

ASIA AND WORLD POPULATION*

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Résumé—Dans tout débat sur la population mondiale, l'Asie ne peut être ignorée. Le continent est remarquable par une information déficiente et une diversité régionale. Dans son ensemble, la dimension et la nature sous-développée de la population de l'Asie sont remarquables. Si nous excluons la Chine de notre étude, nous constatons alors que le reste de l'Asie n'est pas entrain de se développer (s'urbaniser) aussi rapidement qu'on pourrait attendre d'un pays qui est presque au bas de l'échelle socio-économique. Parmi les régions les moins développées, l'Asie, dont la population est la plus dense, a une "densité rurale" d'une croissance rapide comparativement au reste du monde. La paradoxe s'explique par le fait qu'une grande proportion de la population est consacrée à l'agriculture, alors que cette même population a à peine de quoi manger. L'accroissement rapide de la population, une densité déjà élevée, et une culture non-occidentale ne sont pas favorables au développement des nations pauvres de l'Asie.

Abstract—In any discussion of world population, Asia cannot be ignored. The continent is marked by deficient information and regional diversity. Considered as a whole, Asia's population size and undeveloped nature are striking. If China is excluded from our consideration, then the rest of Asia is not developing (urbanizing) as fast as might be expected of one near the bottom of the socio-economic scale. Asia, the most densely settled among the less developed regions, has a fast increasing "rural density" as compared to the rest of the world. The paradox is that a high proportion of the population is devoted to agriculture, while the population barely has enough to eat. The rapid population increase, an already high density, and non-Western culture are not conducive to the development of the have-not nations of Asia.

No matter which aspect of the world's population is considered, Asia (excluding the U.S.S.R.) looms as the major—often the deciding—zone. Among the continental areas it has the most territory, most people, most population increase, most poverty, most cities, most farmers, and most tropics. It is, therefore, of crucial importance in any discussion of world population.

In the study of Asia's demographic role, however, two obstacles stand in the way—the first being deficient information, the second, intraregional diversity. With the exception of Africa, we know less about Asia's population than about that of any other major world region. For some Asian areas there are reasonably good data; for others there are few or none. The largest sector with uncertain or missing data is, of course, Mainland China, which comprises a big portion not only of Asia but of the world as a whole. In 1970, if the estimates are approximately right, China had 37 per cent of non-Soviet Asia's total population and 21 per cent of the entire globe's population. The precise proportions may be more or less, but there can be no doubt that China is a disturbingly large source of doubt in dealing with population.

The second obstacle, the diversity of Asian countries, is an undeniable handicap if one wishes to consider Asia as a single unit. Japan and Bhutan, for instance, or Israel and the Philippines, have so little in common that to lump them together as "Asia" seems fatuous. However, in spite of the diversity, Asia does have what might be called a "majority status"—that is, a situation contrasting with that of other major areas of the world when

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these are taken as wholes. Thus, certain broad generalizations can be made about it. These, furthermore, furnish a background against which the diversity of the region can be turned into an asset. Precisely because of its diversity, Asia lends itself well to internal comparative analysis, and this analysis is all the more valuable because the Asian countries lie outside the European orbit. Let us therefore look at Asia with both internal and external comparisons in mind, beginning with the external ones.

