Poverty and Place in Rapidly-urbanizing Asia

Edward Leman[1]

[1] This is the draft paper developed by Mr. Edward Leman, President of Chreod Ltd. In Canada, as an input to the "Rural-Urban Poverty Linkages" conference on 2-4 Sept 2014, Zhejiang, People's Republic of China. This paper will be revised into a final paper after the Zhejiang conference. The views expressed in this paper are those of the author, and do not necessarily reflect the views and policies of the organizers (the Asian Development Bank [ADB] and the International Poverty Reduction Center in China [IPRCC]), or ADB's Board of Governors, or the governments they represent. ADB and IPRCC do not guarantee the accuracy of the data and information in this paper.

1 Introduction

To alleviate poverty, we need to know *where* it manifests within countries and within their cities, towns, villages, and hamlets. While major strides have been made in Asia over the last two decades to lift its people out of extreme poverty, there are still more than 1 billion living below ADB's new $1.51 poverty line. As Asia continues to rapidly urbanize, extreme poverty will move from the countryside to cities. Urban poverty is complex, multidimensional, and spatially diffused, making it more difficult to measure and alleviate then poverty in rural areas.

This paper seeks to inform on the characteristics of *places* of urban and semi-urban poverty. It begins with the description of a spatial taxonomy of human settlements and urbanizing regions that provides a framework to better understand the places of urban poverty. Urbanization trends in Asia and in selected countries are then reviewed to provide the context for understanding where urban poverty is manifesting. It then addresses two central questions: what is urban poverty, and who are the urban poor? The spatial characteristics of urban poverty are then explored, examining where the poor are living in regions, cities, and towns – and where they are likely to live as Asia continues to rapidly urbanize. Finally, several strategic options for reducing urban poverty in Asia are outlined, emphasizing spatial dimensions.

2 What is 'Urban'?

Before exploring the spatial dimensions of urban poverty in Asia, we need to more clearly define the terms 'urban' and 'poverty'.

Cities have evolved because societies have throughout history sought to maximize the potential for social and economic contacts with the minimum expenditure of effort or cost. Social and economic contacts that people seek are between households (social networks), between households and enterprises (employment and consumer markets), and between enterprises (input and output markets). More precisely, people and producers seek to maximize the density of *potential* social and economic interactions. While they do not necessarily implement all of the potential interactions, within the constraints imposed by geography and cultural norms, societies have generally structured spatially in ways that ensure that the possibilities for interactions are highest – in towns and cities. Rural settlement, largely in hamlets and villages, provides for very low densities of potential contacts.

The densities of potential interactions increase in towns where specialized secondary industries and some basic tertiary sector services can be sustained. The highest densities of potential contacts are reached in cities. Those with a sufficient density of social and economic interactions can create demands for a much broader range of secondary industries and tertiary services. When these densities reach a certain level, higher-order, information and knowledge-based services emerge. People and firms are attracted to metropolitan regions because of the benefits they can potentially reap from agglomeration economies that can only be attained in large cities and adjacent areas.

Asia's cities and urban regions are changing rapidly as 'rural' households and producers increase their social, cultural and economic interactions with 'urban' counterparts in the traditional 'city proper'. The resulting blurring of traditional rural and urban spaces, and the rapid pace of urbanization in Asia, pose major challenges in formulating and applying effective public policies and programmatic interventions, including for poverty alleviation.

Clarity is needed as to which spatial scales urban and rural poverty policies and programs should be formulated, and where they can be most appropriately applied. We need to understand the dynamics of settlement and urbanization to better understand the spatial manifestation of poverty.

There are three broad scales of spatial organization of human settlements[2]:

Scale I: individual settlements

Scale II: settlement regions

Scale III: regional urban systems (Fig. 1).

Scale I: Individual Settlements

There are eleven generic types of settlement based on size of non-farming populations. At the smallest level are Households, Hamlets and Villages up to 5,000 residents; these are predominantly agriculture-based and rarely exceed a 1 km. radius of built up, settled land area. The next largest level is the Small Town with population ranging from 5,000 to 25,000 in built up areas within a maximum radius of 2 km. Although the distinction between urban and rural has been blurred, we can generalize that the poverty in the four smallest types of settlements is generally 'rural poverty'.

Towns have a non-farming population ranging from 25,000-100,000, and generally cover an area with a radius of 2-4 km. Towns are followed by Small Cities with 100,000 – 250,000 inhabitants, Intermediate Cities of 250,000 – 500,000 residents, and Large Cities ranging in population size from 500,000 to 1million. Most range in built up area from 3 – 8 km radius. The three largest types of urban settlement are the Small Metropolis, Intermediate Metropolis, and Large Metropolis. A Small Metropolis ranges in population from 1 million to 5 million non-farming residents, and typically in Asia, extends in built up area up to a 10 km. radius. An Intermediate Metropolis has a population ranging from 5-10 million and extends to a 10-15 km. radius. A Large Metropolis holds populations over 10 million, and in Asia extends in size generally up to, and sometimes beyond, 15 km. from the city center[3]. The distinction between the three types of metropolises is principally population size, but also the far wider sphere of economic and social influence that Asia's Large Metropolises exert over their surrounding regions. The seven largest types of settlement – Towns to Large Metropolis – are where urban poverty manifests in Asia.

The eleven types of settlement generally conform to the territories demarcated in traditional administrative practice in Asia. For cities, they approximate the 'city proper' areas generally under a single municipal administration. They do not, however, encompass the suburban and semi-urban areas of wider urban and metropolitan regions. Poverty has spread beyond the immediate builtup areas of these settlements across wider hinterlands.

Scale II: Settlement Regions

We define 'regions' as territories over which there are clearly identifiable, *daily* social, cultural and economic interactions between and among settlements: households and enterprises in the 11 types of settlements interact at broader spatial scales to form settlement regions. The most basic are Village-centered Regions (VCRs) comprised of hamlets and villages, notionally within a 10 km. radius, which represents a half-day return trip on foot. Town-based Regions (TCRs) are larger (notionally a 20 km. radius, or a half-day return trip on motorized tricycles and small trucks).

Urban Regions are functional territories defined by interactions of a Large, Intermediate or Small City with Towns, Small Cities, and occasionally with Intermediate Cities within a radius of 10 – 20 km. Metropolitan Regions (MR) are far larger in area (20-50 km. radius) and are anchored by

[2] This is an update of a typology first developed by Chreod Ltd. in 2005 for the China CDS2 project that prepared City-Region Development Strategies for five cities in the PRC (World Bank/Cities Alliance). The initial typology appears as the figure on page 7 of ADB's *Managing Asian Cities* (2008).

[3] The term 'megacities' is often used instead of Large Metropolis. We hesitate to use the term 'megacities' due to its ambiguity: some use it to describe a core city while others use it to include the city's surrounding hinterland.

metropolises with at least 1 million non-farming residents. Some Metropolitan Regions in Asia have grown into Extended Metropolitan Regions (EMR) with daily connectivity within a 50-100 km. radius of the central city.

Scale III: Regional Urban Systems

Regional Urban Systems are much larger than Settlement Regions. They can be defined in terms of nodes, links and surrounding functional areas at a *meso* spatial scale. Nodes are the various settlement regions in Scale I. Links are physical infrastructure - largely inter-city roads, railroads, navigable waterways and power grids – that connect nodes.

Four types of Regional Urban Systems have been identified in Asia and a fifth by default - isolated settlements of villages, towns, some small cities, and a few large and intermediate cities that are not part of any regional system in any obvious way. The four types of regional systems are: 1) Single City-centered Systems in which a single Urban or Metropolitan Region plays the major role in regional production, employment and distribution[4]; these city-centered regions are anchored on a metropolitan region and encompass villages, towns/townships, Small Cities, Intermediate Cities, and even Large Cities and can cover a radius from the central city of as much as 200 km.; 2) Regional Clusters of villages, towns and cities at or below the Metropolis scale across an area of 100-200 km. radius[5]; unlike Single City-centered Regions, no single town or city appears to play a dominant economic role; 3) Regional Corridors, which are very similar to Regional Clusters but stretch in a linear form along a major road, rail line, river, or coastline[6]; and 4) Megalopolis[7].

The most economically advanced Regional Urban System is the megalopolis. A megalopolis is not a 'mega-city' (such as Bangkok, Manila, and Jakarta). Rather, it is an articulated, linear band of metropolises, cities and towns of varying sizes, structured along a highly-urbanizing and industrializing corridor at least 150 km. long. There are usually at least two large metropolitan regions anchoring either side of a megalopolis as poles, linked by strong transportation and communications networks, such as expressways and railways.

At which scales should urban poverty alleviation policies be directed? Experience globally suggests that, aside from national-level policies and massive investment in inter-city transport links, there is little that governments can do to shape the growth of large Regional Urban Systems (Scale lll): they are simply too big and complex. At Scale l (individual settlements), policy interventions run the risk of leaving out a growing number of poor in suburban and peri-urban areas.

We need to tackle poverty at Scale ll: the Settlement Regions containing both urban and semi-urban settlements, especially metropolitan and extended metropolitan regions that are attracting the most migrants across Asia. Metropolitan regions have become the engines of economic growth around the world. In Europe, they now account for 67% of GDP[8] and, in the US, for 75%[9]. In the PRC, its 49 metropolitan regions produced 57% of the country's GDP in 2010, up from 54% in 2000[10]. The drivers of these engines are agglomeration economies.

[4] For example, the Bangkok-Centered Region.

[5] For example, the Fuyang Cluster in PRC's Anhui Province, comprising Fuyang, Bozhou, and Jieshou Cities.

[6] For example, PRC's Zhejiang Coastal Corridor stretching from Taizhou in the north through Wenzhou to Cangnan County.

[7] The term 'megalopolis' was coined by French geographer Jean Gottmann in 1961 with the publication of his seminal examination of the Boston-Washington megalopolis (Gottmann, 1961). There are three megalopolises in Asia: the Tokaido Megalopolis in Japan, and the Pearl River Delta Megalopolis and Yangtze Delta Megalopolis.

