

HOW BIG WERE THE METROPOLITAN CITIES?
Metropolization Process in the Far East:
The Demographic Dimension II

Dirk Bronger

1. The urbanization of the earth has been rightly called one of the most radical processes of global change. While in 1850 no society on our earth could be described as predominantly urban, already 100 years later almost all the Industrialized Countries are to be considered as highly urbanized. In these countries metropolization was more or less an integrated part of the urbanization process as such.

In most of the Industrialized Countries, especially in north-western Europe where urbanized societies arose, the pace of urbanization as well as metropolization has, however, slowed down considerably already at the end of the last (England) or the beginning of this century.(1) As against this in the still predominantly agricultural societies of the Third World countries history, speed as well as results and consequences have taken a completely different course. Their population "explosion" especially in the past four decades has resulted in an incredible growth of the metropolitan cities. In other words: The "urbanization" of the Developing Countries, starting only when that of the Industrialized Countries was almost concluded has occurred first and foremost as a "metropolization": A world survey of large cities with a population of one million or more in 1940 would reveal that, apart from the two subcontinental states with a longstanding urban as well as metropolitan tradition, China and India (together 8 metropolises), one could not include a single example in the whole Far East(2) (total population in 1940: 1,105 Mill.) compare to 13 in Europe (379 Mill.).(3) As far as the 5-million category is concerned in 1940 we could find two in Europe (London and Paris) of a bit more than 14 million inhabitants combined as against none including India and China. Today Europe still stands at two of even a bit less than 14 million, but 12 with a population of almost 80 million inhabitants have emerged in Far East within this 40 years period.

2. In contradiction to the vast amount of studies on "urbanization" and - much more few in number - those on "metropolization" in particular (ROBSON 1957(4), DAVIS 1959(5), HOYT/PICKARD 1964(6), DAVIS 1965(7), HOYT 1968(8), HALL 1966(9) and quasi officially: PD-UN 1966/10, UN 1982(11) etc.) reflections are rarely undertaken on the population data, i.e. not merely their accuracy (which is always questionable) but on which base or method they are computed and also whether they are internationally comparable. In almost all cases the figures are taken for granted. The best proof for this assertion is the fact that a clear-cut definition of the respective "metropolitan area", i.e. on which criteria the area was calculated can be found quite rarely or could not be applied in a world-wide comparison.(12) The results are significant differences regarding the population data of metropolitan cities in the literature resp. statistics concerned.(13)

This general statement holds true also with regard to the literature concerned dealing with the subject of urbanization resp. metropolization of the Far East (FRYER 1953(14), GINSBURG 1955(15), HOSELITZ 1957(16), HAUSER 1957(17), MURPHEY 1957(18), Mc GEE 1967(19) & 1971(20), DWYER 1972(21), JAKOBSON/PRAKASH 1971(22) & 1974(23), YEUNG/LO 1976(24), HONJO 1981(25)). We fully agree with DAVIS when he emphasizes that "actually the hardest problem is... ascertaining the boundary of places."(26) However, the fact that concerning his chosen "metropolitan area" he relies on the UN-definition of an "urban agglomeration" as the "city proper - and the...thickly settled territory... adjacent to the city boundaries"(27) certainly cannot be considered as satisfactory.

3. In order to get the most accurate picture possible of the demography of the metropolization process the targets of this contribution will be to determine the population growth of the metropolitan cities in the Far East since 1900 and - simultaneously - to show up to which extent an international comparison of this demographic process can be achieved, resp. is sensible.(28) A critical discussion of these basic (territorial as well as population) data together with the clarification of the methodological problems in the best international context possible has to be viewed as an unalterable precondition for any reflection regarding the demographic aspect of the metropolization process as well as its consequences.

4. A precise operational distinction of these targets, however, seems somewhat arbitrary. In addition to the previous explanations (Part I, No. 1-6, pp. 72f.) some further basic constraints are:

1. In almost all cases the metropolitan boundaries have changed even several times in the past decades - thereby the whole scale from modest changes (India) up to quite extensive ones (China) can be observed.
2. The target to get a consistent picture of the territorial (and thus the population) development of quite a number of particularly Chinese metropolitan cities is further complicated by the fact that the territorial figures presented by the official (census) sources and by the authors often contradict each other.(29) Finally
3. the population figures do not normally include an often large number of unauthorized immigrants.(30)

5. Additionally a number of somewhat principal methodological problems have to be discussed. Despite our assumption that the defined category "Urban Agglomeration" (see Part I, p. 74f.) will serve best our purpose regarding the world-wide comparability these issues always remind us that every choice must be a compromise. The following unsolved questions are caused mainly by the considerably different settlement structure of the metropolitan cities.

1. regarding the computation of the metropolitan quota of the year concerned, and thus the attainment of the metropolitan rate:

- should the metropolitan population be counted of all metropolises exceeding 1 million inhabitants at present (1980) or
- only of those having at least 1 million in the representative decade (year)?

As far as the first possibility is concerned an additional problem arises. We will explain this by an example: The ranking of the present 12 Indian metropolitan cities was quite different in 1900 in the sense that four out of them (Bangalore, Pune, Nagpur and Jaipur) would not have been among the top 12 and thus would have had to be replaced by four other ones. The consequence would be that almost for each decade different cities are to be nominated.(31)

2. regarding the area: population ratio:
 - should the population of the previous years be computed on the present area (1980) or
 - on the basis of the territorial delimitation effective in the year concerned?