TABLE 1: POPULATION OF WORLD'S CONTINENTAL AREAS, 1950, 1960, 1970

	Population (000's)			
	Total	Rural	Urban	City ^a
1950				
Africa	209,271	180,320	28,951	13,558
Northern America ^b	165,563	59,920	105,643	71,660
Latin America	161,260	96,207	65,052	32,057
Asia	1,380,152	1,166,998	213,154	122,584
(Asia without China)	(820,152)	(668,688)	(151,464)	(82,029)
Europe	393,091	183,240	209,851	123,610
Australia-New Zealand	10,165	3,049	7,116	5,019
Oceania	2,343	2,227	115	---
USSR	180,050	103,550	76,500	37,530
World Total	2,501,894	1,795,511	706,383	406,018
1960				
Africa	271,830	223,678	48,152	23,899
Northern America	198,688	60,131	138,557	98,966
Latin America	212,727	111,670	101,156	55,822
Asia	1,674,164	1,332,596	341,568	206,030
(Asia without China)	(1,004,164)	(773,458)	(230,706)	(134,739)
Europe	425,029	178,162	246,866	147,390
Australia-New Zealand	12,760	2,844	9,916	6,810
Oceania	3,062	2,878	185	---
USSR	214,400	106,982	107,418	53,311
World Total	3,012,659	2,018,941	993,718	592,228
1970^c				
Africa	352,568	275,582	76,986	39,534
Northern America	228,766	56,889	171,877	131,344
Latin America	281,934	128,470	153,464	94,509
Asia	2,014,445	1,502,801	511,644	315,688
(Asia without China)	(1,263,780)	(928,861)	(334,939)	(207,573)
Europe	463,487	171,262	292,225	180,295
Australia-New Zealand	15,280	2,403	12,877	9,343
Oceania	3,914	3,609	305	---
USSR	244,125	92,125	152,000	76,631
World Total	3,604,518	2,233,140	1,371,378	847,344

^a"City" means a place of 100,000 or more.

^bCanada, United States, Bermuda, Greenland, St. Pierre and Miquelon.

^cEstimates by the author, subject to revision.

Source: Kingsley Davis, *World Urbanization 1950-1970*, Vol. II (Berkeley: Institute of International Studies, University of California, 1972), Table 51.

Considered as a whole, the most striking general fact about Asia is its sheer size. This can be seen from the population figures in Table 1 and the proportions in Tables 2 and 3. By 1970, Asia had more than two-thirds of the world's rural inhabitants, and yet it had more people in cities than any other region had. Even without China, Asia stands forth as the giant of the globe.

Beyond its size, Asia has a second fundamental trait: It is more underdeveloped than any other continental area except Africa and Oceania. Exactly where it stands is hard to say, because, for most indices of "development," we do not have data covering all countries of

TABLE 2: PERCENTAGE OF WORLD'S RURAL, URBAN, AND CITY POPULATION
IN EACH CONTINENTAL AREA, LISTED BY SIZE
OF TOTAL POPULATION

	Total	Rural	Urban	City
1950				
Asia	55.2	65.0	30.2	30.2
Europe	15.7	10.2	29.7	30.4
Africa	8.4	10.0	4.1	3.3
USSR	7.2	5.8	10.8	9.2
Northern America	6.6	3.3	15.0	17.6
Latin America	6.4	5.4	9.2	7.9
Australia-New Zealand	0.4	0.2	1.0	1.2
Oceania	0.1	0.1	---	---
World	100.0	100.0	100.0	100.0
1960				
Asia	55.6	66.0	34.4	34.8
Europe	14.1	8.8	24.8	24.9
Africa	9.0	11.1	4.8	4.0
Northern America	6.6	13.9	13.9	16.7
USSR	7.1	5.3	10.8	9.0
Latin America	7.0	5.5	10.2	9.4
Australia-New Zealand	0.4	0.1	1.0	1.2
Oceania	0.1	0.1	---	---
World	100.0	100.0	100.0	100.0
1970				
Asia	55.9	67.3	37.3	37.3
Europe	12.9	7.7	21.3	21.3
Africa	9.8	12.3	5.6	4.7
Latin America	7.8	5.8	11.2	11.2
USSR	6.8	4.1	11.1	9.0
Northern America	6.3	2.5	12.5	15.5
Australia-New Zealand	0.4	0.1	0.9	1.1
Oceania	0.1	0.2	---	---
World	100.0	100.0	100.0	100.0

Source: Table 1.

Asia. For instance, estimates of per capita income are not to be found for all Asian countries, especially as of any given date; nor are data on literacy or the industrial structure to be found for all of Asia. In my research office, however, we do have data on urbanization for all countries of the world, including those of Asia, at three dates in time—1950, 1960, and 1970 (K. Davis, 1969, 1972). Since it is well known that urbanization is highly correlated with various other indices of economic level, including per capita income, I shall use these data to gauge Asia's place in the scale of modernization.

TABLE 3: ASIA'S PERCENTAGE OF WORLD POPULATION
WITH AND WITHOUT CHINA

	Per Cent of Population			
	Total	Rural	Urban	City
<i>With China</i>				
1950	55.2	65.0	30.2	30.2
1960	55.6	66.0	34.4	34.8
1970	55.9	67.3	37.3	37.3
<i>Without China^a</i>				
1950	42.2	51.5	23.5	22.4
1960	42.9	53.0	26.1	25.9
1970	44.3	56.0	28.0	28.1

^aChina is excluded from both Asia and the world.

