

Urbanisation in Asia: An Overview

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INTRODUCTION

Of the many profound changes which have swept Asia during the last half-century none have been so profound and far reaching as the doubling of the proportion of population living in urban areas. In 1950, 231 million Asians lived in urban areas and by 2000 they had increased five times to 1.22 billion while their proportions of the total population increased from 17.1 to 34.9 percent (United Nations 2001a). Moreover, in the next two decades Asia will pass the threshold of having more than half their population living in urban areas (United Nations 2002). While there are huge variations between countries in the level of urbanisation and later of urban growth this is indicative of substantial economic, social and demographic change in the region. The paper firstly outlines the major patterns and trends in urbanisation and urban growth in the region. It then examines, in so far as is possible with the information available, the role of population movement in Asian urbanisation. It then discusses a number of key issues relating to migration and urbanisation in the region and finally a number of policy issues relating to urbanisation in Asia are examined.

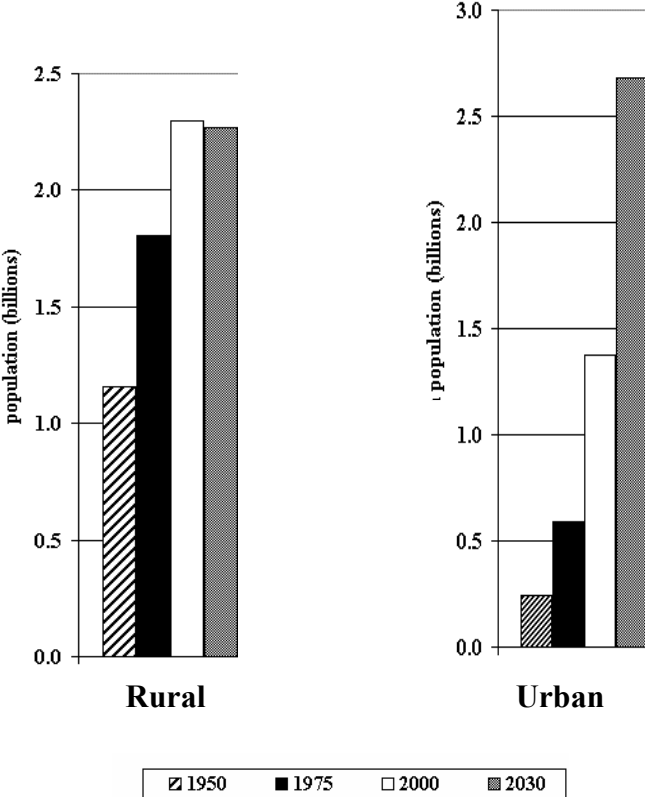
In considering urban population issues in Asia it is important to be aware of a number of difficulties associated with the conceptualisation, definition and delineation of urban areas in the region. One of the most salient features of urban areas in the region are the complex and strong linkages they have with rural areas and the high degree of population mobility which occur along those linkages. This movement has blurred the distinctions between urban and rural areas with many people working in urban areas while keeping their family in and spending long periods themselves in rural areas (Hugo, 1982a). Moreover the definition and delineation of urban boundaries in the region not only varies greatly between Asian countries but in many is based on administrative criteria which are not effective in distinguishing urban from rural populations (Champion and Hugo (eds.) 2003, forthcoming; Jones 2003, forthcoming).

URBANISATION TRENDS

The United Nations biennial estimates of urban, rural and city populations are used here to outline the major recent and likely forthcoming trends in Asian urbanisation and urban growth (United Nations 2001a, 2002). It is important at the outset to stress what the changes have meant in terms of numbers of people since this is most indicative of the shifts in demand and need for goods and services. Figure 1 indicates the massive absolute growth which has occurred in the

Asian urban sector between 1950 and 2000 (from 250 million to almost 1.5 billion people), while the rural population has increased from 1.2 to 2.3 billion.

Figure 1: Asia: Urban and Rural Population Area, 1950-2030
 Source: Zlotnik 2003



On the other hand, the Asian rural population is expected to decline over the next three decades while the urban population will almost double. However, these figures mask enormous variations between individual countries and regions within Asia. Table 1 shows that South-Central Asia is the least urbanised part of the region with less than a third (29.8 percent) of its population living in urban areas while Eastern Asia is the most urbanised (41.6 percent). By 2030 two in three residents in East Asia will live in urban areas while the urban proportion will be 44 percent in South Central Asia and 56.5 percent in Southeastern Asia. The variation is even greater between individual countries and Appendix One presents United Nations estimates and projections of the number and percent of the total population of each country in urban areas. This indicates that the level of urbanisation varies from the city-states of China-Hong Kong and Singapore to the almost totally rural countries of East Timor (7.5 percent living in urban areas) and Bhutan (7.1 percent). It is especially important to consider trends in the largest nations. Of

the 10 nations with more than 100 million residents in 2000, six were in Asia. Table 2 shows trends in growth of the urban populations in those nations.

Table 1: Asia: Urban Population, Number and Percentage Estimates, 1950 to 2000 and Projections, 2030

Source: United Nations 2002

| | 1950 | | 2000 | | 2030 | |
|--------------------|------------|------|------------|------|------------|------|
| | No. ('000) | % | No. ('000) | % | No. ('000) | % |
| Eastern Asia | 121,250 | 18.0 | 616,845 | 41.6 | 1,064,756 | 62.7 |
| South Central Asia | 82,882 | 16.6 | 440,879 | 29.8 | 968,944 | 44.0 |
| Southeastern Asia | 26,305 | 14.8 | 196,029 | 37.5 | 407,174 | 56.5 |
| Asia | 230,437 | 17.1 | 1,253,753 | 34.9 | 2,440,874 | 52.5 |

Table 2: Asia's Largest Countries: Urban Population, Number and Percentage Estimates, 1950 and 2000 and Projections, 2030

Source: United Nations 2002

| | 1950 | | | 2000 | | | 2030 | |
|------------|------------|------|--------------------|------------|------|--------------------|------------|------|
| | No. ('000) | % | % Growth 1950-2000 | No. ('000) | % | % Growth 1950-2030 | No. ('000) | % |
| China | 69,528 | 12.5 | 556.3 | 456,340 | 35.8 | 93.6 | 883,421 | 59.5 |
| India | 61,695 | 17.3 | 352.3 | 279,045 | 27.7 | 106.3 | 575,684 | 40.9 |
| Indonesia | 9,863 | 12.4 | 781.5 | 86,943 | 41.0 | 107.1 | 180,019 | 63.7 |
| Pakistan | 6,949 | 17.5 | 572.9 | 46,757 | 33.1 | 184.9 | 133,226 | 48.9 |
| Bangladesh | 1,774 | 4.2 | 1,836.5 | 34,354 | 25.0 | 186.9 | 98,554 | 44.3 |
| Japan | 42,065 | 50.3 | 137.9 | 100,089 | 78.8 | 2.7 | 102,819 | 84.8 |

Clearly there has been massive urban growth over the 1950-2000 period and this will at least double again except in Japan and China. Only Japan had more than a half of its population in urban areas in 2000 but by 2030 this will also be the case in China and Indonesia. It is also important to consider the tempo of change in urbanisation and urban growth. Table 3 summarises the main trends and shows that over the 1950-2000 period Asia's urban population grew by 3.46 percent per annum.

Table 3: Selected Indicators for the Urban and Rural Population by Major Area, 1950-2030