[8] Djikstra (2009)

[9] Katz and Bradley (2014)

[10] Chreod Ltd. (2014)

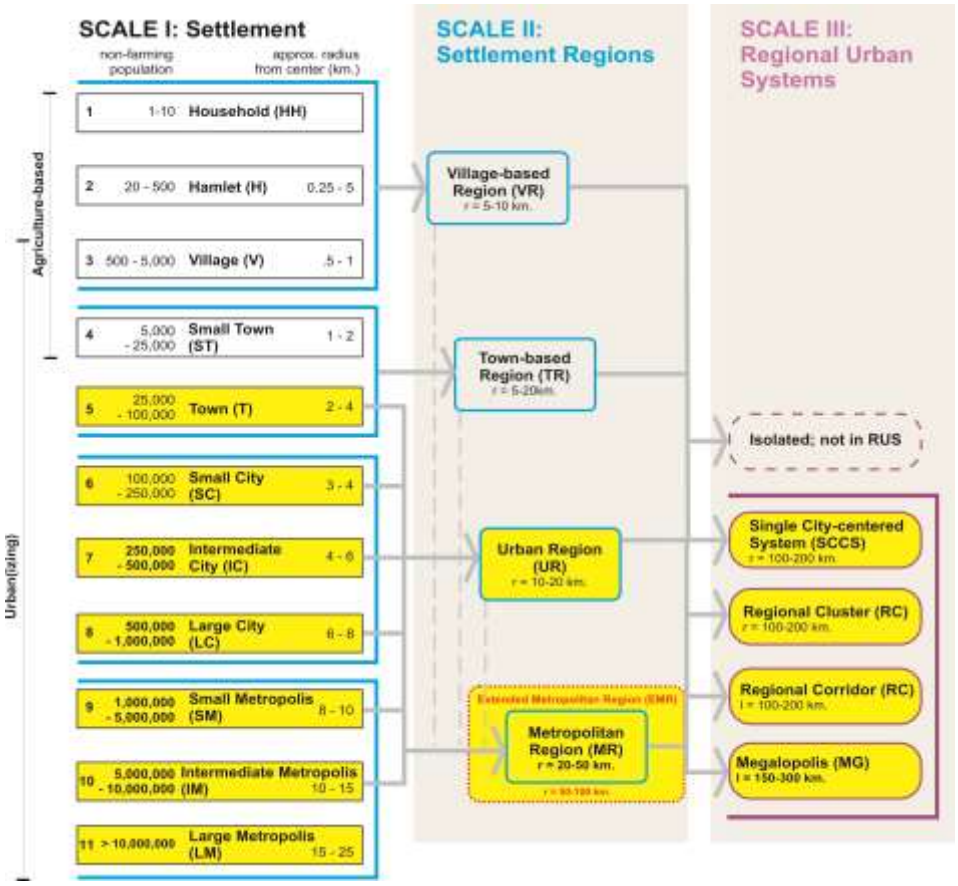

Fig. 1Taxonomy of Settlement

Source: Chreod Ltd. (2014)

Note: yellow areas are locations of urban poverty

A generalized descriptive spatial model of Metropolitan Regions is shown on Fig. 2. Asia's metropolitan regions generally cover a territory within a 50 km. radius from the center of the core city with 1 million urban residents which ranges in drive time from one hour on expressways to two hours on local roads. The spatial structure of metropolitan regions comprises a metropolitan core, a concentric outer core, principal metropolitan sub-centers (large towns and small and intermediate cities), smaller metropolitan sub-centers, high and medium density suburban areas adjacent to the outer core and in clusters and corridors farther out from the core, and low density suburban areas (500 – 1000 inh/km2) in clusters and corridors. Of growing concern is the metropolitanization of urban poverty in Asia. As shown on Figure 2, poverty is no longer only manifesting in inner city slums and squatter settlements, but also in suburban villages in cities, suburban squatter settlements, and in suburban and peri-urban towns and smaller satellite cities.

Worldwide, the population of metropolitan regions grew 21.5% from 2000 to 2010[11]. They now account for at least 23% of overall global population (and consequently, for 47% of the global urban population). In 2010 there were 182 metropolitan regions in Asia with a total population of 857 million (Table 1, Fig. 3). Overall, the population of Asia's metropolitan regions grew at twice the rate of Asia's total population. It is in these fast-growing regions that the urban poverty challenge will increasingly be faced.

Why is there such high growth in metropolitan regions?

To both domestic and foreign firms, locating in metropolitan regions brings them closer to input and

[11] Chreod Ltd. Global Metropolitan Regions Database, 2010.

output markets, reducing transport costs; they can achieve economies of scale in production; they have access to a larger labour pool with specialized skills; in a large and dense marketplace they can quickly exchange knowledge and learn from their customers, suppliers, competitors and institutions of higher learning, supporting innovation; and they can access logistics services and distribution networks that are simply not possible in towns and small cities. To workers and their families, metropolitan regions offer a greater range of employment choices, higher wages, and higher levels of public and infrastructure services than in towns and smaller cities.

Considerable research around the world has found that agglomeration benefits include higher productivity, higher rates of formation of new enterprises, higher wage rates, higher rates of innovation, and greater creativity. Metropolitan agglomerations encourage the formation of industrial clusters that are often self-reinforcing. Economic diversity in metropolitan regions encourages economic growth. More recent research has shown that agglomeration benefits attenuate with distance.

However, if city size and density were the only drivers of economic growth, agglomeration theory would hold that many metropolitan areas in developing countries should be the most productive cities in the world. Clearly, they are not, and focusing urbanization policy on growing bigger, denser cities without addressing market access and production and innovation capacities would be counterproductive. Institutional mechanisms and urban management practices matter in the realization of agglomeration economies.

As many Asian cities illustrate, the downsides of agglomeration are its dis-economies, particularly traffic congestion that extends journeys to work, air and water pollution that affects public health, and the distortion of land and housing markets that increases costs. The poor disproportianately experience the negative effects of these agglomeration diseconomies. Yet migrants continue to stream to metropolitan areas: so far, the benefits (real or perceived) exceed the costs of agglomeration.

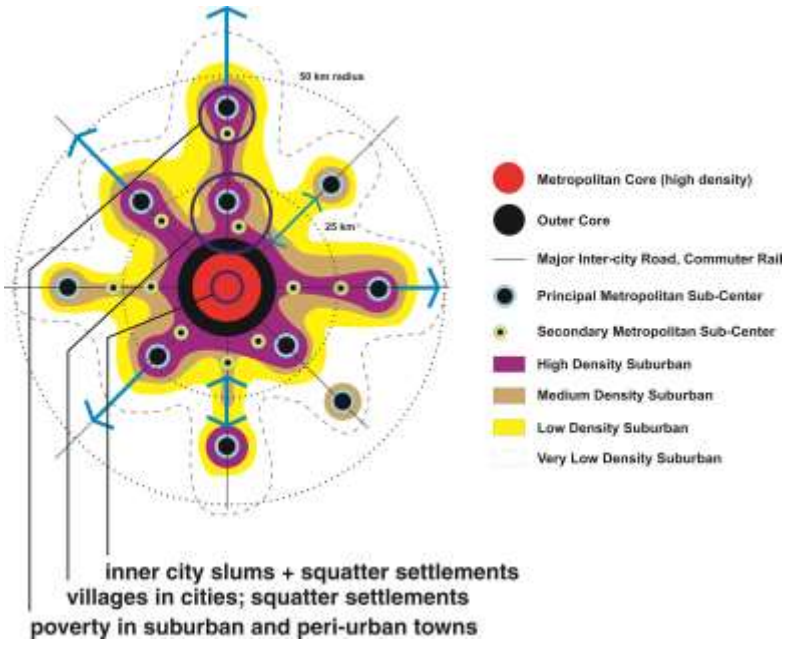

Fig. 2Generalized Spatial Structure of Metropolitan Regions Showing Locations of Urban Poverty

	East Asia	Southeast Asia	South Asia	Central Asia	Asia: Total
2010					
metropolitan pop. (mn)	527	74	204	52	857
as % of total population	33.7	12.3	12.7	20.2	21.3
# of metropolitan regions	82	21	60	19	182
2000					
metropolitan pop. (mn)	473	57	142	41	713
as % of total population	32.1	10.0	10.3	18.5	19.8
# of metropolitan regions	72	17	43	16	148
change					
metropolitan pop. (mn)	54 (11%)	17 (30%)	62 (44%)	11 (27%)	144 (20.2%)
as % of total population	1.6	1.4	2.4	1.7	1.5
# of metropolitan regions	10	4	17	3	34
metropolitan growth as multiple of regional growth:	**2.0**	**2.1**	**2.6**	**1.7**	**1.9**

Table 1: Metropolitan Regions in Asia, 2000, 2010

Source: Source: Chreod Ltd. Global Metropolitan Regions Database

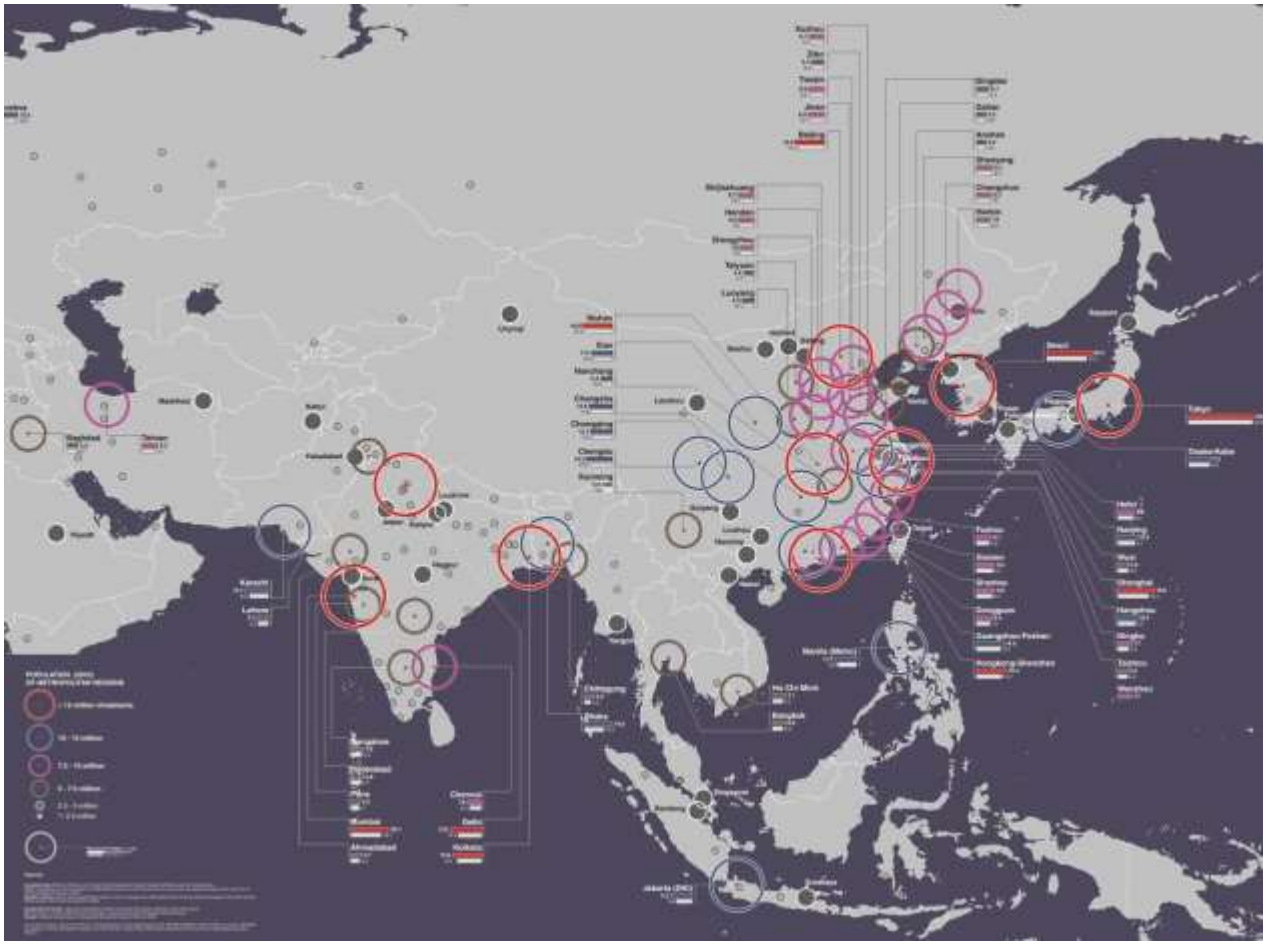

Fig. 3Metropolitan Regions in Asia, 2010

Source: Source: Chreod Ltd. Global Metropolitan Regions Database

3 Recent Urbanization Trends in Asia

Macro Trends

Before addressing issues of urban poverty, a brief review of recent urbanization trends in Asia as a whole, within its subregions, and in selected highly-urbanizing countries will inform the context within which urban poverty is evolving in Asia.

