18,512
aiwan (via Hong Kong) $18,350
United States $17,534
Singapore $8,773
South Korea $5,759
United Kingdom $5,365
Source of Foreign Investment in China
(in billions of U.S. dollars)
SEZs: Free-trade zones; market system and entrepreneurial management allowed
Success of SEZs led China to expand idea to other cities (not just on Pacific)
SEZs led to more trade & financial links to Japan and "Asian Tigers"
Large areas of rural China still have not had market reforms
Harbin
Changchun
Beijing
Dalian
Shanghai
Xian
Chengdu
Guiyang
Zhuhai
Hong Kong

Sustainable Development

Introduced 1990s (UN) - Development providing for the needs of the present generation without diminishing the options of future generations – includes both economic improvement and environmental conservation

Real-World Strategies for LDCs:

- Market mechanisms for envir regulation
- Resource conservation; renewable resources
- Loans to women and very poor *(microcredit)*
- Use of appropriate-scale technology

Muhammad Yunus, founder of Grameen Bank of Bangladesh

Co-winners of the 2006 Nobel Peace Prize

www.grameen-bank-info.org

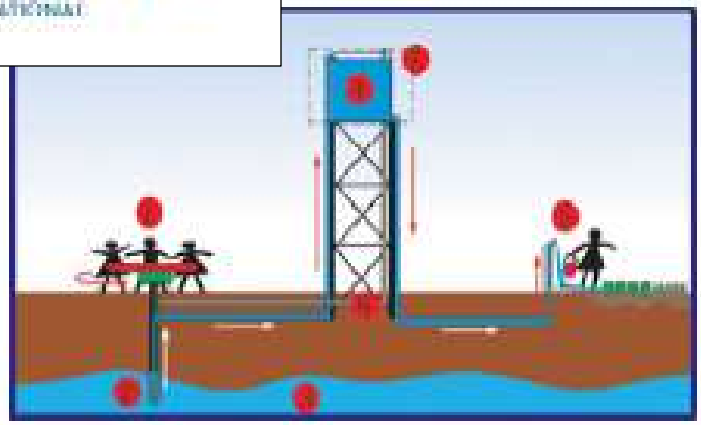
Microcredit

Grameen Bank (GB) has reversed conventional banking practice by removing the need for collateral and created a banking system based on mutual trust, accountability, participation and creativity. GB provides credit to the poorest of the poor in rural Bangladesh, without any collateral. At GB, credit is a cost effective weapon to fight poverty and it serves as a catalyst in the over all development of socio-economic conditions of the poor who have been kept outside the banking orbit on the ground that they are poor and hence not bankable. Professor Muhammad Yunus, the founder of "Grameen Bank" and its Managing Director, reasoned that if financial resources can be made available to the poor people on terms and conditions that are appropriate and reasonable, "these millions of small people with their millions of small pursuits can add up to create the biggest development wonder."

Before opening my food stand, I used to work as a maid in other people's houses. I had to work from dawn to late night almost for a pittance. We used to live in temporary housing made of straw. Those terrible days are now behind me. Now, I have replaced my old house with a tin shed and my two children are attending primary school.

— Jamila, microcredit borrower

Example of "appropriate technology"



How does it work?

The PlayPump™ water system is windmill technology on its side. While children play on the merry-go-round (1), clean water is pumped (2) from underground (3) into a 2,500-liter tank (4), standing seven meters above the ground.

A simple tap (5) makes it easy for women and children to draw water. Excess water is diverted from the storage tank back down into the borehole (6).

The water storage tank (7) provides a rare opportunity to advertise in rural communities. All four sides of the tank are leased as billboards, with two sides for consumer advertising and the other two sides for health and educational messages. The money generated by this model pays for pump maintenance for ten years.

The cost of one PlayPump™ system is US$14,000 (R90,000 in South Africa and £6,500 in the U.K.).

1.1 billion people (18% of world's population) lack access to safe drinking water

Almost 2 million children die each year due to a lack of clean water and inadequate sanitation – access to clean water reduces risk by 50%