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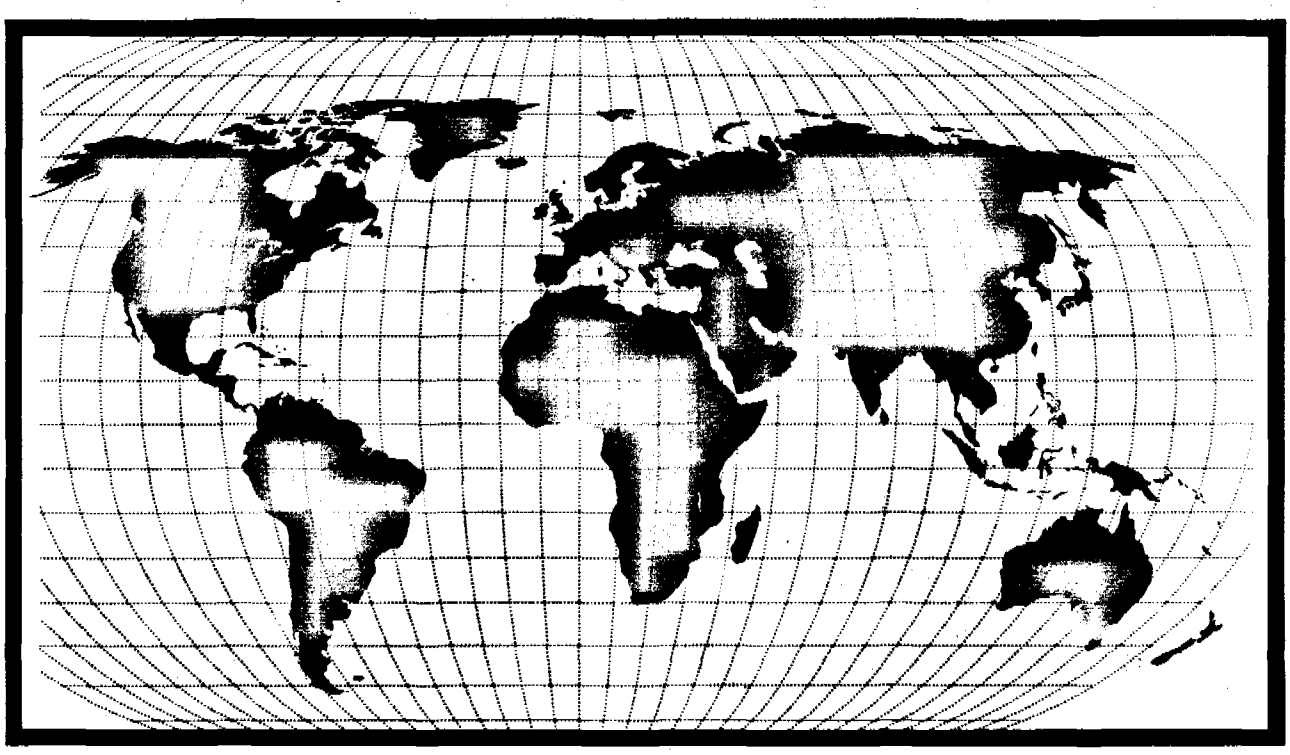

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IMPROVING THE LIVING ENVIRONMENT FOR A SUSTAINABLE FUTURE

The United Nations Centre for Human Settlements (Habitat)
Nairobi, 1992

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FOREWORD

The United Nations Centre for Human Settlements (Habitat), based on mandates from the United Nations Commission on Human Settlements, has devoted continued attention to the environmental aspects of human settlements development in general and those of the poor in particular. In its resolution 12/18 of 2 May 1989, the Commission on Human Settlements stressed that the objectives and policies of the Global Strategy for Shelter to the Year 2000 and the goals of sustainable development are mutually supportive. The Commission underlined the importance it attaches to the concept of sustainable development, while also stressing that the integrated management of human settlements can be a powerful instrument for achieving sustainable development, through improving the quality of life and relieving pressure on threatened natural resources.

In virtually all countries, the past 50 years have brought rapid urbanization and it is expected that by the year 2000 almost half the world population will be urban. The urban population of the developing countries is now larger than that of Europe, North America and Japan combined - a total of 1.3 billion people. Human settlements make heavy demands on natural resources and generate a variety of by-products that adversely affect the health and quality of life of people and cause the deterioration and depletion of the environmental resources essential for long-term development. Most of the urban residents in developing and industrialized countries have health threatening (and in some cases life threatening) pathogens or toxic substances in their living and working environments. The destructive impacts of city-generated wastes, however, do not confine themselves to urban areas; they stretch beyond city boundaries, damaging eco-systems and rural livelihoods, while posing serious threats to long-term environmentally sound development and, thus, they may have serious impacts on countries or regions as a whole.

The urbanization process presently taking place, however, is not necessarily a disaster; it is a challenge for this generation and generations to come with the achieving of long-term sustainability of development, not an impossible task. Yet, in a world where there are 1 billion disadvantaged people, particularly in urban slums, there are many poverty-related problems which create a great risk of further negative impacts on, *inter alia,* shelter and infrastructure supply, but especially environmental quality. One should keep in mind that it would be totally unacceptable to talk about long-term environmental sustainability alone, without considering the short-term problems of mere day-to-day survival for such a large proportion of humanity.

This publication should be seen as a further elaboration on and expansion of document A/CONF.151/PC/L.67 "Promoting sustainable human settlements development" (Section I, Chapter 6 of Agenda 21), illustrating the background to the rationale of the objectives, proposed activities and means of implementation of the programme areas contained in the above document through information on the background to A/CONF.151/PC/L.67: a chronology of developments; the relevant sections of resolution 13/19 of the Commission on Human Settlements; and highlighting ongoing and planned UNCHS programmes in support of Agenda 21. It intends to further expand on why human settlements have a critical role in environmentally sound development and how they can make significant contributions to improving the quality of life of all, and the world's poor in particular.

Dr. Arcot Ramachandran
Under-Secretary-General
Executive Director
UNCHS (Habitat)

I. UNCHS (Habitat) AND 'THE ROAD TO RIO'

Following the publication of the report of the World Commission on Environment and Development, in the spring of 1988, and General Assembly Resolution 42/186 of 11 December 1987 on the Environmental Perspective to the Year 2000 and Beyond, the United Nations Commission on Human Settlements decided to consider at its twelfth session (held in 1989, in Cartagena, Colombia) the issue of sustainable development and to discuss at its thirteenth session (held in 1991, in Harare, Zimbabwe) the following two themes: "Human settlements in relation to the concept of sustainable development within the Global Strategy for Shelter to the Year 2000" and "The use of new and renewable sources of energy in human settlements and the construction and production of building materials".

At its 1989 session, the Commission declared its readiness to take part in the preparations for the 1992 United Nations Conference on Environment and Development and hold a high-level intergovernmental discussion and review of the crucial issues involved. Based on this mandate, UNCHS (Habitat) took part in the first session of the Preparatory Committee of UNCED in Nairobi, August 1990 and made available to the delegates and the UNCED Secretariat a number of option papers related to seven of the main issues identified in resolution 44/228. As a result, the PrepCom invited the Commission on Human Settlements to make a substantive contribution to the preparatory process of the Conference.

The intergovernmental discussion called for by the Commission on Human Settlements took place in November 1990, in The Hague, The Netherlands, under the title "Intergovernmental meeting on human settlements and sustainable development". The meeting was sponsored by UNCHS (Habitat) and by the governments of the Netherlands and the Nordic countries. The 56 participating delegations reviewed a background document called "People, Settlements, Environment and Development" and adopted a Chairman's declaration on the same topic (See Box 1). The meeting placed priority emphasis on the issue of poverty, as sustainability of development cannot be achieved in a world where more than one billion people live in absolute poverty. The eradication of poverty was considered a reachable goal, as the means exist to develop and implement the policies and mobilize the resources needed to meet this goal. The intolerable and worsening living and working environments of the poor in urban slums and rural areas are a major determinant of poverty. Therefore, the improvement of the living and working environment of the poor is a priority concern.

The results of the Hague meeting were presented at the second PrepCom, held in Geneva, in March 1991, by the meeting's chairman, Mr. Max van der Stoel, former Minister of Foreign Affairs of the Netherlands, speaking on behalf of the European Community. The support received by many delegations from both developed and developing countries prompted the UNCED Secretariat to make arrangements for the discussion of human settlements as one of the cross-sectoral themes of the programme of action, "Agenda 21", to be presented at the Conference.

During its thirteenth session, held in Harare, Zimbabwe, in April-May 1991, the Commission adopted a resolution on Human Settlements and Sustainable Development (see Box 2), which, *inter alia,* transmitted to the Secretary-General of UNCED the report "People, Settlements, Environment and Development" and the theme paper on "The significance of human settlements and the Global Strategy for Shelter to the Year 2000 to the concept of sustainable development, with particular emphasis on the relationship between economic development, improving the living conditions of the poor, and the management and planning of settlements" as the Commission's substantive contribution requested by the UNCED Preparatory Committee.

As a result, UNCHS was invited to provide assistance to the UNCED Secretariat in preparing a document on human settlements (A/CONF. 151/PC/43), as well as on another sectoral issue of Agenda 21: Solid Waste and Sewage-related Issues. Additional inputs were provided to reflect human settlements concerns with relation to other documents being prepared by the UNCED Secretariat on fresh-water, land, poverty, population, health, and coastal management.

Human settlements was the first cross-sectoral topic to be discussed during the third session of the PrepCom, which took place in Geneva, August/September 1991, on the basis of document A/CONF.151/PC/43. This document contained a background describing global human settlements conditions and trends, a section illustrating key linkages between human settlements and a number of development issues, and a final part (Options for Agenda 21) outlining programme areas on: Adequate Shelter for All; Human Settlements Management; Land-Resource Management; Environmental Infrastructure: Water, Sanitation, Drainage, and Solid Waste Management; Energy and Transport; Construction; Human-Resource Development and Capacity Building for Human Settlements Development. The introductory part of the paper is reproduced in part II of the present report.

All delegations attending the third session of the PrepCom welcomed the report and stressed the importance of human settlements in the UNCED context. A proposal was made to include a programme area on planning to mitigate the risks and consequences of natural and man-made disasters. Decision 3/3, which was adopted by the PrepCom in its final Plenary session, recommended that human settlements be treated as a distinct programme of Agenda 21, with its programme areas addressing human settlements as a substantive framework for sustainable development, and that other Agenda 21 programme areas include the human settlements dimension.