Source: United Nations 2002, 5

| Major area | Population (in millions) | | | | Growth rate (percentage) | | Doubling time (years) | |
|--------------------------------------|--------------------------|-------|-------|-------|--------------------------------|-----------|-----------------------|-----------|
| | 1950 | 1975 | 2000 | 2030 | 1950-2000 | 2000-2030 | 1950-2000 | 2000-2030 |
| <i>A. Population size and growth</i> | | | | | | | | |
| Total population | | | | | | | | |
| Northern America | 172 | 243 | 314 | 396 | 1.21 | 0.77 | 57 | 89 |
| Latin America and the Caribbean | 167 | 322 | 519 | 723 | 2.27 | 1.11 | 31 | 63 |
| Oceania | 13 | 21 | 31 | 42 | 1.77 | 1.05 | 39 | 66 |
| Europe | 548 | 676 | 727 | 670 | 0.57 | -0.27 | 123 | .. |
| Asia | 1 399 | 2 397 | 3 672 | 4 950 | 1.93 | 0.99 | 36 | 70 |
| Africa | 221 | 406 | 794 | 1 489 | 2.56 | 2.10 | 27 | 33 |
| Urban population | | | | | | | | |
| Northern America | 110 | 180 | 243 | 335 | 1.59 | 1.07 | 44 | 65 |
| Latin America and the Caribbean | 70 | 198 | 391 | 608 | 3.44 | 1.47 | 20 | 47 |
| Oceania | 8 | 15 | 23 | 32 | 2.14 | 1.19 | 32 | 58 |
| Europe | 287 | 455 | 534 | 540 | 1.24 | 0.04 | 56 | 1 947 |
| Asia | 244 | 592 | 1 376 | 2 679 | 3.46 | 2.22 | 20 | 31 |
| Africa | 32 | 102 | 295 | 787 | 4.42 | 3.27 | 16 | 21 |
| Rural population | | | | | | | | |
| Northern America | 62 | 64 | 71 | 61 | 0.28 | -0.49 | 251 | .. |
| Latin America and the Caribbean | 97 | 124 | 127 | 116 | 0.55 | -0.33 | 127 | .. |
| Oceania | 5 | 6 | 8 | 10 | 0.98 | 0.61 | 71 | 114 |
| Europe | 261 | 221 | 193 | 131 | -0.60 | -1.31 | .. | .. |
| Asia | 1 155 | 1 805 | 2 297 | 2 271 | 1.37 | -0.04 | 50 | .. |
| Africa | 188 | 304 | 498 | 702 | 1.94 | 1.14 | 36 | 61 |
| <i>B. Urban indicators</i> | | | | | | | | |
| | Percentage urban | | | | Urbanization rate (percentage) | | Doubling time (years) | |
| | 1950 | 1975 | 2000 | 2030 | 1950-2000 | 2000-2030 | 1950-2000 | 2000-2030 |
| Northern America | 63.9 | 73.8 | 77.4 | 84.5 | 0.38 | 0.30 | .. | .. |
| Latin America and the Caribbean | 41.9 | 61.4 | 75.4 | 84.0 | 1.18 | 0.36 | .. | .. |
| Oceania | 61.6 | 72.2 | 74.1 | 77.3 | 0.37 | 0.14 | .. | .. |
| Europe | 52.4 | 67.3 | 73.4 | 80.5 | 0.68 | 0.31 | .. | .. |
| Asia | 17.4 | 24.7 | 37.5 | 54.1 | 1.53 | 1.23 | 45 | 57 |
| Africa | 14.7 | 25.2 | 37.2 | 52.9 | 1.86 | 1.17 | 37 | 59 |

NOTE: Major areas are ordered according to the percentage urban in 2000.

However, it is anticipated that the rate of increase will fall to 2.22 percent per annum over the 2000-30 period and there will be an annual decline of 0.04 percent in the rural population. Hence in the current century the total net population growth in Asia will be absorbed in urban centres. As explained in the next section this is associated with a net transfer of population from rural to urban areas and the territorial expansion of urban settlement. An important characteristic of urbanisation in Asia has been the emergence of megacities – large multi-nuclear urban

agglomerations of more than 10 million inhabitants. Table 4 shows that no such agglomerations were in Asia in 1950 but by 1975, three of the five in the world were Asian and by 2001, 11 of the 17 global megacities were Asian.

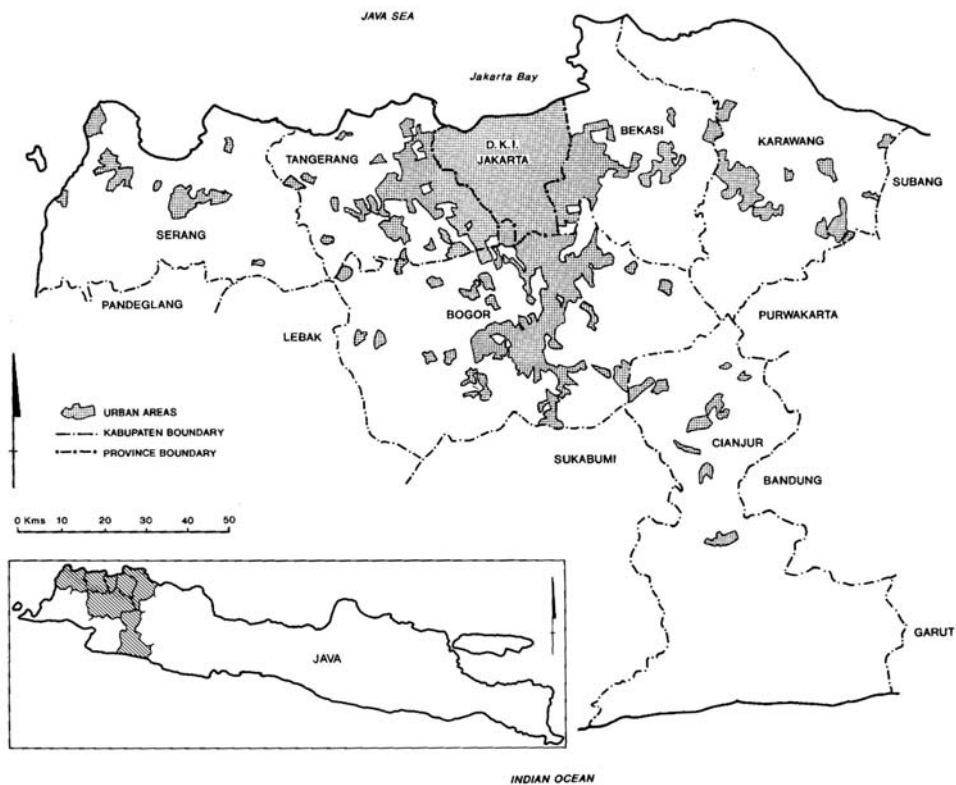
Table 4: Population of Cities with 10 Million Inhabitants or More, 1950, 1975, 2001 and 2015

Source: United Nations 2002, 8

| 1950 | | 1975 | | 2001 | | 2015 | |
|------------|------------|---------------|------------|-------------------|------------|-------------------|------------|
| City | Population | City | Population | City | Population | City | Population |
| 1 New York | 12.3 | 1 Tokyo | 19.8 | 1 Tokyo | 26.5 | 1 Tokyo | 27.2 |
| | | 2 New York | 15.9 | 2 São Paulo | 18.3 | 2 Dhaka | 22.8 |
| | | 3 Shanghai | 11.4 | 3 Mexico City | 18.3 | 3 Mumbai | 22.6 |
| | | 4 Mexico City | 10.7 | 4 New York | 16.8 | 4 São Paulo | 21.2 |
| | | 5 São Paulo | 10.3 | 5 Mumbai | 16.5 | 5 Delhi | 20.9 |
| | | | | 6 Los Angeles | 13.3 | 6 Mexico City | 20.4 |
| | | | | 7 Calcutta | 13.3 | 7 New York | 17.9 |
| | | | | 8 Dhaka | 13.2 | 8 Jakarta | 17.3 |
| | | | | 9 Delhi | 13.0 | 9 Calcutta | 16.7 |
| | | | | 10 Shanghai | 12.8 | 10 Karachi | 16.2 |
| | | | | 11 Buenos Aires | 12.1 | 11 Lagos | 16.0 |
| | | | | 12 Jakarta | 11.4 | 12 Los Angeles | 14.5 |
| | | | | 13 Osaka | 11.0 | 13 Shanghai | 13.6 |
| | | | | 14 Beijing | 10.8 | 14 Buenos Aires | 13.2 |
| | | | | 15 Rio de Janeiro | 10.8 | 15 Metro Manila | 12.6 |
| | | | | 16 Karachi | 10.4 | 16 Beijing | 11.7 |
| | | | | 17 Metro Manila | 10.1 | 17 Rio de Janeiro | 11.5 |
| | | | | | | 18 Cairo | 11.5 |
| | | | | | | 19 Istanbul | 11.4 |
| | | | | | | 20 Osaka | 11.0 |
| | | | | | | 21 Tianjin | 10.3 |

By 2015 there will be 21 megacities worldwide of which 12 will be in Asia, including 7 of the 10 largest. Four will be in excess of 20 million residents. However, there are substantial problems in determining megacities. An example is the Greater Jakarta metropolitan area in Indonesia which is now one of the world's largest urban centres. Figure 2 shows the extent of continuous urban development in Greater Jakarta compared with the official boundaries and demonstrates the extent to which Jakarta has overspilled its boundaries. In 1995, whereas 9.1 million people lived in DKI Jakarta, 15.4 million lived in the continuous builtup urban area of the metropolitan region and 20.2 million lived in all of Jabotabek which incorporates the three neighbouring *Kabupaten* (regencies).