In two generations Asia's urban population has grown almost tenfold from 250 million to 2 billion today. The UN projects it to grow to 2.7 billion by the year 2030. Urban growth in Asia has been unmatched anywhere else in the world. While Asia accounted for 33% of the world's urban population in 1950, it today accounts for 53% and by 2030 will hold 54.5% of the global population living in cities.

East Asia accounts for the bulk of growth and urban population in Asia. From 120 million urban residents in 1950 (33% of Asia's urban population), it has grown by eight times to reach 960 million or 53% of Asia's city dwellers. The UN projects that East Asia will grow to 1.2 billion urban residents by 2030 and account for 54.4% of Asia's urban population. Urban population growth in East Asia occurred initially in Japan and the Republic of Korea but, over the last two decades has been fuelled by rapid urbanization in the PRC. After East Asia, South Asia has experienced the largest urban population growth from 79 million in 1950 to 609 million in 2014. The UN projects South Asia's urban population to grow to 875 million by 2030. Because of East Asia's larger growth, South Asia's share of Asia's urban population has remained relatively steady at 32.3% in 1950, 29.5% in 2014, and 32% projected for 2030. Southeast Asia's urban population grew more than 11 times from 26 million in 1950 to 294 million in 2014. The UN projects Southeast Asia's urban population to grow to 403 million by 2030. Southeast Asia's share of Asia's urban population has grown steadily from 10.7% in 1950 to 14.3% in 2014 to a projected 14.7% in 2030.

Representative National Trends

Urbanization trends in the PRC, Philippines, and Vietnam illustrate forces at work across most of Asia.

In the PRC, population changes during the past three decades have resulted in a major shift in the spatial distribution of its residents. During the past decade in particular, a significant loss of population occurred in much of the Northeast, in the Sichuan Plain, across most of the Yangtze and Huai River Basins, in the inland coastal areas of Zhejiang and Fujian, northern Guangdong, and most of Guizhou and Guangxi Provinces (Fig. 8). Population is gradually shifting from Counties to Cities (Fig. 9). From 2000 to 2010, cities with over 1 million urban residents gained 4.1% of China's population share, and cities with 500,000 to 1 million urban residents gained 0.5%, both at the expense of smaller cities and counties which experienced corresponding losses in population share.

Migration is the driving force behind urbanization in the PRC. In many of the bigger cities, migrants now account for over half the population (Fig. 10). Metropolitan regions in the PRC are growing rapidly, and are the destinations of most migrants. Just over 50% of new urban residents from 2000 to 2010 settled in metropolitan regions. Although holding 32% of China's population (up from 27% in 2000), they hold 45% of the country's urban population (up from 42% in 2000), 54% of China's migrants, 47% of non-agricultural employees, 55% of manufacturing employees, and 53% of China's employees in the financial sector (up from 42% in 2000). Per capita GDP of China's metropolitan regions is 1.6 times the national average. The PRC's metropolitan regions are concentrations of human capital needed to fuel China's economic development: 52% of China's population with senior middle school or higher educational attainment live in the country's metropolitan regions. Half of China's new manufacturing employment during the past decade was created in metropolitan regions.

Similar attraction of large metropolitan regions also exists in the Philippines (Fig. 11). The share of national population is highest in Metro Manila[12] (13%) followed by Cebu, Cavite, Bulacan, Negros Occidental, Pangasinan, Laguna, Rizal, Batangas, Pampanga, and Davao del Sur Provinces. The highest population densities in the country are in the Manila Extended Metropolitan Region, stretching over a 100 km radius from central Manila . Population growth from 1990 to 2010 was highest in Metro Manila followed by Cavite, Rizal, Bulacan, Cebu, Laguna, and Batangas. The average annual population growth rate was highest in the provinces immediately adjacent to Metro Manila.

From 1990 to 2010, shares of the Philippines' population grew in 14 of 81 provinces, and stayed the same in four provinces (Fig. 11). The largest increases in share of national population from 1990 to 2010 were in Rizal and Cavite, followed by Laguna and Bulacan; all four are in the Manila EMR. Metro Manila's share of the national population declined 0.24%. The Manila EMR is the principal magnet for population growth in the Philippines. Provinces adjacent to Metro Manila experienced the fastest growth due to their accessibility to metropolitan agglomeration economies.

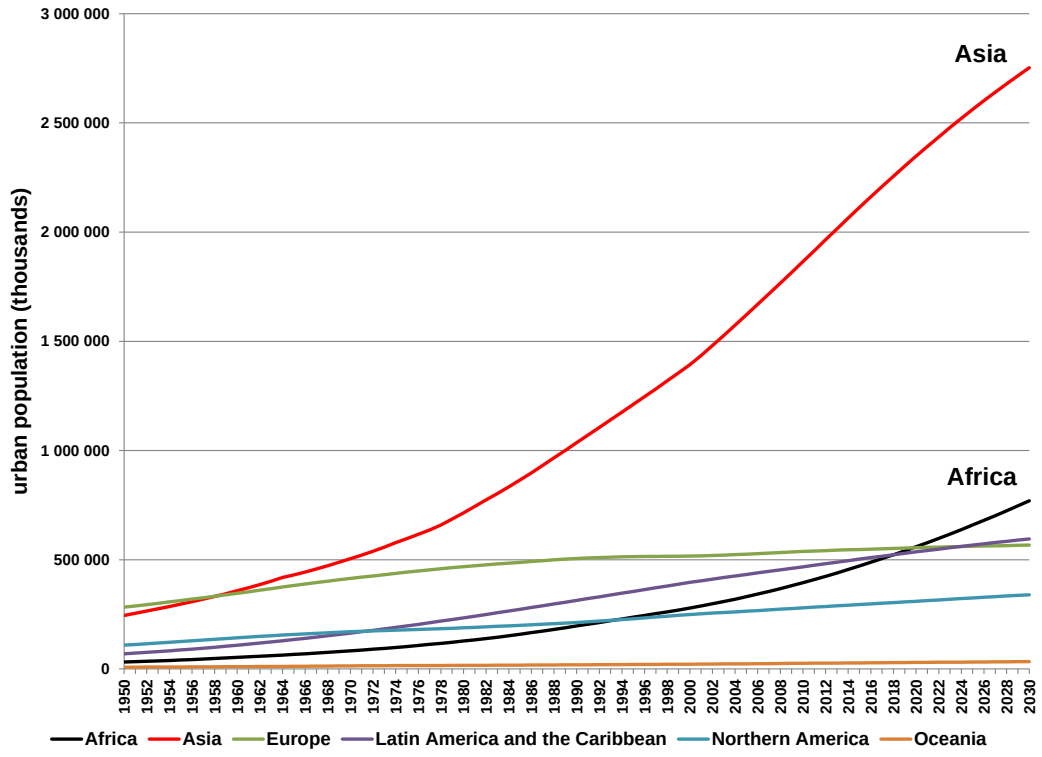

Fig. 4Urban Population of Global Regions, 1950-2030

Source: World Urbanization Prospects: The 2014 Revision, UN

[12] 'Metro Manila' is actually 16 separate cities and one municipality. It is not a level of government.