Thanks to the intensive collaborative effort with the UNCED Secretariat in the months following the third session of the PrepCom, Section 1, Chapter 6 of Agenda 21: "Promoting sustainable human settlements development" (A/CONF.151/PC/100/Add.7) was finalized by the Secretariat and made available to governments for the fourth and final session of the PrepCom in New York, March-April 1992, where it was adopted with amendments and produced into a final document for consideration at the Rio Earth Summit. (A/CONF.151/PC/L.67 "Promoting Sustainable Human Settlements Development"; Section 1, Chapter 7 of Agenda 21)

BOX 1. STATEMENT OF THE CHAIRMAN OF THE INTERGOVERNMENTAL MEETING ON HUMAN SETTLEMENTS AND SUSTAINABLE DEVELOPMENT "PEOPLE, SETTLEMENTS, ENVIRONMENT AND DEVELOPMENT"

1. *Sustainable development means improving the quality of life of all. It cannot be achieved in a world where more than one billion people live in absolute poverty. It is unacceptable and even inhuman to talk about long-term environmental sustainability without considering the short-term problems of mere survival for such a large portion of humanity.*

2. *The eradication of poverty is a reachable goal. The means exist to develop and implement the policies and mobilize the resources needed to meet this priority goal. A major prerequisite is the solution of the debt crisis with its ever-spreading impact on the economies and living environment of the people in developing countries.*

3. *Global urbanization will continue. While almost half of the world's population is already urban, by the first quarter of the next century the majority of the world's inhabitants - over five billion people - will live in urban settlements. A growing share of the world's poor will live in rapidly growing urban agglomerations.*

4. *The intolerable and worsening living and working environments of the poor in urban slums and rural areas, with their implications in terms of human suffering, deteriorating health and reduced life expectancy, are a major determinant of poverty. Therefore, the improvement of the living and working environment of the poor is a priority concern.*

5. *The industrialized countries bear the main responsibility of leading the way in changing consumption and production patterns through energy efficiency, efficient use of other resources, replacement of non-renewable resources by renewable ones, and minimization of waste production and pollution.*

6. *Human settlements, and particularly large urban agglomerations, are major contributors to environmental degradation and resource depletion. At the same time, human settlements, large and small, are also areas of unused opportunities: creativity, economic growth, communication; accessibility for transfer of knowledge; and an efficient and effective attack on waste and pollution.*

7. *The undesired environmental implications of settlement growth can be addressed and reversed. Human settlements can be managed in an orderly and equitable manner through participatory and resource-conscious planning and management. This enabling approach applies to all urban functions, such as land use, construction, water supply, sanitation, waste disposal, transport and recreation.*

8. *Better planning and management of human settlements, including access to and use of environmentally sound technologies and reduced demand for mobility and transport can produce significant energy savings and therefore help prevent global warming and climate change.*

9. *A basic prerequisite for achieving sustainable development is the recognition of the role and contribution of women in all aspects of development.*

10. *International cooperation must be intensified to encourage and support national and local efforts in all countries to achieve the dual objective of sustainable development: meeting the development aspirations of people today and safeguarding the right of tomorrow's generations to do the same in healthy and human environments.*

BOX 2. EXTRACT FROM RESOLUTION 13/19: HUMAN SETTLEMENTS AND SUSTAINABLE DEVELOPMENT

The Commission on Human Settlements,

...

1. Endorses the report "People, Settlements, Environment and Development," ... including the statement of the Chairman of the Meeting on Human Settlements and Sustainable Development held at The Hague in November 1990, and the theme paper on "The significance of human settlements and the Global Strategy for Shelter to the Year 2000 to the concept of sustainable development, with special emphasis on the relationship between economic development, improving the living conditions of the poor, the management and planning of human settlements" Land requests the Executive Director of the United Nations Centre for Human Settlements (Habitat) to transmit those documents, as annexes to the present resolution, to the Secretary-General of the United Nations Conference on Environment and Development as the Commission's substantive contribution to the preparatory process of the Conference;

2. Recommends that the preparatory process of the Conference take into full consideration substantive contributions of the United Nations Centre for Human Settlements (Habitat) as contained above;

3. Stresses the importance of the integrated approach to human settlements development and management adopted by the United Nations Centre for Human Settlements (Habitat), through the combination of research, training, technical cooperation and information;

4. Affirms that a sustainable approach to human settlements development can make an important contribution to the achievement of the goals of the United Nations Conference on Environment and Development, through the improvement of the living and working environments of the urban and rural poor, the possible enhancement of employment and development opportunities created by properly planned and managed settlements and settlements systems, and the reduction of waste and pollution through appropriate policies on land-resource management, water supply, sanitation and wastewater, solid waste, energy, transport and construction-sector activities, and that therefore the issue of human settlements merits being dealt with as one of the components of "Agenda 21" to be adopted by the Conference;

5. Affirms also that human settlements relate to seven of the main issues contained in General Assembly resolution 44/228 listed below, and requests the Executive Director to make further relevant technical contributions to the preparatory process of the Conference, highlighting those aspects that may require additional financial resources to developing countries, focused on the following issues indicated below with their respective indicative annotations:

(a) Protection of the atmosphere: a more efficient use of fossil-fuel consumption and reduction of emissions through the encouragement of settlement-development patterns which minimize transport demand, the promotion of fuel-efficient modes of transport, including public transport and non-motorized traffic and alternative and renewable sources of power, the design of energy-efficient buildings and the adoption of energy-saving heating and cooling solutions, and the promotion of building-materials production and construction techniques requiring lower energy inputs;

(b) Protection of the quality and supply of freshwater resources: achievement of an efficient and equitable utilization of freshwater resources for human settlements, including quantity and quality evaluation, the promotion of a comprehensive approach to water-resource management, the adoption of water-conservation measures such as proper maintenance, upgrading and utilization of existing facilities and wastewater recycling, appropriate pricing policies, and the enforcement of water-quality standards;

(c) Protection of the oceans and coastal areas: adoption of cost-effective solutions to reduce land-based pollution from inland settlements; integrated approaches to coastal area management; and preventive measures to mitigate the impacts of natural disasters, including the possible effects of sea-level rise;

(d) Protection and management of land resources: promotion of inter-sectoral and integrated approaches to land-use management; policies to prevent encroachment of ecologically fragile regions and stimulate employment generation and economic growth by encouraging the expansion of environmentally sound, non-agricultural activities in rural regions and the development of urban functions in secondary centres; and regularization and upgrading of low-income settlements to improve environmental quality in such settlements and prevent resettlement in disaster-prone and hazardous locations;

(e) Environmentally sound management of wastes: adoption of sustainable approaches to sanitation and wastewater management through the development and dissemination of innovative and affordable technologies in sanitary-waste and wastewater management; promotion of incentives to sanitation and wastewater programmes through training, public education and research demonstrating the much higher costs of poor sanitation in terms of public health, efficiency and productivity; adoption of sustainable approaches to solid-waste management including incentives for solid-waste reduction at source and waste recycling and re-use; and integration of solid waste management programmes with other infrastructure programmes, such as water-supply, sanitation and drainage;

(f) Improvement of the living and working environment of the poor in urban slums and rural areas: support to the adoption and implementation of national shelter strategies based on the principles of the Global Strategy for Shelter to the Year 2000 adopted by the General Assembly of the United Nations, the principal aim of which is to facilitate adequate shelter for all by the year 2000 through an "enabling approach" to shelter development and improvement specifically geared to the needs and circumstances of the urban and rural poor; and strengthening of the planning and management capabilities of all settlements in developing the resources and the capacity to satisfy the increasing demands of growing populations through participatory and enabling approaches, with particular emphasis on the contribution, participation and empowerment of women;

(g) Protection of human health conditions: adoption of preventive approaches to safeguarding and enhancing human health in human settlements through the improvement of shelter, infrastructure and services according to the criteria stated above; and adoption of incentives for the production and use of unharmful building materials;

6. Emphasizes the importance of sustainable human settlements management in achieving efficient energy use and in creating opportunities for the alleviation of urban and rural poverty, and in promoting the development and transfer of environmentally sound technology, on concessional terms for developing countries, in relation to the issues listed in paragraph 5 where appropriate;

...

9. Recommends, in particular, that, as one component of human settlements, Agenda 21, to be adopted by the Conference, include:

(a) A costed and targeted capacity-building programme for the implementation of the Global Strategy for Shelter to the Year 2000. This programme should have a view to improving the living conditions of the poor in accordance with enabling national shelter strategies, and make special reference to the development and transfer of know-how and other inputs for the development of institutions, community participation, empowerment of women, housing finance systems, construction sector, land delivery and legislation and regulation;

(b) A costed and targeted settlements management programme with special reference to management of water resources, solid and liquid wastes and land-use management;

...

11. Recommends that the important and distinct role of the human settlements programmes at the national, regional and global levels, as a framework for development, be strengthened and expanded to include all aspects of an environmentally sound and sustainable approach to human settlements, taking into account the results of the Conference;

...

13. Urges the Executive Director, in accordance with the Global Strategy for Shelter, to emphasize work elements which can address and reverse undesirable environmental implications of settlement growth, especially in the urban slums, inter alia, by improvements in urban management;

14. Strongly urges the Executive Director as well as Governments and international organizations in their national and local work on human settlements and environmental matters, in accordance with the Global Strategy for Shelter, to take fully into account the needs of the poor in urban slums and rural areas and especially the needs of women-headed households;

...

19. Appeals to Governments in countries with environmentally and physically unsustainable urban transport patterns to develop sustainable patterns, taking into account that improved organization of alternative transport and adaptation of the urban structure could contribute to reducing the emission of toxic and greenhouse gases from motor-vehicle traffic;

...

8th plenary meeting
8 May 1991

Source:Report of the Commission on Human Settlements on the work of its thirteenth session, 29 April - 8 May 1991, General Assembly Official Records: Forty-sixth Session, Supplement Nº 8 (A/46/8)

II. HUMAN SETTLEMENTS AND SUSTAINABLE DEVELOPMENT

Although there is a large and rapidly growing body of literature about "sustainable development policies", little consideration is given to the human settlements aspects of such policies, and such literature as there is tends to concentrate on issues related to air quality, water quality or the preservation of national landscapes. These are clearly important issues, but they are not the only aspects of human settlements which deserve consideration; in a sustainable-development context, attention has to be paid, first, to the economic and social roles of settlements. Human settlements have a central place in economic and social policy-making and in management of interactions between the built and natural environments.