For our target, to achieve the best comparable frame possible, this aspect is of importance because of the pronounced differences regarding the population density of the metropolitan umland: In contrast to the densely inhabited adjacent territory of Shanghai, Calcutta, Djakarta, Dacca etc. the difference in population of the previous and present boundaries of Delhi, Karachi, Seoul and even Beijing (32) is comparatively limited.

3. In close conjunction with this another principal question arises. Shall we calculate our (minimum) density quota of 2,000/sqkm and thus the boundary of the metropolitan area concerned:

- for the metropolis as a whole or
- according to each "subdivision" (municipality, municipal district etc.)? In case of this choice: down to which level (quarter or ward) shall we count?

The relevance of this aspect is caused by the greatly distinct density pattern of most of the Third World metropolitan cities compared to those in the Industrialized Countries, not to speak of the huge area of the young US-metropolises resulting in a comparatively low density (33). For illustration: Within the City of Los Angeles the density never exceeds 11,000/sqkm per municipal district. In the 33 boroughs of Greater London it ranks between 1,970 (City of London) and 11,770. As far as the most densely populated part of any Western metropolis - Manhattan - is concerned it amounts to "only" 26,000 per sqkm. However, in the core area (=city) of Bombay, Shanghai and Manila the density exceeds 40,000/sqkm (see below: TAB.3), if we move down to the ward level it goes beyond even - unbelievable - 200,000 human beings per sqkm within Delhi and Calcutta! The consequence, the computation of the density according to the metropolitan area as a whole would mean that, because of the high density of the core city the area would reach far into the umland, e.g. beyond the existing territorial boundaries. However, the same problem applies to the Western metropolitan cities in the past: in 1910 the density of Manhattan as the core area of New York reached almost 40,000, within the City of London it amounted to even 47,000 in the middle of the 19th century. - All in all we conclude: For the computation of the metropolitan growth as well as for international comparison we take the present metropolitan area as a basis as far as possible.

4. All these aspects lead us to a fundamental problem which remains unsolved so far: the assessment regarding the

changing size pattern of a city which could be named as "metropolis" in the course of time. Does the presently considered (artificial) 1-million limit correspond to 500,000 in 1940, 250,000 around 1900 and thus to 100,000 in the 19th century? And do we have to reconsider the current 1-million limit and take into account the 2.5-million or even the 5-million limit to be classified as "metropolis" - apart from the remaining criteria defining this category (functional primacy(34))? And: Are these changing size categories valid for each and every cultural sphere too?

To sum up: All these factors mentioned in this paragraph demonstrate that a cross-country comparison especially in respect of this historic-dynamic dimension (metropolization rate) will be always problematic.

6. Despite all these limitations in our computation of the metropolitan population presented in TAB. 1 we depend on the following two criteria: First, the present (1980) 1-million delimitation is based wherever possible on the "urban agglomeration" data as defined in Part I (p.74f.). Second, the figures are computed as far as possible to the present area. This last criterion could be accomplished in the majority of the metropolitan cities in South-Asia, however, only in comparatively few cases in Southeast - and East-Asia(35) (TAB.2). It is all the more important to indicate the area on which the respective population figure is based. We shall demonstrate the necessity of this seemingly simple statement for the two metropolises of New York and Tokyo - up to the present the two biggest in our world. The area: population ratio reveals that Tokyo ranks undoubtedly on top - effective already in 1960 (see Note 13):

Size category	Area (sqkm)	Population (000)		Density
		1960	1980	1980
New York City	776,2	7,782	7,071	9,110
Tokyo-ku	581,0	8,304	8,349	14,370
New York SMSA	3.584,6	10,695	9,081	2,533
Tokyo-to, Yokohama & Kawasaki shi	2.701,9	11,692	15,430	5,711
New York SCSA (1)	12.009,8	15,128	15,796	1,315
Tokyo Metropolitan Region (2)	13.450,3	17.864	28,695	2,133

(1) excludes Norwalk and Stamford, Conn. SMSA's

(2) = Tokyo-to, Kanagawa-ken, Saitama-ken, Chiba-ken

SOURCES: Census data

To what extent any population data without a simultaneous given area figure can be misleading in order to achieve a far-reaching international comparability can be illustrated by means of the latest UN-compilation of our two metropolitan cities.⁽³⁶⁾ Their New York figure (20.2 mill. - 1980) is based on an area of 17,890 sqkm whereas that of Tokyo (20.0 mill.) on less than 5,000 sqkm. The UN-figures become really irregular if we compare the data of Seoul (8.4 mill.), Bombay (8.4 mill.), Jakarta (7.2 mill.) and Manila (5.5 mill. according to this source) on one side and that one for "Los Angeles/Long Beach" (11.6 mill.) on the other: While those of the four Asian metropoli are based on an area always below 650 sqkm (see Part I, Tab. 1, col.9) the area of the latter stretches over 88,078 sqkm i.e. only one tenth less than the whole of South-Korea state!

