WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT

SIXTH MEETING   WCED/86/19
Harare, Zimbabwe
September 15 - 20, 1986

MEMORANDUM

TO: All Members of the World Commission
           on Environment and Development

FROM: Branislav Gosovic
           Senior Programme Officer

DATE: 1st September 1986

RE: SIXTH MEETING OF THE COMMISSION

Please find attached the draft chapter on human
settlements, entitled "Towards Livable and Sustainable
Cities for the 21st Century".

The draft chapter has been elaborated by drawing on the
background papers and on the basis of an initial exchange
of views on the subject by the Commission which took place
in Sao Paulo.

No replies were received from the Commissioners to whom an
earlier version of the chapter was sent for comments.

A table of contents is appended to provide an overview of
the Chapter.

In addition to the three background papers already
circulated in Sao Paulo, an additional paper was prepared
by J. Hardoy and D. Satterthwaite under the title
"Rethinking the Third World City". This paper will be
circulated for information at the Harare meeting.

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CHAPTER 8

TOWARDS LIVABLE AND SUSTAINABLE CITIES FOR THE 21ST CENTURY

I. A GLOBAL CHALLENGE

1. The world is urbanizing. By the year 2000, it is projected that around half the world's population will live in urban areas, ranging from small and medium sized towns, to megacities, metropolitan areas and regional agglomerations. In a large number of countries, three quarters or more of their people will reside in urban settlements. The urbanization process and urban development occupy a central place in the prospects for sustainable development worldwide and for the environmental perspective for the year 2000 and beyond.

2. Cities are seats of political power and key units of social and economic organization, cultural, scientific and educational innovation and leadership. They act as poles for and the principal engines of development and economic growth. They are the centres from which the world production and trade is organized, and it is within an increasingly interlinked network of cities that worldwide communication, interaction and exchange takes place. They

remain the principal location for new or expanded economic
activities, and new job creation, and they continue to be
the centres of opportunity and upward mobility in society.
In many countries, they represent the best and only
possibility for survival for large numbers of rural poor.

3.   There is a strong correlation between the degree of
urbanization in a nation or a region and the level of
development and per capita income. Indeed, economic
development is associated with high levels of urbanization
and a highly developed network of urban centres with strong
and complex interconnections in terms of flows of goods,
people, capital and information. The economies of
agglomeration either within single cities or within the
well-connected city systems have proven essential to most
modern enterprises. Close to three-quarters of the
population in the more developed regions today reside in
urban centres, while a third of this population live in
centres with a million or more inhabitants.

4.   As urban growth proceeds, a rapidly increasing number and a
steadily increasing proportion of the world's people will
experience and witness environmental problems in the
man-transformed and constructed environment of cities.
Many of these problems often arise in densely populated
areas where industrial production and other economic
activities, and population are concentrated together.
Degraded, polluted, complicated, overcrowded and oversized
cities, overrun by cars, buses and trucks, and in the grip
of asphalt, cement dust and noise, have become a symbol of
twentieth century environmental degradation. The urban
environment, the place of work and one's home have also
become a source of health problems, of environmental risk,
and considerable discomfort, anxiety and alienation. Urban

dwellers have come to yearn for clean air and water, green space and nature, human scale and simplicity. And, in many cities, a safer and more comfortable environment has become a mark of social privilege, accessible to the better-off strata of population.

5.   To fulfil their many roles and to meet their own needs and those of their inhabitants, cities need water, food, energy, raw materials, and natural systems to help break down and disperse their effluents and waste products. Cities have been subjected to critical scrutiny because of their resource and energy intensive patterns of development, housing and transport systems, and of the wasteful lifestyles of many of their inhabitants. The demand generated by large cities, especially those characterized by the higher per capita incomes of their populations and advanced levels of economic and social development, is considered as excessive. They are giving rise to trends and pressures on the environment and the natural resource base that are not sustainable in the longer run, that cannot be universally replicated and that result in social inequities between and within countries.

