

## Presentation by Dr. Róbinson Rojas Sandford

For Session 4 of module

**Managing and Planning for Development: International and National Dimensions** (Academic year 2011-2012)

**4 - The process of national structural transformation. From rural to urban. Rural to urban migration and the shifting of poverty. Industrialization and environmental issues...**

The process of national structural transformation (1)

The process of national structural transformation is related to the changing pattern over time of the regime of production in any society.

History of social stratified societies shows a shift from rural to urban production as the main activity,

thus, labour force and created means of production shift also to cities.

therefore, structural transformation generates urbanization and internal and external migration.

The process of national structural transformation (2)

**Planning for development during the process of structural transformation require looking at some important relationships which are at the same time economic, social, political, cultural and moral relationships.**

**We can list some relationships as follows:**

**1.- between industry and agriculture, and between heavy and light industry.**

**2.- between industry in most populated regions and industry in less populated regions.**

**3.- between economic construction and defence construction.**

**4.- between the state, units of production and individual producers.**

**5.- between the central government and the regional governments.**

**6.- between the ethnic majority and the ethnic minorities.**

**7.- between the dominant political party and the rest of civil society.**

**8.- between supporters of the central government economic and political programme and its dissenters .**

**9.- between right and wrong**

**10.- between home nation and other nations.**

**11.- the relationship between national units of production and foreign capital.**

**12.- the relationship between national production and environmental sustainability.**

**“These relationships are all contradictions. Contradictions are everywhere in the world. Without contradictions there would be no world.”**

(NOTE: this list is based on Mao Zedong, 1956, “[On the ten great relationships](#)”, Foreign Languages Editions, Beijing)

**Some scholars distinguish two main stages of migration:  
divergent and convergent**

**a) The divergent migration stage appears during the stage of capitalist expansion in the rural sector of the economy,**

**and**

**b) The convergent migration stage is brought about by urban industrial growth.**

See B. R. Roberts, 1979, “**Migration, the industrial economy and collective consumption**”, International Social Science Journal, Vol. XXXI, No. 2, pp. 282-303

The divergent pattern predominated in the late XIX century and early XX century, first in Latin America, as the development of mining, plantation agriculture and the opening-up of new lands for commercial farming meant the shift of labour, seasonally, temporarily or permanently within the rural sector or across international frontiers;

The convergent pattern appears with the concentration of economic opportunities in cities due to the increasing dominance of industry in national economies bringing a steady shift in population from rural to urban areas



## The process of national structural transformation (6)

**Table 1.-**

### Urban population

avg. annual growth (%)

% of total population

	1965-90	1990-07		1965	1990	2007
<b>East Asia &amp; Pacific</b>	3.70	3.50		19	29	43
<b>E. Europe &amp; Central Asia</b>	2.04	0.20		38	63	64
<b>Latin America &amp; the Caribbean</b>	3.62	2.10		53	71	78
<b>Middle East &amp; North Africa</b>	4.13	2.60		38	52	57
<b>South Asia</b>	3.63	2.70		18	25	29
<b>Sub-Saharan Africa</b>	5.56	4.00		14	28	36
<b>Industrialized countries</b>	1.36	1.00		71	73	77
<b>Total urban population</b>	2.38	2.23		38	43	50
<b>World Population</b>	1.91	1.37		-	-	

Source: [World Development Report 1991](#); World Development Indicators [2005](#), [2009](#); World Bank

## The process of national structural transformation (7)

**Table 2.-**

### Distribution of GDP

#### Agriculture (%)

#### Industry (%)

	1965	1990	2007		1965	1990	2007
<b>East Asia &amp; Pacific</b>	42	25	12		35	40	47
<b>E. Europe &amp; Central Asia</b>	-	16	7		-	43	34
<b>Latin America &amp; the Caribbean</b>	16	9	6		33	36	33
<b>Middle East &amp; North Africa</b>	-	14	11		-	38	40
<b>South Asia</b>	44	31	18		21	27	29
<b>Sub-Saharan Africa</b>	41	19	15		20	34	32
<b>Industrialized countries</b>	5	3	2		42	33	26
<b>World</b>			3				28

Source: World Development Report 1991; World Development Indicators 2005, 2009; World Bank

