

# Patterns of urbanization in developed and developing countries

# *Urbanisation*

The global urban pattern is changing in three main ways as a result of:

- 1. **Urbanisation:** an increase in the proportion of the total population that lives in urban areas.
- 2. **Urban growth:** an increase in the population of towns and cities.
- 3. **Urbanism:** the extension of the social and behavioural characteristics of urban living across society as a whole.

Urbanisation is a process of population concentration whereby towns and cities grow in relative importance through,

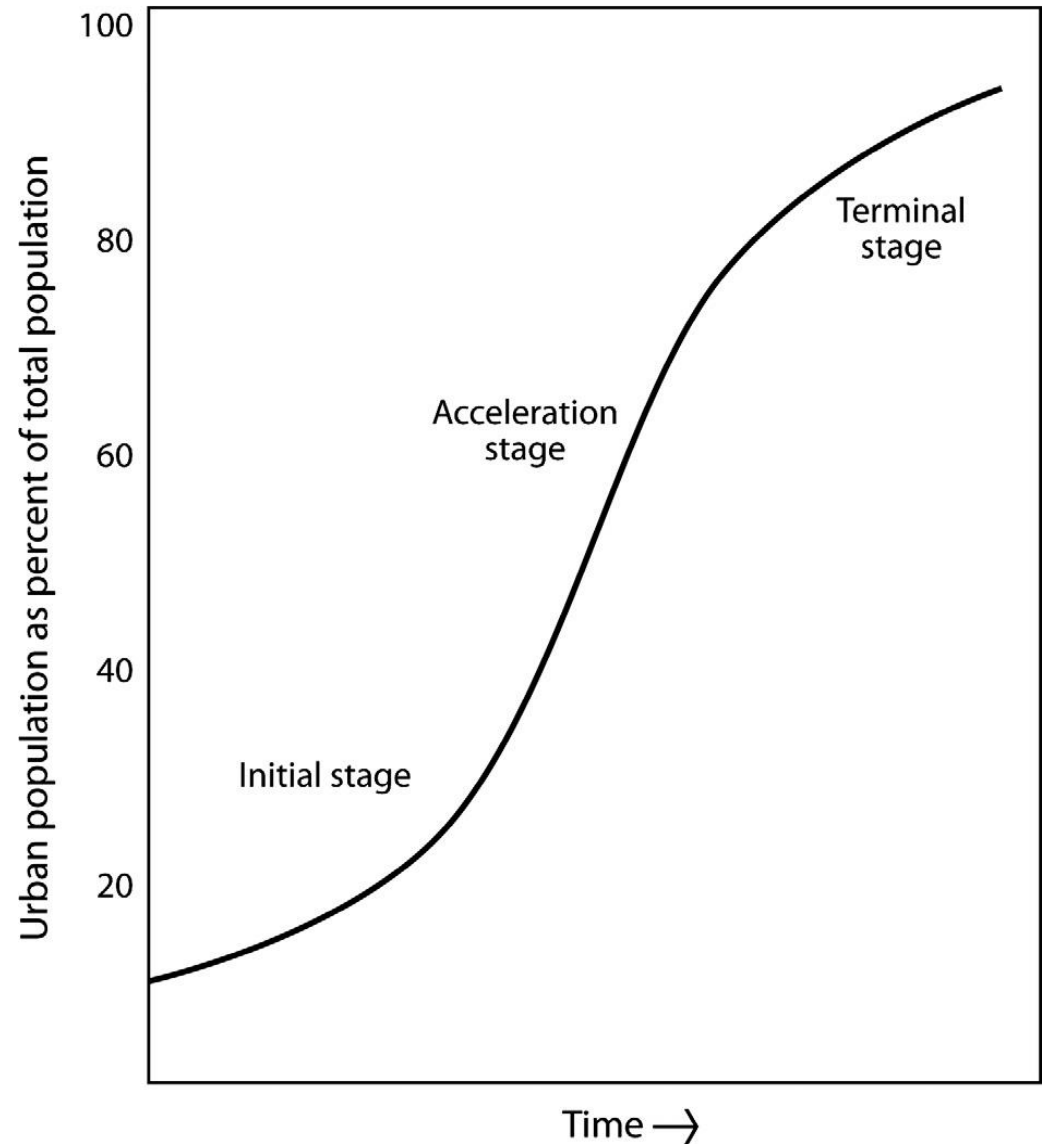
- first, an increasing proportion of the national population living in urban places and,
- second, the growing concentration of these people in the larger urban settlements.