7. Let us sum up some of the specific growth patterns of the metropolization in the Far East⁽³⁷⁾:

1. Only after 1940 metropolization started to display its pronounced dynamic nature. In other words: Although the majority of the present metropoli arose as colonial bastions their disconcerting growth took place after independence. Then it far outstripped the city boom of the industrialization era in the 19th and beginning of the 20th century in Western Europe and the major parts of the United States. Unlike their "urban revolution" a hundred years ago this recent process should be called

- the "metropolitan revolution" valid not only in the Far East but in the entire Third World.
2. Despite this general statement a somewhat heterogenous fabric of metropolitan growth can be stated too. This refers particularly to our two subcontinental states of China and India: Cities with a comparatively low growth rate (apparently even Shanghai) on one side and those with spectacular dynamics on the other.
 3. This different growth pattern is caused mainly by the highly centralized form of government in these countries (India being no exception): The most exceptional growth occurred in the capital cities. While Rangoon exceeded Mandalay already in 1900, Delhi and Karachi outpaced Madras resp. Lahore only after independence. Today (except Beijing and Delhi) the state capital ranks not only first but with a pronounced demographic primacy in most of the cases: Manila, Rangoon, Kuala Lumpur (Penang was still bigger even 1947), Colombo, Pjongang and, most outstanding in the world, Bangkok exceeding the second one, Chiangmai sixty times!
 4. A specific feature of the metropolization process in the Far East is to be seen in the continuous condensation of the population within the core area of the metropolitan cities. In contrast see the almost opposite growth pattern of Western metropolises (TAB.3)(38):

TAB.3: Growth Pattern of Metropolitan Core Areas - European: Far Eastern Cities (Density per sqkm)

Year	Core Area				
	Inner London 320.65 sqkm	Ville de Paris 106.20 sqkm	Calcutta City 104.00 sqkm	Bombay City 68.71 sqkm	City of Manila 38.28 sqkm
1901	14,177	23,041	8,981	11,294	5,742
1931	13,713	26,648	11,740	16,897	16,279
1951	10,441	26,563	25,942	33,896	25,690
1961	10,893	26,271	28,144	40,343	29,729
1971	9,456	24,397	30,279	44,681	34,746
1981	7,953	21,573	31,654	46,500	42,571
Increase/Decrease (in thousands):					
1901-1981	- 1,996	- 156	+ 2,358	+ 2,419	+ 1,410
1951-1981	- 798	- 530	+ 594	+ 866	+ 646

That of the Third World is caused mainly by the fact that the immigrants from the rural areas are keen to live close to their places of work, which in the informal sector is necessarily the core area, in order to avoid the comparatively high transportation cost. As governmental housing programmes are very limited at least when compared to the demand, the consequences are to be seen in the alarming growth of the slum and squatter areas, particularly within the core areas: As far as the City of Manila is concerned the percentage of the squatter and slum dwellers to the total population increased in the short period of 1963 - 1971 from 27,5 to 44,1%. (39)

8. This last mentioned characteristic feature of the Third World metropoli leads us to the general question: Is the depletion of the core area in the Western world ("Suburbanization"(40)) a temporary affair or is there a fundamental conjunction between metropolization, industrialization ("the later each country became industrialized, the faster was its "Urbanization"(41)) and the level of development? At least the course of the metropolization process in connection with the economic development, and thus the preconditions, were entirely different. In the Industrialized Countries metropolization has taken place as a continuous process in causal connection with the process of industrialization. As against this the Developing Countries were literally caught unawares by the dynamics of the metropolization during the last 30 to 40 years well in advance of economic development occurring on top of a mass of other problems which North Americans, Europeans and Japanese have at least economically solved. The metropolization process, its dynamics - if the present speed of 5 %/year continues the present (1980) 400 million metropolitan population in the Third World will reach almost one billion already in the year 2000! - and its predominantly negative consequences I consider a major challenge not only for the countries concerned but for all of us.

Notes

- (1) See: PFEIL, E., Großstadtforschung und gegenwärtiger Stand, Hannover (1972), esp. p. 119.
- (2) excluding Japan.
- (3) excluding USSR.
- (4) ROBSON, W.A. (ed.), Great Cities of the World, New York 1957.

- (5) DAVIS, K. et al., *The World's Metropolitan Areas*. Berkeley - Los Angeles 1959.
- (6) HOYT, H./PICKARD, J.P., *The World's Million-Population Metropolises*, 1964, reprinted in: BREESE, G. (ed.), *The City in Newly Developing Countries*, Englewood Cliffs 1969, pp. 198-204.
- (7) DAVIS, K., *The Urbanization of the Human Population*, reprinted in: BREESE, G., op. cit. pp. 5-20.
- (8) HOYT, H., *Growth and Structure of Twenty-One Great World Cities*, 1966, reprinted in: BREESE, G., op.cit., pp. 205-216.
- (9) HALL, P., *The World Cities*, London 1966.
- (10) POPULATION DIVISION UNITED NATIONS BUREAU OF SOCIAL AFFAIRS (ed.), *World Urbanization Trends, 1920-1960*, 1966, reprinted in: BREESE, G., op.cit., pp. 21-53 (cited as: PD-UN).
- (11) UN (Ed.), *World Population Trends and Policies*. 1981 Monitoring Report, Vol. I, New York 1982.
- (12) Compare the definition of DAVIS (1959: 27) with his population data (ibid.: 33 ff.), and his own explanation of "Metropolitan Area" (ibid.: 32-33 and 65 ff).
- (13) For "Metropolitan Tokyo", to take an example, we can find the following population figures (in mill.-for 1960): HOYT/PICKARD, 1964: 14.7 (for 1962); DAVIS, 1965: 10.177; HOYT, 1966: 11.374; HALL, 1966: 13.628; PD-UN, 1966: 13.534; UN, 1982: 10.7.
- (14) FRYER, D.W., *The Million City in Southeast Asia*, *Geographical Review*, 43 (1953), pp. 474-494.
- (15) GINSBURG, N.S., *The Great City in South-east Asia*, *American Journal of Sociology*, LX, (1955), 5, pp. 455-462.
- (16) HOSELITZ, B.F., *Urbanization and Economic Growth in Asia*, *Economic Development and Cultural Change*, 6 (1957), pp. 42-54.
- (17) HAUSER, P.M. (ed.), *Urbanization in Asia and the Far East*, Calcutta 1957.
- (18) MURPHEY, R., *New Capitals in Asia*, *Economic Development and Cultural Change*, 5 (1957), pp. 216-243.
- (19) Mc GEE, T.G., *The Southeast Asian City. A Social Geography of the Primate Cities of Southeast Asia*, London 1967.
- (20) Mc GEE, T.G., *The Urbanization in the Third World*, London 1971.
- (21) DWYER, D.J. (ed.), *The City as a Centre of Change in Asia*, Hong Kong 1972.