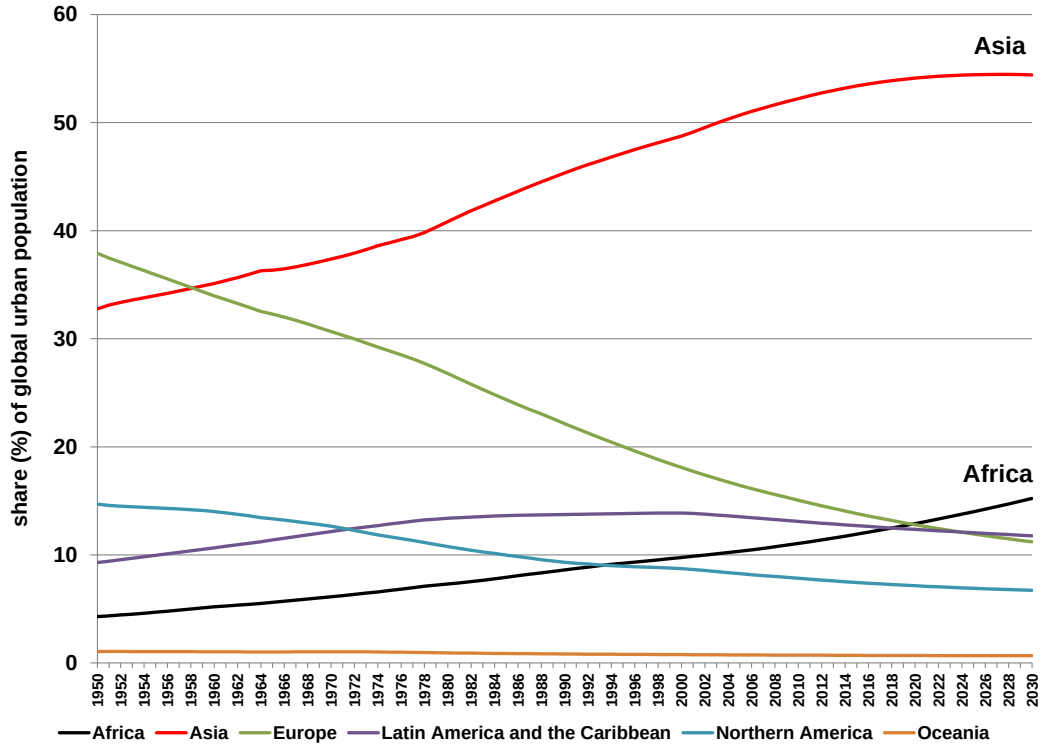

Fig. 5Regions' Share (%) of Global Urban Population, 1950-2030

Source: World Urbanization Prospects: The 2014 Revision, UN

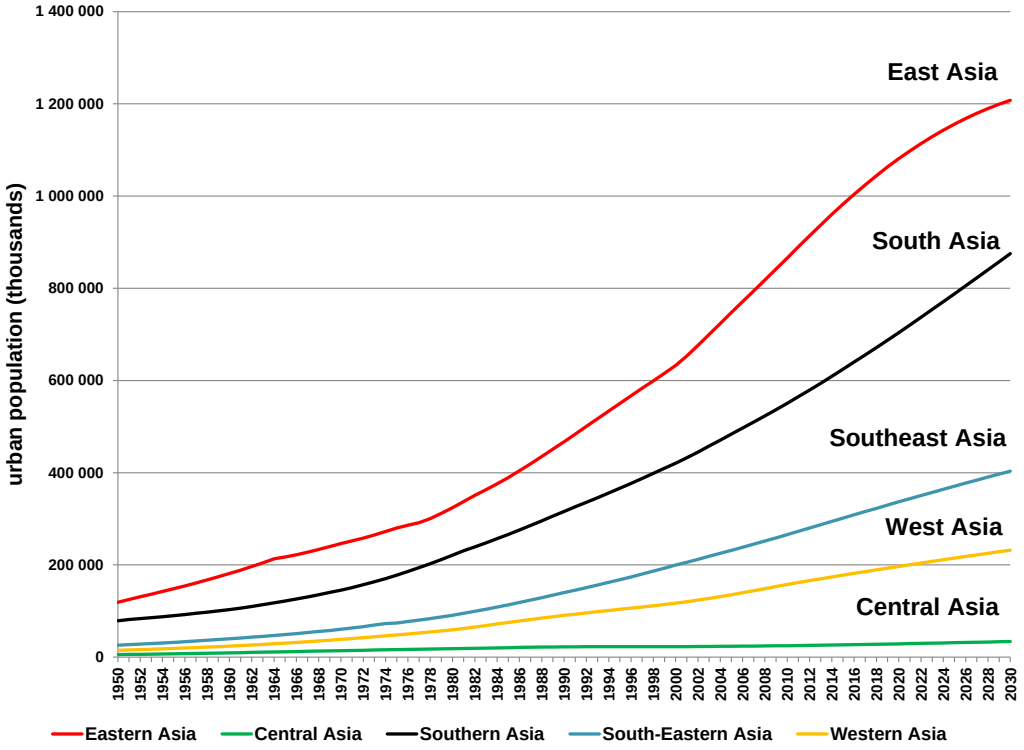

Fig. 6 Asian Sub-Regions' Urban Population, 1950-2030

Source: World Urbanization Prospects: The 2014 Revision, UN

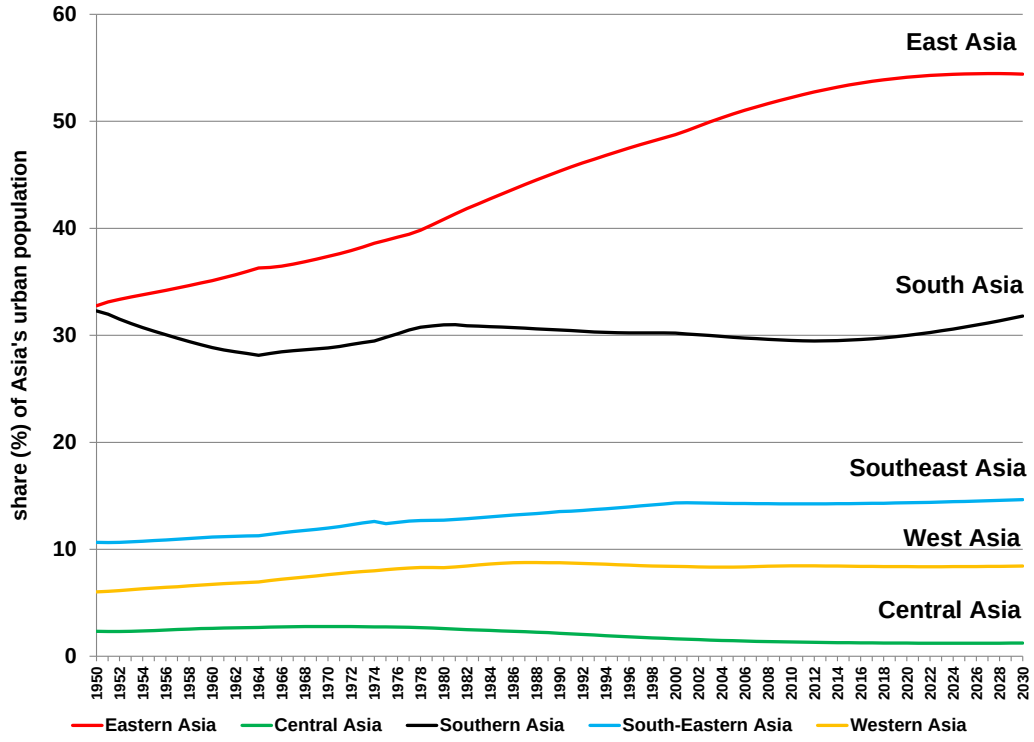

Fig. 7 Sub-Regions' Share (%) of Asia's Urban Population, 1950-2030

Source: World Urbanization Prospects: The 2014 Revision, UN

Similar concentration in metropolitan regions is occuring in Vietnam (Fig. 12). The population of Vietnam is heavily concentrated. Twelve provinces and five centrally-controlled cities (out of 63 second-level territories) held half the nation's population in 2012. The highest densities are in the Red River Delta in the north, anchored on Hanoi, and in the Mekong Delta to the south, anchored on Ho Chi Minh City (HCMC).

The strength of agglomeration economies in Vietnam's two largest cities is clearly shown in the change in share of the country's population from 2006 to 2012 (Fig. 12). The largest increase in share was in HCMC (1.9% larger share of Vietnam's population), Hanoi (1.0%), Binh Duong (.96%), and Can Tho (.87%). Binh Duong is in the HCMC EMR; Can Tho is in the southern part of the Mekong Delta. The decrease in share in provinces surrounding Hanoi is significant: the capital city seems to be syphoning population from adjoining provinces. In the south, however, spillovers appear to be occurring in provinces to the north and east of HCMC, but not in the west in the Mekong Delta, except in Can Tho and neighbouring Dong Thap.

In each of these countries national governments have for decades sought to decentralize population and production from their metropolitan regions. Small city and town development have been promoted vigorously using various economic and fiscal instruments. By and large, the forces of metropolitan agglomeration economies have been stronger than the efforts of governments to direct urbanization into smaller centers.

This growth of larger cities is changing national poverty dynamics. Poverty is shifting from the countryside and small towns to cities – especially to the larger, fastest-growing metropolitan regions which are becoming the geographic loci of an increasing share of Asia's urban poverty and vulnerability.

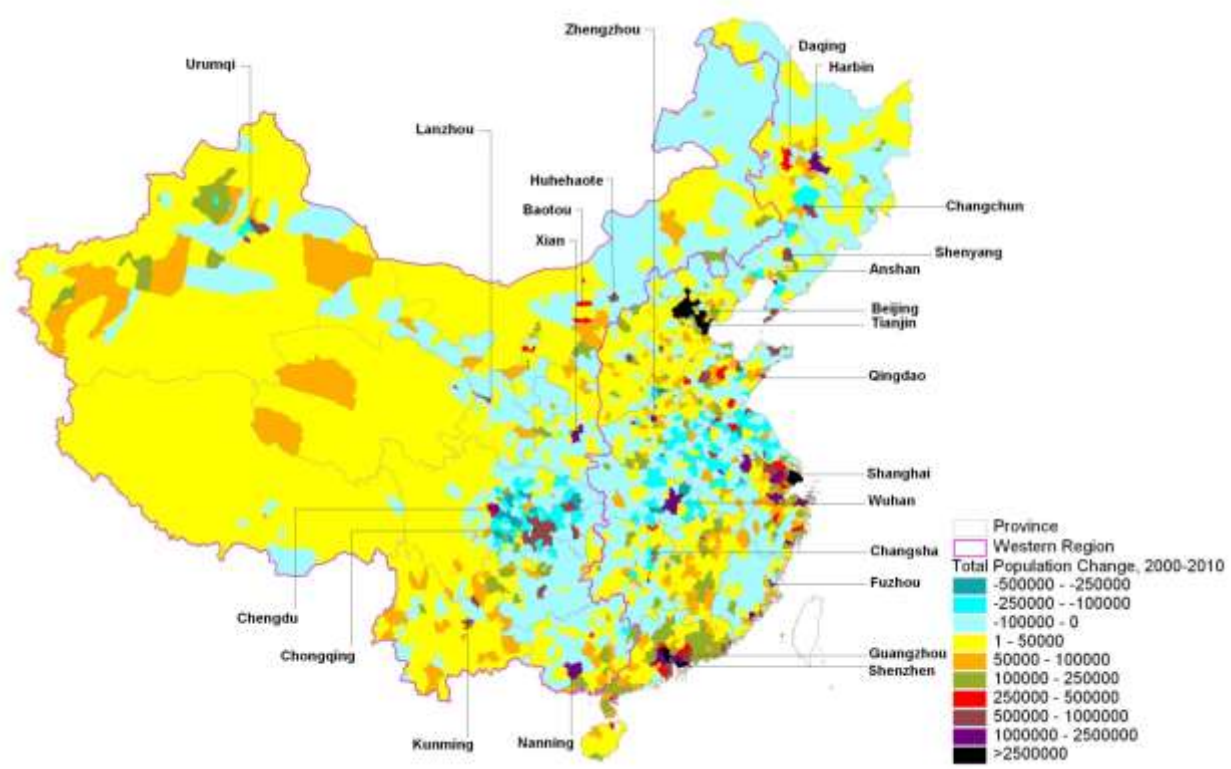

Fig. 8Population Change (all residents), 2000-2010

Note: derived from 2000 and 2010 National Censuses of China
Source: Chreod Ltd. (2013)

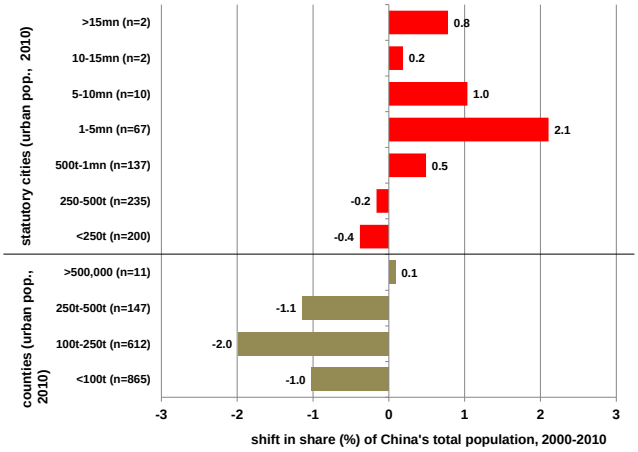

Fig. 9 Shift in Share of China's Population, 2000-2010

Note: derived from 2000 and 2010 National Censuses of China
Source: Chreod Ltd. (2013)

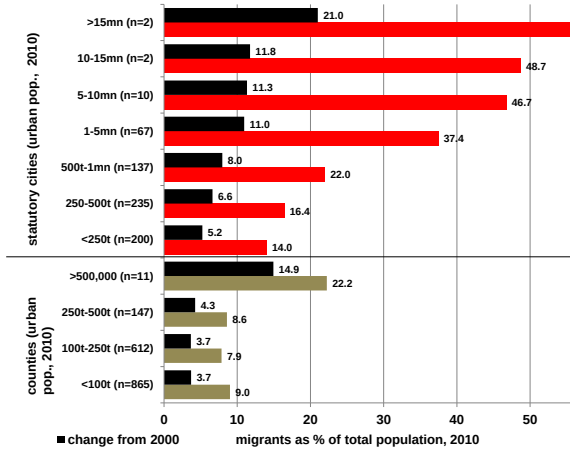

Fig. 10 Migrants as per cent of Total Population, 2010

Note: derived from 2000 and 2010 National Censuses of China
Source: Chreod Ltd. (2013)

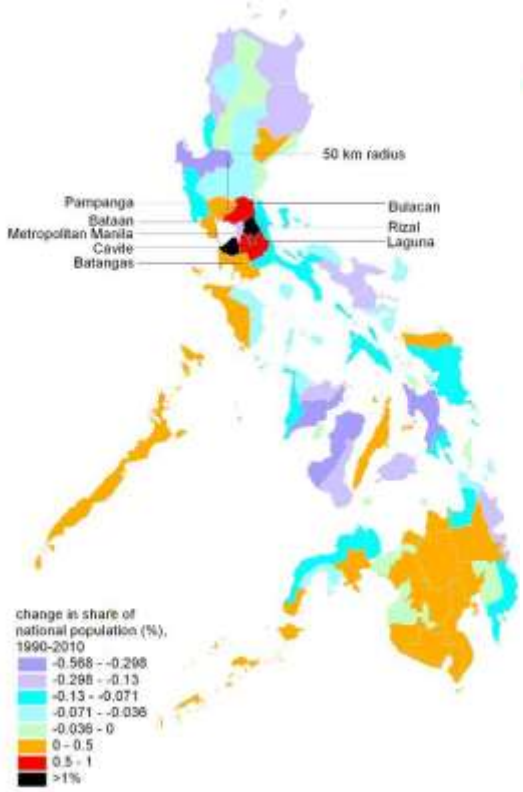

Fig. 11 Change in Share (%) of Philipines' Population, 1990-2010

Note: mapped using Census data from National Statistics Office
Source: Chreod Ltd. (2014)