6.   In brief, there is a tension and dualism in the modern cities, between their essential economic and social roles, and their negative and often unintended and unwanted consequences in the environment-development sphere. Indeed, the impacts of the patterns of development evolving in cities can often subvert or even negate some of their very development objectives, let alone generate effects harmful to people, denying to increasing numbers of them the basic right of a healthy and safe living and working environment.

7.   One of the important facets of the environment-development
      perspective for the year 2000, and beyond, is the rapid
      process whereby the world cities are becoming hubs of an
      ever tighter global web of complex and multiplying
      relationships between national economies, world economy,
      societies, peoples and the physical environment. What
      takes place in urban settlements, how they get organized,
      the demands they give rise to, their efficiency or the
      extent of waste built into their fabric, the pollution they
      generate, and so on, will have important effects on how
      people live and on prospects of generations to come, for
      the state of the global environment, for the future of the
      world economy and for the development process itself.

8.   Indeed, world cities as key units of social organization
      where patterns of development, lifestyles and individual
      and group aspirations are molded, represent important
      access points for influencing and dealing with many issues
      on the environment-development agenda. It is in the cities
      that many strands having to do with energy, food security,
      industry, population, technology, environmental risks, etc,
      come together and originate. What happens in the world
      cities and how they evolve, therefore, is of crucial
      significance for the objectives of sustainable
      development.

9.   In addition to their traditional objectives and concerns,
      contemporary cities have thus acquired new ones which have
      to do with urban design, development patterns and
      lifestyles that are energy and materials conserving,
      efficient and favourable to human welfare, pollution
      abatement and human health protection, and managing to deal
      with evermore complex and hazardous technologies,

technological and production systems and products. These new objectives which are becoming of critical importance for quality of life, economic growth and societal well-being, need to be internalized into the very rationale, decision-making structures and fabric of cities, and given meaning through behaviour, actions and decisions of various actors that make up or shape cities, from the highest levels of government to individual citizens.

10. The essence of the challenge for the contemporary society then is how to maximize the positive aspects of cities, their roles as agents of sustainable development and providers of healthy and rewarding life for all. This is a global challenge which poses itself in a different manner in different parts of the world, countries and cities. The diversity of urban settlements, and of the mix of factors and their individual situations is great and usually defies generalization, even more so when one introduces the environment-related variables into the picture. However, there is still one great division, that which separates developed and developing countries. Indeed, the contemporary urban challenge is greatly influenced by the gap and the differences in the levels of economic development between developed and developing countries.

Key Points
CITIES - A GLOBAL CHALLENGE

* World is rapidly urbanizing; by the year 2000 half the world's population will live in urban areas.

* Cities are crucial units of social organization for sustainable development prospects - how they fulfil their roles and are organized, demands they give rise to, their efficiency, pollution they generate, etc, have great bearing on how people live, state of the environment, pressures on the resource base and on the development process in general.

* There is a tension and dualism in modern cities between their many economic and social roles, and some of the impacts and processes that accompany these and which threaten quality of life and subvert sustainable development objectives. As a result, new concerns and goals have emerged in the cities.

* The essence of the challenge is how to maximize positive roles of cities and their contribution to the objectives of sustainable development.

* The challenge poses itself quite differently in different parts of the world; there exists, however, one great division, that which separates developed from developing countries.

II. FOCUS ON THE THIRD WORLD CITY

11. The Commission has opted to focus on the Third World city. It has done so in part as a way to sharpen and give manageable proportion to what it has to say on the vast and infinitely complex topic of human settlements and habitat. Primarily, however, it has done so because a crisis is sweeping urban settlements in the developing countries. The management and resolution of this crisis holds one of the keys for prospects of sustainable development in the Third World.

12. The focus chosen by the Commission is not meant in any way to diminish the importance of what takes place in the cities of the industrialized countries. What happens in these cities, choices made and lines of action pursued is of fundamental importance on the global scale. The majority of population of industrialized countries is urban, and they account for a dominant share of global environmental pollution, resource and energy use. Moreover, the responses evolved in these cities to the environmental and resources challenge will have worldwide implications because of their diffusion, adoption and influence in the global urban network.