National and subnational (regional) settlement systems are the framework within which economic activities operate, and the settlements system - cities, small centres and rural settlements and their interconnections - provides the spatial context for most capital-investment decisions. Settlements systems also have an important role in agricultural development, since it is only through the urban system and its links with rural settlements that farming can be strengthened with agricultural extension services, with production inputs, with credit support and with storage, marketing and processing facilities. Finally, settlements systems have a central place in social provision: it is through the settlements system that both rural and urban populations obtain access to health care, education, communication facilities and emergency life-saving services.

In essence, sustainable development means meeting the needs of the present generation without compromising the ability of future generations to meet their needs; and meeting human needs implies recognizing each person's right to a standard of living adequate for health and well-being, including adequate access to food, clothing, shelter, medical care and necessary social services (as stated by the Universal Declaration of Human Rights). This Declaration and subsequent United Nations documents have also stressed that development goals should include the right to choice and participation in representative governmental structures. In the context of sustainable development, human settlements management seeks not only the achievement of good living and working environments but also the attainment of economic, social and political goals, by making optimum use of the global natural-resource base of life-support systems. Thus, "sustainable settlements development" brings together two strands of thought about the management of human activities - one concentrating on developmental goals (including a concern that the poor receive an equitable share of the benefits of development); the other on achieving those goals without damaging the planet's life-support systems and without jeopardizing the interests of future generations.

A. 15 YEARS OF HUMAN SETTLEMENTS SINCE HABITAT: UNITED NATIONS CONFERENCE ON HUMAN SETTLEMENTS

In 1976, the United Nations convened its first major Conference on Human Settlements. The 64 recommendations for national action adopted by the Habitat Conference covered six major areas: settlement policies and strategies; settlement planning; shelter, infrastructure and services; land; public participation; and institutions and management. Under these headings, individual recommendations referred to a very broad range of issues which can be traced in the present Human Settlements Programme of the United Nations and in specific programmes launched and developed by the Centre and by its international partners in human settlements development.

The institutional arrangements outlined by the Conference resulted in the consolidation of various existing units and activities of the United Nations Secretariat into the United Nations Centre for Human Settlements (Habitat), to act as the focal point for human settlements within the United Nations system, to provide secretariat services to the United Nations Commission on Human Settlements and to implement an integrated work programme which includes research, technical cooperation and information dissemination.

The Commission on Human Settlements, in particular, has taken the lead in developing new perspectives on human settlements issues which also have a bearing on wider development issues: among them it is worth mentioning the "enabling approach"[1] to human settlements development and the identification of urbanization as a challenge and an opportunity for development, rather than simply the result of rural under-development and uncontrolled migration; the 1987 International Year of Shelter for the Homeless and the "Global Strategy for Shelter to the Year 2000"; the Urban Management Programme, in co-operation with UNDP and the World Bank; the Sustainable Cities Programme; the definition and support of the role of women in human settlements development; and the evolution of research, training and technical cooperation efforts from a project-by-project basis to an integrated programme approach.

Thus, possible solutions to human settlements problems have been developed starting from the sound foundation provided by the Habitat Conference. They have taken the form of policy recommendations across the whole spectrum of human settlements, of specific research work and technical guidelines covering building materials, the construction sector, water supply and sanitation, appropriate modes of transport, environmental planning and management, energy, the assessment of training needs, and many others; and of field-testing of appropriate and replicable approaches in practically all developing countries. As a result of these activities a large number of developing countries are strengthening their human settlements institutions, promoting decentralization, and mobilizing the resources of many new actors for the improvement of the settlement conditions of relatively large numbers of their population.

[1] The "enabling approach": a process in which development efforts are based on constructive partnerships between all actors of development: government, non-governmental (private sector, both formal and informal, non-governmental organizations and institutions, and individual communities). The role of government is redefined as that of a coordinating and facilitating force based on consultation, community participation, accountability, and well-trained and motivated professional cadres.

Nevertheless, at the policy level, a number of countries still perceive human settlements, and the provision of shelter in particular, as a top-down responsibility. Decentralization policies transferring functions and responsibilities are rarely accompanied by the resources, staff and legislation enabling local authorities to expand their sources of revenue. The poor, their settlements and their informal activities are still seen as disturbing problems, rather than resources to be included as legitimate actors in the mainstream of development. More generally, expenditures for human settlements management and development are still perceived by too many policy makers as social expenditures, rather than what they are and what they can be - one of the indispensable foundations of social and economic progress, economic growth, human development and environmental improvement. To date it is estimated that less than 3 per cent of the total commitment of the multilateral programme is allocated to the shelter sector. Only in the late 1980s has the realization of the urban dimension of development taken a concrete dimension with initiatives such as the 1986 meeting of the Development Assistance Committee (DAC) of OECD on Urban Development, the launching of the UNDP/World Bank/UNCHS Urban Management Programme in the same year, WHO's Healthy Cities Programme, and the World Bank's "Urban Policy and Economic Development and Agenda for the 1990s" in 1991.

This must also be seen against a background of escalating human settlements problems, a situation in which long-term planning is overshadowed by the urgencies of crisis management; a growing gap between escalating demand and stagnant, and often decreasing public-sector capacity and resources; the short-term repercussions of structural adjustment policies; mounting debt problems; and the growing problem of poverty, seen from the combined point of view of national situations and the growing numbers of urban and rural poor in the developing world and in this connection, the "urbanization of poverty", the most recent and preoccupying phenomenon in the developing world.

B. HUMAN SETTLEMENTS CONDITIONS AND TRENDS: SOME BASIC ISSUES

The present population of the world is estimated at around 5.3 billion. At its peak in the late sixties and early seventies, the average annual rate of increase of the world's population was close to two per cent. Projections suggest that this rate of increase will fall to less than one per cent by the second decade of the next century. However, the gradual abatement of global population growth rates varies from one region to another. In addition, diminishing rates of population increase in developing countries apply to increasingly large absolute numbers. The result is that absolute population increases in the developing world will reach their historic peak in the remaining part of the present century and initiate a slow downward trend only twenty years from now. During the present decade, the developing countries will have to plan for shelter, infrastructure and services for nearly a billion additional people, both rural and urban - not to mention the need to improve existing conditions and to overcome the enormous deficiencies of existing settlements. The urban population of the developing countries, in particular, is increasing at a

rate of about 3.6 per cent per year, which means a doubling time of only twenty years. This is from combined natural increments of urban populations and rural-urban migration.

Many countries have successfully implemented policies to lower population growth rates; however, shelter, infrastructure and services are needed today, and policies and programmes are required to increase the capacity of countries to satisfy equally large needs in the future as well.

There are differences between urban and rural population growth patterns. According to a recent United Nations Study on Fertility Behaviour in the Context of Development, based on the United Nations World Fertility Survey, urban/rural fertility differentials have widened, owing to rapid declines in fertility in urban areas. Several factors account for this phenomenon: women in urban areas desire smaller families, marry later and use contraception more often and possibly more efficiently.

Experts have also theorized on the magnitude of rural/urban differences in fertility changes in the course of the demographic transition. It is thought that at the initial stage, urban/rural differences are small. Gradually couples develop preferences for smaller families, and the use of various methods of fertility control spread among the urban population. Then, at the last stage of the transition, urban attitudes and values concerning fertility and fertility-related behaviour spread to rural areas: rural fertility then falls, and, ultimately, rural and urban fertility levels converge and stabilize around low levels. Thus, urbanization has a far-reaching effect on the reduction of natural population growth rates not only in urban areas but also in rural areas. Paradoxically, urbanization might be the most powerful long-term factor of spontaneous decrease in over-all rates of population growth.

URBANIZATION

World Urbanization Trends

"Global urbanization will continue. While almost half of the world's population is already urban, by the first quarter of the next century the majority of the world's inhabitants - over 5 billion people - will live in urban settlements. A growing share of the world's poor will live in rapidly-growing urban agglomerations."[2]

Urbanization - the process by which population settles within areas classified as urban - shows different trends in the industrialized and in the developing countries. In industrialized countries, high levels of urbanization were reached by the middle of the present century, and urban population has now practically stabilized. In 1950, more than half of the industrialized countries' population already lived in cities, and this percentage has grown steadily - from 60.5 percent in 1960 to 72.7 percent at present. By the year 2025, almost eight out of ten residents of industrialized countries will live in cities and towns.

[2] "People, Settlements, Environment and Development," UNCHS, Nairobi, 1991.

Urbanization processes have been much more rapid in developing countries. In 1950, the percentage of the total population living in urban areas was only 16.9 percent. It grew very rapidly to 25.5 percent in 1970 and 33.9 percent at present. In less than twenty years from now, nearly half of the population of developing countries will live in urban areas (see table).

In industrialized countries, rural populations are steadily decreasing. In the developing countries, on the other hand, population is increasing in both urban and rural areas, although at a much lower rate in the second group. Rural areas will continue to be a substantial source of urban growth, supplementing a continuing increase from higher-than-replacement rates of fertility.

BOX 3. THE URBANIZING WORLD

CITIES OF THE DEVELOPING WORLD ARE EXPERIENCING GREAT URBANIZATION PRESSURES...

"Cities are currently absorbing two-thirds of the total population increase in the developing world. At this rate, close to two billion people will populate the urban areas of developing countries by the year 2000, with some 600 million of this number being added during the current decade alone. Another two billion people are expected to be added to the urban population of the developing countries between 2000 and 2025. Moreover, the majority of these new urban residents will be living in large cities. Today, half of the urban population is located in some 360 cities of over half a million inhabitants each.

...AND ARE MAKING VITAL CONTRIBUTIONS TO ECONOMIC GROWTH...

Cities are the main catalysts of economic growth in developing countries. Economic activities tend to concentrate in the urban centres, where today 60 per cent of gross national product is generated by about one-third of the total population.

...AND HUMAN WELL-BEING...

Cities provide health, educational and social services to their own residents, but also to many more people who cannot find such services in smaller settlements and sparsely populated rural areas.

...BUT THE URBAN ENVIRONMENT IS DECAYING...

For the majority of the city dwellers in the developing countries, the urban environment is worsening as a result of the inability of the city or national government to provide satisfactory services for sanitation, solid waste disposal, transport and energy for heating or cooking.

...AND THE POOR SUFFER MOST...

As the physical environment in and around the growing cities deteriorates, those affected most are the urban poor, who make up 30 to 60 percent of the urban population in developing countries and whose numbers are growing. The increased costs of health care and the productivity loss due to mortality and morbidity from gastroenteric and respiratory diseases and malnutrition are only indicators of the economic impact on the poor; we cannot adequately measure the unquantifiable costs in human suffering and lowered quality of life. For the poor, the main environmental priorities remain improved housing and the provision of basic water and sanitation services at affordable costs. Moreover, in the rapidly industrializing cities of the developing world, there is evidence that the poor are at significantly higher risk from chronic and degenerative diseases previously associated with developed countries."