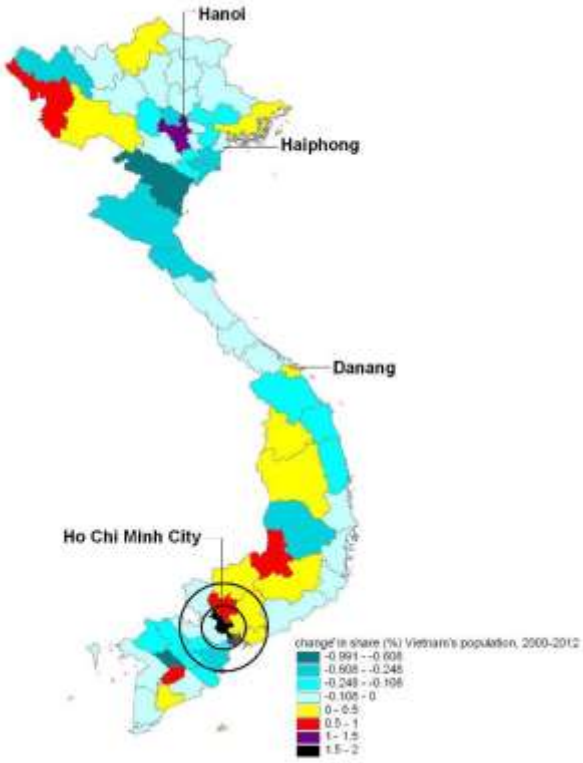

Fig. 12 Change in Share (%) of Vietnam's Population, 2006-2012

Note: mapped using Census data from General Statistics Office
Source: Chreod Ltd. (2014)

4 What is 'Urban Poverty' and Who are the 'Urban Poor'?

Before defining urban poverty we must first examine definitions of poverty itself.

The World Bank defines poverty as "pronounced deprivation in wellbeing" (see Box 1). Following the World Bank's lead, most developing countries have established minimum acceptable standards of living that are expressed through national poverty lines. Below these lines subsidies or other forms of social support are typically provided by government.

For international agencies, such as ADB and the World Bank, national poverty lines are problematic because they are usually not comparable. Faced with this problem of having a comparable threshold standard of living across developing countries, in 1990 the World Bank established a US$ 1 a day poverty line based on a sample of national poverty lines in 33 countries[13]. The US$ 1/day income poverty line was representative of the national poverty lines in 10 developing countries with the lowest incomes. This poverty line was updated in 2000 using 1993 prices which translated into $1.08 a day. In 2008, the World Bank updated its global poverty estimates based on the results of the 2005 International Comparison Program (ICP) study which examined prices of numerous commodities and services in 75 developing countries around the world to update purchasing power parity (PPP) values. The 2008 update found that the cost of living was higher than estimated in the year 2000. Slightly over 900 million people in Asia lived in extreme poverty compared to previous estimates of 664 million. The International Comparison Program was updated in 2011 using 199 countries as the

[13] Bauer et al. (2008)

sample. The World Bank will not update the international poverty line until most national poverty lines are updated; this 'could take some time, judging from past experience' [14].

In the meantime, ADB has just announced a new Asia regional poverty line[15]. It maintains that '… the Asian poverty line should be estimated at $1.51/day/person (in 2005 PPPs), an increase of 20.8% from $1.25. Using this poverty line, the extreme poverty rate in Asia rises by 9.8 percentage points to 23.5% in 2010, compared with 20.7% at $1.25.' The increased poverty line now incorporates food insecurity, vulnerability to natural disasters, the increasing impact of climate change, economic crises and other shocks that are unique to Asia (Table 2:).

With the new definition 175.7 million people in Asia crossed the poverty line between 2005 and 2010 – but still leaving 1.08 billion living in extreme poverty, including 584 million in India and 221 million in the PRC (Fig. 13).

Neither the World Bank's nor ADB's new poverty lines yet distinguish between rural and urban poverty. An early criticism of the World Bank's $1/day poverty line has yet to be addressed:

> "Among monetary measures of poverty, the Millennium Development Goal Standard of one US dollar a day has become an important benchmark by which the extent of poverty is assessed. However, it pays little attention to differences in the expenditure patterns of different groups of the poor or to the cost differences faced by different groups. There appear to be several reasons that suggest that urban dwellers both earn more and spend more on necessities. First, some goods are more expensive in urban areas, especially in larger and/or more prosperous cities. There is extensive evidence to suggest that, in general, prices are higher in urban areas (although the price of specific items may be lower). Second, some goods that are essentials for everyone have to be purchased in urban areas but may not be marketed in rural areas (for example, fuel, water and shelter). Many empirical studies have shown the high costs paid by particular urban groups (or those living in particular settlements) for non-food essentials such as housing, water and fuel. Finally, different livelihoods require different costs, and these may not be adequately taken into account in a standardised bundle of "basic needs" goods and services. For example, the nature of urban labour markets may require expenditure on transport…"[16].

As reviewed later in this paper, housing and transport costs – including opportunity costs – are directly affected by where the urban and suburban poor live.

National poverty lines are used in many Asian countries to define poverty and, hence, eligibility for subsidies or other forms of support. In the PRC municipal governments set local income lines below which a "Minimum Living Standard" (MLS) subsidy is triggered. However, the MLS only applies to residents with local non-agricultural household registration (*hukou*).

In 1957, to strictly limit rural-to-urban migration, the central government introduced regulations requiring all citizens of the PRC to be assigned an agricultural or non-agricultural residency designation (*hukou*) at birth, based on that held by the father. Residents with non-agricultural *hukou* were granted ration cards for a wide range of basic foodstuffs and commodities, and were entitled to employment in cities, largely with State Owned Enterprises (SOEs) or government agencies that provided full housing, healthcare, and education services. Agricultural-registered residents were not entitled to "urban" benefits. Those designated as agricultural residents were assumed to be farmers, and were entitled, under the Constitution, to farm collectively owned land as the basis of their livelihoods.

In today's PRC, tying the Minimum Living Standard subsidy to local non-agricultural *hukou*, leaves both urban and rural migrants out of the system, regardless of whether their incomes fall below the MLS qualifying line:

---

[14] ADB (2014).

[15] ibid.

[16] Mitlin (2004).

> "Though the Chinese government has in recent years implemented dozens of policies and measures to build the subsistence safety net for urban and rural residents, the current problem lies in the fact that such a net is cut into two parts for urban and rural areas, instead of being an effectively connected "net" planned as a whole. This is the major cause of vulnerability in groups not covered by this net, which are obviously lagging behind the process of urban-rural economic integration. Migration and urbanization in China will persist for a long period. Meanwhile, the complete elimination of urban-rural separation in social services and special anti-poverty policies in China is a long-term process. So resolving the poverty of China's floating rural population is not only a long-term process but also a hard task. Attention should also be paid to the issue of poverty in this new and large vulnerable group in addition to the traditional rural poor groups"[17].

Given the migration trends in the PRC reviewed earlier in this paper, a large and growing proportion of the country's urbanizing population is vulnerable to falling into extreme poverty without a safety net. This could have major repercussions on social stability in the PRC's cities and metropolitan regions.

Box 1: Poverty, Inequality, and Vulnerability

According to the World Bank (2000), "poverty is pronounced deprivation in wellbeing." This of course begs the questions of what is meant by well-being and of what is the reference point against which to measure deprivation. One approach is to think of well-being as the command over commodities in general, so people are better off if they have a greater command over resources. The main focus is on whether households or individuals have enough resources to meet their needs. Typically, poverty is then measured by comparing individuals' income or consumption with some defined threshold below which they are considered to be poor. This is the most conventional view—poverty is seen largely in monetary terms—and is the starting point for most analyses of poverty.

A second approach to well-being (and hence poverty) is to ask whether people are able to obtain a specific type of consumption good: Do they have enough food? Or shelter? Or health care? Or education? In this view the analyst goes beyond the more traditional monetary measures of poverty: Nutritional poverty might be measured by examining whether children are stunted or wasted; and educational poverty might be measured by asking whether people are literate or how much formal schooling they have received.

Perhaps the broadest approach to well-being is the one articulated by Amartya Sen (1987), who argues that well-being comes from a capability to function in society. Thus, poverty arises when people lack key capabilities, and so have inadequate income or education, or poor health, or insecurity, or low self-confidence, or a sense of powerlessness, or the absence of rights such as freedom of speech. Viewed in this way, poverty is a multidimensional phenomenon and less amenable to simple solutions.

Poverty is related to, but distinct from, inequality and vulnerability. Inequality focuses on the distribution of attributes, such as income or consumption, across the whole population. In the context of poverty analysis, inequality requires examination if one believes that the welfare of individuals depends on their economic position relative to others in society. Vulnerability is defined as the risk of falling into poverty in the future, even if the person is not necessarily poor now; it is often associated with the effects of "shocks" such as a drought, a drop in farm prices, or a financial crisis. Vulnerability is a key dimension of well-being since it affects individuals' behavior in terms of investment, production patterns, and coping strategies, and in terms of the perceptions of their own situations.

Source: Handbook on Poverty and Inequality, World Bank (2009).

[17] Lin (2013)

Subregion/Country	Poverty rate (%)			Number of poor (million)		
	2005	2008	2010	2005	2008	2010
Central and West Asia	**30.6**	**29.3**	**21.9**	**63.04**	**63.36**	**49.11**
Armenia	9.3	3.4	6.5	0.28	0.10	0.20
Azerbaijan	3.1	0.8	0.4	0.26	0.07	0.04
Georgia	21.7	20.7	23.8	0.95	0.91	1.06
Kazakhstan	2.2	0.2	0.6	0.34	0.02	0.11
Kyrgyz Republic	31.2	11.2	12.6	1.60	0.59	0.67
Pakistan	36.4	36.2	26.5	57.80	60.54	46.04
Tajikistan	27.0	16.6	14.2	1.74	1.11	0.97
Turkmenistan	1.4	0.3	0.2	0.06	0.02	0.01
East Asia	**22.7**	**18.4**	**16.5**	**295.57**	**243.71**	**220.67**
China, People's Rep. of	22.7	18.4	16.5	295.57	243.71	220.67
South Asia	**56.2**	**52.5**	**48.0**	**747.46**	**728.19**	**683.98**
Bangladesh	64.5	61.2	58.0	90.63	89.06	86.24
Bhutan	27.6	17.3	9.5	0.18	0.12	0.07
India	55.8	52.3	47.7	636.93	622.61	584.33
Maldives	4.6	1.2	1.2	0.01	0.00	0.00
Nepal	57.5	46.9	37.2	15.68	13.55	11.15
Sri Lanka	20.3	13.9	10.5	4.02	2.84	2.20
Southeast Asia	**27.9**	**26.0**	**22.0**	**141.72**	**136.81**	**118.57**
Cambodia	45.5	34.4	25.4	6.08	4.76	3.59
Indonesia	32.9	34.6	28.0	74.86	81.20	67.16
Lao PDR	54.1	46.7	38.1	3.11	2.81	2.36
Malaysia	0.9	0.4	0.4	0.23	0.11	0.13
Philippines	30.9	27.9	26.9	26.41	25.19	25.12
Thailand	2.5	1.2	1.1	1.67	0.85	0.78
Viet Nam	35.6	25.7	22.4	29.36	21.89	19.43
Pacific	**52.3**	**47.1**	**44.3**	**4.16**	**4.00**	**3.93**
Fiji	23.9	10.8	13.3	0.20	0.09	0.11
Micronesia, Fed. States of (Urban)	35.8	37.4	37.3	0.01	0.01	0.01
Papua New Guinea	55.3	51.3	47.3	3.38	3.36	3.25
Timor-Leste	57.2	49.8	49.8	0.58	0.54	0.56
Developing Asia	**37.3**	**34.0**	**30.5**	**1,251.95**	**1,176.07**	**1,076.26**

Source: ADB estimates.