It has been suspected that all nations pass through this process as they evolve from agrarian to industrial societies. For Davies (1969)<sup>6</sup> the typical course of urbanization for a nation is represented by a logistic curve (S/J Shaped).

# Phases of Urbanisation

**Urbanization** process can be divided into **three stages**:

- **Initial stage**
- **Acceleration stage**
- **Terminal stage.**



# World Urbanisation

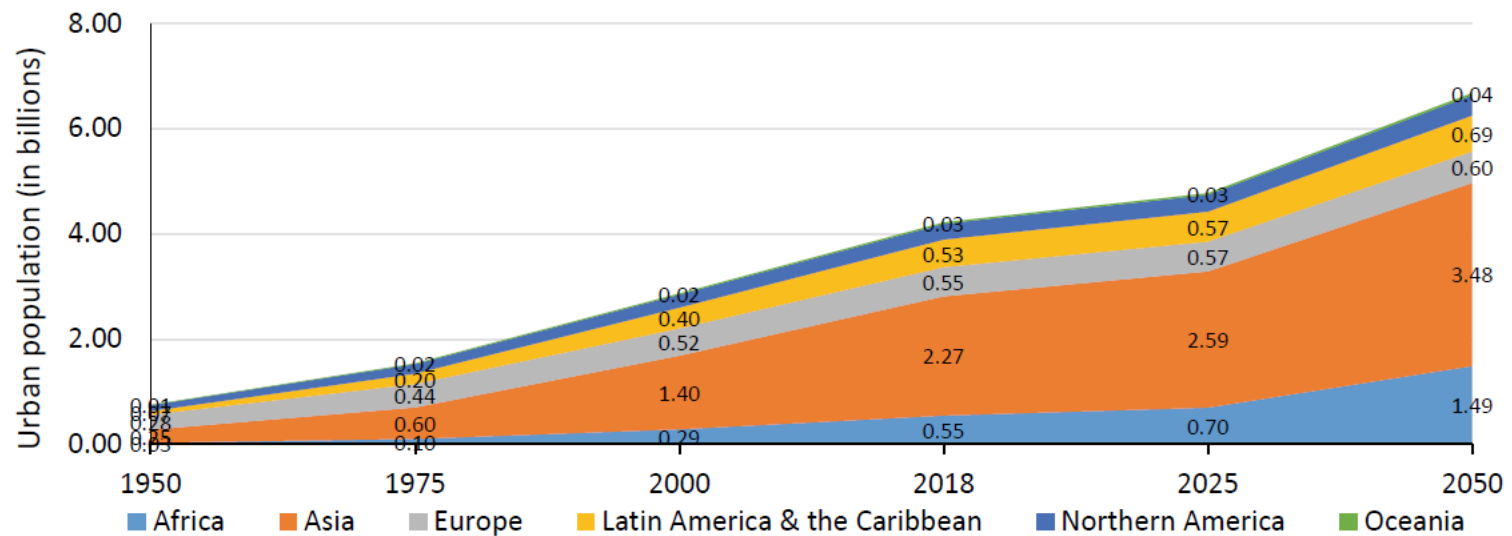
**TABLE 4.1 URBAN POPULATION AND PERCENTAGE URBAN IN MORE DEVELOPED AND LESS DEVELOPED REGIONS, 1970, 1994 AND 2025**