Figure 1: The Functioning Urban Region of Greater Jakarta



Between 1990 and 1995 the Jabotabek population increased by 18 percent to reach 20.2 million persons. Most of these people live and work with a strong functional connection to and incorporation in Jakarta. It will be noted from Table 4, however, that the UN estimates gave Jakarta a population of only 11.4 million in 2001. This is substantially less than the population that lived in the continuous builtup area focused on Jakarta in 1995. This points to the problems in the UN data relating to megacities. Hence although Table 5 shows a slow down in the growth rates of megacity populations over the next 15 years these rates and the population sizes for several countries have to be questioned. The significance of ‘megaurban’ regions in the world is seen from the fact that Jones (2002, 121) has estimated that 11 percent of the total population of Southeast Asia is living in such regions.

Table 5: Population and Growth Rate of Urban Agglomerations With More Than 10 Million Inhabitants in 2011, 1975-2015

Source: United Nations 2002, 9

| | Population (millions) | | | | Growth Rate (%) | |
|--------------|-----------------------|------|------|------|-----------------|-----------|
| | 1975 | 2000 | 2001 | 2015 | 1975-2000 | 2000-2015 |
| Tokyo | 19.8 | 26.4 | 26.5 | 27.2 | 1.16 | 0.19 |
| Mumbai | 7.3 | 16.1 | 16.5 | 22.6 | 3.13 | 2.26 |
| Calcutta | 7.9 | 13.1 | 13.3 | 16.7 | 2.02 | 1.66 |
| Dhaka | 2.2 | 12.5 | 13.2 | 22.8 | 7.00 | 3.99 |
| Delhi | 4.4 | 12.4 | 13.0 | 20.9 | 4.13 | 3.45 |
| Shanghai | 11.4 | 12.9 | 12.8 | 13.6 | 0.48 | 0.36 |
| Jakarta | 4.8 | 11.0 | 11.4 | 17.3 | 3.31 | 3.00 |
| Osaka | 9.8 | 11.0 | 11.0 | 11.0 | 0.45 | 0.00 |
| Beijing | 8.5 | 10.8 | 10.8 | 11.7 | 0.95 | 0.49 |
| Karachi | 4.0 | 10.0 | 10.4 | 16.2 | 3.69 | 3.19 |
| Metro Manila | 5.0 | 10.0 | 10.1 | 12.6 | 2.75 | 1.56 |

Note: Urban agglomerations are ordered according to their population size in 2001.

POPULATION MOVEMENT AND URBANISATION IN ASIA

Population movement has played a key role not only in the growth of urban centres in Asia but it has strongly influenced the social, economic and demographic structure and development of those centres. From the perspective of the growth of urban centres it is apparent that net internal migration from rural areas has been substantial. While intercensal reclassification of rural areas as urban due to the lateral expansions of urban areas has been important, rural/urban immigration has been the main engine of growth. To use the example of Jakarta in Indonesia again at the 2000 census, Jakarta and the neighbouring province of West Java-Banten accounted for 8.6 million of Indonesia's 20.2 million immigrants moving into the nation's 30 provinces (42.3 percent). Table 6 shows United Nations (2001) estimates of the components of growth in urban areas in the 1960s, 70s and 80s and it indicates that net migration has been substantial.

Table 6: Selected Asian Countries: Percent of Urban Growth Attributed to Natural Increase and Net Migration, 1960s, 1970s and 1980s

Source: United Nations 2001b, 30

| Country | 1960s | | 1970s | | 1980s | |
|--|------------------|---------------|------------------|---------------|------------------|---------------|
| | Natural Increase | Net Migration | Natural Increase | Net Migration | Natural Increase | Net Migration |
| Components of Urban Growth by Country (Percentage) | | | | | | |
| China | | | | | 28.1 | 71.9 |
| Republic of Korea | 39.7 | 60.3 | 43.7 | 56.3 | 45.0 | 55.0 |
| Indonesia | 68.5 | 31.5 | 49.4 | 50.6 | 41.2 | 58.8 |
| Malaysia | | | 45.2 | 54.8 | | |
| Philippines | | | 59.8 | 40.2 | 47.6 | 52.4 |
| Thailand | | | 42.2 | 57.8 | 55.5 | 44.5 |
| Bangladesh | 41.4 | 58.6 | 34.4 | 65.6 | | |
| India | 68.7 | 31.3 | 54.9 | 45.1 | | |
| Iran (Islamic Rep. of) | | | 56.8 | 43.2 | 70.4 | 29.6 |
| Nepal | 67.1 | 32.9 | 39.1 | 60.9 | | |
| Pakistan | | | 82.9 | 17.1 | | |
| Sri Lanka | 50.2 | 49.5 | 118.0 | -18.0 | | |

It is useful to focus on a single country to show the significance of population movement in urbanisation. In Indonesia, for example, the national urban population more than quadrupled between 1961 and 1995 and the proportion living in urban areas increased from 14.8 percent to 35.9 percent. Although shifts in definition of urban areas has had some influence, growth of urban populations has been at about 5 percent per annum over the last three decades, while the rate of growth of rural populations fell from 1.63 percent per annum in the 1970s to 0.82 percent in the 1980s, to 0.16 percent in the early 1990s. Both rural/urban migration and reclassification have played a role but both processes can be of economic and social significance since while the latter involves movement from one labour market to another, the former may reflect a change in the local labour market with the increasing availability of non-agricultural jobs seeing non-mover residents leave the agricultural sector. A substantial part of the increase in urbanisation in Indonesia has been due to reclassification of areas from rural to urban. Gardiner and Oey-Gardiner (1991) report that the number of rural desa classified as urban almost doubled between 1980 and 1990 from around 3,500 to approximately 6,700. It is apparent that not only have Indonesia's urban areas recorded massive population gains during the 1980s but there also has been a huge increase in the lateral extent of urban areas. This lateral extension of Indonesia's urban areas has tended to occur in corridors, along major transport routes radiating out from (and

linking) major urban areas (McGee 1991; Firman 1989, 1991, 1992). In addition to the population classified as urban in the census, however, there are large numbers of rural residents, especially in Java, who work in non-agricultural occupations often based in urban or peri-urban areas by virtue of circular migration or commuting. The blurring of the distinction between urban and rural areas in Indonesia, especially Java, which was apparent in the early 1970s (Hugo 1975, 1978) has become even more apparent over the last two decades. Indeed, McGee (1991, 1992) has coined the term *kotadesasi* to describe the process whereby extensive areas in Indonesia have a complex mix of urban and rural activities.

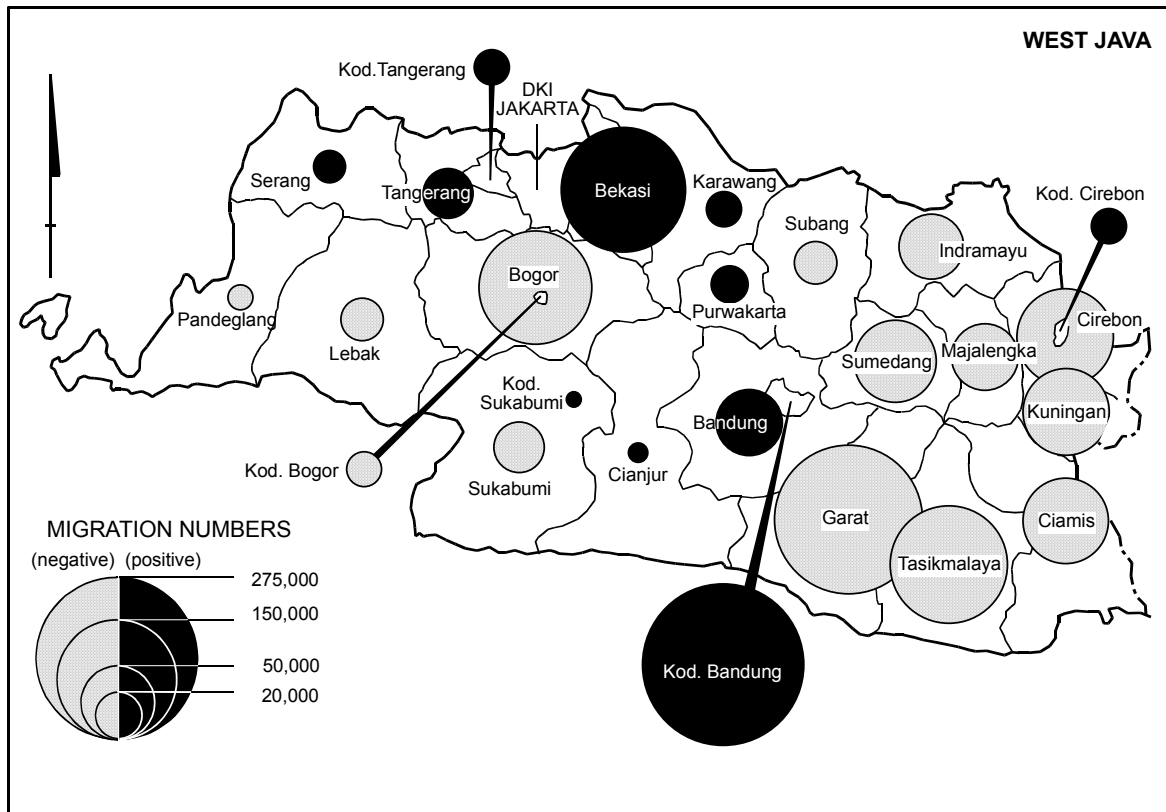
As is the case elsewhere in Asia, the examination of rural/urban migration in Indonesia is made difficult by the fact that:

- Indonesian census migration data does not differentiate between urban and rural origins of migrants.
- Indonesian census data does not detect migration within provinces and a great deal of rural to urban migration occurs within provinces.