Source: A/CONF.151/PC/43

TABLE 1. Urban population in industrialized and developing countries[3] 1950-2025 (million)

Year	Developed Countries		Developing Countries	
	Urban	% of total population	Urban	% of total population
1950	448	53.8	286	17.0
1960	572	60.5	459	22.1
1970	699	66.6	653	24.7
1980	799	70.3	958	28.9
1990	875	72.6	1,515	37.1
2000	946	74.9	2,251	45.1
2010	1,020	77.9	3,053	51.8
2020	1,089	81.1	3,926	58.2
2025	1,117	82.5	4,375	61.2

Rural-urban migration poses dramatic additional demands on the capacity of cities to provide land, shelter, infrastructure, services and employment; but at the same time, it relieves the demand for exactly the same needs on the part of-out migrants who leave rural areas overtaxed beyond their carrying capacity. Natural population growth, which is highest in rural areas, can only take three directions: in the absence of migration, the concentration of population on existing and already fully exploited agricultural lands, or the opening up of new lands for agriculture, often with decreasing returns on investment; in the case of rural-rural migration, the colonization of the rural frontier, which happens, as a rule, in ecologically fragile regions, with devastating consequences for the environment and for the settlers themselves (deforestation, destruction of natural habitats, decreasing productive returns on over-exploited and often inadequate land); or migration to existing urban settlements.

It may be stated that, from an environmental point of view, migration to urban settlements is the most desirable option. While the high density of human activity which is characteristic of cities leads to special environmental problems, such as congestion and pollution, it is also true that cities are better places than remote and unplanned rural areas to mitigate and control the environmental effects of their development. Citizens have much more leverage than isolated rural dwellers to exert pressure on government, local authorities and industry to protect their own health and to limit the impact of activities that are damaging to the environment.

Urban growth, with its high densities, may also lead to a more efficient use of limited land areas. Each productive activity has certain needs for land, but modern technology can provide solutions to land-efficient development for both the urban and rural sector. In urban settlements, for example, appropriate land-use policies

[3] United Nations, Population Division, World Urbanization Prospects 1990, New York, United Nations, 1991.

based on efficient densities and development patterns can reduce the amount of land needed for settlement development, and at the same time minimize the need for transportation, with consequent beneficial effect in terms of resource consumption, environmental protection and amenities for residents.

Finally, urbanization provides a partial answer to the needs, preferences and aspirations of people. The cities of the developing world are providing an immensely resourceful safety net for millions of dispossessed and jobless rural migrants, as well as for their own settled and growing populations. Cities also act as hosts to the needs of non-urban residents: it is often common for millions of rural dwellers to use higher-level urban services (special health care, for example) for emergency needs that cannot be satisfied in isolated and poorly equipped rural locations.

These considerations have led in recent years to a more constructive approach towards urbanization issues. This approach can be best summarized in the following statement from the UNDP *1990 Human Development Report:* "Rapid urbanization is neither a crisis nor a tragedy. It is a challenge for the future. The process of urbanization has created a host of new opportunities intermeshed with new and ill-understood problems.... The focus on today's cities must move decidedly towards better management, with past failures giving way to more appropriate policies and practices".

MEGACITIES

Trends in the distribution of the world's urban population by size-classes of cities are very significant. Present global estimates and projections show a gradual redistribution of urban population in the 1,000,000+ city-size range. In 1960, more than one third of the world's city dwellers lived in cities below 100,000 people, more than one third of the world's urban population already lived in cities with above one million population. By the year 2000, almost half of the total urban population of the world will live in urban agglomerations of one million inhabitants or more. Their number (1.3 billion people) will be greater than the total urban population of the planet 40 years before. It is estimated that by the year 2000, 18 of the 24 world cities of over ten million inhabitants will be in the developing countries.

While some of the megacities in the industrialized world are showing trends of population stabilization or decrease, the largest urban agglomerations located in developing countries will continue to grow. Decentralization policies can have their effects felt only if sustained over prolonged periods of time, and only as a result of massive investments capable of creating real alternatives to the agglomeration economies present in the largest cities. Therefore, the unavoidable option is to prepare for this future scenario and to take anticipatory action in view of the many crises which have already impacted severely on the quality of life and management prospects of many of these large cities, particularly in the areas of water supply, water quality, and environmental pollution.

In spite of the problems megacities face there is no clear, substantiated evidence to suggest an automatic correlation between city size, quality of life and environmental degradation. The most recent global survey on this subject is "Cities: Life in the World's largest Metropolitan Areas", conducted by the Washington-based

Population Crisis Committee. The survey was based on ten indicators: public safety; food costs; living space; housing standards; communications; education; public health; peace and quiet; traffic flow; and clean air. The combined indicator based on these data shows no correlation between quality of life and city size. In India, for example, Calcutta, with a population of almost 13 million, ranks low on the global scale, but also shows a marginally better record than that of Kanpur (population: 2.3 million). Shanghai (population: over 9 million) shows a better overall ranking than Harbin and Nanjin, two other cities of China below three million in size. In Latin America, the combined indicator for the fourth largest urban agglomeration in the world, Sao Paulo (population: 17.2 million) is slightly worse than that of Belo Horizonte but considerably better than that of Recife, another Brazilian city less than one-sixth its size.

Similarly, while the air pollution situation, crippling traffic and water problems of some cities are well-known cases, smaller cities may present such liabilities as lack of employment and access to land and essential infrastructure which fuel migration to megacities.

Developing countries should therefore adopt urbanization policies based on efficient management of all cities, large and small. The aim should be to take maximum advantage of irreversible and powerful urbanization development trends and to strengthen urban settlements that can act both as centres of production and growth for national and subnational economies, as well as efficient recipients of rural-urban migratory flows. At the same time, the strengthening of intermediate cities which can act as magnets for migration flows may take some pressure off the megacities. The role of secondary cities and intermediate settlements must be given full consideration as recommended by the United Nations Commission on Human Settlements.

Despite the increasing process of urbanization, the majority of the developing country population still lives in rural areas, relying heavily on agriculture for their livelihood. To the extent efficient agriculture can be encouraged by appropriate policies and infrastructure, people will remain in the countryside, taking pressure off the cities. Efficient agriculture, which involves rural/urban trade of inputs and outputs, also gives rise to urban job creation. Thus, one aspect of an overall urban strategy should be measures to support more efficient agricultural development.

POVERTY

"The intolerable and worsening living and working environments of the poor in urban slums and rural areas, with their implications in terms of human suffering, deteriorating health and reduced life expectancy, are a major determinant of poverty. Therefore, the improvement of the living and working environment of the poor is a priority concern".[4]

Estimates of world poverty vary according to different methods of calculation. One of the most recent assessments[5] gives a global figure of 1 billion people below the

[4] "People, Settlements, Environment and Development".

[5] World Bank Development Report 1990.

poverty line. According to estimates in the 1989 Report on the World Social Situation, the percentage of the world's population living in absolute poverty has decreased between 1970 and 1985 (from 52 to 44 per cent), but the absolute numbers of the poor are increasing in all developing regions: during the 1970-1985 period they increased by 22 per cent. What is particularly striking is the increase of urban poverty. While the percentage increase of the world's rural poor is estimated at 11 per cent, the percentage increase of the urban poor has been 73 per cent over the same 15 year period. Peaks are found in Latin America, where the urban poor have more than doubled, and in Africa, where the increase was as high as 81 per cent.

In many countries of the developing world, poverty has become a predominantly urban problem. Thus, increasing numbers of people have to try to satisfy basic needs for shelter, infrastructure and services in urban environments, where access to the requisites for settlement - employment, land, building materials, mobility - are much more difficult to satisfy than in most rural contexts.

Most of the urban and rural poor have no access to safe drinking water, elementary sanitation and primary health-care services. A high proportion of the urban and rural poor are disabled by household or workplace accidents. Informal urban settlements are often located in hazardous, flood-prone and unhealthy sites, where overcrowding is compounded by exposure to communicable disease and garbage dumps constitute a permanent health hazard.

The low-income majorities in the developing world, however, are not "poor" in terms of skill, ingenuity, social identity, traditions, culture or personal dignity (and other attributes of human "richness"); they are poor in the sense that, in the context of rapidly-evolving societies, based on monetary values and on the exchange of material goods, they cannot afford access to a dignified and healthy livelihood. Adequate shelter is one basic need which they cannot meet. In the absence of an adequate and steady source of income, the only ways to gain access to decent shelter in an urbanized context are the provision of shelter by government (a policy which has often proven inefficient and cannot address the problem at the scale required), an efficient system of subsidies, whereby the gap between disposable income and the market price of decent housing can be reduced or the facilitation of self-help and/or "informal" solutions to shelter needs.

The first two options or a combination of the two have found application in some industrialized societies, where some of the shelter needs of poor urban minorities could be addressed by sizeable public-housing programmes and adequate subsidies. In most developing countries, the situation is exactly the opposite: welfare programmes are virtually non-existent, and public housing programmes are targeted to limited numbers of recipients, whereas the poor constitute, as we have seen in many cases, the bulk of the urban population.

In such situations, the urban poor are left with the residual option of finding shelter with their own means. This happens in a variety of ways: temporary accommodation with friends and distant or close relatives; rental accommodation provided by the informal sector. For many others the only option is to build, individually or on a communal basis, temporary shelter on derelict or vacant sites.

It is necessary for governments to understand and acknowledge this state of affairs and to facilitate the recognition of this option as a legitimate settlement process. Examples of appropriate and feasible approaches abound: they all relate to the legitimization of the urban poor's efforts in providing themselves with adequate housing. Among them are the granting of security of tenure, the simplification of existing codes and regulations, the acceptance of indigenous and low-cost building materials, the regularization of informal settlements which are not permanently exposed to contamination, flooding or landslides, the provision of basic infrastructure with the participation and financial contribution of residents and the promotion of other forms of access to low-cost shelter, such as rental housing. All of these measures can greatly improve the living conditions of the urban poor and, at the same time, contribute to environmental improvement in urban areas.

Serious problems also exist in the developed countries. For instance, in many countries the number of homeless people has been growing rapidly in recent years. In others, there is a significant proportion of people suffering severe deprivation. Many such people (especially the uneducated, poor and elderly) are trapped in declining industrial cities or decaying city districts, as the young, well-educated or rich move out. Many countries still suffer from serious problems, resulting from the decline of large industrial centres. Slow economic growth and serious housing shortages affect much of the urban population, and, recently, there have been economic and political uncertainties, rising unemployment and cutbacks in social-security provision.