- (22) JACOBSON, L./PRAKASH, V. (eds.), Urbanization and National Development. Vol. I: South and Southeast Asia Urban Affairs. Beverly Hills 1971.
- (23) JAKOBSON, L./PRAKASH, V. (eds.), Metropolitan Growth. Public Policy for South and Southeast Asia. New York 1974.
- (24) YEUNG, Y.M./LO, C.P. (Eds.), Changing South-East Asian Cities, Readings on Urbanization. London - New York - Melbourne 1976.
- (25) HONJO, M. (ed.), Urbanization and Regional Development. Nagoya 1981. (see esp.: HONJO, M., Overview of Urbanization and Metropolization in Asia, pp. 13-41).
- (26) DAVIS, 1965:7.
- (27) *ibid.*: 6. Up to the present this definition remains the same. See: UN Demographic Yearbook 1982. New York 1984, p. 26.
- (28) The necessity "to push ahead in the field of comparative studies" is rightly stressed by Kingsley Davis already 25 years ago: "Such an effort always runs into the criticism that international comparisons of urban phenomena are impossible, because the data are not yet sufficiently abundant nor sufficiently comparable. However, if we waited until complete information were available before attempting scientific inquiry, we would wait forever." (DAVIS, 1959:3).
- (29) See: BRONGER, D., Metropolization in China?, Geo Journal, 8 (1984), TAB.2 (for Shanghai, Beijing, Tianjin, Guangzhou, Nanjing); BRONGER, D., Metropolization in India and China - A Comparative Analysis, Aligarh 1985, TAB.4 (for Shenyang).
- (30) see Part I, Note 11.
- (31) This would be even more relevant to quite a number of present Chinese metropolises, which - up to 1930 - exceed not even the 100,000 mark (No. 49, 52, 55, 57, 61, 62, 63, 69 and 71 in TAB.1).
- (32) The population density of Beijing's umland (Xian-area) amounts to 254 persons/sqkm, compare to 281/sqkm for the surrounding Hebei province. In Shanghai, on the other hand, the density of the Xian-area comes to 930 persons/sqkm (figures for 1981, computed from the Statistical Yearbook of China - 1981).
- (33) The density for Los Angeles SMSA amounts to 707/sqkm, i.e. lower than certain rural areas in Far East (Java, Lower Ganges Valley etc.; see Note 32).
- (34) BRONGER, D., Metropolisierung als Entwicklungsproblem in den Ländern der Dritten Welt. Ein Beitrag zur Be-

griffsbestimmung, Geographische Zeitschrift, 72 (1984), pp. 147 ff.

- (35) This procedure is unsatisfactorily particularly in the case of Shanghai. The metropolitan area of 893 sqkm, valid up to January 1958, gives a pretty accurate picture of the "Urban Agglomeration". It includes besides the very compact city of Shanghai, the town of Wusong with the Baoshan Iron and Steel Complex (at the junction of the Huangpu and Yangtse Rivers) and the adjacent new satellite town of Minhang. At that time (end of 1957), Shanghai's population was quoted at 6.890 Mill. (ZUKANG, Z., Local Authorities and Human Settlements Development. Shanghai 1982 (mimeogr.), p. 4). Thus the population of the Urban Agglomeration could be estimated presently (1982) at around 8 million. - The given population figure of 5.802 Mill. (1970 - see TAB.1) refers to the "urban districts" (= 223 sqkm) only. The population development of Shanghai since the end of World War II is officially quoted as follows:

Year	Area (sqkm)	Population (in 1,000)		
1945	893	3,660		
1949	893	5,020		
1953	893	6,204		
1957	893	6,890		
			Shanghai - Province Urban - Districts	
	Area (sqkm)	Population (in 1,000)	Area (sqkm)	Population (in 1,000)
1958	6,185	10,280		
1965	6,185	10,937	223	6,430
1970	6,185	10,725	223	5,802
1975	6,185	10,767	223	5,570
1976	6,185	10,813	223	5,519
1977	6,185	10,864	223	5,470
1978	6,185	10,982	223	5,573
1979	6,185	11,321	223	5,914
1980	6,185	11,462	223	6,012
1981	6,185	11,628	223	6,134
1982 (C)	6,185	11,860	230	6,321

- SOURCES: 1945-1980: Zukang, 1982, op.cit., p. 4-5;
1981: Statistical Yearbook of China - 1981,
p. 35; 1982: Statistical Yearbook of China
- 1983, p. 115.
- (36) UN, 1982: 158.
- (37) A detailed discussion of the data is not intended within the frame of this documentation.
- (38) Source: Census data. The data for Paris refer to the Census years of 1911, 1936, 1954, 1962, 1968, 1975.
- (39) See: LAQUIAN, A., Slums are for People. Honolulu 1971, p. 19, 216 (for 1963); PLANNING AND PROJECT DEVELOPMENT OFFICE, DEPARTMENT OF PUBLIC WORKS, TRANSPORTATION & COMMUNICATIONS, Manila Bay Metropolitan Region Strategic Plan. Manila 1978, p. 39 (for 1971). Calculations by the author.
- (40) The term "suburbanization" was coined by Weber already in 1899 (WEBER, A.F., The Growth of Cities in the Nineteenth Century, Ithaca/New York 1963 (2nd ed; original: 1899).
- (41) DAVIS, 1965: 11.