Source: Table 1.

Table 4, in which the continental areas are listed according to their degree of urbanization, shows that Asia is far below Latin America in this scale. It is only about half as urbanized as Latin America, and is indeed much closer to Africa in this regard. Its position is slightly higher when China is excluded, but by 1970, China does not make much difference at all, especially if one takes the cumulative index as the best single measure of urbanization. The data document the fact that Asia is still extremely undeveloped.

How Fast Is Asia Developing?

If Asia as a whole is near the bottom of the socio-economic scale, it could be expected to show a fast rate of development—on the ground that the later an area starts, the faster it moves. If we look at the entirety of non-Soviet Asia, we find our expectation confirmed. According to Table 5, Asia showed the fastest rate of urbanization among the eight world areas. However, most of this fast increase can be ascribed to China. With China removed, the rest of Asia manifested a slower rate of urbanization than the world as a whole and in fact, slower than any other region except the already highly urbanized industrial areas where percentage gains in urbanization are necessarily small. When the index chosen is the urban-rural ratio (the urban population divided by the rural—which does not have any upper limit other than infinity), we find that the rate of change in 1950-60 was faster for Asia as a whole than for any of the other eight areas except Australia-New Zealand, and in 1960-70, faster than all but that region and Oceania and U.S.S.R. (see Table 6). Again,

TABLE 4: INDICES OF URBANIZATION IN CONTINENTAL AREAS,
1950, 1960, AND 1970

		Percentage ^a		
			Urban	
	Rural	Total Urban	City	Cumulative Index ^b
1950				
Australia-New Zealand	30.0	70.0	49.4	44.8
Northern America	37.2	63.8	43.3	40.4
Europe	46.6	53.4	31.4	30.4
USSR	57.5	42.5	20.8	19.5
Latin America	59.7	40.3	19.9	20.7
<i>Asia with China</i>	84.6	15.4	8.9	8.3
<i>Asia without China</i>	81.5	18.5	10.0	9.5
Africa	86.2	13.8	6.5	6.3
Oceania	95.1	4.9	---	1.2
1960				
Australia-New Zealand	22.3	77.7	53.4	50.7
Northern America	31.3	69.7	49.8	45.9
Europe	41.9	58.1	34.7	33.3
USSR	49.9	50.1	24.9	23.2
Latin America	52.5	47.5	26.2	26.5
<i>Asia with China</i>	79.6	20.4	12.3	11.6
<i>Asia without China</i>	77.0	23.0	13.4	12.5
Africa	82.3	17.7	8.8	8.2
Oceania	94.0	6.0	---	1.5
1970				
Australia-New Zealand	15.7	84.3	61.1	57.2
Northern America	24.9	75.1	57.4	53.3
Europe	37.0	63.0	38.9	37.2
USSR	37.7	62.3	31.4	29.5
Latin America	45.6	54.4	33.5	33.3
<i>Asia with China</i>	74.6	25.4	15.7	15.1
<i>Asia without China</i>	73.5	26.5	16.4	15.2
Africa	78.2	21.8	11.2	10.5
Oceania	92.2	7.8	---	1.9

^aThe urban and rural percentages add to 100.0. The city percentage is included in the urban proportion.

^bThe cumulative index gives more weight to larger places. It is computed by adding the per cent urban, the per cent in all cities, in cities of 500,000+, and in cities of 1,000,000+ and dividing by 4.

however, it is mainly the presence of China that accounts for this showing. When China is removed, Asia shows a low gain in this index in 1950-60 and the lowest in 1960-70. We must conclude that Asia is not developing as fast as might be expected. The data seem to say that, as compared to the rest of non-Soviet Asia, China is developing faster. This may

TABLE 5: RISE IN URBANIZATION INDICES, CONTINENTAL AREAS,
1950-60, 1960-70 (Areas Listed According to Level of Urbanization)