| <i>Region</i>                 | <i>Urban population (million)</i> |              |              | <i>Urban share (%)</i> |             |             |
|-------------------------------|-----------------------------------|--------------|--------------|------------------------|-------------|-------------|
|                               | <i>1970</i>                       | <i>1994</i>  | <i>2025</i>  | <i>1970</i>            | <i>1994</i> | <i>2025</i> |
| <b>More developed regions</b> | <b>677</b>                        | <b>868</b>   | <b>1,040</b> | <b>67.5</b>            | <b>74.7</b> | <b>84.0</b> |
| Australia–New Zealand         | 13                                | 18           | 26           | 84.4                   | 84.9        | 89.1        |
| Europe                        | 423                               | 532          | 598          | 64.4                   | 73.3        | 83.2        |
| Japan                         | 74                                | 97           | 103          | 71.2                   | 77.5        | 84.9        |
| Northern America              | 167                               | 221          | 313          | 73.8                   | 76.1        | 84.8        |
| <b>Less developed regions</b> | <b>676</b>                        | <b>1,653</b> | <b>4,025</b> | <b>25.1</b>            | <b>37.0</b> | <b>57.0</b> |
| Africa                        | 84                                | 240          | 804          | 23.0                   | 33.4        | 53.8        |
| Asia <sup>a</sup>             | 428                               | 1,062        | 2,615        | 21.0                   | 32.4        | 54.0        |
| Latin America                 | 163                               | 349          | 601          | 57.4                   | 73.7        | 84.7        |
| Oceania <sup>b</sup>          | 1                                 | 2            | 5            | 18.0                   | 24.0        | 40.0        |

*Source:* adapted from United Nations (1995) *World Urbanization Prospects: The 1994 Revision* New York: United Nations

*Notes:* <sup>a</sup>Excluding Japan. <sup>b</sup>Excluding Australia–New Zealand

# World Urbanisation



**Fig. 2.4** Region-wise urban population (in billion), 1950–2050. Source: United Nations, Department of Economic and Social Affairs, Population Division (2018)

## Initiation and continuation of Urbanisation:

- At the end of the nineteenth century the extent of world urbanisation was limited, with only Britain, north-west Europe and the USA more than 25 per cent urban in 1890.<sup>1</sup> With less than 3 per cent of the world's population living in towns and cities, levels of urbanisation elsewhere were insignificant.
- The rising levels of urbanisation in Africa and Asia, which were almost wholly rural in 1950, confirms that for most countries of the world urbanisation is a contemporary and ongoing process.

|                                   | <i>Proportion of the world's:</i> |             |                                           |             | <i>No. of the world's<br/>100 largest cities in:</i> |             |             |
|-----------------------------------|-----------------------------------|-------------|-------------------------------------------|-------------|------------------------------------------------------|-------------|-------------|
|                                   | <i>Urban population</i>           |             | <i>Population in<br/>'million cities'</i> |             |                                                      |             |             |
|                                   | <i>1950</i>                       | <i>1990</i> | <i>1950</i>                               | <i>1990</i> | <i>1800</i>                                          | <i>1950</i> | <i>1990</i> |
| <b>Africa</b>                     | <b>4.5</b>                        | <b>8.8</b>  | <b>1.8</b>                                | <b>7.5</b>  | <b>4</b>                                             | <b>3</b>    | <b>7</b>    |
| Eastern Africa                    | 0.5                               | 1.7         | —                                         | 0.8         | —                                                    | —           | —           |
| Middle Africa                     | 0.5                               | 1.0         | —                                         | 0.8         | 0                                                    | 0           | 1           |
| Northern Africa                   | 1.8                               | 2.8         | 1.8                                       | 3.2         | 3                                                    | 2           | 5           |
| Southern Africa                   | 0.8                               | 0.9         | —                                         | 0.8         | 0                                                    | 1           | 0           |
| Western Africa                    | 0.9                               | 2.6         | —                                         | 2.0         | 1                                                    | 0           | 1           |
| <b>Americas</b>                   | <b>23.7</b>                       | <b>23.0</b> | <b>30.1</b>                               | <b>27.8</b> | <b>3</b>                                             | <b>26</b>   | <b>27</b>   |
| Central America and the Caribbean | 2.8                               | 4.2         | 2.2                                       | 3.5         | 2                                                    | 2           | 3           |
| Northern America                  | 14.4                              | 9.2         | 21.2                                      | 13.1        | 0                                                    | 18          | 13          |
| South America                     | 6.5                               | 9.7         | 6.7                                       | 11.1        | 1                                                    | 6           | 11          |
| <b>Asia</b>                       | <b>32.0</b>                       | <b>44.5</b> | <b>28.6</b>                               | <b>45.6</b> | <b>64</b>                                            | <b>33</b>   | <b>44</b>   |
| Eastern Asia                      | 15.2                              | 19.7        | 17.6                                      | 22.2        | 29                                                   | 18          | 21          |
| South-East Asia                   | 3.7                               | 5.8         | 3.4                                       | 5.6         | 5                                                    | 5           | 8           |
| South-Central Asia                | 11.2                              | 14.8        | 7.0                                       | 14.6        | 24                                                   | 9           | 13          |
| Western Asia                      | 1.8                               | 4.1         | 0.6                                       | 3.3         | 6                                                    | 1           | 2           |
| <b>Europe</b>                     | <b>38.8</b>                       | <b>22.8</b> | <b>38.0</b>                               | <b>17.9</b> | <b>29</b>                                            | <b>36</b>   | <b>20</b>   |
| Eastern Europe                    | 11.8                              | 9.3         | 7.7                                       | 6.3         | 2                                                    | 7           | 4           |
| Northern Europe                   | 7.7                               | 3.4         | 9.0                                       | 2.1         | 6                                                    | 6           | 2           |
| Southern Europe                   | 6.5                               | 4.0         | 6.7                                       | 3.2         | 12                                                   | 8           | 6           |
| Western Europe                    | 12.8                              | 6.2         | 14.6                                      | 6.2         | 9                                                    | 15          | 8           |
| <b>Oceania</b>                    | <b>1.1</b>                        | <b>0.8</b>  | <b>1.6</b>                                | <b>1.3</b>  | <b>0</b>                                             | <b>2</b>    | <b>2</b>    |