TABLE 1: Population Growth of METROPOLITAN CITIES in South-, Southeast- and East Asia since 1900
(Figures in 1,000); (C = census, E = estimates)

No.	Country	Metropolis	1900		1910		1920		1930		1940		1950		1960		1970									
			Source	Population	Source	Population	Source	Population	Source	Population	Source	Population	Source	Population	Source	Population	Source	Population								
1.	PAKISTAN	Karachi	C	1901	136	C	1911	187	C	1921	244	C	1931	301	C	1941	436	C	1951	1,138	C	1961	2,044	C	1972	3,608
2.		Lahore	C	1901	203	C	1911	229	C	1921	282	C	1931	430	C	1941	672	C	1951	849	C	1961	1,296	C	1972	2,170
3.		Faisalabad	C	1901	9	C	1911	20	C	1921	28	C	1931	43	C	1941	70	C	1951	179	C	1961	425	C	1972	823
4.	INDIA	Calcutta	C	1901	1,488	C	1911	1,718	C	1921	1,851	C	1931	2,106	C	1941	3,578	C	1951	4,589	C	1961	5,737	C	1971	7,031
5.		Bombay	C	1901	928	C	1911	1,139	C	1921	1,380	C	1931	1,398	C	1941	1,801	C	1951	2,994	C	1961	4,152	C	1971	5,971
6.		Delhi	C	1901	406	C	1911	414	C	1921	488	C	1931	636	C	1941	918	C	1951	1,744	C	1961	2,659	C	1971	4,066
7.		Madras	C	1901	594	C	1911	604	C	1921	628	C	1931	775	C	1941	930	C	1951	1,542	C	1961	1,945	C	1971	3,170
8.		Bangalore	C	1901	159	C	1911	189	C	1921	237	C	1931	306	C	1941	407	C	1951	779	C	1961	1,200	C	1971	1,654
9.		Ahmedabad	C	1901	186	C	1911	217	C	1921	274	C	1931	314	C	1941	595	C	1951	877	C	1961	1,206	C	1971	1,742
10.		Hyderabad	C	1901	448	C	1911	502	C	1921	406	C	1931	467	C	1941	739	C	1951	1,128	C	1961	1,249	C	1971	1,796
11.		Pune	C	1901	164	C	1911	173	C	1921	199	C	1931	250	C	1941	324	C	1951	606	C	1961	791	C	1971	1,135
12.		Kanpur	C	1901	203	C	1911	179	C	1921	216	C	1931	244	C	1941	487	C	1951	705	C	1961	971	C	1971	1,275
13.		Nagpur	C	1901	167	C	1911	119	C	1921	165	C	1931	242	C	1941	329	C	1951	485	C	1961	690	C	1971	930
14.		Jaipur	C	1901	160	C	1911	137	C	1921	120	C	1931	144	C	1941	176	C	1951	291	C	1961	410	C	1971	637
15.		Lucknow	C	1901	256	C	1911	252	C	1921	243	C	1931	275	C	1941	387	C	1951	497	C	1961	656	C	1971	826
16.	SRI LANKA	Colombo	C	1901	691	C	1911	827	C	1921	921	C	1931	1,081	C	1946	1,420	C	1953	1,709	C	1963	2,207	C	1971	2,672
17.	BANGLA DESH	Dacca (Dhaka)	C	1901	90	C	1911	109	C	1921	119	C	1931	139	C	1941	213	C	1951	411	C	1961	750	C	1974	1,950
18.		Chittagong	C	1901	27	C	1911	29	C	1921	36	C	1931	53	C	1941	92	C	1951	290	C	1961	364	C	1974	945
19.	BURMA	Rangoon	C	1902	245	C	1911	293	C	1921	342	C	1931	400	C	1941	501	C	1953	737	C	1964	1,530	C	1973	3,189
20.	THAILAND	Bangkok	E	1900	250	E	1910	340	E	1920	475	E	1930	665	E	1937	886	C	1947	1,179	C	1960	2,136	C	1970	3,077
21.	MALAYSIA	Kuala Lumpur	C	1901	32	C	1911	47	C	1921	80	C	1931	111				C	1947	176	C	1957	316	C	1970	542
22.	SINGAPORE	Singapore	C	1901	230	C	1911	305	C	1921	418	C	1931	558	E	1940	760	C	1947	938	C	1957	1,446	C	1970	2,075
23.	INDONESIA	Jakarta	E	1905	173				C	1920	254	C	1930	533				E	1954	1,852	C	1961	2,973	C	1971	4,579
24.		Surabaya	E	1905	150				C	1920	192	C	1930	342				E	1954	927	C	1961	1,008	C	1971	1,556
25.		Bandung	E	1905	47				C	1920	95	C	1930	167				E	1954	805	C	1961	973	C	1971	1,200
26.		Medan			97				C	1920	45	C	1930	77				E	1954	309	C	1961	479	C	1971	636
27.		Semarang			47				C	1920	158	C	1930	218				E	1954	370	C	1961	503	C	1971	647
28.	PHILIPPINES	Metro Manila	C	1903	308				C	1918	460			C	1939	993	C	1948	1,569	C	1960	2,462	C	1970	3,967	