Some indication of the importance of intraprovincial rural/urban migration is evident in the results from the 1995 intercensal survey (SUPAS). Although this survey suffers from the problems associated with small clustered samples for identifying migration patterns (Hugo 1982b), it gives some interesting insights into migrations within provinces. The data do not detect all interprovincial movement since it only counts movement within kabupaten and most local mobility will occur within kabupaten boundaries. Figure 3 shows the pattern of inter-kabupaten movement within the province of West Java (Wahyuni 2000) in 1995 and some striking patterns are evident.

Figure 3: Intraprovincial Migration in West Java, 1995

Source: Wahyuni 2000



There is a clear geographical separation of areas receiving net migration gains and those with net migration losses. Net migration gains are clearly concentrated in urban areas:

- The overspilling of Jakarta’s urban development into Bogor, Bekasi, Tangerang and, to a lesser extent, Serang, Karawang and Purwakarta.
- The major urban centre of Bandung overspilling into the surrounding kabupaten of Bandung.
- The regional cities of Cirebon and Sukubumi.

The predominantly rural kabupaten of the eastern and southwestern parts of the province experienced net migration losses. This pattern clearly reflects a substantial rural to urban migration pattern.

In her analysis of population movement in Central Java Wahyuni (2000) found that 68.5 percent of inter-kabupaten movement was directed toward urban areas although only 31.1 percent of the non-migrant population lived in urban areas. Some 62.5 percent of interprovincial

migrants moved to urban areas. Hence the movement within the province was more oriented to urban areas than that going out of the province. Moreover, that within the province involved a greater proportion of females (52.3 percent) than did the interprovincial movement (48.8 percent).

It is not just permanent migration of rural dwellers to urban areas which has influenced urban development in Asia over recent decades. There has been an exponential increase in movement between rural and urban areas involving long distance commuting or circular migration. Such mobility has a very long history in the region but it is true that modern developments in transport have facilitated an enormous expansion in the scale, type and composition of that movement. Again, the Indonesian case is indicative. Field studies in the early 1970s (Hugo 1975, 1978) demonstrated the widespread incidence and socio-economic significance of circular migration and commuting from rural to urban areas in Indonesia. While there are no substantiating data collected in censuses or national surveys it is clear that the tempo of non-permanent movement has greatly increased over the last two decades. There are a number of case studies which demonstrate this. In particular studies which resurveyed villages studied in the early 1970s discovered a substantial increase in non-permanent moves (e.g. Singarimbun 1986; Keyfitz 1985) and found that this change had been fundamental in improving the economic situation in those villages through a substantial inflow of remittances. A comprehensive longitudinal study of 37 villages in Java carried out over the period 1967-91 (Collier et al. 1993, 1) concluded that:

Twenty five years ago many of the landless labourers on Java had very few sources of income ... Now most of the landless rural families on Java have at least one person who is working outside of the village, and in a factory or service job.

In all of the villages in the 1992-93 resurvey, massive migration out of the village to jobs in the larger cities and towns was recorded and only 20 percent of households depended on agriculture for their total livelihood. The bulk of the movement recorded was on a temporary basis. The fact that those villages were deliberately selected to be representative of villages in highly accessible and low accessibility areas suggests that the scale of non-permanent rural/urban movement from Javan villages has increased exponentially in recent years and that such movement still far outweighs permanent relocation from village to city. The reasons for opting

for a non-permanent migration strategy over permanent relocation include the following elements:

- This type of mobility strategy is highly compatible with work participation in the urban informal sector since the flexible time commitments allow time to circulate to the home village. Similarly, the ease of entry to the urban informal sector is a factor.
- Participation in work in both the urban and rural sectors spreads the risk by diversifying families' portfolio of income earning opportunities.
- The cost of living in urban areas (especially Jakarta) is considerably higher than in rural areas so that keeping the family in the village and 'earning in the city while spending in the village' allows earnings to go much further.
- Java's transport system is cheap, diverse and allows workers to get to their home village quickly.
- Job options in the village, especially during seasonal increases in demand for labour (such as harvesting time) are able to be kept open. Hence risk can be spread over several sources of income.
- Many informal and formal sector employers in large cities, especially Jakarta, provide barracks type accommodation for workers.
- Often the movement is part of a family labour allocation strategy in which some members are sent out of the village to contribute to the village based family's income.
- In many cases there is a social preference for living and bringing up children in the village where there are perceived to be less negative, non-traditional influences.
- Social networks are crucial in the development of this form of migration. Most temporary migrants make their initial movement with other experienced migrants or join family or friends established at the destination.
- As is the case with international migration, recruiters and middlemen of various types have played a significant role in the increasing rural to urban migration in Indonesia. As Collier et al. (1993, 41) point out ... 'Often a factory manager will meet with the head of the village to recruit young people for his factory. They sometimes would send a bus in the morning to pick up the workers'. Such a pattern of strong mandor (foremen), calo (recruiter) and taikong (agents) has a long history in Java and has become even more significant in recent years in encouraging migration to both formal

and informal sector jobs based in urban areas. Firman (1991), for example, has demonstrated the critical role played by mandors in the construction industry in urban Indonesia.

While there are many similarities in the contemporary situation with respect to patterns and processes of non-permanent migration compared with the 1970s, there also have been some significant changes. Paramount among these is the increasing involvement of women in both permanent and temporary movements, especially those directed from village to city. Another change is that the increasing size of the formal sector in Indonesian cities, especially Jakarta and other large cities in Java, has led to an increasing number of migrants having to be more or less permanently settled in the city and not free to come and go to their village as frequently and readily as was possible when they worked in the informal sector. In many cases, for example with many of the young women working in factories in and around cities like Jakarta and Surabaya, there are intentions to eventually return to settle in their village but the fixed time commitments of their work prevents them circulating to and from the village on a weekly, fortnightly or monthly basis.

A final dimension of population mobility which needs to be mentioned when considering urbanisation in Asia is international migration. Of course, international migration has not been as substantial an element in Asian urbanisation as it has in contemporary population growth in the major cities of Euro-American societies. Nevertheless, international migration is assuming greater significance, especially in cities in the most developed countries in the region. In Singapore, for example, it is now estimated that 19 percent of the population are foreign citizens and 27.7 percent of the workforce are foreigners (Yap 2003). In Hong Kong, 6.7 percent of the population are citizens of other countries (Chiu 2003). The number of foreign nationals in 2001 in Japan was 1.77 million and there were some 224,067 overstaying illegal migrants, most of

them in the nation's urban areas. In cities like Kuala Lumpur and Bangkok there are also significant numbers of foreigners, although in China's and India's cities the number of foreigners in cities is quite small.

There are a number of elements in the international migration into Asia's largest cities among which the following are particularly important:

- There is an inflow of a professional and managerial group of expatriates. This group is increasing in size throughout the region and while it involves some foreigners of Asian origin, especially from India and the Philippines, skilled people from Europe, North America, Japan, Korea and Australia-New Zealand predominate. It is partly associated with increased Foreign Direct Investment in these cities and the associated transfer of staff from parent companies located in MDCs. It also includes other skilled people who are in demand because local mismatches between rapidly growing and restructuring economies demands jobs which cannot be met by the local training/education system. All major cities in the region have significant numbers of this group but especially Singapore, Kuala Lumpur, Hong Kong and Bangkok.
- There is a substantial influx of women to work as domestic maids, especially in the cities in the Newly Developing Countries (NDCs) – Taiwan, Hong Kong, Singapore, Brunei, Malaysia. They are predominantly drawn from Indonesia, the Philippines and Sri Lanka.
- The construction industry in many cities in NDCs is dominated by foreign workers. In several countries, too, low skilled foreign workers have been brought in to work in factories and in other low pay, low skill areas.

- The so-called ‘entertainment’, sex industry is an important element in the major cities (Lim 1998) and in several places foreigners, especially women, are involved.