# Growth of Urban Population

**TABLE 4.2 AVERAGE ANNUAL RATE OF CHANGE OF URBAN POPULATION, 1965–70, 1990–5 AND 2020–5 (%)**

| <i>Region</i>                 | <i>1965–70</i> | <i>1990–5</i> | <i>2020–5</i> |
|-------------------------------|----------------|---------------|---------------|
| <b>World</b>                  | <b>2.64</b>    | <b>2.53</b>   | <b>1.93</b>   |
| <b>Less developed regions</b> | <b>3.58</b>    | <b>3.51</b>   | <b>2.33</b>   |
| Africa                        | 4.64           | 4.38          | 3.34          |
| Asia <sup>a</sup>             | 3.28           | 3.68          | 2.31          |
| Latin America                 | 3.97           | 2.60          | 1.26          |
| Oceania <sup>b</sup>          | 2.26           | 3.13          | 3.32          |
| <b>More developed regions</b> | <b>1.74</b>    | <b>0.75</b>   | <b>0.45</b>   |
| Australia–New Zealand         | 2.35           | 1.32          | 1.05          |
| Europe                        | 1.68           | 0.84          | 0.24          |
| Japan                         | 2.20           | 0.37          | –0.06         |
| North America                 | 1.63           | 1.29          | 0.99          |

*Source: adapted from United Nations (1995) World Population Prospects: The 1994 Revision New York: United Nations*

**TABLE 4.5 NUMBER OF MEGACITIES, 1970, 1994, 2000 AND 2015**

| <i>Region</i>                 | <i>1970</i> | <i>1994</i> | <i>2000</i> | <i>2015</i> |
|-------------------------------|-------------|-------------|-------------|-------------|
| <b>World</b>                  | <b>11</b>   | <b>22</b>   | <b>25</b>   | <b>33</b>   |
| <b>Less developed regions</b> | <b>5</b>    | <b>16</b>   | <b>19</b>   | <b>27</b>   |
| Africa                        | 0           | 2           | 2           | 3           |
| Asia <sup>a</sup>             | 2           | 10          | 12          | 19          |
| Latin America                 | 3           | 4           | 5           | 5           |
| <b>More developed regions</b> | <b>6</b>    | <b>6</b>    | <b>6</b>    | <b>6</b>    |
| Europe                        | 2           | 2           | 2           | 2           |
| Japan                         | 2           | 2           | 2           | 2           |
| Northern America              | 2           | 2           | 2           | 2           |

*Source: adapted from United Nations (1995) World Urbanization Prospects: The 1994 Revision New York: United Nations*

