

## XII. FLOOR AREA PER PERSON

### International goals

*All countries should give priority to measures that improve the quality of life and health by ensuring a safe and sanitary living environment for all population groups through measures aimed at avoiding crowded housing conditions ... (para. 8.10 of ICPD Programme of Action).*

*... Improving the availability of affordable and adequate shelter for all ... (para. 36(m) of WSSD Programme of Action)*

*Adequate shelter means more than a roof over one's head. It also means adequate privacy; adequate space; physical accessibility; adequate security, including security of tenure; structural stability and durability; adequate lighting, heating and ventilation; adequate basic infrastructure, such as water-supply, sanitation and water-management facilities ... (para. 60 of the Habitat Agenda).*

*Agenda 21, adopted at the United Nations Conference on Environment and Development, and the Vienna Programme of Action, adopted at the World Conference on Human Rights, also adopted goals on housing.*

### DEFINITION

Floor area per person is defined as the median floor area (in square metres) of a housing unit divided by the average household size. This indicator measures the adequacy of living space in dwellings. A low value for the indicator is a sign of overcrowding.

### RECENT SITUATION

Floor area per person is one of the 10 key housing indicators approved by the Commission on Human Settlements (UNCHS) to measure progress towards meeting the objectives of the Global Strategy for Shelter to the Year 2000, adopted by the General Assembly in 1988 and by the Commission in 1995.

Human settlement conditions in many parts of the world are deteriorating, mainly as a result of low levels of investment. Floor area per person is to a considerable degree the outcome of market forces, which are, in turn, shaped by a variety of housing policies. Housing policies, particularly in urban areas, greatly affect the living conditions of people. In low-income settlements, reduced space per person can be associated with certain health risks (United Nations, 1996).

Table XII.1 shows the distribution of countries according to floor area per person. Since data availability is very limited for this indicator at the country level (results have been collected mostly at the city level in 188 cities), observations based on current national data should be interpreted with caution.

At the global level, out of 37 countries with data available, two thirds report floor area per person of less than 20 square metres. This global average is an outcome of two disparate housing situations in the more developed regions, on the one hand, and in the less developed regions, on the other. In the more developed regions, about 60 per cent of the countries with data report floor area per person of 20 square metres or larger. In the case of the less developed regions, only 10 per cent of the countries do so.

Floor area per person is less than 20 square metres for all of the African countries, and for three quarters of the Asian and the Pacific countries. Two countries in Asia and the Pacific—Israel and the Philippines—report floor area per person of 20 square metres or more. Chile, the only country in Latin America and the Caribbean which has data for this indicator, reports floor area per person of less than 20 square metres.

Figure XII.1 graphically shows the differences in floor area per person among the major regions. Based on the limited data, African countries tend to have less floor area per person than those in other regions. The more developed regions tend to have relatively more floor space per person than the other regions, while Asia and Oceania lies between Africa and the more developed regions.

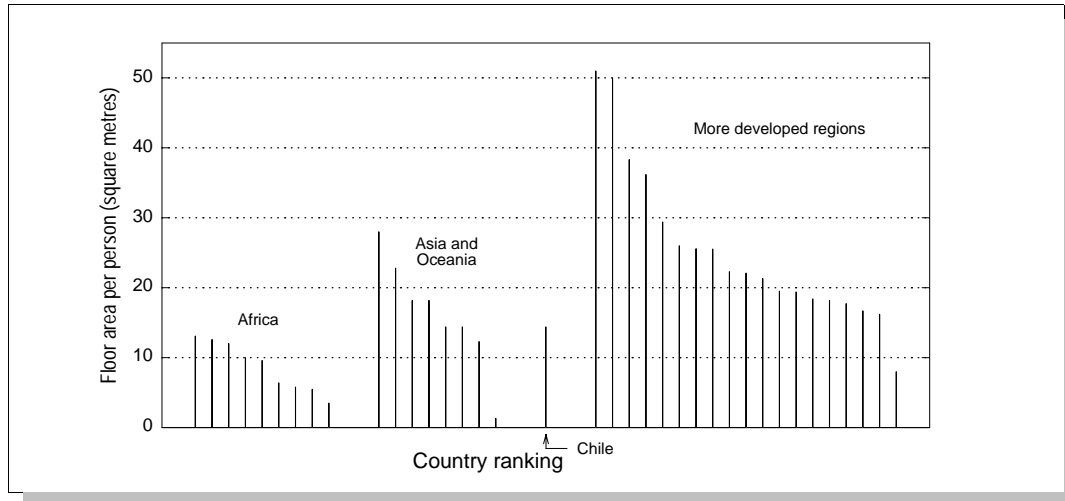
**Table XII.1.** Distribution of countries according to floor area per person, 1990-1995

	Percentage of countries with floor area per person of:			Number of countries	
	20 square metres or more	Less than 20 square metres	Total	With data available	Total
World	35	65	100	37	184
More developed regions	58	42	100	19	43
Less developed regions	11	89	100	18	141
Least developed countries	0	100	100	4	45
Africa	0	100	100	9	53
Asia and Oceania <sup>a</sup>	25	75	100	8	57
Latin America and the Caribbean	0	100	100	1	31

*Source:* Urban Indicators Programme, UNCHS.

NOTE: Excludes countries and areas with populations under 150,000.

<sup>a</sup> Excluding Japan, Australia and New Zealand, which are included in the more developed regions.

**Figure XII.1.** Floor area per person, 1990-1995, by country ranking and region

Source: Urban Indicators Programme, UNCHS, 1997.

NOTE: Bars show floor area per person for individual countries with data available.