Undocumented workers often trafficked into the country are substantial.

- In several cities foreign workers, many of them undocumented, have become an important part of the informal sector.

International migration is associated with the increasing incorporation of cities into the global economic system. It is one of the distinctive characteristics of Asia’s megacities.

The high levels of permanent and non-permanent movement to Asia’s cities are important in increasing their strong linkages to their rural hinterlands, to the region and to the world. These linkages are important in shaping the social, economic and demographic characteristics of the cities but also are important conduits of money to rural areas through remittances as well as ideas and goods. Moreover, during the financial crisis of the late 1990s in several countries in the region, the chief initial impact was in urban areas and one of the ways in which urban dwellers coped with the crisis was for some family members to return temporarily to their village origins. In most cities in the region more than a half of the inhabitants are first generation migrants from rural and small urban areas or the children of those migrants. In addition, because urban origin remittances are such an important component in the economies of many rural areas in Asia, the impact of the crisis quickly spread to those areas.

SOME ISSUES RELATING TO MIGRATION AND URBANISATION IN ASIA

Urbanisation and Economic Growth

Many commentators in the past have seen cities as having a parasitic role in relation to their hinterlands; extracting their surpluses, depriving them of their most talented and entrepreneurial residents, assigning them low levels of provision of utilities and services etc.

However, in Asia at least there is an emerging consensus that cities, especially the megacities, are major 'engines of growth' in national economies. As Jones (2002, 121) has pointed out:

'... Bangkok produced 37 percent of Thailand's GDP and Manila, 24 percent of the Philippines' GDP. In 1990 the ratio of city GDP per capita was 3.5 for Bangkok, 1.9 for Manila and 3.7 for Shanghai'.

Over the last decade the most dynamic sectors in national economies in the region have been largely urban based activities. Many countries in the region have deregulated and opened up their economies to outside investment and the focus of most of this investment has been the cities. Much of the foreign investment was from Japan, Taiwan, South Korea, Hong Kong and Singapore and has involved massive growth of factories to take advantage of cheap, abundant and readily controlled labour in poorer countries in the region. Industries like clothing, electrical goods, footwear, toy manufacturing which are highly labour intensive and involve much assembly type activity have been drawn to the cities of the poorer nations in the region. In recent years China has become the main focus of this investment so that the population of its largest eastern region cities are growing at unprecedented rates. However, the onset of economic crisis in several Asian countries saw a withdrawal of foreign investment from countries like Indonesia which had a substantial impact on employment in some cities.

The development of export-oriented manufacturing activity has created considerable demand for low and medium skilled labour, especially for women. It has influenced the economic structure and form of the cities with most factories being very large and located on the rapidly expanding peripheries of the cities. There have been substantial spillover effects on other parts of the urban economy, both its formal and informal sectors. Moreover, through remittances there have been impacts throughout the hinterlands of cities.

While the last decade has seen rapid economic growth in large urban centres, some regional areas have suffered as a result of a concentration of power, investment, decision making and services in large cities. Contrasts between the prosperity of these cores and many peripheral areas has grown and been exacerbated by the most entrepreneurial, risk taking and educated groups from the outer regions being attracted into the centre. The opening of national economies to outside investment has exacerbated this with most foreign investment being concentrated in the nation's largest urban areas. As a result, the largest cities have attracted a disproportionate amount of national provision of services etc. and wide gaps have grown between GDP levels per

capita and growth within national spaces. In some nations, however, political changes in the late 1990s began to challenge the concentration of investment, power and resources in a few major cities. In Indonesia, for example, the fall of President Suharto in 1998 has been followed by a period of democratisation and associated with this has been a major move toward devolution of decision making, revenue collection, power and investment to the regional level.

Urbanisation and Wellbeing

The rapid economic growth in Asia's cities in recent years has not been shared equally between all inhabitants. Indeed, there are stark inequalities evident expressed most graphically in the contrasts between opulent leafy sections of cities characterised by large housing on spacious allotments occupied by elites and the overcrowded, often unhealthy, ramshackle dwellings of the poor often located in squatter settlements on public land with little or no service provision. While the latter areas are extensive and an area of concern in Asian cities, they can often tell a misleading story to the outside observer of conditions in Asian cities. As Jones (2002, 121) points out:

‘Most indicators of welfare or human resource development, such as consumption levels, mortality rates and educational attainment, show that big city dwellers (for example, in Jakarta or Bangkok) have a considerable advantage over their rural counterparts’.

Nevertheless, within cities there are steep gradients of inequality between the haves and have nots in these cities and those differences may be increasing.

In most countries in the region infant mortality levels are generally lower in urban areas than in rural, especially in the largest cities. Formal poverty measures usually indicate that poverty levels are lower in urban areas, although there are real difficulties in equating costs of living in urban and rural areas in Asian contexts. Nevertheless, there are large populations living below the poverty line, however different, in Asian cities. Moreover, family based support systems may be weaker in urban areas than they are in rural areas for many groups.

The Informal Sector

One of the most distinctive features of the economies in most Asian cities is the fact that in most, more than half of workers are employed in the urban informal sector. These are jobs which generally do not have fixed hours, are in family rather than formal enterprises, are small

scale, often lack a fixed location, involve small investments, have no fixed earnings, involve no formal training, lack formal security and are not within the formal economy in terms of regulations, work conditions, taxation etc. They involve provision of a myriad of services at the individual or household level, small scale selling and a wide range of skilled and semi-skilled trades. They often provide services to households but also are involved in a wide array of manufacturing and service activities and often are linked in complex ways with the formal sector. A major characteristic is that it is highly absorptive with new workers being able to readily enter it, largely through family, friendship or locality of origin connections than through possessing formal qualifications. Accordingly, new entrants to the city often enter the labour market through the informal sector. Moreover, the informal sector's flexible hours and work week regime make it highly compatible with circular migration. Working in the formal sector usually involves set daily hours and working weeks which means that its workers need either to settle in the city or commute in daily from the environs in the city. Indeed, very long distance commuting has become characteristic of Asia's largest cities involving an array of transport types but especially buses and railways. Very often, there is strong occupational segmentation in particular areas of the informal sector so that urban workers in particular occupations tend to come from the same areas of origin. While the bulk of informal sector activity is relatively small scale, particular activities can grow to be quite large. Some informal sector activity takes place on the margins of law and indeed there are some activities which are considered illegal by city authorities.

Interpretations of the role of the informal sector in Asia's cities have changed over recent decades. An early view saw the sector as being more of a 'sink' to absorb the surplus of workers in such cities and an area for migrants to work until they got a 'real job' in the formal sector. This view has changed with there being increased recognition of the important role that the sector plays in the economy of Asian cities and economies.

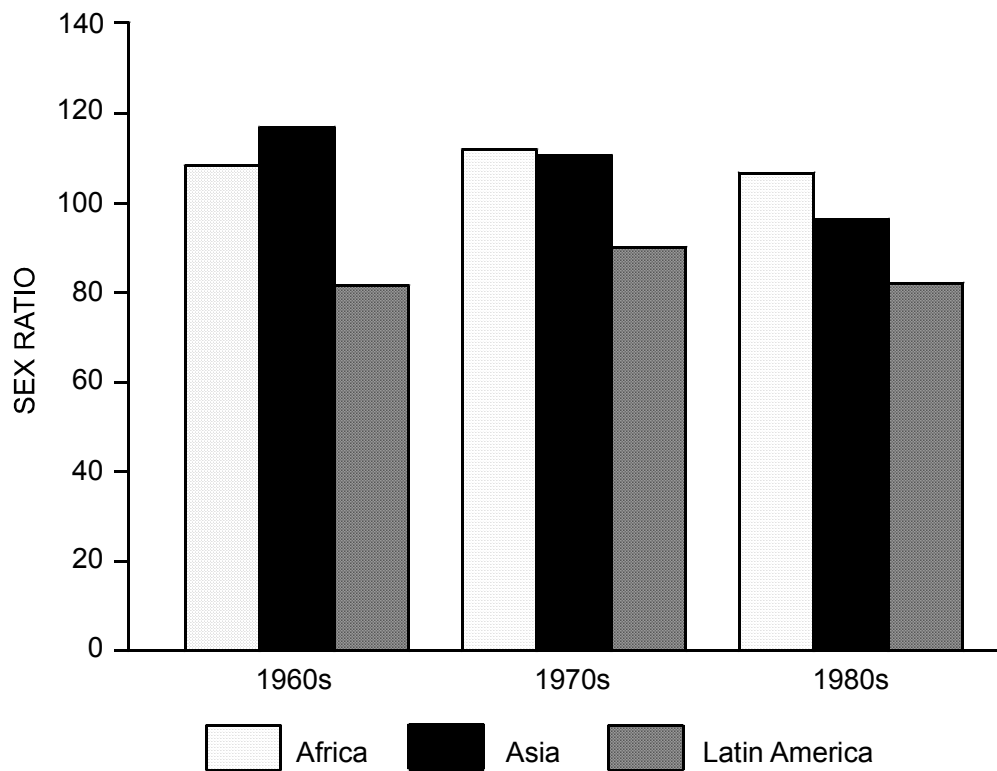
Women, Migration and Urbanisation

One of the distinctive features of rural to urban migration in Asia has been the importance of women in that movement, a feature which has differentiated it from other parts of the world (Hugo 1993). Patterns vary from country to country but in many Asian countries historical and cultural factors have combined with particular developments in the industrial and