*Note: <sup>a</sup>Excluding Japan*

# City Size and Population Distribution

**TABLE 4.3 URBAN POPULATION, NUMBER OF CITIES AND PERCENTAGE OF URBAN POPULATION BY CITY-SIZE CLASS: WORLD, MORE DEVELOPED REGIONS AND LESS DEVELOPED REGIONS**

| Size class                          | World |      |       |       | More developed regions |      |      |      | Less developed regions |      |      |       |
|-------------------------------------|-------|------|-------|-------|------------------------|------|------|------|------------------------|------|------|-------|
|                                     | 1950  | 1970 | 1990  | 2015  | 1950                   | 1970 | 1990 | 2015 | 1950                   | 1970 | 1990 | 2015  |
| <b>10 million or more</b>           |       |      |       |       |                        |      |      |      |                        |      |      |       |
| No. of agglomerations               | 1     | 3    | 12    | 27    | 1                      | 2    | 4    | 4    | 0                      | 1    | 8    | 23    |
| Population                          | 12    | 44   | 161   | 450   | 12                     | 33   | 63   | 71   | 0                      | 11   | 98   | 378   |
| % urban                             | 1.7   | 3.2  | 7.1   | 10.9  | 2.8                    | 4.8  | 7.5  | 7.2  | 0.0                    | 1.7  | 6.9  | 12.0  |
| <b>From 5 million to 10 million</b> |       |      |       |       |                        |      |      |      |                        |      |      |       |
| No. of agglomerations               | 7     | 18   | 21    | 44    | 5                      | 8    | 6    | 8    | 2                      | 10   | 15   | 36    |
| Population                          | 42    | 130  | 154   | 282   | 32                     | 61   | 44   | 56   | 10                     | 69   | 110  | 226   |
| % urban                             | 5.7   | 9.6  | 6.8   | 6.8   | 7.2                    | 9.0  | 5.2  | 5.7  | 3.5                    | 10.2 | 7.7  | 7.2   |
| <b>From 1 million to 5 million</b>  |       |      |       |       |                        |      |      |      |                        |      |      |       |
| No. of agglomerations               | 75    | 144  | 249   | 472   | 43                     | 73   | 98   | 120  | 32                     | 71   | 151  | 352   |
| Population                          | 140   | 265  | 474   | 941   | 84                     | 136  | 191  | 240  | 56                     | 129  | 283  | 701   |
| % urban                             | 19.0  | 19.6 | 20.8  | 22.7  | 19.1                   | 20.1 | 22.7 | 24.2 | 19.0                   | 19.0 | 20.4 | 22.2  |
| <b>From 500,000 to 999,999</b>      |       |      |       |       |                        |      |      |      |                        |      |      |       |
| No. of agglomerations               | 105   | 175  | 295   | 422   | 59                     | 85   | 104  | 123  | 46                     | 90   | 191  | 299   |
| Population                          | 73    | 122  | 203   | 293   | 42                     | 61   | 72   | 84   | 31                     | 61   | 132  | 209   |
| % urban                             | 9.9   | 9.0  | 8.9   | 7.1   | 9.5                    | 9.0  | 8.5  | 8.5  | 10.5                   | 9.0  | 9.2  | 6.6   |
| <b>Fewer than 500,000</b>           |       |      |       |       |                        |      |      |      |                        |      |      |       |
| Population                          | 470   | 792  | 1,284 | 2,178 | 272                    | 386  | 472  | 540  | 198                    | 406  | 812  | 1,638 |
| % urban                             | 63.7  | 58.5 | 56.4  | 52.6  | 61.5                   | 57.1 | 56.1 | 54.5 | 67.0                   | 60.0 | 56.6 | 52.0  |

Source: adapted from United Nations (1995) *World Urbanization Prospects: The 1994 Revision* New York: United Nations

# Pre-Condition for Urbanisation

The preconditions for life in cities have been summarized by Sjöberg (1960), using Gordon Childe's analysis as:

- (1) a favourable "ecological" base,
- (2) an advanced technology (relative to the pre-urban form), and
- (3) a complex social organization—above all, a well-developed power structure.