C. LINKAGES BETWEEN HUMAN SETTLEMENTS AND ISSUES OF ENVIRONMENT AND DEVELOPMENT

LAND

In the developing countries, competition for finite amounts of land suited for agriculture, coupled with the introduction of capital-intensive agriculture, makes it increasingly difficult for growing numbers of rural dwellers to sustain their livelihood base. Many of them move to ecologically-fragile lands on the agricultural frontier, where prospects for sustainable agriculture are even more precarious and settlement conditions are exceptionally harsh because of the remoteness from urban centres and lack of infrastructure and services.

In urban areas, land is also competed for by various uses and users: industry, services, commerce, transport, infrastructure, and housing. However, appropriate criteria for settlement planning and development can make land use more efficient. New urban expansion areas, for example, can be planned according to suitable densities, without sacrificing space and public amenity and at the same time allowing for more cost-efficient infrastructure and transport systems. An important contribution to sustainable human-settlements approaches to the land issue can come from improving the access of the poor to suitable land in urban areas. Expanding access to participation in the land market by removing the legal and regulatory bottlenecks that presently conspire to exclude low-income groups from the market should become a priority objective for municipal authorities, together with parallel efforts for the advance planning of suitable sites for informal-sector

and self-help development and the regularization of existing low-income settlements suitable for consolidation.

DEFORESTATION

Uncontrolled deforestation processes are the result of a number of causes: among them are commercial exploitation and pressure for new land, usually for settlement and agriculture.

Land reform though a difficult goal in these countries must be pursued, and viable alternatives for gainful employment in the non-agricultural sector should be sought.

A problem which has received much attention is the destruction of soil cover and tree vegetation for fuelwood and charcoal production, which is the main source of energy for the urban and rural poor in many developing countries. It must be noted, however, that the poor resort to these means simply because they still provide the cheapest, and often the only, source of energy for heating and cooking purposes. Gathering fuelwood is a time-consuming, exhausting and often hazardous practice, which falls as a rule on women and children. Viable alternatives exist in terms of more efficient cooking stoves and of renewable sources of household energy, such as biogas. The introduction of these alternatives is simply a function of resources needed to improve their range of applicability and to disseminate their application in rural areas.

ENERGY AND TRANSPORTATION

Human settlements are vast consumers of energy for transport, household and industrial use, and atmospheric pollution is largely due to the concentration of emissions caused by settlement-based activities . The industry and commerce sectors are estimated to absorb about 46 per cent of global commercial energy consumption, while the household and transport sectors account for the remaining 54 per cent. Thus, more efficient ways to provide for the energy needs of industry, households and for the transportation of people and foods can lead to considerable reductions in energy consumption and in atmospheric pollution.

There are several ways to reduce atmospheric pollution: increase the efficiency in the use of fossil fuels; introduce and enforce appropriate standards and regulations; encourage the use of renewable resources of energy; and reduce the causes of atmospheric pollution at the source. The optimization of fossil-fuel use can be achieved through many means, and particularly in the transport sector, by encouraging energy-efficient modes of transport (e.g. public transport and rail).

Transportation alone accounts for approximately fifty per cent of the total global consumption of fossil fuel. Public transport is of fundamental importance to the urban and rural poor, who do not have access to suitable means of individual transport and have to travel long distances daily to reach their place of work. In urban areas, efficient public transport systems are one of the best means available to relieve traffic congestion, which is a prime cause of discomfort and air pollution.

Energy is an important input for building materials production and therefore an area where considerable savings can be achieved. The energy demand for the

heating and cooling of buildings can also be reduced through appropriate insulation and building design and the adoption of renewable energy sources.

It should be noted that the abatement of atmospheric pollution is not only dictated by environmental priorities, but justified by equity considerations. It is the poor whose health suffers most from daily exposure to high levels of atmospheric pollution.

COASTAL AREA MANAGEMENT

Coastal areas are the object of intense pressure and development because of their very characteristics: the presence of harbour facilities, their locational advantages for certain industrial processes and the advantages they offer for tourism and recreation. At the same time, they often contain precious and irreplaceable natural habitats, are permanently exposed to the risk of natural disasters such as hurricanes, cyclones and tidal floods, and are located at the interface between land-based and marine sources of pollution. Sea-level rise, which is the likely result of global climate changes now taking place, is an additional factor which must be taken into account by human settlements in coastal area.

Coastal area management calls for a coordinated effort among coastal municipalities so as to share the gains, as well as the costs, of integrated urban development and environmental protection.

Other problems have to be addressed by controlling discharges of pollutants in upstream watercourses, and the best way of doing so is to provide adequate waste treatment infrastructure in inland settlements which, in turn, will improve their own environmental and health conditions.

WATER SUPPLY

Water is indispensable for human existence, health, and all of humanity's productive activities. Human settlements are where all of these needs converge. Water is needed for drinking, washing, sanitation and a host of productive and service activities which support development and economic growth, particularly in large cities. In the developing countries, most settlements, both urban and rural, are afflicted by a chronic lack of safe water supply - a lack which is due not only to increasing costs in water provision and distribution infrastructure, but also to poor management and maintenance of existing urban and rural water systems, resulting in considerable water losses.

In addition, the competing needs for water in human settlements inevitably affect the weakest segments of the population. It is the urban and rural poor, and in particular women and children, who have to fetch water over long distances and who pay water vendors in informal urban settlements prices which can be up to five times higher than that of piped water supplied to higher-income neighbourhoods. This results in severe impacts on income, hygiene, nutrition and health.

In urban areas, the causes and effects of water-supply problems can be addressed by forward-looking urban planning and management. Charges could reflect the actual costs of water supply and maintenance with appropriate cross-subsidy

systems for low-income users. The superfluous use of drinking water for gardening, street washing, car washing, and a number of household uses can be discouraged through disincentives or regulations. The regularization of informal settlements, including water supply infrastructure, can create the conditions for residents to pay water charges regularly, thus contributing to the sustainability of urban water-supply systems.

SANITATION AND WASTEWATER MANAGEMENT

Sanitary wastes and waste waters are hazardous to health and cause adverse impacts on the environment. Lack of sanitation in a community results in increased costs for curative medicine and reduced productivity, as well as lowering the quality of life generally. Uncontrolled discharge of urban sewage and industrial effluent contaminate potable water supplies and make surface waters unfit for safe use. Yet wastewater can be collected, treated and used for crop irrigation, aquaculture or industry.

The environment has a natural capacity to assimilate waste materials, but, as the density of population increases, these limits are quickly exceeded. In rural areas, human waste disposal must be dealt with along with provision of a safe and plentiful water supply and health education, if mortality (particularly infant mortality) and morbidity levels are to be reduced. However, both health risks and potential damage to living conditions are greatest in densely populated urban areas. Adequate sanitation provision (including sewerage), wastewater-disposal systems and stormwater drainage are vital in urban centres.

In the developing countries, less solid waste is produced per inhabitant, but only 30 per cent is collected on average. This situation poses significant public health problems, undermining the health and the well-being of the people, decreasing their productivity and constraining the development aspirations of the potential of individuals and settlements.

An environmentally sound and resource-efficient approach to the problem of growing amounts of sanitary waste, waste waters and solid waste would therefore be a crucial component of human settlements policies and programmes. An extensive description of waste and sewage management issues can be found in document A/CONF.15/PC/76: Environmentally-Sound Management of Solid Wastes and Sewage-related Issues. However, it must be noted that improvements in water supply, sanitation and waste management can best be achieved through a settlement-wide, integrated management approach dealing with the entire cycle of water and waste management.

CONSTRUCTION ACTIVITIES

Construction provides the direct means for the development, expansion, improvement, maintenance and preservation of human settlements, and economic growth in general. The construction industry is, therefore, vital to the achievement of national socio-economic development goals, including human settlements development.

Construction, however, can also contribute to the degradation of the environment, through physical disruption, the depletion of key renewable resources, and excessive consumption of energy. The production of building materials, in particular cement, lime and bitumen, can account for a significant share of air pollution. CFCs have also been used by the construction industry (e.g. air conditioners and insulation products).

In the developing countries, the lack of appropriate and affordable building materials is a major factor hampering development and, in particular, affecting the shelter conditions of the urban and rural poor. On the one hand, the large-scale production of building materials is inefficient, and with higher end costs to the consumer. On the other, the production and use of indigenous and appropriate building materials is often discouraged by outdated attitudes and unrealistic building codes and regulations. Opportunities for the small-scale production of building materials are thus lost, undermining both openings for employment and access to affordable building materials on the part of the urban and rural poor.

III. AFTER RIO: ONGOING AND PROPOSED UNCHS ACTIVITIES WITH RELEVANCE TO AGENDA 21

Since its inception, the Commission on Human Settlements has devoted continued attention to the environmental aspects of human settlements development. This concern has been expressed in a number of resolutions on such topics as the environmental aspects of human settlements policies and management[6]; energy conservation and/or new and renewable sources of energy[7]; and natural resources and the production of building materials[8], which are reflected in the activities of UNCHS (Habitat).

Within the research and development activities and technical cooperation programmes of UNCHS (Habitat) there is a host of activities with great relevance to the objectives and aims of Agenda 21. The most important among these can be grouped under the following 'umbrella' programmes:

1. The Global Strategy for Shelter to the Year 2000;
2. The Urban Management Programme;
3. The Settlement Infrastructure and Environment Programme;
4. The Sustainable Cities Programme;
5. The Community Development Programme;
6. The City Data Programme; and
7. Training Activities.

1. THE GLOBAL STRATEGY FOR SHELTER TO THE YEAR 2000

Despite efforts of Governments and international organizations, more than 1 billion people have shelter unfit for habitation, and this number will increase dramatically unless determined measures are taken immediately. In order to address this need, the General Assembly adopted, in 1989, the Global Strategy for Shelter to the Year 2000 (GSS).

The aim of the GSS is to facilitate adequate shelter for all. Adequate shelter means more than a roof over one's head: it means adequate privacy, adequate space, adequate security, adequate basic infrastructure and adequate basic facilities in a healthy environment. The GSS contains a range of guidelines for national action based on an enabling approach. The operational focus for the implementation of the GSS calls for national action, whereby governments should deploy their resources on those activities which the private sector and the people themselves,

[6] See resolutions 2/6 of 4 April 1979, and 4/11 of 6 May 1981, decision 5/21 of 6 May 1982, resolutions 6/14 of 6 May 1983, 7/1 of 10 May 1984 and 10/3 of 16 April 1987.

[7] See decision 3/12 of 15 May 1980 and resolution 10/9 of 16 April 1987.