service sectors of cities to expand employment opportunities for women (Lim 1993). A United Nations (2001b, 41) study has found from examination of sex ratios of rural-urban migration flows in several countries, that it is in Asian countries that the greatest feminisation of flows have occurred. Figure 4 shows that among the Asian countries studied, there were 116.8 males to every 100 female rural-urban migrants in the 1960s but this declined to 111 in the 1970s and 96.6 in the 1980s. There are variations between countries but generally there has been an increase in the involvement of women in rural-urban migration throughout the region due to:

- Increased growth of export based large scale manufacturing and assembly activities in Asian cities. For many of the activities in those new factories (assembly of electric devices, clothing, shoe manufacture, toy manufacture etc.) women are preferred by employers because they are generally paid lower wages, are considered more easily controlled and are considered better able to undertake tasks which involve delicate and intricate finger work as well as repetitive tasks (Lim 1993). The bulk of these women have high school level education and are directly recruited from rural areas and live in dormitories or shared accommodation. Employers often exploit these women and there is a tendency to dismiss them once they get into the family formation age group, so there is a high turnover.

Figure 4: Median Sex Ratio of Urban Net Migrants by Region, 1960s, 1970s and 1980s
 Source: United Nations 2001b, 41



- As the cities have expanded, there has been a rapid increase in demand for domestic workers as both the middle and upper classes conventionally employ several domestics. The great majority are women and they are almost all recruited from rural areas.
- There is also evidence of more women moving independently for educational and employment reasons to cities. In recent decades, traditional sanctions on the independent movement of women have been eroded with increased education and the breakdown of strong patriarchal, extended families.
- The informal sector of cities have many opportunities for females, especially in small scale selling and service activities. Both permanent and circular migrants are involved in this area.

- There has been substantial growth of the sex and entertainment industries of Asian cities and women involved in these are almost entirely rural-urban migrants and circulators.

A key characteristic of Asian cities has been that their female labour forces tend to be much more occupationally segregated than is the case for their male counterparts. In some of these areas of work there are opportunities for exploitation, not only in work that occurs in homes (domestics), and in illegal or quasi legal contexts (sex work) but also in more formal work situations like in factories. However, it is clear that social networks offer some protection in these situations. Increasing levels of female workforce participation outside the home are characteristic of Asian cities throughout the region. There is strong evidence of marriage ages being considerably higher in cities than in rural areas and fertility levels being considerably lower. Indeed, several Asian cities have fertility levels below replacement level (e.g. Jakarta, Bangkok) and indeed some (e.g. Shanghai) have some of the lowest contemporary fertility levels in the world.

Planning and Environmental Issues

The rapidly growing and large populations of Asian cities present city planners with an array of daunting challenges in provision of appropriate services, utilities and infrastructure. Indeed, the sheer size of multinuclear megacities are especially difficult in this aspect. An important issue relates to governance. In fact, many of the largest urban areas have administrative and planning boundaries which have little relationship to functioning cities. Hence, integrated planning can be very difficult with a number of jurisdictions having responsibility for different parts of the city and policies often being at odds with one another. City administrators often lack the power and organisation to apply an appropriate and equitable taxation and revenue raising system and to fully enforce building codes, environmental controls etc. Many cities in the region hence face environmental problems of substantial magnitude. In Jakarta in Indonesia, air pollution levels in some parts of the city often exceed WHO maximum levels, a situation exacerbated by the universal use of leaded petrol. Availability of uncontaminated fresh water is an issue in many areas. In Jakarta overuse and contamination of aquifers is a large problem and incursion of sea water into those aquifers is making it impossible

to draw fresh water from wells over a large part of the city. An array of health problems associated with exposure to emissions, infected water etc. are serious.

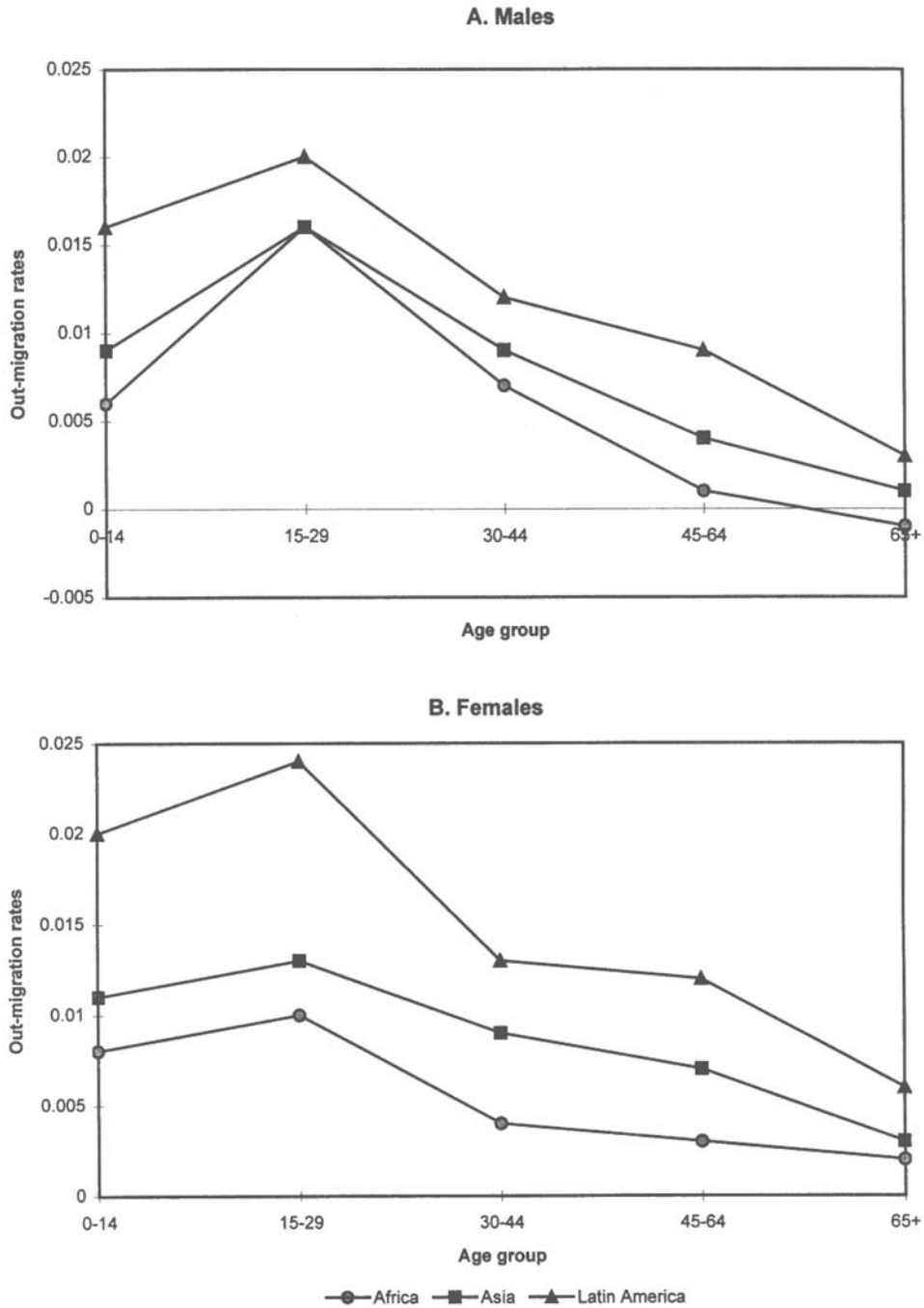
Congestion has reached massive proportions in several cities, although some have developed modern rapid transit systems. Public transport is the main way people get around in the cities and while there is a diverse range of such transport available, travel times within cities are much greater than in European and North American cities of comparable size. Other utilities such as electricity are difficult to provide on a reliable and economic basis. Sewerage is confined to limited parts of most cities and waste disposal is a massive problem. Some cities have substantial problems in maintenance of law and order and crime is a major issue. Cities are unable to meet the challenge of providing adequate or indeed in some cases any housing to the burgeoning urban populations. Squatter settlements have hence developed in railway right of way areas and in other public land areas. Provision of health, education, policing, aged care and other services is difficult.