It may be as well to recapitulate the main essentials of the urbanization process, here concentrating on the founding of cities, very briefly, as an aid to further discussion and conceptualization:

- (1) the setting up of towns requires an agricultural surplus, originally close at hand, thus an ecological base (which will include supplies of water);
- (2) the agricultural surplus frees some people from dependence upon their own labour for their own food: they, or some of them, representing a rural population surplus, move to the town and to other activities, i.e. urbanization involves migration;
- (3) the town, as it grows, will demand more agricultural surplus, thus technically more advanced or more productive agriculture, or command of a wider agricultural area;

# Pre-Condition for Urbanisation

- (4) urban growth is by natural increase and/or more inward migration;
- (5) the new urban dwellers become specialists in various trades and occupations, though early towns inevitably include food producers, fishermen, and primary producers such as miners and foresters;
- (6) new economic processes are set up, of barter and exchange, with first travelling then permanent markets, etc.; the surplus is stored in the city;
- (7) organization structures arise, including processes for the administration of the food and water supply, the storage, counting and recording and defence of the surplus, and of the organization itself; this implies a power structure of some kind;
- (8) technological processes are advanced in the city, of transport and storage, of hand manufacture: these use energy on a greater scale, though still largely animate energy;
- (9) growth of the town requires growth of its parts and processes as well as of its command of external resources.

# Urbanisation and Economic development

- A general relationship between urbanization and economic development often has been assumed, i.e. that the most highly urbanized countries are, ipso facto, the most "developed", and that the most economically "advanced" countries must be also the most urbanized ones.
- Berry (1962) lists 143 proposed indices of economic development and 95 countries for which the data may exist. Using principal components analysis, Berry concluded that the possible  $95 \times 43$  matrix of rankings could be collapsed into four fundamental patterns of association of the indices, and accounting for over 90% of the variance of the data matrix.
- The first pattern, called by Berry a "**technological scale**", included indices relating to transport and communications, trade, energy production and consumption, national product, and public services
- The second pattern, the "**demographic scale**", included demographic indices and those relating to population per unit area, per unit of cultivated land, and percentage of land area cultivated
- The third group was of poor trading countries with low national products, high birth and population growth rates, but with large amounts of trade and international communications.
- The fourth dimension of the analysis differentiated between extremely large and extremely small countries.

# Urbanisation and Economic development

**Active Population :** The active population of a country or region is, quite simply, that number or proportion of working age who are economically active, i.e. actually in the labour force. The proportion is expressed either as a participation rate or an activity rate

- Participation rate = Economically active population/Total population

and:

- Activity rate = Number actually in employment/Total number potentially available for employment

whilst the inverse of the participation rate is termed a population multiplier:

- Population multiplier = Total population/Economically active population

But the statistics of active population are often less than satisfactory in developing countries; to a large extent this is due to difficulties in defining and measuring employment—or unemployment.

**Population and Employment:** One of the striking features of some underdeveloped economics is, that people in these economies work less at higher wage rates and more at lower ones. There are two alternative policies for developing countries as postulated by Harris and Todaro:

- High output, capital intensive industry with high wages and a smaller labour force and thus increasing unemployment as the population continues to grow; or
- Low output, labour-intensive, less "modern" industry with lower wages, (but still a differential over agriculture), a larger labour force and thus some attempt effectively to contain unemployment.

# Urbanisation and Economic development

- **Underemployment:** One characteristic of the Third World city is the high incidence of very marginal employment: flower sellers at traffic lights, shoe-shine boys, food-vendors, soft-drinks vendors, newspaper sellers—all kinds of trading and service occupations which demand little stock, no fixed premises, minimum skills, and speedy returns. **Such occupations conceal an unemployment situation by substituting underemployment to a large degree.**



# Urbanisation and Demographic Change

**Population Growth:** Taking the developing countries as being represented by Asia, Africa, and Latin America, at the beginning of the century, less than 5% of the population of these continents lived in cities; but by 1950 this figure had increased to 15%, and by 1975 to 36%. By the year 2000 it will be at least 42%, and still increasing: at least 70% of the total increase in population to year 2000 of the developing countries will be absorbed by their cities

**Rapid Pace of demographic change:** This pressure of urbanization seems likely to be the most severe in India and China, due to their already large populations, but in very many countries severe problems are probable as already large cities become even larger.

- European urbanization happened against a background of much lower population growth, higher incomes, and slower technological change. Thus there was an adequate time in which the relevant institutions able to regulate urban changes could emerge, whilst the supply of economic resources available to support urbanization was more adequate.
- In contrast, developing countries are now faced with very rapid population growth; often low levels of rural income and (in some cases) a decline of the available agricultural land per capita;

**Natural Increase:** European urbanization was at its most rapid when national population growth rates were of the order of 0.5% per annum, whereas rates today for most developing countries average 2.5% to 3.0%. Thus natural population increases already within cities are much larger, and population movements to the cities are also larger.