## The process of national structural transformation (8)

**Table 3.-**

### **Distribution of GDP Services (%)**

	<b>1965</b>	<b>1990</b>	<b>2007</b>
<b>East Asia &amp; Pacific</b>	23	35	41
<b>E. Europe &amp; Central Asia</b>	-	41	60
<b>Latin America &amp; the Caribbean</b>	51	55	61
<b>Middle East &amp; North Africa</b>	-	48	49
<b>South Asia</b>	35	43	53
<b>Sub-Saharan Africa</b>	39	47	53
<b>Industrialized countries</b>	53	65	72

Source: **World Development Report 1991; World Development Indicators 2005, 2009;** World Bank

## The process of national structural transformation (9)

**Table 4.- Rural population income per capita as % of GDP per capita**

Derived from Tables 1 and 2

	<b>1965</b>	<b>1990</b>	<b>2007</b>
<b>East Asia &amp; Pacific</b>	50	30	21
<b>E. Europe &amp; Central Asia</b>	-	40	20
<b>Latin America &amp; the Caribbean</b>	30	30	27
<b>Middle East &amp; North Africa</b>	-	30	26
<b>South Asia</b>	50	40	25
<b>Sub-Saharan Africa</b>	50	30	23
<b>Industrialized countries</b>	17	13	9

Source: **World Development Report 1991; World Development Indicators 2005, 2009; World Bank**

## The process of national structural transformation (10)

**From an aggregate point of view the trends are as follows :**

Sector distribution of total value added (GDP) by region (percentage shares)

<b>AFRICA</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	24.5	18.4	16.5
<b>Industry</b>	32.0	35.4	40.7
<b>Services</b>	43.5	46.1	42.8

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**

## The process of national structural transformation (11)

**From an aggregate angle the trends are as follows :**

Sector distribution of total value added (GDP) by region (percentage shares)

<b>ASIA</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	21.7	8.7	7.4
<b>Industry</b>	37.9	37.8	38.0
<b>Services</b>	40.4	53.6	54.6

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**

## The process of national structural transformation (12)

**From an aggregate angle the trends are as follows :**

Sector distribution of total value added (GDP) by region (percentage shares)

<b>EUROPE</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	10.4	5.1	2.2
<b>Industry</b>	43.0	34.1	27.9
<b>Services</b>	46.7	60.8	69.9

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**

## The process of national structural transformation (13)

**From an aggregate angle the trends are as follows :**

Sector distribution of total value added (GDP) by region (percentage shares)

<b>LATIN AMERICA &amp; CARIBBEAN</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	12.3	9.2	5.9
<b>Industry</b>	35.5	36.8	34.5
<b>Services</b>	52.2	54.1	59.6

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**



## The process of national structural transformation (14)

**From an aggregate angle the trends are as follows :**

Sector distribution of total value added (GDP) by region (percentage shares)

<b>NORTH AMERICA</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	3.0	2.0	1.1
<b>Industry</b>	33.9	27.7	22.4
<b>Services</b>	63.0	70.3	76.4

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**

## The process of national structural transformation (15)

**From an aggregate angle the trends are as follows :**

Sector distribution of total value added (GDP) by region (percentage shares)

<b>OCEANIA</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	8.6	4.6	3.4
<b>Industry</b>	36.9	28.8	28.2
<b>Services</b>	54.5	68.9	68.4

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**

## The process of national structural transformation (16)

From an aggregate angle the trends are as follows :

Sector distribution of total value added (GDP) by region (percentage shares)

<b>WORLD</b>	<b>1970</b>	<b>1990</b>	<b>2008</b>
<b>Agriculture</b>	10.0	5.6	4.0
<b>Industry</b>	38.3	33.3	30.1
<b>Services</b>	51.7	61.1	65.9
<b>Agricultural labour force</b>		51.6	44.6
<b>% of national income per capita</b>		10.9	8.9
<b>Industry + services labour force</b>		48.4	55.4
<b>% of income national per capita</b>		195.0	173.2

Source: **United Nations Industrial Development Organization**  
calculations based on **UN Statistics Data**

The process of national structural transformation (17)

About rural-urban migration (1)

**In 2007 rural-urban migration accounted for around half the population growth in cities in developing countries. [see here](#)**

**“push” and “pull” factors :**

**Rural-urban migration is driven not only by economic factors such as poverty (absolute or relative) in the rural sector (**push**), but also by expectations, particularly among the better educated and the young (**pull**).**

The process of national structural transformation (18)

About rural-urban migration (2)