29.	VIETNAM	Ho-Chi-Minh-City												E	1936	256	E	1950	498	E	1963	1,336	C	1973	1,825	
30.		Hanoi							E	1936	149			E	1936	159	E	1951	217	C	1960	644	C	1973	1,378	
31.		Haiphong							E	1936	70			E	1936	70	E	1951	146	C	1960	369	E	1976	1,191	
32.	HONG KONG	Hong Kong	C	1901	369	C	1911	457	C	1921	625	C	1931	840	C	1941	1,640	C	1949	1,860	C	1961	3,130	C	1971	3,937
33.	TAIWAN	Taipei							E	1920	164			C	1940	326	E	1952	499	E	1960	899	C	1970	1,770	
34.		Gaoxiong							E	1920	41			C	1940	152	E	1952	274	E	1960	468	C	1970	828	
35.	KOREA - S	Seoul							C	1920	250	C	1930	355	C	1940	931	E	1950	1,693	C	1960	2,445	C	1970	5,525
36.		Pusan							C	1925	106	C	1930	146	C	1940	250	E	1949	474	C	1960	1,164	C	1970	1,881
37.		Taegu							C	1925	77	C	1930	93	C	1940	179	E	1949	314	C	1960	677	C	1970	1,083
38.		Incheon		1900	16		1910	31	C	1920	37	C	1930	64	C	1940	171	E	1949	266	C	1960	401	C	1970	646
39.	KOREA - N	Pjongjang	E	1905	30				E	1923	95	E	1936	180	E	1944	343			E	1960	653	E	1970	1,500	
40.	CHINA	Shanghai	E	1900	950				E	1920	1,539	E	1930	3,122	E	1938	3,595	C	1953	6,204	E	1958	6,977	E	1970	5,802
41.		Beijing				E	1913	728	E	1920	1,181	E	1929	1,369	E	1938	1,574	C	1953	2,768	E	1958	4,148	E	1970	5,000
42.		Tianjin							E	1920	839	E	1930	1,392	E	1938	1,223	C	1953	2,694	E	1958	3,278	E	1970	3,600
43.		Shenyang	E	1900	100				E	1922	250	E	1936	527	E	1938	772	C	1953	2,300	E	1958	2,423	E	1970	2,800
44.		Wuhan							E	1922	750	E	1927	1,584	E	1938	1,424	C	1953	1,427	E	1958	2,226	E	1970	2,560
45.		Guangzhou							E	1929	830	E	1938	1,022	C	1953	1,599	E	1958	1,867	E	1958	1,867	E	1970	2,500
46.		Chongqing							E	1920	351	E	1934	298	E	1938	528	C	1953	1,773	E	1958	2,165	E	1970	2,400
47.		Harbin							E	1922	200	E	1929	320	E	1938	468	C	1953	1,163	E	1958	1,595	E	1970	1,670
48.		Chengdu							E	1922	423	E	1934	441	E	1938	458	C	1953	857	E	1958	1,135	E	1970	1,250
49.		Zibo															C	1953	184	E	1958	806	E	1970	850	
50.		Xi'an										1935	188	E	1938	218	C	1953	787	E	1958	1,368	E	1970	1,600	
51.		Nanjing							E	1922	300	E	1929	522	E	1938	440	C	1953	1,092	E	1958	1,455	E	1970	1,750
52.		Taiyuan							E	1922	80	E	1934	139	E	1938	177	C	1953	721	E	1958	1,053	E	1970	1,350
53.		Changchun							E	1922	70			E	1938	360	C	1953	855	E	1958	988	E	1970	1,200	
54.		Dalian							E	1926	237	E	1936	586	E	1938	504	C	1953	892	E	1958	1,590	E	1970	1,650
55.		Lanzhou							E	1922	110	E	1934	103	E	1938	122	C	1953	397	E	1958	732	E	1970	1,450
56.		Kunming							E	1926	170	E	1938	184	C	1953	699	E	1958	900	E	1958	900	E	1970	1,100
57.		Zhengzhou							E	1922	35	E	1931	80	E	1938	197	C	1953	595	E	1958	785	E	1970	1,050
58.		Tangshan							E	1920	76	E	1929	100	E	1938	146	C	1953	693	E	1958	812	E	1970	950
59.		Jinan				E	1914	246	E	1922	300	E	1933	428	E	1938	472	C	1953	680	E	1958	882	E	1970	1,100
60.		Guiyang							E	1933	117	E	1938	145	C	1953	271	E	1958	530	E	1958	530	E	1970	660
61.		Qiqihar							E	1920	43	E	1930	76	E	1938	97	C	1953	345	E	1958	704	E	1970	760
62.		Anshan							E	1938				E	1938	120	C	1953	549	E	1958	833	E	1970	1,050	
63.		Fushun							E	1920	181	E	1936	118	E	1938	215	C	1953	679	E	1958	1,019	E	1970	1,080
64.		Qingdao							E	1920	131	E	1928	318	E	1938										

TAB. 1 & 2: Sources and explanations

Note: Besides important addenda the official census data are not quoted here.