**Rural In-migration:** the pressure to migrate from the rural areas is not lessened by the need for more food, in such a situation.

# Urban System & Urban Hierarchy

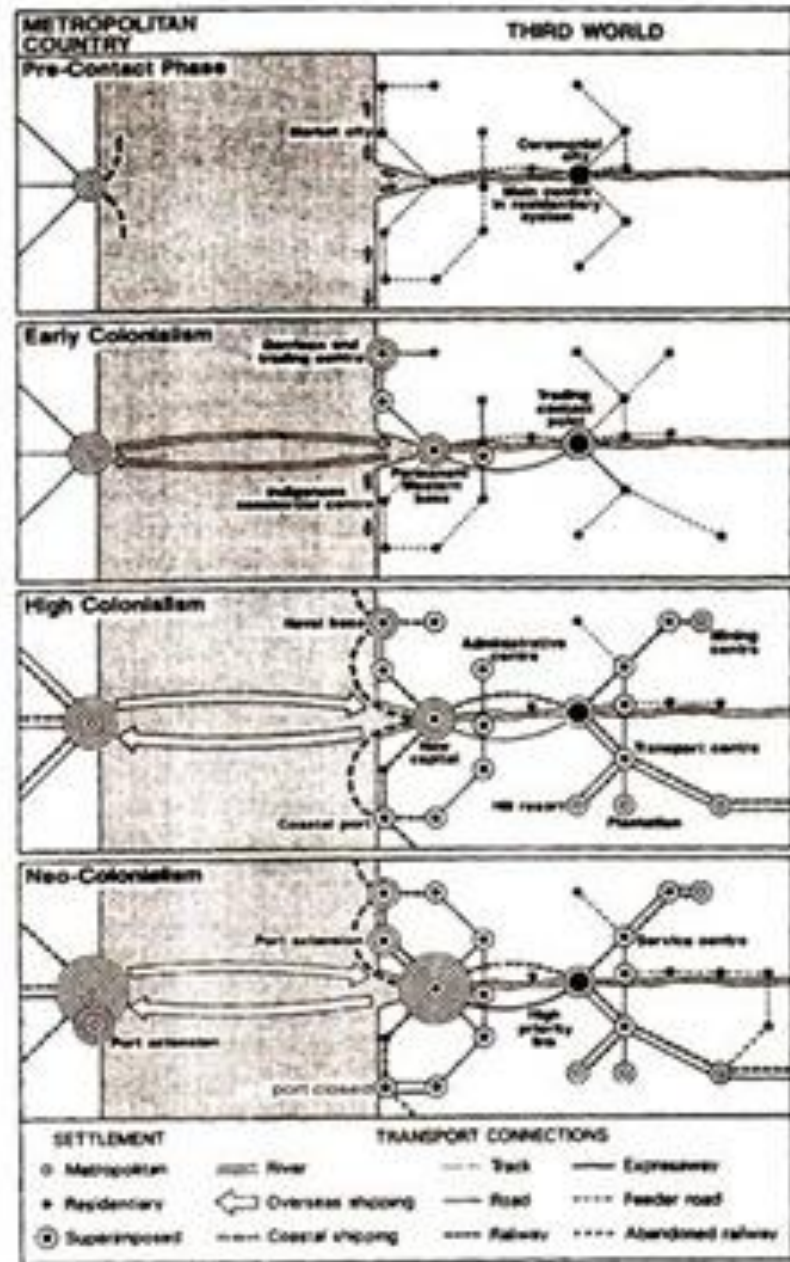
- It is perhaps logical to begin at the broader scale. Hope T. Eldridge (1956) has suggested that urbanization has two major elements: the "multiplication of points of concentration", and the "increase in size of individual concentration."
- Advanced countries with primate distributions were usually very small, and the less-developed countries with lognormal distributions were generally very large and having long histories of urbanization, as if the lognormal distribution might, after all, indicate a steady-state condition, arrived at only over a long time and based upon urban system interactions of some complexity
- Britton Harris (1959) has pointed out: "India . . . has a well-balanced structure of urban places, while many smaller underdeveloped areas have a single large capital, (usually a port and administrative centre), and no other significant metropolis."
- **Natural urban system vs. Colonial urban system:** In developing country urban system is not fully controlled by economic factors, like developed countries.
- History, administration, infrastructure, social structure and process, urban environment all together develop or hinder the urban system in developing countries