Table 2: Poverty Estimates Uisng the $1.51 Regional Poverty Line

Source: reproduced from ADB (2014)

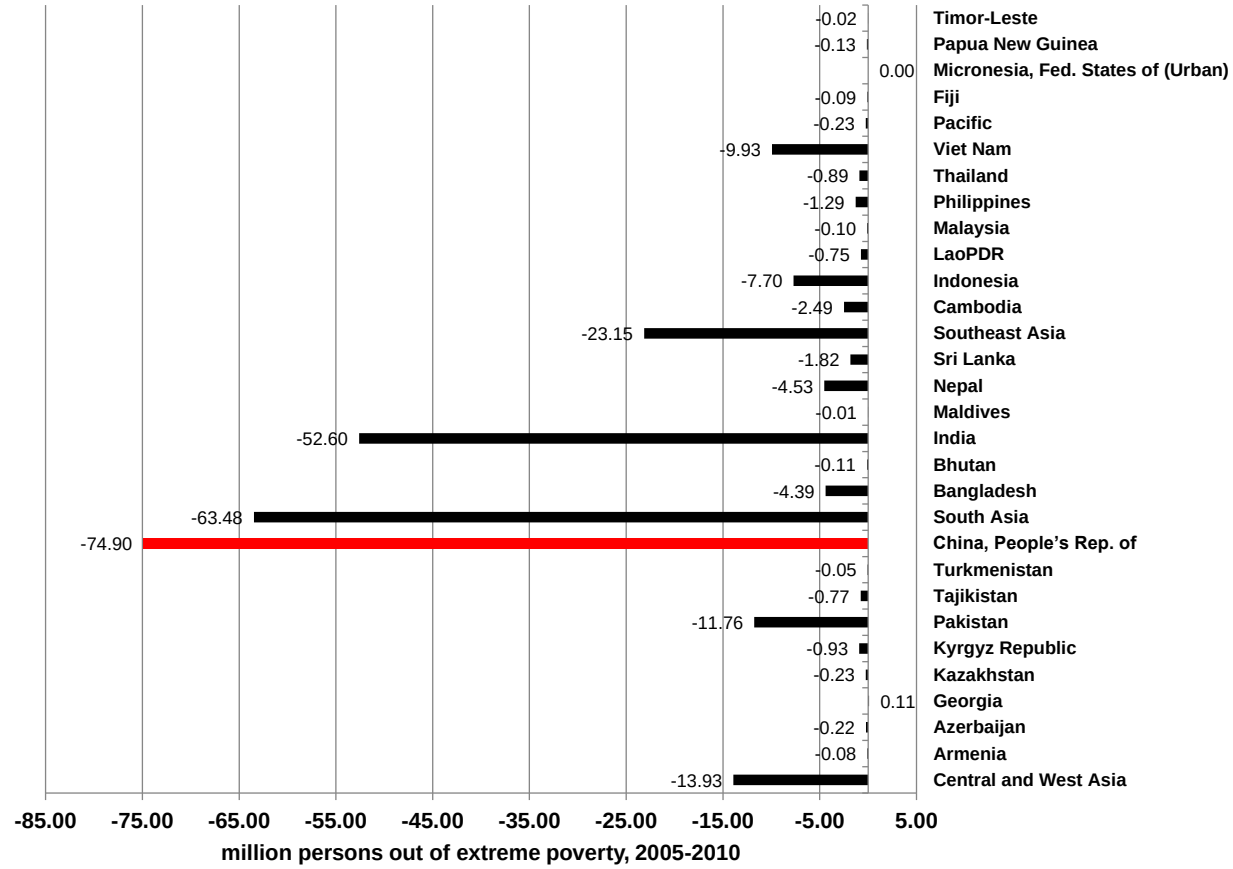

Fig. 13 Progress in Poverty Allevation in Asia (using ADB's new $1.51/day/person poverty line)

Source: ADB (2014)

A recent study examined how migration affects measurements of urban poverty and inequality in the PRC[18]. Using the results of the 2005 China Urban Labor Survey that was conducted in five large and five small cities, the study found that there is relatively little difference in poverty rates between local residents and migrants, regardless of which of the five poverty lines were applied. The authors suggest that, even though migrants' hourly wages are much lower than local residents, they compensate by working considerably longer hours (Table 4:). They also have higher labor force participation rates and lower dependency ratios. Whether these small differences in poverty rates would hold true today is questionable, given the extent of migration that occurred during the past decade and the increasing tendency for migrants to move as small families, thereby increasing dependency ratios.

This study also examined inequality in the ten cities, and found that inequality was greater when including migrants, and that it was considerably higher in small cities (Fig. 14). The size of cities matters to migrants: in four of the five poverty lines, migrants poverty rates are considerably higher in small cities: using the $1/day line, migrant poverty is 3.7 times higher in small cities than in the five large cities. This is directly due to the weaker agglomeration economies in the small cities.

Aggregating all cities and counties by urban population size using 2010 national census data, and averaging per capita GDP by city size class, clearly shows the affects of agglomeration on productivity and incomes: per capita GDP in cities with over 15 million residents is three times the level in cities with under 250,000 residents, and five times the level found in towns in counties with urban populations of less than 100,000.

In defining urban poverty, some advocate that, instead of using poverty lines, *specific* depravations should be the measure that need to be understood and addressed. A recent study on urban poverty in Asia conducted for the ADB notes that:

> "… rising poverty, in formalization, and shelter depravations are yet to receive anything close to the attention these deserve… Urban poverty is multidimensional; its dimensions relate to the various forms of depravations, disadvantage and risks, and are manifest in the lack of access of the poor in cities and towns to basic services such as water and sanitation, shelter, and livelihood, and, as is becoming increasingly evident, to health, education, social security, and empowerment and voice."[19]

City	Local residents	Migra
Large cities		
Adjusted rural low income line	1.6	1.5
$l/day	1.6	1.5
National mean dibao line	3.6	3.3
$2/day	4.2	4.5
$3/day	10.3	13.(
Small cities		
Adjusted rural low income line	3.4	5.6
$l/day	3.4	5.6
National mean dibao line	6.9	6.6
$2/day	8.2	6.9
$3/day	14.8	12.(

Table 3: Poverty Rates in Selected PRC Cities, 2005
Source: Park and Wang (2010)

	Local residents	Migrants
Labor force participation rate		
Large cities	56.1	89.3
Small cities	50.1	84.0
Unemployment rate		
Large cities	8.5	1.6
Small cities	8.8	4.5
Hourly wages (Y)		
Large cities	14.7	4.6
Small cities	8.3	7.6
Working hours		
Large cities	182.7	282.9
Small cities	184.0	250.0

Table 4: Labor Force Characteristics in Selected PRC Cities, 2005
Source: Park and Wang (2010)

[18] Park and Wang (2010)
[19] Mathur (2013)

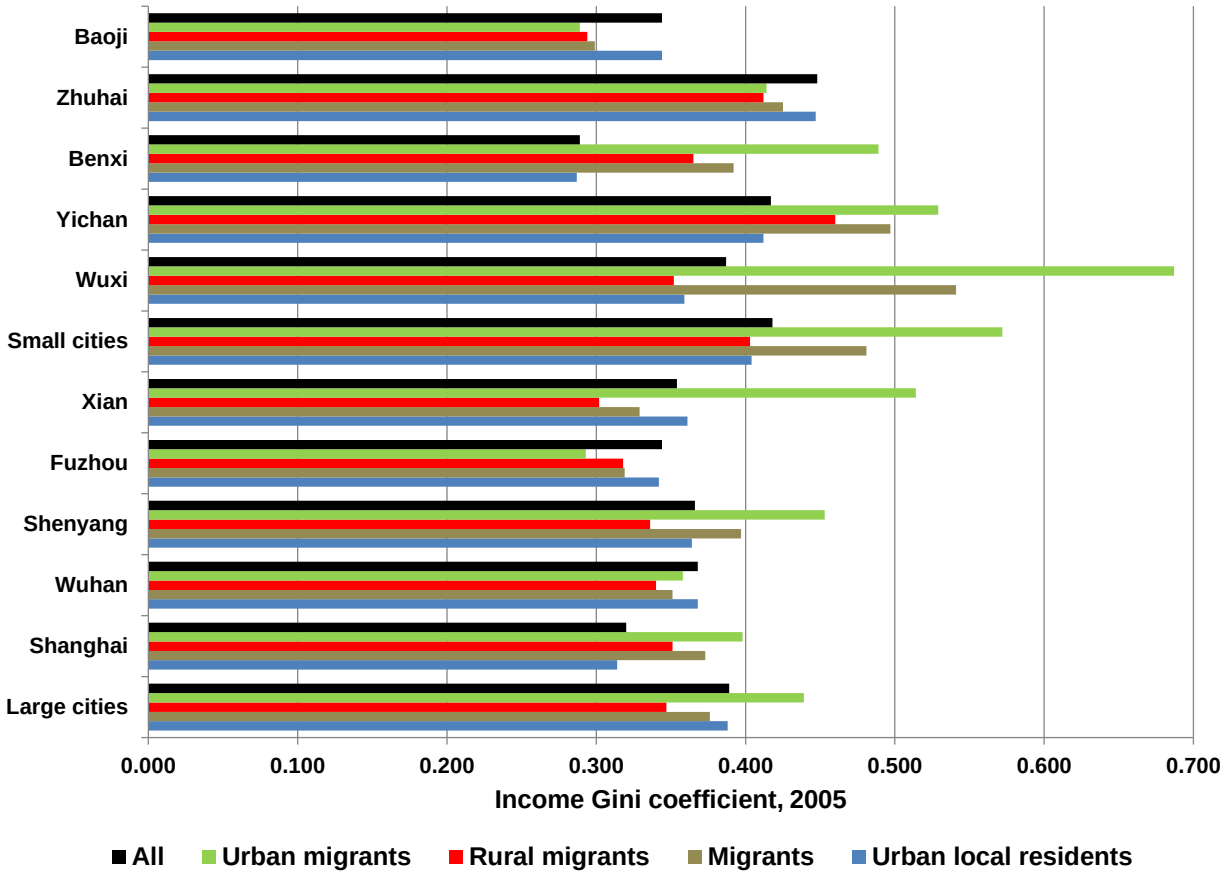

Fig. 14 Income Gini Coefficients in Selected PRC Cities, 2005

Source: Park and Wang (2010)