13. Nor is the focus on the Third World city meant to diminish the complexity and magnitude of the urban challenge in developed countries - politically, socially, economically and environmentally. However, these countries are well-poised to face the problems of their cities and to work out appropriate solutions. They are well-off economically. Growth of urban population is comparatively modest and manageable; indeed, in some regions there is no

growth of urban population and even a decline has been
registered. Cities are in place, with well-developed
housing, infrastructure, production and transport
facilities. There has been a long experience with
management and administration of cities. Local government
for the most part, is strong and has at its disposal
significant powers and resources. With advanced and
versatile economies, high per capita incomes, materials and
energy uses, having at their disposal resources,
institutions and technological abilities, and with a good
deal of flexibility and space for manoeuvre and innovation,
the question is ultimately one of making appropriate social
choices and decisions.

14. The industrialized societies can deal with inequalities and
squalor that exist in their cities and entrap the old, the
poor and the ethnic and racial minorities; it is not a
question of resources or weaknesses in the institutional
structure, but rather of political commitment to do so
among those in power. These societies are in a position to
meet the requirements of urban renewal, redesign and
replacing the deteriorating housing stock, infrastructure
and declining industries. Likewise, they can achieve and
maintain an environmentally sound and healthy urban
environment. The fact that they are in a favourable
situation to pursue this multiplicity of social goals and
objectives, however, does not detract from the degree of
difficulty, cost, technological innovation and social
change that achievement of these objectives will entail.

15. The Commission has also not chosen to delve on the
conditions in the rural settlements of the Third World.
Rural settlements are less settlement specific and are more
directly linked to the overall context of rural
development, issues which were broadly discussed in the
earlier chapters. The very nature of rural settlements,
namely their small size, dispersion, self-reliance for

housing and a variety of other functions, manageability,
dependence on the local ecosystems for survival,
availability of materials, less exposure to environmental
pollution (even though this advantage is being negated by
the impacts of chemicals/biocides used in agriculture and
by the spread of pollution from cities to rural areas)
etc., eliminate a series of complex problems that concern
especially large urban settlements.

16. It is in the urban areas that problems are specific to
     settlements. In cities people need cash income to
     survive. They cannot eke out an existence by growing food;
     they cannot find accommodation without income; and there
     are no free materials on hand as in many rural areas - with
     which to build. To varying degrees, urban settlements in
     most developing countries, and in particular some of their
     large and primate cities, have experienced a very rapid and
     uneven urban growth and urbanization process, a marked
     growth of their needs, and increase in population numbers
     both through migration from rural areas and through natural
     growth. Where similar expansion took more than a century
     to accomplish in some metropolitan areas of developed
     countries, it has been compressed into much shorter periods
     of several decades or less in a number of cities of the
     Third World. It has also taken place at much lower per
     capita incomes, preceding the establishment of a solid and
     diversified economic base to back up the process and of the
     necessary housing and urban infrastructure, and fusing up
     what elsewhere have been sequential stages in the evolution
     of a settlement.

17. The present difficult stage in the development process in
     the Third World, is punctuated by an urban crisis of major
     proportions. It is a crisis of development and often
     survival, of lagging economic growth, of rapidly growing
     cities, of a weak and undiversified development base, of
     little accumulation and dearth of public finance needed to

invest in the management and growth of cities, of
frequently lopsided distribution of resources within
society, of great and sometimes total dependence on the
unpredictable and unfavourable international economic
environment, of circumscribed choices and of little chance
to get extricated from various difficulties or to pursue
desired social objectives. It is a crisis of marked local
impacts and suffering. On the eve of the 21st century, it
is the development situation and evolving trends in the
cities of the Third World that present one of the most
urgent challenges for the developing countries themselves,
and for the international community as a whole.

18. Urban settlements in the Third World differ very
profoundly. Yet, there is also a great deal that they have
in common to make it possible to highlight a few factors
that have played a role in shaping these cities and the
crisis that they are experiencing today.