## The Rimmer Model (1977)

An alternative and complementary perspective is provided by Peter J. Rimmer (1977), British-Australian Geographer, who outlined the development of a **hybrid transport system in less-developed countries**, derived from the colonization process by which metropolitan powers used revolutionary modes of transport to penetrate indigenous systems and to gain both political control and cultural and economic dominance.

Using terminology derived from Brookfield (1972, 1975), Rimmer identified **four phases** in the evolving interrelationships between metropolitan and Third World countries in transport terms.

Figure 3.7  
*The Rimmer's Model: Showing Development of Hybrid Transport System in Less Developed Countries by Metropolitan Powers*



# The Rimmer Model (1977)

- 1. A **pre-contact phase** involved no links between a Third World country and a distant power in the advanced world. Within the Third World country, a limited network of tracks, together with navigable waterways, supported a relatively restricted socio-economic and political system.
- 2. An **early colonial phase**, secondly, involved the establishment of direct contacts by sea between advanced and developing countries but did not produce radical changes in Third World societies, Europeans being largely content to dominate sea transport routes and to establish foothold settlements such as trading posts and garrisons.
- 3. A third **phase of high colonialism** involved more fundamental changes including the introduction of roads and railways, port facilities and inland transport nodes, and the diversification of economic activity (including industrialization and commercial agriculture) and settlement patterns (including rapid urbanization).
- 4. A fourth **neo-colonial phase** involves a substantial further diversification of the economic development surface of the Third World country and continuing (if modified) trade links with the former metropolitan power. The modernization of the transport system in the Third World country involves, at this stage, elements of rationalization, adaptation and selective investment in response to changing demands. There is, however, no radical adjustment to the systems inherited from earlier phases.

# A 'STAGES OF URBAN DEVELOPMENT' MODEL

The concept of a cycle of urbanisation has also been employed by Klaassen *et al.* (1981) and van den Berg *et al.* (1982) to study the growth patterns *within* individual urban agglomerations. shows, four stages of urban development are envisaged:

- 1. *Urbanisation*: when certain settlements grow at the cost of their surrounding countryside.
- 2. *Suburbanisation* or *exurbanisation*: when the urban ring (commuter belt) grows at the cost of the urban core (physically built-up city).
- 3. *Disurbanisation* or *counterurbanisation*: when the population loss of the urban core exceeds the population gain of the ring, resulting in the agglomeration losing population overall.
- 4. *Reurbanisation*: when either the rate of population loss of the core tapers off, or the core starts regaining population with the ring still losing population.

# Future of Urbanisation

Beier *et al.* suggest a typology of four categories as an aid to a closer appreciation of the situation:

- *Type I.* Those countries in which the process of urbanization is well underway. The population is already more than half urban, incomes relatively high and there is little pressure of population on arable land and natural resources. The end of the urbanization process will occur before the turn of the century when most of the population will be in urban areas and rural areas will begin to experience absolute declines. (Includes most of Latin America.)
- *Type II.* In these countries the urbanization experience is more recent. Over half the population is still in rural areas. Population pressures exist on the land and incomes are at relatively low levels. If population pressures can be eased and resource constraints overcome, this group of countries by the turn of the century should obtain levels of urbanization similar to those found in the Type I countries today. (Includes such semi-industrialized countries of Asia and North Africa as Egypt, Korea, Malaysia, the Philippines.)
- *Type III.* This group of countries is predominantly rural but urbanizing rapidly. Even so, by the year 2000 they will still be predominantly rural with high rates of growth of the rural population. The outcome of the race between population growth and resources (and the resulting growth of per capita income) is uncertain. (Includes most of Africa south of the Sahara.)
- *Type IV.* These countries are dominated by severe pressures on the land in largely rural, subsistence-level-income societies. If the projected population growth rates are sustainable they will still be characterized in the year 2000 by large and growing

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