No.	Tab.	Year	Sources/Explanations
1	1/2	1901-1981	The figures for Karachi are not incontestable. According to the latest Census (1981) data the given population figures are related to an area of 3.528 sqkm (Karachi District). The "Karachi Development Authority (KDA)" quote the territorial development as follows: 1870: 15.53; 1947: 233; 1959: 724 and presently 1.993 sqkm (FARUQUI, M.S., Karachi: Physical Situation of Human Settlements. Karachi 1982, p. 3 f.).
2	2	1901 ff.	Lahore M.C.
3	2	1901 ff.	Faisalabad M.C.
6	1/2	1901 ff.	The population development of the "Urban Agglomeration" (541 sqkm) was as follows: 1901: 214; 1911: 238; 1921: 304; 1931: 447; 1941: 696; 1951: 1,437; 1961: 2,359; 1971: 3,647; 1981: 5,729 (figures in thousands)
8	2	1961	according to the same Census: 501.21 sqkm ("Bangalore Metropolitan Town Group").
16	1/2	1901 ff.	Population and Territorial figures refer to Colombo and Gampaha districts; the latter was separated only in 1978. The population development of Colombo M.C. (39 sqkm) was as follows: 1901: 185; 1911: 250; 1921: 296; 1931: 352; 1946: 485; 1953: 596; 1963: 512; 1971: 562; 1981: 586 (figures in thousands).
17	1	1901-1951	See also: ALSDORF, L., Vorderindien. Braunschweig 1955, p. 218, 286.
18	2	1901 ff.	The territorial development of Chittagong municipality was as follows: since 1901: 10; 1960: 15; 1965: 78; 1978: 155 and 326.34 sqkm for the Urban Agglomeration (CHOWDRY, F.Q., The port of Chittagong, In: YLAP (ed.), Voluntary Papers, Yokohama 1982, p.28).
19	2	1901 ff.	The figure of 66.045 skm given by Spate (SPATE, O.K.H./TRUEBLOOD, L.W., Rangoon: A Study in Urban Geography, In: Geographical Review, 32 (1962), p. 60) is probably without the cantonment area.
20	1	1901 ff.	The census figures of 1909, 1919, 1929 and 1937 could not be traced out. The 1937 figure is quoted in: Geographical Handbook Series, Indo-China, Washington 1943, p. 249. From this figure the data from 1930 back to 1900 are calculated according to the growth rates given by Sternstein for "Greater Bangkok Metropolitan

No.	Tab.	Year	Sources/Explanations
			Area" (3.106 sqkm) (STERNSTEIN, L., Portrait of Bangkok, Bangkok 1982, p. 94). Although our accuracy is somewhat limited it reveals that the figure of 628.675 for 1903 quoted in MURPHEY (1957: 227) must be considered as definitely too high.
21	2	1931, 1947 1957, 1970	CONCANNON, T.A.L., A New Town in Malaya, In: The Malayan Journal of Tropical Geography, 5 (1955), p. 40. according to other sources: 93 sqkm (001 JIN-BEE, Peninsular Malaysia, London 1976, p. 148) resp. 96 sqkm (SENDUT, H. (1965), The Structure of Kuala Lumpur, Malaysia's Capital City, In: Town Planning Review, 36 (1965), p. 126.)
23- 25+	1/2	1905-1954	MILONE, P.D., Urban Areas in Indonesia. Berkeley 1966, Tab. 1 & 4.
27		1961-1980	EVANS, J., The Growth of Urban Centres in Java since 1961, In: Bulletin of Indonesian Economic Studies, 20 (1984), p. 46.
26		1954	see: MILONE, P.D. op.cit.
	2	1930-1961	WOLFRAM-SEIFERT, U., The Agglomeration Medan - Entwicklung, Struktur und Funktion des dominanten Oberzentrums auf Sumatra (Indonesien), In: Mitt. d. Geogr. Ges. in Hamburg, 72 (1972), p. 133.
29- 31	1	1936	Geographical Handbook Series, Indo-China, Washington 1943, p. 248.
29	1	1950	MURPHEY, R. (1957), op.cit., p. 216. The figure of 1.6 Mill. for 1951, quoted in DAVIS, 1959: 52, and 1.9 Mill. for 1955 /UN Demographic Yearbook 1960, New York 1962, p. 180) seems far too high.
30/ 31	1	1951	DAVIS, K. (1959), op.cit., p. 52.
29- 31	1	1960/1963	UN Demographic Yearbook 1964, New York 1965, p.183.
	1	1973/1976	STATISTISCHES BUNDESAMT WIESBADEN (ed.), Länderkurzbericht Vietnam 1979, Wiesbaden 1979, p. 12.
	2	1973-1976	The Far East and Australasia 1982/83, p. 1214.
33	1	1920	TIETZE, W. (ed.) (1970), Westermann Lexikon der Geographie, Braunschweig 1970, Vol. IV, p. 508.