The Age Structure of Asian Cities

One of the most consistent of findings in relation to rural-urban migration all over the world is the age selectivity of that movement. This is evident in Figure 5 which shows the median age specific rates of rural outmigration of a sample of countries in three major world regions over the 1960s, 1970s and 1980s. This shows the concentration in the young adult age groups and this points to Asian cities having considerably younger age structures than rural areas. A number of things follow from this, such as the increasing problem in some rural areas where aged parents are not able to receive assistance in old age from children as much as used to be the case because the children have moved to the city.

Figure 5: Median Age Specific Rural Outmigration Rates by Region and Sex, 1960s, 1970s and 1980s

Source: United Nations 2001b, 47



In the city, however, there are large concentrations of young adults placing considerable pressure on education services but also on the labour market to continue to be able to absorb each year large numbers of people entering the labour market for the first time. This concentration of the young also tends to be selective in that it tends to be the more highly educated youth population which moves to the city and these tend to have relatively high levels of unemployment. In Asian cities, unemployment levels are low by European standards because the poor cannot afford to be unemployed where there is no formal social security system. Accordingly, they have to take on any work regardless of its status, remuneration etc. Hence unemployment in such contexts tends to be concentrated in the more educated groups whose family can afford to support them until they are able to get work commensurate with their aspirations and level of qualifications.

Hence Asian cities have disproportionate concentrations of young, better educated people. In some rural Asian urban contexts they also have very high levels of unemployment. Some have argued that this can lead to the development of a large disaffected group who feel disenfranchised and not able to get good jobs in manifestly expanding areas of the economy. When this is allied to a perception of corruption and nepotism at high levels it can lead to discontent, protest and opposition to the status quo. Hence the conflicts against authority in some Asian countries tends to be started by young urban based people.

Migration, Urbanisation and Health in Asia

There are a number of health implications which flow from developments in urbanisation and population mobility in Asia. The movements of people from different ecological contexts means migrants may not have antibodies to cope with new localised diseases. Many newcomers to urban areas in Asia live in cramped unhealthy situations. Some workers may sleep outdoors or be exposed to infectious diseases through contaminated food and water. This may be partly due to migrants, especially circular migrants, wishing to maximise the amount of earnings that they are able to remit to their home areas. One area which is of increasing concern is HIV/AIDS. While in most countries in Asia prevalence levels are relatively low, there are some indications that it could spread quite rapidly and that one of the main vehicles for this is the high levels of population mobility, especially that between rural and urban areas. There is growing recognition of an important nexus between labour mobility, the expanding commercial sex industry and HIV infection in Asia. As indicated earlier, the commercial sex industry has grown rapidly in Asia

and its main location is in urban areas. Moreover, the sex industry often locates in areas within cities where there are large numbers of migrant workers who are a group who are major users of the commercial sex sector. This is because most migrant workers, especially the circular migrants, are young males who are freed from the close sanctions on their activity in the home area, if married they are separated from wives and family, they often have cash available and are lonely and separated from other life in the city. Hence the opportunities for contracting HIV infection are considerable, especially in the situation in Asia where the use of condoms for commercial sex is not well established. In several countries high rates of infection have been found among sex workers and some groups of mobile workers. The infected workers then return to their home areas and to other urban work destinations and have potential to spread the disease. Moreover, most sex workers are migrant workers themselves and can contract the disease and spread it to their home village and to other urban areas since most do not work in a single city.

POLICIES REGARDING URBANISATION

Several countries in Asia have adopted policies and programs which attempt to intervene in the processes of urbanisation and labour mobility. For much of the period of the 1970s and 1980s strong anti-urban sentiments prevailed in some governments and international agencies. This saw rapid urban growth as having deleterious effects, both in urban areas through excessive demands being placed on utilities, housing, transport, waste collection, job opportunities, health and education services etc. as well as rural areas being robbed of their most talented and entrepreneurial people which was a barrier to economic and social development in those areas. This led to a rash of anti-urban policies and programs such as:

- In some cases cities were 'closed' so that people who were not registered residents and who were detected at check points were evicted from the city. This, for example, was the case for Jakarta in the early 1970s.
- In several large Asian cities squatter settlements, whose inhabitants were frequently migrant workers, were bulldozed.
- In some cities economic activity favoured by migrant workers was made illegal. This includes street vendors and street based service providers. The informal sector in large cities absorbed the bulk of unskilled incoming migrant workers and programs sought to close down many such activities.

These anti-urban approaches were also influenced by somewhat romanticised notions of the 'rural way of life' being intrinsically better than in urban areas. There were elitist views that the 'privileges' of living in the city should not be open to any citizen who wishes to live there. Foreign observers were strongly influenced by contrasts of the superficial, rustic, attractive greenness of villages to the squalor of urban squatter settlements but ignored the fact that people could get work in the city but not in their village.

The fact was that anti-urban policies seemed to fly in the face of market forces:

- There was considerable 'urban bias' in both public and private investment which meant that new job creation was strongly concentrated in sectors (manufacturing and services) which were mainly urban based. On the other hand, in the agricultural sector increased commercialisation, mechanisation and replacement of labour inputs with capital inputs was displacing labour.
- In some cases there were other policy interventions which greatly favoured urban areas. In Indonesia, for example, the government fixed the price of the staple food, rice, for admirable welfare reasons. However, what this meant was the urban dwellers were able to purchase their basic food at below market prices and farmers were compelled to sell their main product for less than what it was worth. Hence there was a strong advantage in favour of urban living and a disadvantage to remaining in agriculture.
- There were widening differentials between rural and urban areas in service provision in health, education etc. as well as in the availability of electricity and other utilities.
- Migrant workers in cities were showing a great deal of ingenuity and self-reliance and were not heavily dependent on governments and institutions but more on social networks based on family or origin linkages. Hence for the bulk of immigrants they obtained their work and housing not through government and formal institutions but through family based and self-help activity in the informal sector and squatter housing. The migrants were succeeding in the city to obtain work and housing with little or no assistance from the formal institutions in the city.

A critique of the anti-urban position developed through the 1980s and 1990s which was based upon several elements including:

- The realisation that there were strong economic gradients between rural and urban areas and that any attempt to dissuade people from moving along them would be difficult and destined to failure.
- There was a growing body of research that indicated that the informal sector was not simply a sink which absorbed surplus labour but that it was a major productive element in the urban economy. Moreover, it had important labour absorptive capabilities that greatly facilitated people being able to enter the labour market. It was also recognised that there was considerable upward mobility in the sector.
- Similarly, research began to show that with such rapid population growth it was simply not possible for the formal construction sector to provide sufficient housing that conformed to formal restrictions and regulations which would accommodate the growth. 'Self-help' squatter housing often succeeded where the formal construction sector failed. Latin American work suggested that it was better to adopt a 'site and service' approach where minimal services are supplied to squatter areas.
- Another body of research showed that in Asia it is not appropriate to have separate 'urban' and 'rural' policies and programs since there are strong and developing rural/urban ties. There are flows of people, information, finance and goods along these linkages which means that policies instituted at one end will have impacts on the other. There hence is a need when considering intervention to take into account effects in both urban and rural areas.

In most countries this has led to an abandonment of anti-urban policies, although there are remnants. Indeed, Jakarta's 'closed city' legislation abandoned in the mid 1970s was revived by the Governor of Jakarta in 2001. Currently, however, a number of other elements are important:

- Firstly, in recognition of the fact that there are increasing pressures on many urban areas and lagging in many rural areas, there is increased emphasis on integrated regional, rather than urban, development strategies which self-consciously attempt to reduce the rural/urban economic gradient along which migration occurs. This emphasises decentralisation of government activity, investment and decision making to encourage the growth of employment opportunities in regions. In addition, there is an effort to reduce

the differential in service provision in such areas as health, education and electricity. It is often associated with development of devolution and democratisation policies.

- Secondly, within urban areas there is less emphasis on policing and placing barriers in the way of migrants being integrated into urban labour and housing markets. Instead, there is more of an ‘accommodationist’ approach which accepts:

- (a) migration to the city will continue,
- (b) there are insufficient resources to fully provide for them.

This approach tends to facilitate their integration into the city and build on the self-help and network based support that already exists. Hence site and service schemes, upgrading of squatter settlements etc. can improve the accommodation available.

Productivity in the informal sector can be enhanced by access to loans, training etc.