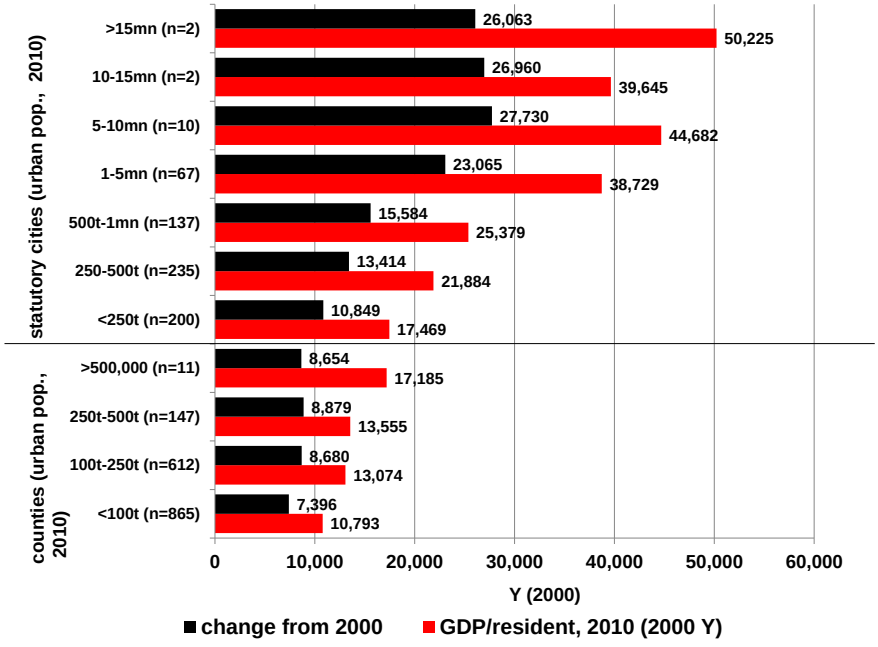

Fig. 15 Per Capita GDP by City Size Class, 2010 (Y/resident)

Source: calculated from Provincial Statistical Yearbooks for 2000 and 2010

A broader, multi-dimensional view of urban poverty and inequality based on deprivations gives policymakers concreteness in addressing their alleviation. The ten-city China Urban Labor Survey shows the extent of some significant differences emerging in the PRC's cities (Table 5:).

	Local resident workers	Migrant workers
Housing conditions (5 large cities)		
Construction areas (square meters)	18.4	10.7
Has drinking water (%)	98.8	78.1
Has toilet (%)	88.2	45.5
Has heating (%)	61.7	31.8
Pension (%)		
Large cities	61.0	5.7
Small cities	65.5	16.2
Unemployment insurance (%)		
Large cities	17.6	1.8
Small cities	25.0	12.4
Medical insurance (%)		
Large cities	50.7	3.9
Small cities	61.0	15.8

Table 5: Inequality in Ten PRC Cities, 2005

Source: Park and Wang (2010)

Approaching urban poverty through the lens of deprivations raises the need to consider vulnerabilities of urban residents. These vulnerabilities differ by age group which we need to recognize in formulating poverty alleviation interventions. Vulnerabilities in the PRC's cities by age group are generalized in Fig. 16.

If we acknowledge that urban poverty is deprivation of basic services, shelter, income, and the right of abode, who then are the urban poor? To answer this question requires distinguishing between the formal and informal urban economies in Asian cities, and examining three types of residents: permanent residents, long staying migrants, and new migrants (Fig. 17).

Permanent residents in the formal economy are either employed (including self-employed as entrepreneurs) or unemployed. The unemployed can be both skilled and semi-skilled workers, and recent graduates of universities and vocational schools who are unable to find work. In the PRC, these three types of unemployed – if they have local *hukou* – are eligible to receive the Minimum Living Standard subsidy. They can also access urban health care and education services. If they have enrolled and paid into the program, these three types of unemployed can receive unemployment insurance payments.

Permanent residents in the informal economy are either competitive, and therefore income-producing, or they are uncompetitive and have low, if any income. Uncompetitiveness is usually a reflection of insufficient skills and/or access to finance to grow a micro-business. Other types of permanent residents vulnerable to poverty are the elderly, the infirm, and the physically or developmentally handicapped. In the PRC, most are covered by the MLS.

For long staying migrants in the formal economy, they are either employed, including self-employed as entrepreneurs, or unemployed. The unemployed in the formal economy can be skilled or were semiskilled. This particular group generally depends on employment in foreign invested or large domestic firms firms, and are therefore vulnerable in times of economic downturns. In the PRC, they are not eligible for MLS subsidies since they do not have local *hukou* but could potentially receive unemployment insurance if they had enrolled and contributed in their previous employment.

Long staying migrants in the informal economy can be competitive in income-producing, either as employees in informal firms or as entrepreneurs. Alternately, they can be (or become) uncompetitive and have low incomes due to insufficient skills, no access to finance, harassment from civil

authorities and criminal organizations, and discrimination based on caste, religion, or ethnic origin. They generally have no urban social safety net. While long staying migrants to cities, especially in the PRC, were originally young single men and women, given that many have been urban residents for longer than 20 years, there are now elderly, infirm, and handicapped among them who are also vulnerable to poverty.

For new migrants in the formal economy they can also either be employed or self-employed as entrepreneurs, or unemployed. In the informal economy, new migrants can either be employed or become successful entrepreneurs or – especially in the early stage of urban transition – uncompetitive and have low incomes for the same reasons as long-staying migrants. However, new migrants face two additional impediments: they may be uninformed of market opportunities, and have weak or no connections with other entrepreneurs in their line of work.

These eight groups constitute those most vulnerable to urban poverty. To our knowledge, aside from permanent residents in the formal economy and the elderly, infirm, and handicapped, no country in develping Asia gathers data on the number and circumstances of permanent residents and migrants in the informal economy, or migrants in the formal economy. The number of Asia's urban poor cannot, as of now, be reliably quantified at the city or national scales.

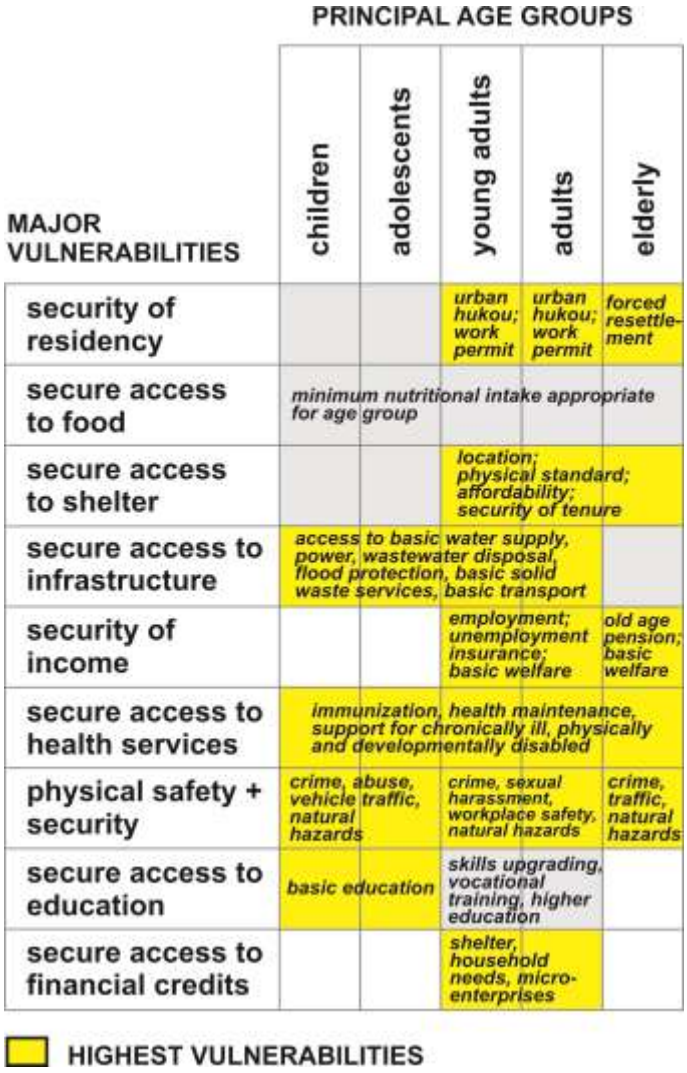

Fig. 16 Vulnerabilities by Age Group

Source: Chreod Ltd.