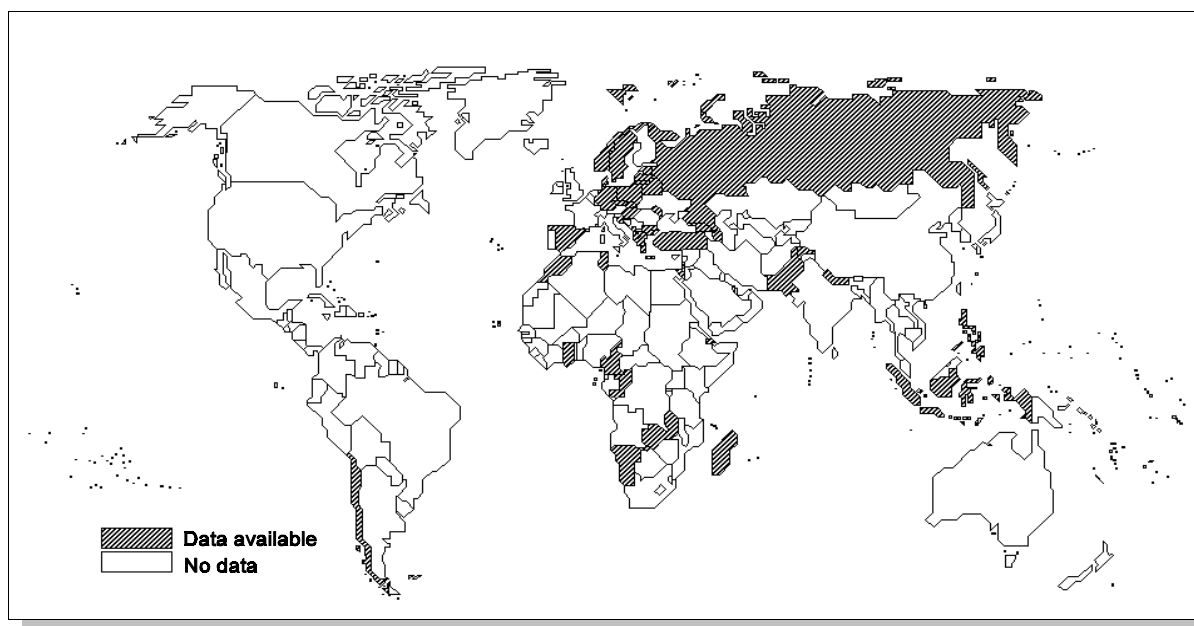
**Table XII.2.** Distribution of cities according to floor area per person, 1990-1995

	Percentage of cities with floor area per person (in square metres) in the range:						Number of cities	
	20 or more	15-19	10-14	5-9	Less than 5	Total	With data available	Total <sup>a</sup>
World	18	18	24	28	13	100	188	237
More developed regions	56	37	5	2	0	100	41	62
Less developed regions	7	12	29	35	17	100	147	175
Least developed countries	4	4	23	37	33	100	52	63
Africa	5	1	33	40	21	100	80	94
Asia and Oceania <sup>b</sup>	5	15	32	32	17	100	41	49
Latin America and the Caribbean	15	42	15	23	4	100	26	32

Source: Urban Indicators Programme, UNCHS, 1997.

<sup>a</sup> Number of cities in the Urban Indicators database.

<sup>b</sup> Excluding cities in Japan, Australia and New Zealand, which are included in the more developed regions.

**Figure XII.2.** Data availability of floor area per person at the national level, 1990-1995

Source: Urban Indicators Programme, UNCHS, 1997.

Findings in table XII.2, which is based on city-level data, reinforce those from table XII.1. In more than half of the cities in the more developed regions, floor area per person is 20 square metres or more. In the less developed regions, only 7 per cent of the cities fall in this category, while over half have average floor area under 10 square metres per person. Urban housing in Latin America and the Caribbean is significantly more crowded than in the more developed regions, but it tends to be significantly less crowded than in either Africa or Asia/Oceania. In nearly 60 per cent of Latin American and Caribbean cities, the average floor area is at least 15 square metres per person, while this is the case in only 6 per cent of African cities and 20 per cent of the cities in Asia and Oceania. There are also significant variations within intraregional groups, with, for example, substantially more spacious living arrangements in high-income than in transitional economies within the more developed regions (not shown).

### SOURCES OF DATA, COVERAGE AND QUALITY

Data are compiled by the United Nations Centre for Human Settlements under its Urban Indicators Programme. Primary data sources include censuses and household surveys. Data are available from 1987 to 1995, depending on the country.

Data availability at the national level is extremely limited for this indicator, as compared with the other indicators included in this report. This indicator has been collected at the city level by the UNCHS Urban Indicators Programme. While city data are available for 188 cities, only 37 countries have provided national data (20 per cent of the 184 countries with populations of 150,000 or more). Of those 37 countries, about half are from the more developed regions, primarily from Europe (see fig. XII.2). The country coverage for the less developed regions is only 13 per cent.

“Floor area” includes all living space, along with bathrooms, internal corridors and closets. Covered semi-private spaces such as corridors, inner courtyards or verandas should be included in the calculation, if used by the household for cooking, eating, sleeping, or other domestic activities. “Floor area” refers to a housing unit, defined as a separate and independent place of abode intended for habitation by one household at the time of the census or other inquiry.

Various levels of data collection are necessary to provide a full picture of this aspect of housing. Floor area per person does not by itself give a complete picture of living conditions. Cultural values affect sensitivity to crowding as well. According to UNCHS, however, this indicator is more precise and policy-sensitive than related indicators, such as persons per room or households per dwelling unit.

### **FOR FURTHER INFORMATION**

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### **REFERENCES**

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