	Percentage Change ^a			Cumulative Index
	Rural	Urban	City	
1950-60				
Australia-New Zealand	-25.7	11.0	8.1	13.1
Northern America	-16.4	9.3	15.1	13.5
Europe	-10.1	8.8	10.3	9.4
USSR	-13.2	17.9	19.3	19.3
Latin America	-12.0	17.8	32.0	27.7
<i>Asia with China</i>	- 5.9	32.1	38.6	40.2
<i>Asia without China</i>	- 6.7	13.6	18.1	16.1
Africa	- 4.5	28.0	35.7	30.4
Oceania	- 1.2	22.6	---	22.4
World	- 6.6	16.8	21.1	20.6
1960-70				
Australia-New Zealand	-29.4	8.4	14.6	12.9
Northern America	-17.8	7.7	15.3	16.2
Europe	-11.8	8.6	12.2	11.8
USSR	-24.4	24.3	26.2	27.0
Latin America	-13.2	14.6	27.7	25.8
<i>Asia with China</i>	- 6.3	24.5	27.3	29.8
<i>Asia without China</i>	- 6.7	11.1	16.7	16.7
Africa	- 5.0	23.3	27.5	27.9
Oceania	- 1.9	29.0	---	29.0
World	- 7.6	15.3	19.6	20.4

^aThis is the percentage change each decade in the proportion or the index.

Source: Table 4.

be the case, but we do not know. Remember, the reason we took China out of Asia was not to compare it with the rest of that region but rather to eliminate a large unknown within Asia. Not being able to say with any confidence what is happening in China, we have elected to give figures on Asia without that country. If it is true that China is developing faster than the rest of Asia taken as an entity, it is ironic, because the Chinese regime has made much of its effort to arrest the growth of cities. The most recent estimates derived from UN data on Asia imply that China has a smaller urban population than I have given it for 1970.

Asia's Population Growth

The China question aside for the moment, we have to ask what may be preventing Asia from urbanizing—and, presumably, developing—as fast as some other world regions. To answer that question, we need to look at the absolute numbers used to compute the urbanization indexes. What has been happening, for example, to the growth of the total, rural and urban population in Asia? Since, as is well known, the highly developed areas have a slower rate of population growth than the less developed ones, we should omit

TABLE 6: PERCENTAGE CHANGE IN URBAN/RURAL RATIO^a
1950-60 AND 1960-70

	1950-60	1960-70
Australia-New Zealand	49.4	53.7
Asia with China	40.3	32.8
Asia without China	31.7	20.9
USSR	35.9	64.3
Africa	34.1	29.8
Latin America	34.0	31.9
Northern America	30.7	31.1
Oceania	24.5	31.5

^aThe urban/rural ratio is the urban divided by the rural population.

Source: Table 1.

Japan (Asia's largest developed nation) and compare the rest of Asia with other predominantly underdeveloped regions of the world. When this is done, we find that Asia has a slower rate of population growth than the rest of the underdeveloped world, as Table 7 shows.

TABLE 7: POPULATION GROWTH CHANGES IN THE
UNDERDEVELOPED WORLD

	Per Cent Population Change			
	Total	Rural	Urban	City
<u>1950-60</u>				
Asia without Japan	21.9	16.5	55.1	66.2
Asia without Japan and China	23.6	19.9	42.5	59.8
Rest of Underdeveloped World ^a	28.1	19.0	55.0	73.1
<u>1960-70</u>				
Asia without Japan	20.9	14.4	51.0	54.5
Asia without Japan and China	27.5	23.3	45.5	56.7
Rest of Underdeveloped World ^b	30.2	21.0	58.9	78.4

^aIn 1950-60, includes Africa except South Africa, Latin America except Argentina, Puerto Rico, and Uruguay, and the following European countries: Albania, Bulgaria, Greece, Malta, Portugal, Romania, and Spain.

^bIn 1960-70, includes the above except for Chile, Venezuela, Brazil, and Spain.

Excluding Japan and Mainland China, Asia's total population growth appears to be slightly less rapid than that of underdeveloped areas generally. The available statistics do not tell us whether this is due to higher mortality or lower fertility in Asia, but it seems more likely to be a combination of both. The United Nations *Demographic Yearbook* for 1967 estimated the crude rates of continental areas as shown in Table 8. These rates are not much better than educated guesses, but they suggest that nonindustrial Asia has a slightly lower birth rate than either Africa or Tropical Latin America, and a death rate that falls between those two. Its natural increase may exceed that of Africa but does not equal that of Latin America.