There are two main types of migration sharing the “push”-“pull” factors:

1. internal migration ( village – town – city – metropolis)
2. migration to a foreign country where wages and opportunities are better at the eye of the migrant

**In both cases, migrants will send back home part of their incomes, which will generate economic effects in both city and countryside when migration is internal, and in the host economy and economy of origin when migration is external.**

From **World Development Indicators 2008**, Tables [4.2](#) and [6.16](#)  
**Remittances from international workers migration (year 2006)**

	<b>GDP 2006 US\$ mill.</b>	<b>workers remit. RECEIVED US\$ mill.</b>	<b>workers remit. PAID US\$ mill.</b>	<b>RECEIVED as % of GDP</b>	<b>PAID as % of GDP</b>	<b>Remit. NET as % of GDP</b>
<b>East Asia &amp; Pacific</b>	<b>3616708</b>	<b>52847</b>	<b>10431</b>	<b>1.46</b>	<b>-0.29</b>	<b>1.17</b>
<b>South Asia</b>	<b>1146716</b>	<b>39779</b>	<b>2031</b>	<b>3.47</b>	<b>-0.18</b>	<b>3.29</b>
<b>Middle East &amp; N. Africa</b>	<b>734423</b>	<b>26697</b>	<b>8837</b>	<b>3.64</b>	<b>-1.20</b>	<b>2.44</b>
<b>Sub-Saharan Africa</b>	<b>712731</b>	<b>10344</b>	<b>2911</b>	<b>1.45</b>	<b>-0.41</b>	<b>1.04</b>
<b>Europe &amp; Central Asia</b>	<b>2499359</b>	<b>35385</b>	<b>17747</b>	<b>1.42</b>	<b>-0.71</b>	<b>0.71</b>
<b>Latin America &amp; Carib.</b>	<b>2964189</b>	<b>56860</b>	<b>2646</b>	<b>1.92</b>	<b>-0.09</b>	<b>1.83</b>
<b>Developing countries</b>	<b>11674126</b>	<b>221932</b>	<b>44603</b>	<b>1.90</b>	<b>-0.40</b>	<b>1.50</b>
<b>High Income</b>	<b>36794507</b>	<b>74844</b>	<b>163263</b>	<b>0.20</b>	<b>-0.44</b>	<b>-0.24</b>
<b>World</b>	<b>48468633</b>	<b>296776</b>	<b>207866</b>	<b>0.61</b>	<b>-0.43</b>	

This table was updated by Róbinson Rojas on 27<sup>th</sup> October 2009 in accordance with a World Bank updating. See “About the data” from the World Bank in slides [36 and 37](#) below. Compare with data in slide [38](#).

The process of national structural transformation (19)

About rural-urban migration (3)

Cai Feng, 2000, “[The invisible hand and visible feet: internal migration in China](#)”, working papers series, The World Bank, lists seven “positive” economic effects of rural-urban migration:

1. **Sustaining rapid economic growth**
2. **Accelerating the urbanization process**
3. **Supporting new sectors with low labour costs**
4. **Feeding back to rural development**
5. **Reducing the income gap between regions**
6. **Improving human capital in rural areas**
7. **Trickle down effect on rural-non migrants**

## The process of national structural transformation (20)

### About rural-urban migration (4)

**On the negative side, some problems arise when the cities cannot absorb the surplus labour force migrating from rural areas:**

- 1. The surplus labour force, now urban surplus labour force, will survive in slums, creating a marginal economy ( the informal economy)**
- 2. In industrialised countries the location of slums tend to be in the inner city, and in developing countries the location will tend to be in the periphery**
- 3. The informal economy will support the formal economy producing cheap goods and services, and sustaining a huge pool of urban surplus labour.**



The process of national structural transformation (21)

About rural-urban migration (5)

The most important outcomes are:

1. Rural poverty becomes urban poverty which creates a large supply of cheap labour which will attract domestic and foreign investments, fostering styles of industrialization to meet the economic needs of the international integrated system of production.
2. This styles of industrialization will be dependent on industrialized countries finance, technology and research & development.