While this brief account has overly simplified and generalised a diverse range of approaches to urbanisation in Asia over the last four decades, it is no doubt true to say that there has been a general move away from policies and programs which seek to act in the opposite direction to market forces and to facilitate positive trends. In the process there has been a move away from a concept of urbanisation as somehow being unnatural and parasitic toward it being inevitable and integral in improving economic and social wellbeing.

CONCLUSION

Urban areas will soon house more than a half of Asia’s population while two generations previously, only one in ten Asians lived in urban areas. This represents a profound change in the way in which Asians live their lives. However, there are many challenges which Asian urbanisation presents to policy makers, planners and researchers. One crucial area lies in the arena of data collection and research. Planning for efficiency and equity in Asian cities requires timely and relevant research. However, in Asia, as elsewhere, conceptualisation and definition of urban areas has remained mired in the thinking of the 1970s and does not capture the nature of contemporary dynamic urban systems. Moreover, data collection systems are based on large areas while modern technology allows small building block units for censuses and other data collection which in turn allows flexible and appropriate definition of urban boundaries. Sound planning and governance of urban centres in Asia requires better delineation of boundaries and of appropriate specifically disaggregated data within those boundaries. Moreover, research in

urban areas needs to be integrated so that an understanding of the dynamics of population change in urban areas may be achieved.

Appendix One
Asia: Urban Population, Number and Percentage, Estimates 1950 to 2000 and Projections 2010 to 2030
Source: United Nations 2002

| | 1950 | | 1975 | | 2000 | | 2010 | | 2020 | | 2030 | |
|---------------------------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|---------------|---------|
| | Number ('000) | Percent | Number ('000) | Percent | Number ('000) | Percent | Number ('000) | Percent | Number ('000) | Percent | Number ('000) | Percent |
| Asia | 243,845 | 17.4 | 591,930 | 24.7 | 1,375,519 | 37.5 | 1,783,600 | 43.0 | 2,231,108 | 48.7 | 2,678,680 | 54.1 |
| Eastern Asia | 121,250 | 18.0 | 276,778 | 25.2 | 616,845 | 41.6 | 788,427 | 49.9 | 949,753 | 57.2 | 1,064,756 | 62.7 |
| China | 69,528 | 12.5 | 161,445 | 17.4 | 456,340 | 35.8 | 617,348 | 45.2 | 771,861 | 53.4 | 883,421 | 59.5 |
| China, Hong Kong SAR | 1,629 | 82.5 | 3,943 | 89.7 | 6,860 | 100.0 | 7,658 | 100.0 | 8,365 | 100.0 | 8,962 | 100.0 |
| China, Macao SAR | 185 | 86.9 | 247 | 97.7 | 439 | 98.8 | 476 | 99.0 | 511 | 99.1 | 532 | 99.2 |
| Dem People's Rep of Korea | 3,353 | 31.0 | 9,082 | 56.7 | 13,415 | 60.2 | 15,046 | 63.5 | 17,074 | 67.9 | 19,045 | 72.0 |
| Japan | 42,065 | 50.3 | 84,409 | 75.7 | 100,089 | 78.8 | 103,211 | 80.5 | 104,039 | 82.6 | 102,819 | 84.8 |
| Mongolia | 144 | 19.0 | 704 | 48.7 | 1,434 | 56.6 | 1,663 | 58.0 | 2,027 | 61.6 | 2,423 | 66.5 |
| Republic of Korea | 4,347 | 21.4 | 16,947 | 48.0 | 38,269 | 81.9 | 43,024 | 86.7 | 45,877 | 89.2 | 47,554 | 90.5 |
| South-Central Asia | 82,882 | 16.6 | 195,723 | 22.2 | 440,879 | 29.8 | 573,355 | 32.9 | 748,844 | 37.8 | 968,944 | 44.0 |
| Afghanistan | 473 | 5.8 | 1,899 | 13.3 | 4,762 | 21.9 | 8,443 | 27.0 | 13,392 | 33.3 | 20,174 | 39.9 |
| Bangladesh | 1,774 | 4.2 | 7,452 | 9.9 | 34,354 | 25.0 | 52,223 | 31.1 | 74,432 | 37.7 | 98,554 | 44.3 |
| Bhutan | 15 | 2.1 | 41 | 3.5 | 149 | 7.1 | 268 | 9.9 | 465 | 13.5 | 756 | 17.9 |
| India | 61,695 | 17.3 | 132,272 | 21.3 | 279,045 | 27.7 | 352,246 | 30.3 | 447,535 | 34.7 | 575,684 | 40.9 |
| Iran | 4,561 | 27.0 | 15,334 | 45.8 | 45,023 | 64.0 | 57,032 | 70.6 | 70,574 | 75.5 | 82,333 | 78.8 |
| Kazakhstan | 2,616 | 39.0 | 7,374 | 52.2 | 9,031 | 55.8 | 8,960 | 56.7 | 9,677 | 60.2 | 10,471 | 65.3 |
| Kyrgyzstan | 540 | 31.0 | 1,250 | 37.9 | 1,692 | 34.4 | 1,912 | 34.7 | 2,360 | 38.3 | 3,019 | 44.9 |
| Maldives | 9 | 10.6 | 25 | 18.1 | 80 | 27.6 | 127 | 32.3 | 197 | 38.3 | 289 | 44.9 |
| Nepal | 194 | 2.3 | 656 | 5.0 | 2,730 | 11.8 | 4,523 | 15.6 | 7,245 | 20.4 | 10,899 | 26.1 |
| Pakistan | 6,949 | 17.5 | 18,556 | 26.4 | 46,757 | 33.1 | 66,966 | 36.9 | 96,534 | 42.4 | 133,226 | 48.9 |
| Sri Lanka | 1,078 | 14.4 | 2,978 | 22.0 | 4,314 | 22.8 | 5,552 | 26.8 | 7,312 | 33.2 | 9,098 | 39.8 |
| Tajikistan | 450 | 29.4 | 1,223 | 35.5 | 1,681 | 27.6 | 1,845 | 27.9 | 2,491 | 32.8 | 3,336 | 39.4 |
| Turkmenistan | 545 | 45.0 | 1,198 | 47.6 | 2,122 | 44.8 | 2,683 | 47.5 | 3,416 | 53.0 | 4,248 | 58.8 |
| Uzbekistan | 1,984 | 31.4 | 5,465 | 39.1 | 9,140 | 36.7 | 10,574 | 37.1 | 13,212 | 40.7 | 16,856 | 47.2 |
| South-Eastern Asia | 26,305 | 14.8 | 71,519 | 22.3 | 196,029 | 37.5 | 266,227 | 44.8 | 337,606 | 51.1 | 407,174 | 56.5 |
| Brunei | 13 | 26.8 | 100 | 62.0 | 237 | 72.2 | 299 | 76.9 | 357 | 80.1 | 411 | 82.6 |
| Cambodia | 443 | 10.2 | 731 | 10.3 | 2,216 | 16.9 | 3,796 | 22.8 | 6,052 | 29.5 | 8,610 | 36.1 |
| East Timor | 43 | 9.9 | 60 | 8.9 | 55 | 7.5 | 86 | 8.4 | 129 | 11.1 | 187 | 15.0 |
| Indonesia | 9,863 | 12.4 | 26,047 | 19.4 | 86,943 | 41.0 | 120,986 | 50.9 | 153,006 | 58.4 | 180,069 | 63.7 |
| Laos | 127 | 7.2 | 335 | 11.1 | 1,018 | 19.3 | 1,602 | 24.2 | 2,436 | 30.2 | 3,418 | 36.8 |
| Malaysia | 1,244 | 20.4 | 4,616 | 37.7 | 12,758 | 57.4 | 16,680 | 63.8 | 20,325 | 68.6 | 23,952 | 72.7 |
| Myanmar | 2,881 | 16.2 | 7,215 | 23.9 | 13,220 | 27.7 | 17,712 | 33.4 | 23,121 | 40.0 | 29,139 | 46.6 |
| Philippines | 5,426 | 27.1 | 14,943 | 35.6 | 44,295 | 58.6 | 59,398 | 66.1 | 72,452 | 71.4 | 84,552 | 75.1 |
| Singapore | 1,022 | 100.0 | 2,263 | 100.0 | 4,018 | 100.0 | 4,604 | 100.0 | 4,879 | 100.0 | 5,059 | 100.0 |
| Thailand | 2,056 | 10.5 | 6,200 | 15.1 | 12,453 | 19.8 | 15,517 | 22.3 | 20,080 | 26.7 | 26,293 | 33.1 |
| Viet Nam | 3,186 | 11.6 | 9,011 | 18.8 | 18,816 | 24.1 | 25,547 | 28.8 | 34,770 | 34.7 | 45,485 | 41.3 |

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