TABLE 8: CONTINENTAL GROWTH RATES, 1960-67

	Per 1,000 Population Per Year, 1960-67		
	Births	Deaths	Natural Increase
Africa	46	22	24
Caribbean	38	14	24
Middle America	45	11	34
Tropical South America	42	12	30
Middle South Asia	43	18	25
Southeast Asia	41	15	26
Southwest Asia	41	15	26
East Asia (excluding Japan and Mainland China region)	40	12	28
World	34	15	19

Source: United Nations, *Demographic Yearbook*, 1967.

Although underdeveloped Asia's total population growth was relatively slow between 1950 and 1970, this was not true of its *rural* increase. As Table 7 shows, the rural population expanded more rapidly in Asia than in the rest of the underdeveloped world, whereas the urban population grew much more slowly. When the data are broken down for sub-regions, the rapid rural population growth is found to characterize all of underdeveloped Asia except East Asia without China and Japan. Expressed as per cent of increase in rural population per decade for the 1950 to 1970 time span, the figures are: Southeast Asia, 24.2; South Central Asia, 21.7; Southwest Asia, 19.4; and East Asia (without Japan and China), 10.0. The East Asia region is an exception because, even without Japan, it is composed of rather urbanized and developed areas such as Hong Kong, Taiwan, South Korea, and the Ryukyu Islands. It is also small in relation to the rest of Asia, containing (without China and Japan) only 67 million people in 1970—compared to 103 million in Southwest Asia, 285 million in Southeast Asia, and 706 million in South Central Asia. It, therefore, does not exercise much influence on the average rural population increase for all of underdeveloped Asia.

Asia's Unusual Population Density

The rapid increase in the rural population of Asia is largely a function of Asia's lack of development. This is shown not only by the more developed parts of Asia evidencing the

least rapid increase, but also by the only world regions exceeding Asian regions in this regard being those which are quite underdeveloped. For instance, of twenty-two regions of the world, three exceed any Asian region in rural population percentage increase for 1950 to 1970: Western Africa, 31.0; Oceania, 27.3; East Africa, 24.6.

However, there is one peculiarity of such rural increase in Asia that demands attention. Among the less developed regions, Asia is by far the most densely settled. It is consequently adding rural inhabitants to land that is already very fully utilized. Leaving out China, Asia is, on the average, more than three times as densely settled as the rest of the world. If we had data on the agricultural land in Asia we would find in all probability, that the agricultural density in relation to the rest of the world is even higher. Joginder Kumar (1973) has shown for Asian countries for which data could be obtained an exceptionally high agricultural density. Although he uses regions that are constituted differently from ours, the results in Table 9 confirm our findings. The "Middle East" is here mainly composed of countries in Southwest Asia. The table thus shows a sharp contrast in agricultural density between Asia and other regions of the world.

TABLE 9: AGRICULTURAL DENSITIES OF WORLD REGIONS

	Number of Countries		Male Agricultural Labor Force Per Square Mile of Arable Land	
	1950	1960	1950	1960
Africa	4	10	73.6	35.6
Middle East ^a	6	11	162.3	129.6
Asia	18	17	159.2	187.5
Frontier Countries ^b	24	25	77.0	48.5
Europe	20	21	72.2	60.2

^aSeven countries in North Africa and 15 in Southwest Asia.

^bNorth and South America, Australia-New Zealand, and the Soviet Union.

Source: Joginder Kumar, Population and Land in World Agriculture (Berkeley: Population Monograph Series, Institute of International Studies, University of California, 1973).

The figures in Table 9 are not comparable for the two dates, because some countries in each region fluctuate. By taking only those countries with information at both dates, we can see the rate of change during the 1950-60 decade. Unfortunately, Africa drops out, because in Dr. Kumar's sample, only one African country had the relevant statistics for both dates. Table 10 shows the rate of change in the other regions. The first three regions, each dominated by underdeveloped countries (e.g., the "frontier" group includes all of Latin America), all show an increase in agricultural density, whereas Europe, which is dominated by developed countries, shows a sharp decline. The density in the underdeveloped regions,

especially in Asia, was already very high in 1950. What has happened since then is that the very densely peopled agricultural land of Asia has become even more dense, while the more lightly peopled agricultural land of the developed regions has become still more lightly peopled. In general, the advanced regions have expanded their agricultural land faster than the less-advanced regions, and their agricultural population has declined, while that of underdeveloped areas has been increasing.