[8] See resolution 10/9 of 16 April 1987.

through formal and informal organizations, cannot undertake efficiently. The enabling strategies thus release government resources to serve the needs of the poor and disadvantaged in particular, and, through the full mobilization of all potential indigenous resources, can greatly contribute to sustainable development.

In order to assist governments, the private sector and non-governmental organizations (NGOs) towards the implementation of the GSS, UNCHS (Habitat) organized 10 subregional seminars in cooperation with host governments: a) for Eastern Africa (Nairobi, January 1990), b) for East Asia (Bali, May 1990), c) for Southern Africa (Harare, August 1990), d) for South Asia (Colombo, August 1990), e) for Eastern Europe (Moscow, September 1990), f) for Anglophone West Africa (Accra, October 1990), g) for the Caribbean (Kingston, October 1990), h) for Francophone Africa (Ouagadougou, December 1990), i) for Portuguese-speaking Africa (Lisbon, January 1991), and j) for Latin America (San José, March 1991). These seminars have been successful in enabling governments to obtain a sound understanding of the application of guidelines for national action contained in the GSS and, in particular, the ways of involving all elements of society in shelter production. A number of countries have initiated follow-up action after the seminars, some with assistance from UNCHS (Habitat). Since May 1989, special short-term advisory services in the formulation and implementation of national shelter strategies have been provided to a number of countries including Afghanistan, Angola, Brunei Darussalam, Costa Rica, Lao People's Democratic Republic, Malaysia, Namibia and Zimbabwe to back up national seminars and workshops on the formulation and implementation of national shelter strategies and related issues.

Technical cooperation in the preparation of national shelter strategies is being provided under several programmes and projects. The first of these is the UNCHS (Habitat)/FINNIDA Support Programme for Preparing National Shelter Strategies, a global programme funded by Finland under which assistance is provided to Costa Rica, Indonesia, Nicaragua, Phillipines, Uganda and Zimbabwe in strategy formulation. The second is the UNDP-funded UNCHS (Habitat) programme which provides technical cooperation towards the preparation of national shelter strategies for Afghanistan, Angola, Bangladesh, Congo, Djibouti, Ecuador, Fiji, Gabon, Ghana, Honduras, Malaysia, Mozambique, Nepal, Oman, Sao Tome and Principe, Somalia and Tunisia. At governments' requests, project documents have been prepared for the preparation of national shelter strategies for 12 countries: Côte d'Ivoire, Gabon, Guinea-Bissau, Kiribati, Lao People's Democratic Republic, Madagascar, Mali, Namibia, Solomon Islands, Somalia, Togo and Vanuatu. Additionally, assistance is extended for the identification of issues for technical cooperation projects in various other aspects of human settlements planning, development and management.

UNCHS (Habitat) has also distributed a set of indicators for use by governments as guidelines to review progress in the formulation and implementation of their strategies for shelter and services. Under a programme implemented jointly by UNCHS (Habitat) and the World Bank, these indicators have been extensively tested in over 52 cities throughout the world, to identify a set of key indicators for wider use in the monitoring of the performance of the housing sector. In order to provide further assistance to countries to initiate follow-up action to implement the

The Centre's research and development programme addresses several critical issues in order to enable governments to improve their national shelter strategies. These include the fields of building materials, infrastructure operations and maintenance, transport, energy, employment, land management, municipal finance, community participation, rental housing and computerized human settlements information systems. All these issues are included in the Centre's current work programme and the research results are disseminated widely through publications, training seminars and expert group meetings.

Issues concerning the role of women in shelter activities have been given increasing attention, through, among others, five regional seminars culminating in an Inter-regional Seminar to Promote the Participation of Women in the Global Strategy for Shelter to the Year 2000. The recommendations of the seminars have been widely distributed and incorporated into the Centre's 1992-1993 work programme.

UNCHS (Habitat) is disseminating its Human Settlements Statistical Database (HSDB.stat), containing information on human settlements and shelter conditions for as many as 160 countries. This database is continually being updated with the latest figures and UNCHS (Habitat) is prepared to carry out advisory missions, upon requests from governmental and intergovernmental organizations, to assist in the establishment of a specific human settlements database and for the general use of HSDB.stat.

As the coordinating agency for the implementation of the GSS, UNCHS (Habitat) is collaborating with a large number of organizations in the areas of programme coordination, research, training and information dissemination.

2. THE URBAN MANAGEMENT PROGRAMME

The Urban Management Programme (UMP) is a global programme developed in partnership between UNCHS (Habitat), UNDP and the World Bank. Its principal objective is to strengthen the contributions towns and cities in developing countries make towards human development including economic growth, social development, environmental improvement and the alleviation of poverty. The first phase of the UMP (1986-1991) focused on the development of better understanding of urban issues and the production of technical guidelines on policy options in the area of concern to the Programme; urban land management; municipal finance and administration; infrastructure management; the urban environment; and the alleviation of poverty.

continually updated and enriched by country-level capacity-building activities, which, in turn, will benefit from this global-level knowledge. The five components are, however, at different stages of development within the Programme and are being pursued in ways most suited to their own particular characteristics. While the interactive processes to be explained below are set out in generic terms, their use in practice will differ depending not only on the needs of the particular country working with the Programme but on the component in respect of which they are being activated.

- CITY/COUNTRY CONSULTATIONS AND TECHNICAL COOPERATION: As noted earlier, the Programme recognizes that policy and institutional development are politically sensitive matters and that success in assisting in these areas can only result from countries' commitment to address the critical issues. Thus, country commitment is an explicit requirement for UMP participation. Consequently, a UMP country programme will be initiated only at the request of the developing country. Following such a request, a consultative process will begin, coordinated at the regional level, during which developing countries will, in cooperation with the UMP, identify issues on which they consider there is a particular need for assistance. The UMP will then work to bring together national and local authorities, private-sector professionals, and other actors in country and regional research/training institutions, NGOs, consultants, and external assistance as needed in a collaborative process designed to address these issues and to devise solutions. Through the consultative process, which is the cornerstone of the UMP strategy, the need to take long-term, demand-driven views of assisting developing countries will be of utmost importance.

Since each consultation is tailored to the specific circumstances of the country in which the consultation is to take place, there will be considerable flexibility in the structure of each consultation to allow the participation of a full range of groups involved in the formulation of a strategy to address the particular issue concerned. Because of the interlinkages among the issues of urban management, a consultation, which may have begun with a particular topic area of the UMP, would readily link into the work of other topic areas. Thus, a consultation could be one event or a series of events. Participants may be brought together at the same time, or may come together in segmented groups with provision for ensuring that the views of all are adequately represented in the final decision-making forum. The consultation could be at a city, a regional (provincial) or country level. The participatory approach adopted would be one that promises open and full discussions of issues, options, and strategies with all interested parties, but which is nevertheless relatively efficient at arriving at a consensus. Participants at a consultation will be people who are well aware of the issues to be addressed and will include, as appropriate: local, regional, and international experts; key senior officials, policy

makers and politicians from central and local governments dealing with the pertinent issues; leaders of the private-sector firms involved in the delivery of urban services, including professional services; leaders of NGOs and community-based organizations CBOs with special concern or involvement in the urban sector; leaders from neighbourhoods of the urban poor; senior financial experts in the public and private sectors; and interested donor agencies. Countries may also use consultations as a framework for in-country substantive aid coordination or for developing their national urban programmes.

Involvement of the various actors at the community level is a key concern of Phase II of the UMP. Community leaders, CBOs and the general population of low-income urban settlements must be involved in policy and programme dialogue if there is to be a sense of involvement and thereby a broad-based, concerted effort to implement urban management recommendations. These community level activities will include: 1) training of neighbourhood leaders and leaders of local non-governmental organizations as to their role in urban management at the community level; 2) planning activities such as municipal forums which allow community residents to provide practical guidance to policy and programme formulation; 3) evaluation activities involving community residents and representatives to ensure that the ultimate beneficiaries of the UMP process are being appropriately involved and benefitted.

Follow-up activities to the consultation may include institutional reform programmes including the increased involvement of NGOs and CBOs in urban management, policy recommendations, demonstration projects, further urban research studies, city-wide replication, transfer of innovations among cities, workshops, seminars, and training. In addition, although this is not the primary objective of a consultation, its outcomes may assist in developing programmes of technical cooperation and investment. It is anticipated that follow-up activities would be undertaken by, or in conjunction with, UMP partners from External Assistance Agencies. The outcome of the consultation will be documented with regard to both the process and the results. It must be recognized, however, that outcomes of a consultation cannot be predicted in advance and cannot, therefore, be set out in specific terms.

- REGIONAL PANELS AND TECHNICAL COOPERATION: To ensure more effective programmes of technical cooperation, the interchange of experiences and ideas between cities and countries, the successful interchange of information at the global, regional and country level, and the development of region-specific programmes of research and production of tools, the UMP will establish regional panels of expertise anchored in developing countries' institutions to cover each of the five UMP subject areas in each of the developing country regions of Africa, Asia, Latin America and the Caribbean (LAC), and Europe, Middle East and Northern Africa (EMENA). Each regional panel will have a regional coordinator. Developing countries will be able to draw upon this expertise for technical advice and cooperation on a sustained basis. To establish these panels, institutions and individuals with the requisite background in each topic area and region will be identified and brought together in a series of workshops. These workshops will focus on lessons learned from Programme activities to date and the experience of panel members with regard to specific issues. They will develop region-specific approaches to the five

component areas. Members of the panels will be retained by the Programme and be made available to countries requesting UMP involvement. Products planned for development at the regional level through the use of these panels and in conjunction with country authorities include agreed-upon work programmes, region-specific case studies and databases, research project reports and case studies, training programmes, and dissemination strategies. The regional panels, together with regional coordinators, will increasingly take the lead in research and technical cooperation activities.

Regional coordinators will be based in the UNDP field office or regional institution in each region. They will manage the UMP at the regional and country level including maintaining the regional panel network, providing support for the country consultations, overseeing the preparation of policy frameworks and tools, enabling dissemination of information, and liaising with the nucleus team.

- GLOBAL SUPPORT AND SYNTHESIS: At the global level, the UMP nucleus team will support the regional panels and regional and national institutions to : continue research activities arising from the expanding areas of interest and concern in efficient urban management; assist in organizing the regional network workshops; synthesize lessons learned from project activities to date; and disseminate Programme-related materials, as appropriate, at the global, regional and national levels. The nucleus team will have an active monitoring and technical support role in respect of the regional networks and UMP country activities.

Through the above three interactive elements, the UMP will provide technical cooperation support where required, disseminating lessons learned, and continue to initiate studies and research in relevant subject areas within its five components at the regional and country levels. The responsibility for directing this work will quickly shift to regional and country-based institutions.