The process of national structural transformation (22)

About rural-urban migration (6)

Finally, heavily polluting industries from industrialized countries will migrate to developing countries, among them:

**Chemicals**

**Metallurgy**

**Paper**

**Building materials**

**Agribusiness**

**Energy**

**Computer processors**

The process of national structural transformation (23)

About rural-urban migration (7)

Environmental degradation will accelerate as follows:

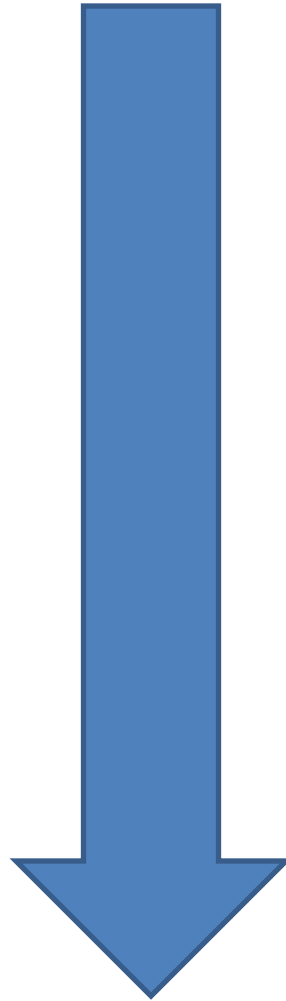
1. Degradation affecting humans and eco-systems **within the range of the event**: water pollution; water scarcity; air pollution ( for example, smog, acid rain); solid waste; and hazardous waste.
2. Degradation affecting **all living species and eco-systems on planet earth**: soil degradation; deforestation; loss of biodiversity; and atmospheric changes ( greenhouse effect).

The process of national structural transformation (24)

**Carbon dioxide ( CO2) emissions**

	Million metric tons.		Per capita m. tons	
	1990	2006	1990	2007
East Asia and Pacific	3,031	6,770	1.9	3.3
Eastern Europe and Central Asia	4,822	3,087	10.2	7.1
Latin America and the Caribbean	1,037	1,361	2.4	2.6
Middle East and North Africa	575	1,113	2.5	3.3
South Asia	768	1,593	0.7	1.1
Sub-Saharan Africa	418	649	0.8	0.9
<b>Industrialized countries</b>	<b>10,652</b>	<b>13,100</b>	<b>11.8</b>	<b>13.1</b>
<b>Total</b>	<b>21,303</b>	<b>27,673</b>		

Source: **World Development Indicators** [2008](#), [2009](#), The World Bank



# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>Developing countries</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	4324.4	1580.9	2743.5			
2007	5554.0	2460.1	3093.9	879.2	439.8	<b>50.0</b>
Avg. annual growth	1.5	2.6	0.7			
<b>If 1.5% growth for both sectors</b>		<b>2036.2</b>	<b>3533.7</b>			
difference		+423.8	-439.8			

# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>East Asia % the Pacific</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	1596.0	460.0	1136.0			
2007	1912.4	827.7	1084.7	367.7	283.5	<b>77.1</b>
Avg. annual growth	1.1	3.7	-0.3			
<b>If 1.1% growth for both sectors</b>		<b>554.0</b>	<b>1368.2</b>			
difference		+273.7	-283.5			

# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>Europe &amp; Central Asia</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	436.2	273.7	162.5			
2007	445.6	283.3	162.3	9.6	3.0	<b>31.2</b>
Avg. annual growth	0.1	0.2	0.0			
<b>If 0.1% growth for both sectors</b>		<b>278.4</b>	<b>165.3</b>			
difference		+4.9	-3.0			



# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>Latin America &amp; the Caribbean</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	435.1	308.0	127.1			
2007	560.6	438.8	121.8	130.8	41.9	<b>32.0</b>
Avg. annual growth	1.5	2.1	-0.2			
<b>If 1.5% growth for both sectors</b>		<b>396.7</b>	<b>163.7</b>			
difference		+42.1	-41.9			

# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>Middle East &amp; North Africa</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	223.7	115.7	108.0			
2007	313.2	179.3	133.9	63.6	17.3	<b>27.2</b>
Avg. annual growth	2.0	2.6	1.3			
<b>If 2.0% growth for both sectors</b>		<b>162.0</b>	<b>151.2</b>			
difference		+17.3	-17.3			

# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>South Asia</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	1120.2	279.2	841.0			
2007	1522.0	443.9	1078.1	164.7	60.9	<b>37.0</b>
Avg. annual growth	1.8	2.7	1.5			
<b>If 1.8% growth for both sectors</b>		<b>378.1</b>	<b>1139.0</b>			
difference		+65.8	-60.9			