TABLE 10: AGRICULTURAL DENSITY RATE OF CHANGE, 1950-1960

	Number of Countries	Agricultural Labor Force Per Square Mile of Arable Land		Per Cent Change
		1950	1960	1950-60
Middle East	6	162.3	169.2	4.3
Asia	8	159.2	162.3	1.9
Frontier Countries	20	63.1	64.4	2.1
Europe	19	58.8	49.1	-16.5

Source: Joginder Kumar, *Population and Land in World Agriculture* (Berkeley: Population Monograph Series, Institute of International Studies, University of California, 1973).

The Kumar data pertain only to those countries for which information on the agricultural population and land could be found. Our own data cover all countries of the world, but they give only the "rural" instead of the strictly agricultural population, and only the total area of each nation rather than of the agricultural land. Even so, they confirm the Kumar findings. For instance, a comparison of Asia (excluding China) with the rest of the world and with all developed countries, shows that Asia's "rural density" is not only much higher to begin with but is increasing faster than that in the rest of the globe and very much faster than that in the developed areas taken generally. Furthermore, the differences are greater with respect to "rural density" than with respect to overall density, as Table 11 makes clear.

The Meaning of City Growth in Asia

In other words, the cities of Asia, like those of other less developed regions, are not growing fast enough even to approach absorbing the natural increase of the rural population, much less to removing the existing surplus labour from the countryside. Thus the growth of the cities, which is substantial, is not helping greatly to modernize agriculture. As a result, in country after country throughout Asia and much of the rest of the underdeveloped world, there is the tragic paradox that a high proportion of the population is devoted to agriculture, yet the population barely has enough to eat. The converse applies in developed countries, where a low proportion is engaged in agriculture, yet there is an agricultural surplus.

TABLE 11: COMPARISONS OF RURAL DENSITIES, 1950, 1960, 1970

	Population Per Square Mile			Per Cent Change Per Decade 1950-70
	1950	1960	1970	
<i>Total Population</i>				
Asia without China	120	146	184	23.8
World without China	40	48	59	21.5
Developed Countries ^a	34.3	38.1	44.4	13.8
Original 43		39.2	44.1	13.3
<i>Rural Population</i>				
Asia without China	96	113	135	18.6
World without China	27	30	34	12.2
Developed Countries ^a	16.2	15.4	14.6	- 5.1
Original 43		15.4	13.7	- 7.8

^aIncludes 43 countries in 1950, 50 in 1960, and 55 in 1970. For comparison of change, the number of countries is kept the same in each decade--43 in 1950-60 and 50 in 1960-70. The next line follows the original 43 through as a group.

Behind this paradox, of course, is the rapid growth of population in regions like Asia. The excess of births over deaths is great both in the countryside and in the cities. Modern public health measures assure that the cities in these regions are reasonably healthy, in sharp contrast to the historical cities of the now-industrialized countries during their stages of early development. Furthermore, the modernization and urbanization taking place in these countries is being accomplished with a degree of governmental paternalism and solicitude for the "customs" of the people that did not characterize the industrializing West. As a consequence, the incentives for reproduction even in an urban setting have remained strong. The cities in backward areas are therefore growing rapidly from their own excess of births over deaths. They do not need and do not attract migrants from the countryside as abundantly as cities did historically in the now-developed countries. The rural areas are therefore labouring under the burden of a massive and rapidly growing population that they cannot unload, while the cities are growing rapidly and cannot stop this growth even if they curtail rural-urban migration. In this way, population increase is making a mockery of "the development of the Third World." The problem is worse in Asia because Asia began its attempt to modernize with an already dense population, and with a non-Western culture which motivated high reproduction in the face of hardship.

References

- Davis, Kingsley. World Urbanization 1950-1970. Berkeley: Institute of International Studies, University of California, Vol. I, 1969; Vol. II, 1972.
- Kumar, Joginder. 1973. Population and Land in World Agriculture. Berkeley: Institute of International Studies, University of California.

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