3. THE SETTLEMENT INFRASTRUCTURE AND ENVIRONMENT PROGRAMME (SIEP)

Systems of environmental infrastructure and services, to satisfy the needs for water supply, sanitation, solid waste management and drainage are indispensable to the efficient operation of human settlements as well as for overall national development. The coverage, level of service and reliability of infrastructure determine the quality of the living environment. Sustainable progress in the sector, with an emphasis on the poor, results in increased productivity, improved health and reduced burdens of investment in curative medicine and poverty alleviation.

The Settlement Infrastructure and Environment Programme (SIEP) is built on the Centre's experience in the provision of environmental infrastructure and services for human settlements and has taken advantage of the momentum generated by UNCHS in increasing awareness among donors and developing countries of the urgent need for innovative approaches in dealing with the outstanding demand for basic services, especially on the part of low-income communities. The goal of SIEP is to develop an integrated human settlements approach to the planning, delivery,

substantive framework for sustainable development, through its various programme areas. SIEP's activities will focus on issues relevant to programme area d) "Promoting the integrated provision of environmental infrastructure", such as urban water resource management, water supply and sanitation, solid and hazardous waste management and environmental health impact assessment and management (with particular reference to human settlements-related hazards). Research on such issues will provide the framework for integrated environmental infrastructure improvement, with special reference to informal settlement upgrading.

BOX 4. RECENT UNCHS (HABITAT) CONTRIBUTIONS TO INTERNATIONAL INITIATIVES IN THE AREAS OF URBAN WATER RESOURCE MANAGEMENT, WATER SUPPLY AND SANITATION, SOLID WASTE MANAGEMENT AND ENVIRONMENTAL RISK ASSESSMENT

The Centre was responsible for taking the lead in developing "Water and Sustainable Urban Development" as one of the principal themes of the International Conference on Water and the Environment (Dublin, 26-31 January 1992). The Centre also prepared a series of key-note, issues and action options papers, to serve as official documents for deliberation at the Dublin Conference. Currently the Centre is in the process of preparing a book-style analytical publication presenting a global overview of urban water resources conditions and trends, including supporting case evidence, and presenting requisite policy measures and actions to improve the management of the resource. Also under preparation is an action programme publication to provide guidelines for the formulation and implementation of technical co-operation projects responsive to ensuring the continued supply of affordable safe water essential for safeguarding sustainable urban development. As an outcome of these activities, SIEP will undertake a research project on "Urban Water Resource Management" with funding from DANIDA. In addition, SIEP, in collaboration with the Asian Development Bank (ADB), is to initiate a programme to contribute to Asian governments' efforts and capacities to sustain national development and productivity through environmentally sound management of water resources for urban use.

The Centre also gave a key contribution on the theme of "Urbanization" at the Water Supply and Sanitation Collaborative Council Global Forum (Oslo, 18-20 September 1991), and is an active member of the working groups on "Urbanization" and "Applied Research" within the Collaborative Council. With special emphasis on water supply and sanitation, SIEP will, during the present biennium (1992-1993), undertake applied research and produce comprehensive reports on infrastructure operation and maintenance including strategic options for their management, methods of finance and cost recovery. SIEP will attempt to conduct research on water supply and sanitation in an integrated manner, exploring ways in which these services should be integrated with other basic services such as refuse disposal and stormwater drainage. Recently, a study has been completed on the "Role of Storm Water Drainage and Land Reclamation for Urban Use".

The Government of the Netherlands has provided funds to conduct a major research project on "Strategies for Solid Waste Recycling and Reuse in Developing Countries". This project will be completed by the end of 1992. The project provides municipalities, small-scale entrepreneurs, such as waste collectors and recyclers, and the informal sector with detailed technical, environmental, social, economic and institutional/legal information and guidelines in the form of reports, policy

interventions in equal partnership with governments, NGO's and development agencies, SIEP will develop a community-based information system. The Centre also plans to undertake the production of an authoritative reference book on "Housing and Health: Environmental Health Aspects of Human Settlements in Developing Countries". The Commission of European Communities is expected to collaborate in this effort.

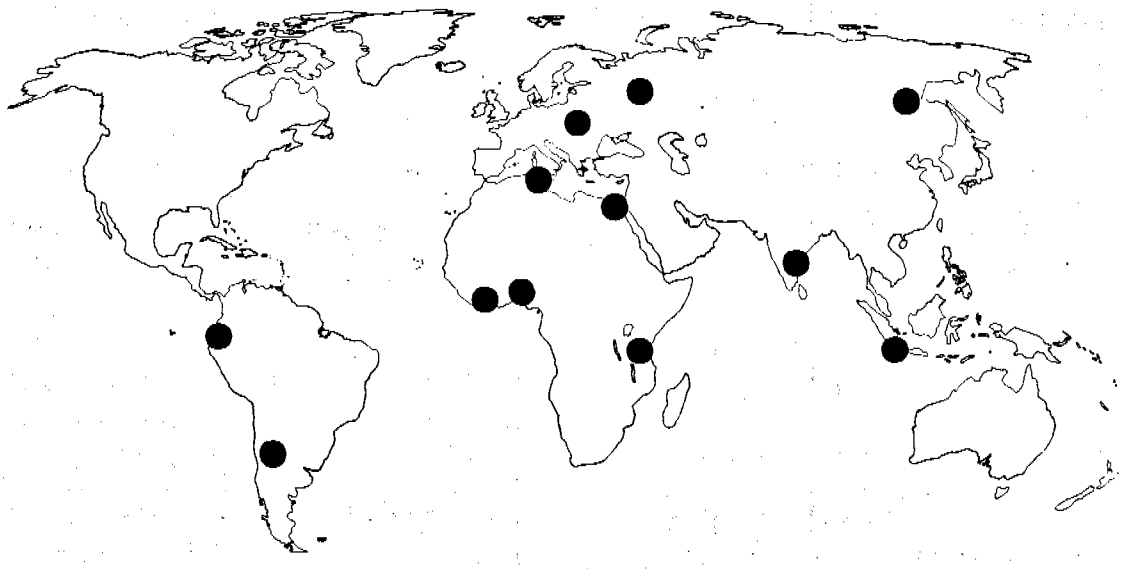
In international consultations over the years, and especially through its recent contributions to the Oslo Global Forum, the Dublin Conference and the preparatory process for UNCED (see Box 4), UNCHS (Habitat) has directed the attention of the sector to the critical need for a new, integrated approach to the provision of environmental infrastructure and services, with a focus on the poor. This new approach will, it is hoped, provide the framework for a concerted international effort to achieve sustainable progress in the field. The Centre intends to continue, through the SIEP programme, to play a leading role in its development and promotion.

4. SUSTAINABLE CITIES PROGRAMME

In August 1990, UNCHS (Habitat) launched the Sustainable Cities Programme (SCP). Its principal goal is to provide municipal authorities and their partners in the public, private and popular sectors with an improved environmental planning and management capacity. This will strengthen their ability to define the most critical environmental issues, to identify available instruments to address these issues, and to involve all those whose cooperation is required in concerted and practical action. Participating cities differ in the type and severity of environmental problems they face, and they differ in their capacity to address these problems. As a result the SCP activities differ from one city to the other. However, all these cities have formally requested participation in the SCP through their central governments and have a strong local commitment in common: to resolve their environmental problems, to incorporate environmental considerations into continuing development management practices, to rely on broad-based participation and negotiated rule making, and to emphasize the use and further development of local expertise. As a global programme, the SCP is designed to promote the sharing of expertise and lessons of experience between cities within and between various regions of the world. As an inter-organizational effort, the SCP mobilizes know-how, technology, and financial resources for city-level application. The Programme continues a process which was started when UNEP and UNCHS (Habitat) collaborated in the development of the "Environmental Guidelines for Settlements Planning and Management"[9] which were jointly published in 1987.

[9] Volumes I, II, and III, UNCHS (Habitat)/UNEP, Nairobi, 1987, ISBN 92 807 1158X

Map 1. Cities where the SCP is at present in action.



By the end of 1991, as a result of high government demand and strong donor interest, the SCP had gained significant momentum. City-level activities, at various stages in the project cycle, are under way in some 12 countries in Africa, Arab States, Central and Eastern Europe, Asia and the Pacific, and Latin America. Funding (required at a level of approximately $US 0.5 million per city) comes from UNDP-IPF, from bilateral sources (currently five donors), and from multilateral organizations. At the programme level the SCP has also gained significance as a vehicle for inter-organizational cooperation: vis-a-vis UNDP and the World Bank the SCP is the operational arm of the Urban Management Programme's environment component. It also is the global counterpart of the UNDP/World Bank MEIP (Metropolitan Environmental Improvement Programme); according to the last joint progress report on UNEP/UNCHS (Habitat) collaboration, the SCP is the main programme which, for the next few years, will define joint activities between the two organizations; together with WHO, the SCP is developing a "Healthy and Sustainable City" demonstration in Ibadan and a joint programme-level initiative most probably to be funded by Germany. The German Government (BMZ/GTZ) is also contributing to the preparation of a re-usable tool (a city consultation "shell") to support the initial consultation process in all SCP cities; and the UNCED Secretariat has cited the SCP as a vehicle for expanding future urban initiatives within the framework of Agenda 21.

5. THE COMMUNITY DEVELOPMENT PROGRAMME

Throughout the developing world low-income communities, supported by enlightened public authorities, international organizations and non-governmental organizations, are demonstrating that they can improve the environment of their human settlements in a sustainable manner.

Life for hundreds of millions of poor urban people is characterized by some of the world's most degraded environments. Their ramshackle, over-crowded settlements lack clean drinking water and decent sanitation facilities, while garbage lies rotting outside their make-shift shelters, turning surface drains into open sewers. Diarrhoea, dysentery, respiratory diseases and food-poisoning are all facts of life.

In the rapidly growing cities the slums and squatter settlements of the poor are often most visible and it is all too easy to blame urbanization for the plight of their inhabitants. But urbanization is not in itself 'the problem'; rather, urbanization is a result of the development process and people are drawn to the cities in search of benefits from fast growing urban economies. City managers find it difficult to cope with these skyrocketing population increases, particularly where it concerns the provision of shelter and employment.

The majority of the low-cost housing schemes that were launched in response to the demand for shelter proved too expensive for the intended beneficiaries. Later attempts to halt the spread of squatter settlements concentrated on involving low-income communities in self-help construction programmes with benefitting families contributing through labour to reduce capital costs. The outcome, however, was often less successful than expected, mainly due to two factors. Firstly, the people were often not able to spend the necessary time working on their site and, secondly, heavily subsidized schemes could only provide shelter on a limited scale. Yet, the urban poor are willing and able to use their ingenuity and resources to meet their own shelter needs, given adequate incentives.