No.	Tab.	Year	Sources/Explanations
34	1	1920	ibid., Vol, II, p. 696.
33+	1	1940	UN Demographic Yearbook 1960, op.cit., p. 179.
34	1	1952 ff.	Statistical Yearbook of the Republic of China 1983, Taipei 1983, p.10.
	2	1952 ff.	Statistical Yearbook of the Republic of China 1982, Taipei 1982, p. 11 f.; the municipal area amounted to 67 sqkm for Taipei in 1960 and 114 sqkm for Gaoxiang in 1963.
39	1	1905-1936	TIETZE, W. (1970), op.cit., Vol. III, p. 935.
		1944	DAVIS, K. (1959), op.cit., p. 51.
		1960	UN Demographic Yearbook 1964, New York 1965, p. 181.
		1970	STATISTISCHES BUNDESAMT WIESBADEN (ed.), Länderbericht Demokratische Volksrepublik Korea 1984, Wiesbaden 1984, p. 20.
	2	1970	ibid., p. 18.
40- 72			With the exception of 1953 and 1982 (data being published only for Shanghai, Beijing and Tianjin so far) the figures of the Chinese metropolises are based entirely on estimates. They are to be taken with particular caution. Even the 1953 Census data have to be quoted with care (see inter alia: ORLEANS, L.A. Every Fifth Child: The Population of China. London 1972, pp. 72 ff.). Only the territorial as well as population figure for 1930 of Shanghai (FEETHAM, R. (1931), Report to the Shanghai Municipal Council, Vol. I, P. 17) and the data for Jinan (for 1914, 1933 and 1942: 575,821) of the careful study of Buck (BUCK, D.D., Urban Change in China. Politics and Development in Tsinan, Shantung 1890-1949, Madison 1978, p. 230 ff.) may be cited as an exception. The distinction of the metropolitan growth is further complicated because of an almost complete lack or contradictions regarding area figures before 1949 as well as the frequent and in addition often quite extensive changes in urban area after independence (see also note 29). The population data of 1970 obviously refer partly to previous territorial figures (see esp. note 35 for Shanghai). - In the following only the seemingly most reliable sources are cited.
40	1	1900	calculated from: MURPHEY, R., Shanghai: Key to Modern China. Cambridge, Mass. 1973, p. 22.

No.	Tab.	Year	Sources/Explanations
41	1	1913	CHANG, S.-D., Peking: The Growing Metropolis of Communist China, In: The Geographical Review, 55 (1965), p. 313.
43	1	1900	SCHINZ, A., Fengtian - Mukden - Shenyang, In: Geowissenschaften in unserer Zeit, 1 (1983), p. 208.
59	1	1914	BUCK, D.D. (1978), op.cit., p. 230 ff.
68	1	1907	WOODHEAD, H.G.W. (ed.), The China Year Book 1923. New York 1923, p. 4 ff.
40-72	1	1920	China Year Book 1923 op.cit.; TREWARTHA, G.T., Chinese Cities: Number and Distribution, In: Annals Association of American Geographers, 41 (1951), pp.338 f.
	1	1930	THE COUNCIL OF INTERNATIONAL AFFAIRS, CHUNGKING (ed.), The Chinese Yearbook 1943, Nendeln/Lichtenstein (1968-repr.), pp. 42f.; TREWARTHA, G.T. op.cit.; FEETHAM-Report op.cit. (for Shanghai); SCHINZ, A., op.cit. (for Shenyang); BUCK, D.D., op.cit. (Jinan).
	1	1938	ULLMAN, M.B., Cities of Mainland China: 1953 and 1958. Washington 1961, pp. 20 ff.
	1	1948	ULLMAN, M.B. op.cit.; TREWARTHA, G.T. op.cit.
	1	1953	SHIGER, A.G., Administrativno-territorial'-noe delenie zarubezhnuikh stran: spravochnik, Moskva 1957, pp.143 f.
	1	1958	ULLMAN, M.B. op.cit.; CHEN, N.-R., Chinese Economic Statistics. A Handbook for Mainland China, Edinburgh 1966, pp. 129 ff.
	1	1970	CHEN, C.-S., Population Growth and Urbanization in China, 1953-1970, In: The Geographical Review, 3 (1973), p. 67.
40	2	1930 ff.	see note 35.
41	2	1929	Chinese Yearbook 1935/36, pp. 1712 f.
	2	before 1958	ULLMAN, M.B. op.cit., Appendix D (pp. 42 ff.).
	2	1958	ibid.
42	2	1935	Chinese Yearbook 1943 op.cit.
	2	before 1958	CHANDRASEKHAR, S., China's Population, Hong Kong 1960, p. 41.
	2	1958	CHANG, S.-D., The Changing System of Chinese Cities, In: Annals Association of American Geographers, 66 (1976), p. 407.
43	2	1900	SCHINZ, A. (1983), op.cit., p. 208.
	2	1917	LO, C.-P./PANNELL, C.W./WELCH, R., Land Use changes and City Planning in Shenyang and Canton, In: Geographical Review, 67 (1977), p. 275.
	2	1936 ff.	SCHINZ, A., op.cit.

No.	Tab.	Year	Sources/Explanations
45	2	1935	Chinese Yearbook 1943, op.cit.
	2	before 1958	
50	2	1958	ULLMAN, M.B. op.cit., Appendix D.
	2	before 1948	
51	2	1935	CHINZ, A., Die Entwicklung der Stadt Xian, Provinz Shaanxi/China, In: Die Erde, 114 (1983), p. 156.
	2	1953	Chinese Yearbook 1943, op.cit.: 40.804 sqkm - municipality, 477.845 sqkm - "controlled by the municipality".
	2	1975	CRESSEY, G.B., (1955), op.cit., p. 38.
55	2	1953+1957	SKINNER, G.W., Vegetable Supply and Marketing in Chinese Cities, In: The China Quarterly, 76 (1978), p. 761.
	2	1957+1958	
69	2	1957+1958	ULLMAN, M.B. op.cit., Appendix D.
			ibid.