# Rural migration contribution to urban growth in developing countries 1990 – 2007

Data processed by Róbinson Rojas from tables 2.1, 3.1 and 3.11 in World Development Indicators 2009, World Bank

<b>Sub-Saharan Africa</b>	Total pop. mill.	Urban pop. mill.	Rural pop. mill.	Urban growth mill.	Rural urban migr. mill.	<b>Rural migr. contri. %</b>
1990	513.2	144.3	368.9			
2007	800.0	287.1	512.9	142.8	57.8	<b>40.5</b>
Avg. annual growth	2.6	4.0	1.9			
<b>If 2.6% growth for both sectors</b>		<b>223.2</b>	<b>570.7</b>			
difference		+63.9	-57.8			
<a href="#"><u>back to text</u></a>						

**Text from “About the Data” for table 6.16 (1):**

*“Workers’ remittances and compensation of employees are World Bank staff estimates based on data from the International Monetary Fund’s (IMF) *Balance of Payments Yearbook*. The IMF data are supplemented by World Bank staff estimates for missing data for countries where workers’ remittances are important. The data reported here are the sum of three items defined in the IMF’s *Balance of Payments Manual* (fifth edition): workers’ remittances, compensation of employees, and migrants’ transfers. The distinction between these three items is not always consistent in the data reported by countries to the IMF. In some cases countries compile data on the basis of the citizenship of migrant workers rather than their residency status. Some countries also report remittances entirely as workers’ remittances or compensation of employees. Following the fifth edition of the *Balance of Payments Manual* in 1993, migrants’ transfers are considered a capital transaction, but previous editions regarded them as current transfers. For these reasons the figures presented in the table take all three items into account.”*

**Text from “About the Data” for table 6.16 (2):**

**Workers’ remittances and compensation of employees received and paid comprise current transfers by migrant workers and wages and salaries earned by nonresident workers. Remittances are classified as current private transfers from migrant workers resident in the host country for more than a year, irrespective of their immigration status, to recipients in their country of origin. Migrants’ transfers are defined as the net worth of migrants who are expected to remain in the host country for more than one year that is transferred to another country at the time of migration. Compensation of employees is the income of migrants who have lived in the host country for less than a year.**

**[back to slide 21](#)**

From **World Development Indicators 2009**, Tables [4.2](#) and [6.17](#)  
**Remittances from international workers migration (year 2007)**

	<b>GDP 2007 US\$ mill.</b>	<b>workers remit. RECEIVED US\$ mill.</b>	<b>workers remit. PAID US\$ mill.</b>	<b>RECEIVED as % of GDP</b>	<b>PAID as % of GDP</b>	<b>Remit. NET as % of GDP</b>
<b>East Asia &amp; Pacific</b>	<b>4365487</b>	<b>65340</b>	<b>12909</b>	<b>1.50</b>	<b>-0.30</b>	<b>1.20</b>
<b>South Asia</b>	<b>1443539</b>	<b>52086</b>	<b>2007</b>	<b>3.61</b>	<b>-0.14</b>	<b>3.47</b>
<b>Middle East &amp; N. Africa</b>	<b>850182</b>	<b>31678</b>	<b>5673</b>	<b>3.73</b>	<b>-0.67</b>	<b>3.06</b>
<b>Sub-Saharan Africa</b>	<b>847438</b>	<b>18586</b>	<b>3816</b>	<b>2.19</b>	<b>-0.45</b>	<b>1.74</b>
<b>Europe &amp; Central Asia</b>	<b>3156118</b>	<b>50377</b>	<b>25908</b>	<b>1.60</b>	<b>-0.82</b>	<b>0.78</b>
<b>Latin America &amp; Carib.</b>	<b>3615910</b>	<b>63107</b>	<b>3582</b>	<b>1.75</b>	<b>-0.10</b>	<b>1.65</b>
<b>Developing countries</b>	<b>14278674</b>	<b>281174</b>	<b>53895</b>	<b>1.97</b>	<b>-0.38</b>	<b>1.59</b>
<b>High Income</b>	<b>40309714</b>	<b>90089</b>	<b>194171</b>	<b>0.22</b>	<b>-0.48</b>	<b>-0.26</b>
<b>World</b>	<b>54588388</b>	<b>371263</b>	<b>248066</b>	<b>0.68</b>	<b>-0.45</b>	

You can compare this table with the one [slide 21](#).