In 1984, UNCHS (Habitat) launched its Training Programme for Community Participation to support governmental initiatives to work directly with local communities as a strategy to improve shelter conditions for growing urban populations. This programme, supported by the Danish International Development Agency (DANIDA), was the first of its kind to develop a training approach specifically geared for establishing community participation as a standard and permanent feature of human settlements improvement schemes. Today the UNCHS (Habitat) Community Development Programme has two components. The Training Programme for Community Participation, has already helped thousands of low-income families in Sri Lanka, Bolivia and Zambia to improve their housing and living conditions and established community participation as an integral component of settlement improvement activities. Secondly, the newly established Community Management Programme has been launched in Costa Rica, Ecuador, Ghana and Uganda and aims to reorient local-government practices and policies in the provision of community services through a strengthening of community organization, management and building skills.

6. THE CITY DATA PROGRAMME

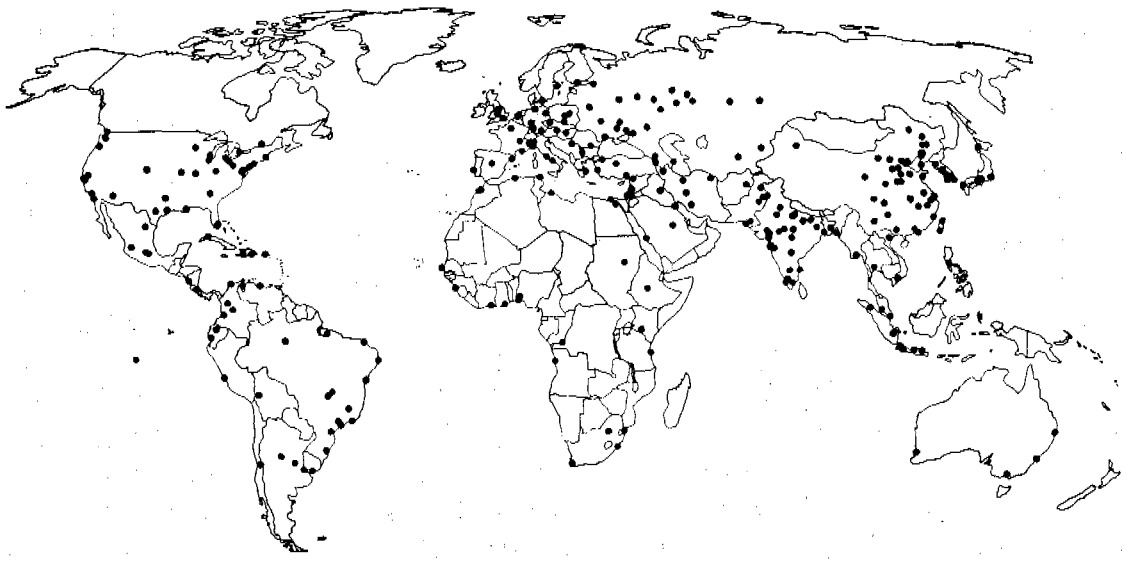
In all countries, cities are the centres of economic, social and cultural development and their critical importance for development cannot be overemphasized. Particularly in developing countries, however, urban policies and strategies are often based on insufficient socio-economic information and statistical data and projections. As a result, quantative and qualitative analyses are often deficient, resulting in costly urban policy failures.

The rapidly growing demand for accurate city-level data from policy-makers and researchers has been further fuelled by pressing environmental problems in a great number of cities, both in the industrialized and developing countries. Systematic and specific data at the urban level is a prerequisite for the identification and implementation of efficient policies and the targeting of assistance to vulnerable population groups.

A Consultative Meeting on Urban Environmental Data and Information Systems (Washington D.C., October 1989) identified the lack of collaboration/coordination and exchange of urban data among international agencies as one of the main shortcomings in urban research and policy-making, and recognized UNCHS (Habitat) as the appropriate institution to be entrusted with a global coordination and repository function for urban data. A follow-up Technical Working Group Meeting (Barcelona, September 1990) urged UNCHS (Habitat) to develop and maintain a global database for the management and exchange of urban data worldwide.

In response to this request, UNCHS (Habitat) launched the City Data Programme (CDP) on 1 May 1991. The immediate objectives of the CDP are to design a global urban-data collection and dissemination system which will provide optimal statistical support to urban policy-making and to strengthen the statistical capabilities and institutional efficiency in the participating cities with respect to the collection and dissemination of data relevant for the formulation of urban policies.

Under this programme a PC-application is being developed - called UNCHS-Citi-Base - a global database on cities; a pilot study is carried out in eight cities and towns in Kenya consisting of training workshops and data collection based on an urban-data framework including key urban indicators. Wall charts featuring pressing urban problems as well as a software package "PC-Citibase" for world-wide distribution are under preparation.



The key urban indicators are covering topics such as transport, energy use, air and noise pollution, water resources/supply and sewerage/sanitation as well as solid and hazardous wastes.

In addition to the pilot study in Kenya, similar projects are expected to be implemented in other countries.

7. TRAINING PROGRAMME AND CAPACITY-BUILDING FOR MUNICIPAL MANAGEMENT

Two key policy options were developed and identified by UNDP in the 1990s - the human development report and the urban agenda. The Training and Capacity-building Strategy for Municipal Management developed by UNCHS (Habitat) is the operational strategy for translating the human dimension of the urban agenda into practice. The key focus of the programme is on strengthening the capacity of special groups, communities and urban municipal authorities to make more effective and efficient use of their resources in the provision, operation and maintenance of essential urban infrastructure and basic services.

In many developing countries, the larger municipal authorities command budgets which equal or surpass the resources and capital assets of the biggest corporations in the national economy. Yet, their day-to-day management systems are far

Development Agency (DANIDA), is based on the premise that women play a key, and yet unrecognized, role in the promotion of sustainable resource management and human settlements development. The programme, which is being implemented in selected countries in Africa, Asia and Latin America, focuses on promoting gender-aware, and environmentally-sound approaches to human settlements planning and management. Key activities include participatory research, policy seminars, regional and national workshops, NGO networking, the production of training tools and training of community leaders. Another important feature of the programme is the mainstreaming of gender-aware approaches to human settlements within international agencies.

2. *The training component of the Municipal Development Programme for Sub-Saharan Africa:* - a joint UNCHS/World Bank initiative which seeks to improve the management capacity of municipalities through training and management action plans, information exchange and information systems, support to associations of municipalities and strengthening of municipal training institutions and units. A key feature of the programme is the building-up of a cadre of African municipal management expertise in the key areas of the Urban Management Programme as well as areas which have been and are continuously being identified and are specific to the African context. In the course of 1992-1993 some 120 senior officials and professional staff from central and local government, NGOs/CBOs and training institutions will have benefitted from training and exchange of experience.

3. *Training of Trainers Programme in Urban Finance and Management for Arab States*: This programme is a joint UNDP/UNCHS/World Bank multi-year programme, launched in 1989, which focuses on strengthening the capabilities of training institutions and units responsible for training municipal cadres. The key focus of the programme which is being implemented in the Maghreb and Machrek sub-regions, focuses on strengthening the working relationships between municipal authorities and training institutions in order to adequately diagnose municipal management performance and to propose appropriate training and advisory responses. The programme includes policy seminars and round table conferences to analyze and promote new and/or improved policy options and strategies, training of trainers, development and field-testing of training materials and management tools and instruments.

Municipal Finance and Management for South Asia which started in 1992; the first series of municipal management workshops in Eastern Europe in 1992-1993, and the UNDP/UNCHS/ESCAP pipeline programme for Asia, due to start in 1993. These programmes will focus on exchange of experience, training of trainers and municipal managers and the development of management tools and techniques.

In addition to regional programmes, UNCHS (Habitat), provides *ad hoc* advisory services, upon the request of governments and municipalities, in undertaking training needs assessments, management audits and improving training delivery services. Countries which have benefitted recently from such services include Burkina Faso, Jordan, Nigeria, Tunisia and the UAE.

IV. THE ROAD AFTER RIO

Sustainable development has been defined as development that meets the needs of the present, without compromising the ability of future generations to meet their own needs. This definition illustrates in a succinct and effective way the role of human settlements in sustainable development. Virtually all needs of present generations are generated and addressed within human settlements, while those of the future generations will continue to be addressed in human settlements - and more than ever before in the cities of the world. Furthermore, because human settlements are the milieu in which all human activities usually must take place, their state of well-being and functioning inevitably conditions the outcome of those activities.

Whatever international protocols are adopted or global targets set, implementation action on them eventually has to take place on the ground, in human settlements, where, moreover, they have to be integrated with operational programmes undertaken by national and local institutions. Human Settlements management thus becomes crucial even to the process of implementing the UNCED objectives, and in every environmental/ developmental sector.

Since poverty alleviation and human development has emerged as a prerequisite for sustainable development, the shelter and related infrastructure and services of the poor will require priority attention and action. Human settlements are where the poor of the world live, and it is in human settlements where opportunities for improved health conditions, income generation, and access to the fundamental sources of livelihood can be translated into tangible results. This reality is made even more pressing by the fact that the living environments of the poor are increasingly located in urban contexts where access to adequate shelter, infrastructure and services are a fundamental prerequisite for survival.

More generally the improvement of the living environments of the poor cannot be seen in a sectoral, isolated context. The improvement of living conditions and the eradication of poverty are strictly connected to the management of human settlements, and to their capacity to function as the engines of economic growth and centres of social and cultural development. In a world where cities produce up to sixty per cent of the Gross National Product, the problem of adequate and well managed urban infrastructure cannot be treated as a secondary issue. Only well planned and managed human settlements can offer the basic framework required for the expansion of employment and the improvement of the quality of life of all.

Specifically,ways will have to be found to encourage the reduction of unnecessary urban waste both at the source and at the consumption end; to promote sustainable patterns in the production and use of energy needed for transport, lighting, cooking, heating and cooling of buildings; and to treat human-settlements generated waste which cannot be immediately re-cycled at the source, thus avoiding the pervasive and negative effects of water pollution and contamination. These measures constitute the core of forward-looking human settlements planning and management, and different ways will have to be found to develop solutions suited to the needs of different countries and regions within the overall global objective of ensuring a decent and humane living and working environment for all.

UNITED NATIONS CENTRE FOR HUMAN SETTLEMENTS (Habitat)
P O Box 30030, Nairobi, KENYA. Telephone: 230800, 520600
Cable: UNHABITAT; FAX (254) 2 226473, 226479; Telex: 22996 UNHAB KE