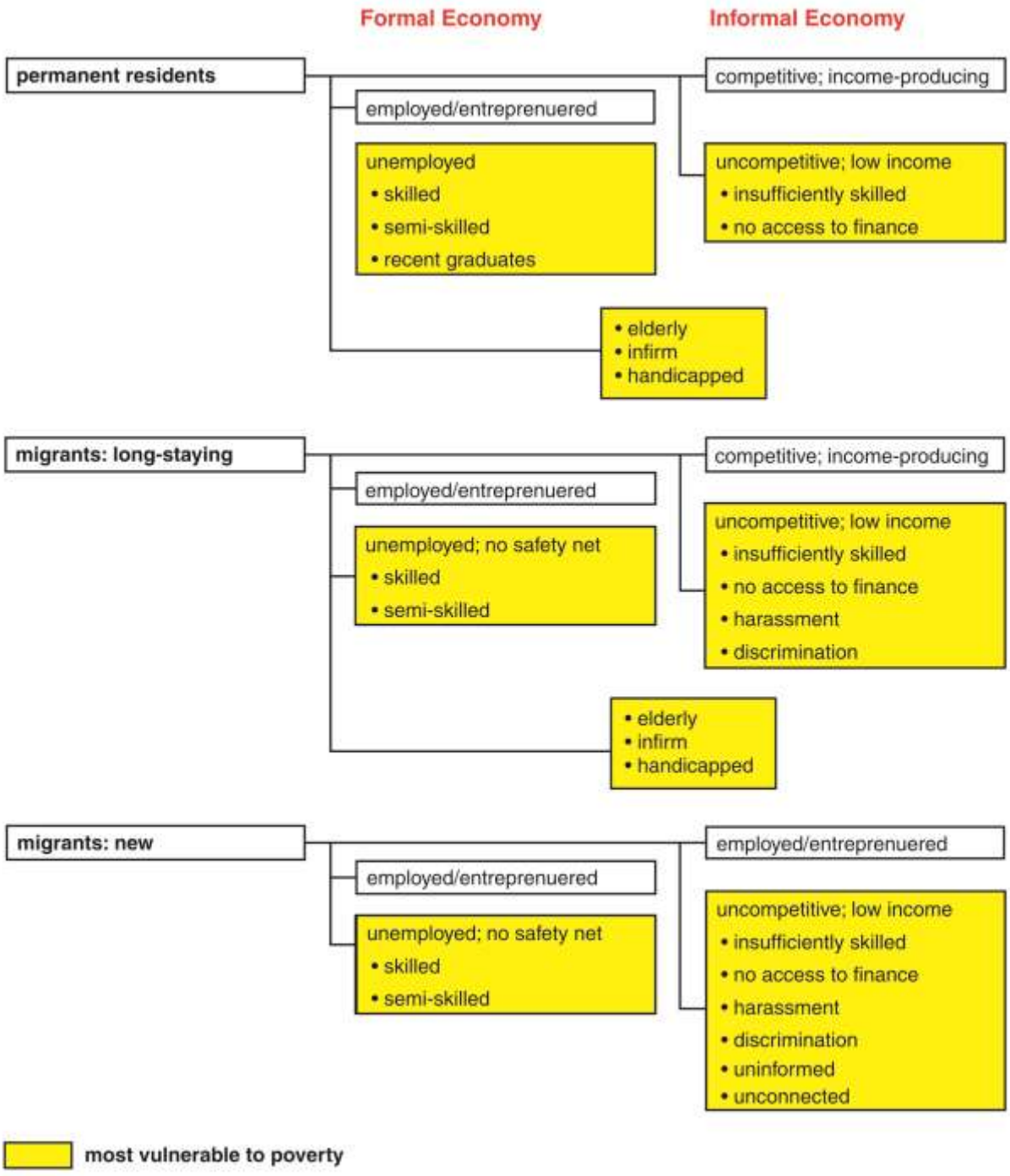

Fig. 17 Most Vulnerable to Urban Poverty

5 Enclaves of the Poor and Vulnerable

Sub-standard, Legal Housing

Fig. 18 Inner city, sub-standard rental housing, Kathmandu

Squatter Settlements

Fig. 19 Squatter Settlements, Metro Manila

Villages in Cities

Fig. 20 Village in Dongguan City

Suburban and Peri Urban Villages and Towns

Fig. 21 Suburban Village, Beijing

Fig. 22 Suburban Lanzhou

Small Cities and Towns

Fig. 23 Shangli Town, Jiangxi Province

Fig. 24 Baoding, Hebei Province

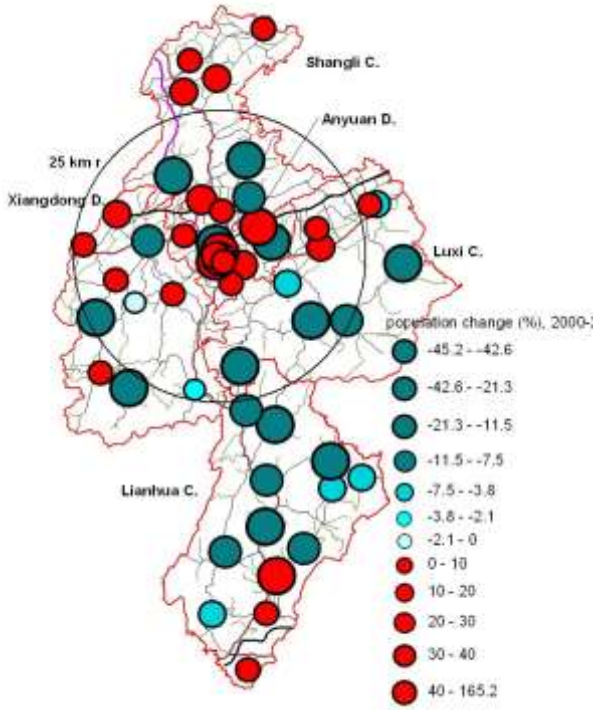

Fig. 26 Population Change in Pingxiang Prefecture-level City, 2000-2010

Note: mapping of data from National Census, 2000, 2010
Source: Chreod Ltd. (2014)

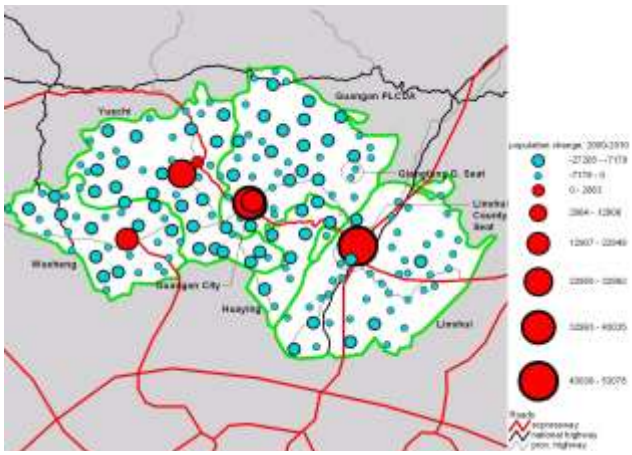

Fig. 25 Population Change in Guang'an Prefecture-level City, 2000-2010

Note: mapping of data from National Census, 2000, 2010
Source: Chreod Ltd. (2014)

Counties in the PRC are comprised of just over 12,000 towns (with a total population of 368 million in 2000) and almost 19,000 townships comprised of villages and hamlets (total population of 260 million). Each County has a town that is the County seat, and varying numbers of 'regular' towns. Public policy has first sought to urbanize towns that are County seats.

Although the average population of towns in Counties is 30,500, their populations vary considerably. In 2000, there were 157 towns in Counties with over 100,000 residents (average population of 125,000), 1584 towns with populations between 50,000 and 100,000, and 4461 towns with populations from 25,000 to 50,000.

One-third of towns in Counties, holding a population of 146 million, are within 100 km radius of a city with over 1 million urban residents. Beyond these 100 km radii, two thousand towns, with a population of 63 million, are now within 10 kms of an expressway. Therefore, at least half of towns in Counties are quite isolated from urban markets and can be assumed to be traditional market towns serving a farming hinterland. The other half are potentially connected to urban markets.

The wide differences in the size of town populations and their locations relative to urban markets precludes broad generalizations on PRC's 'town-based urbanization' over the past several decades. While many towns are likely farming-based, there are many others closer to cities and proximate to expressways that are, or could become, small industrial and distribution centers providing outputs to domestic urban and even export markets.

For the latter set of towns, experience in other countries suggests that their continued urbanization can only be sustained if there are real prospects for steady, reasonably-paid, non-agricultural jobs. Although town-based urbanization in Counties grew markedly from 2000 to 2010, in most Counties non-agricultural employment did not keep pace with growth of the urban population. Among the

eleven urban settlement size classes, on average all of those in counties had urbanization rates that were at least 10% higher than rates of growth of non-agricultural employment (Fig. 27).

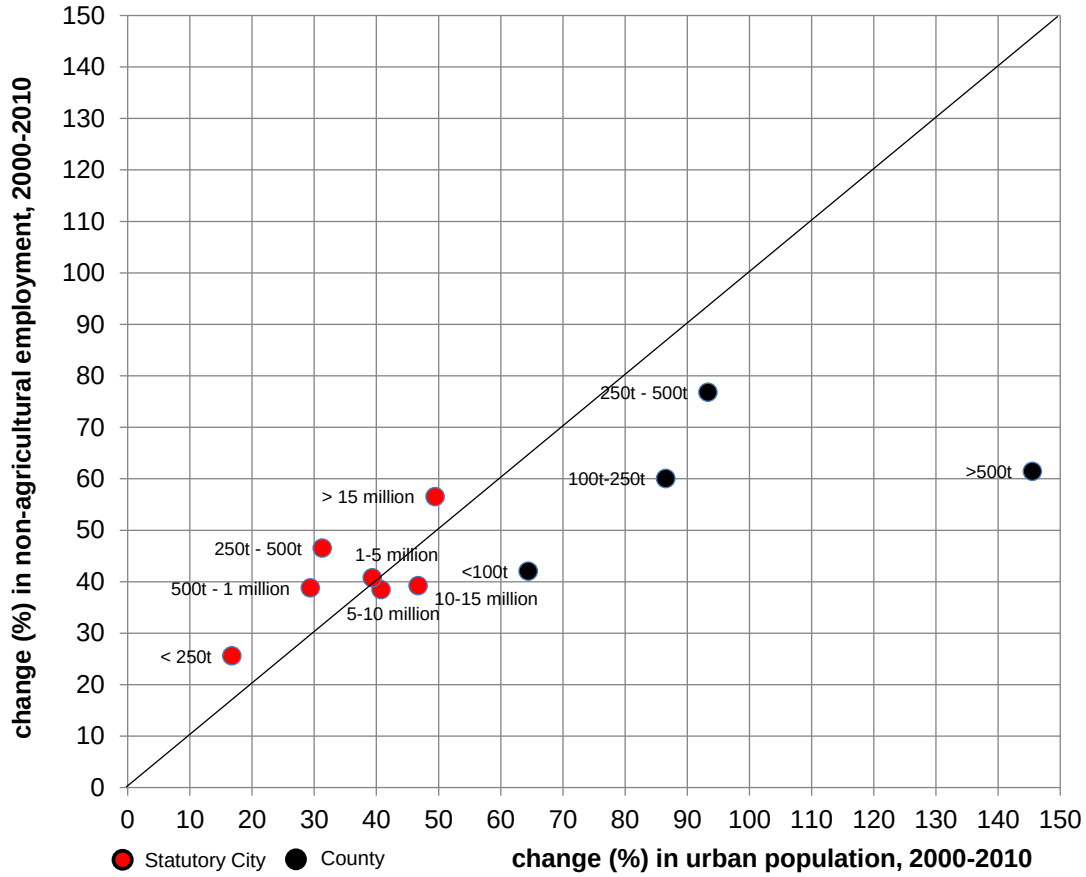

Fig. 27 Changes in Urban Population and Non-agricultural Employment, 2000-2010, by Urban Settlement Size Class

Source: derived from 2000 and 2010 National Censuses of China

The underlying pattern of urbanization in County towns during the past decade was that, in 67% of China's Counties, most towns likely did not create sufficient non-agricultural employment to enable the majority of new 'urban' residents to permanently cut their ties to farming. Given the rudimentary economies of most of these towns – and their isolation from major urban markets and supply chains – sustained growth of non-agricultural employment is highly unlikely over the next two decades. They will continue to be rural market towns with stable or declining urban populations as rural labourers continue to be made redundant through agricultural efficieny gains, and as rural populations age.

For the remainder of Counties that experienced demand-driven urbanization, there is the potential for absorption of additional urban residents as long as manufacturing, mining, or tourism continue to grow. Some towns in these better-performing Counties could easily become small cities over the next two decades. If these towns can maintain their 2000-2010 rate of non-agricultural employment growth, they might absorb 40-50 million new urban residents by 2030, or 13% to 17% of the additional 300 million urban population expected in the PRC over the next two decades

6 Asia's Future Urban Poverty

Projections

Locations

7 Strategic Options for Reducing Urban Poverty in Asia

Strengthening Economies of Small Cities and Towns

Rural-Urban Integration

Urban Inclusion

Strengthening Metropolitan and Extended Metropolitan Regions

Need for Better Understanding of Urban Poverty and Its Spatial Manifestations

Bauer, Armin; Hasan Rana; Magsombol, Rhoda; Wan, Guanghua. 2008. The World Bank's New Poverty Data: Implications for the Asian Development Bank. ADB Sustainable Development Working Paper Series. Mandulayong City: Asian Development Bank.

Lin, Wanglong. 2012. New Challenges for China's Anti-poverty Policy during the Process of Urban-rural Integration. 2013 Working Paper Series No. 8. Beijing: International Poverty Reduction Center in China.

Mathur, Om. 2013. Urban Poverty in Asia. Consultant report to the Asian Development Bank.

Mitlin, D. 2004. Understanding Urban Poverty; What the Poverty Reduction Strategy Papers Tell Us. Human Settlements Working Paper Series: Poverty Reduction in Urban Areas No. 13. IIED, London.

Park, Albert, and Wang, Dewen. 2010. Migration and Urban Poverty and Inequality in China. Discussion Paper No. 4877. Bonn: Institute for the Study of Labor.

Wang, Xiaolu, and Woo Wing Thye. 2010. The Size and Distribution of Hidden Household Income in China. Beijing: Chinese Research Society for Economic System Reform.