19. The poverty and underdevelopment trap has shaped many Third
World cities and has helped frustrate many well-intentioned
and often carefully thought out strategies and schemes of
urban development. Rapid urbanization taking place at
quite low per capita income - and very often with
increasing population numbers and decreasing resources
available on a per capita basis to build and manage cities
- poses serious dilemmas and difficult social and economic
choices for policy and decision-makers involved in urban
management.

20. In many Third World cities, international economic
    relations have played a prominent role in this process all
    along, both by fueling rapid and imbalanced urban growth
    and by undermining urbanization through vagaries of
    international trade and instability of earnings,
    unfavourable terms of trade, outflow of surplus capital,
    and so on. In recent years, the effects of recession,
    decelerated growth, foreign debt burden, adjustment
    programmes and various austerity measures have had a
    telling effect in their urban areas, with the more
    vulnerable and weaker socio-economic groups being hit most
    severely. Reduced incomes for the poor, increased
    unemployment, higher prices for food and other necessities,
    restrictions and cuts in government expenditures,
    withdrawal of subsidies and weakening of government
    programmes aimed at alleviation of poverty, social
    consumption and welfare of population, etc. have resulted
    among other things in a decline of nutritional, health,
    education and housing standards related to quality of
    life. Indeed there is one generalization which holds true
    for a large number of Third World cities: as we face the
    year 2000, the very foundation from which the difficult and
    complex undertaking of urbanization is to be carried out
    has been undermined by the world economic crisis.

21. Direct and indirect heritage of history including the
    colonial past, tends to be a pronounced factor in the
    current problems of a number of Third World cities. This
    includes the very rationale, siting, location and early
    growth of settlements, their present role in the world
    economy and international division of labour, the inherited
    legal system relating to land, the colonial separation of
    the "European city" and the "native town" which is more or
    less reproduced today with the better-off strata of

population living in well-serviced areas and the poor in
the marginal settlements, etc. This burden of the past and
the frustrations of the present are part and parcel of the
broader pattern of relationships that developing countries
experience vis-à-vis the industrialized North.

22.   In this context, there is an outward orientation of most
      cities in the Third World, looking up to and copying
      urbanization models from the developed countries. This
      often leads to an excessive openess and uncritical
      borrowing of urban models, methods of planning and
      management, and technologies, all of which were generated
      under quite different social, economic and environmental
      conditions. This tendency is reinforced by the aspirations
      of the middle and upper income groups to reproduce
      lifestyles and patterns of development of their
      counterparts in the more affluent societies. It is further
      assisted by the pervasiveness of messages diffused by
      media, especially the TV, and through transnational
      advertising.

23.   It is these models of urban development which have had an
      important role to play in the evolving urban situation in
      the developing countries. Their economic and social costs,
      and the irrationalities and waste inherent to them could
      not be easily tolerated in developing nations with limited
      margins of action and reserves to draw on, and meager
      public resources available for many competing development
      needs and objectives. This fact is illustrated by problems
      of finance which plague practically every Third World
      City. Governments and urban administration find themselves
      squeezed between requirements and costs to build, run,
      maintain and manage the cities including their high
      dependence on equipment and other inputs from abroad, the

demands of the well-off strata of population to maintain
their privileges, and the increasing pressures for social
equity and participation of the ever greater numbers of
urban poor.

24. Poverty, degradation and the harsh economic reality are
thus juxtaposed with aspirations and impatience for
attaining levels of affluent, technologically advanced
consumer societies. In a situation of conflicting and
competing social objectives and insufficient resources to
attain them in short and medium-term, of pressures of
consumerism, of market and speculative forces in land and
real estate, and of differential power that social groups
and classes command in society and in government, there is
a tendency for dual or multilayer, highly unequal cities to
emerge. The city of the privileged and the city of the
poor majority cohabit in a tense relationship. The former
enjoys public services, water, drainage, paved roads,
street lights, garbage disposal, sewers, various amenities,
including green space and a more favourable location
vis-a-vis the sources of environmental pollution, and the
already scarce public funds tend to be used largely for its
upkeep and management; the latter, at best has one or two
of the above services and often none of them, is
characterized by the degraded environmental conditions, a
continuing aggression on the environment resulting from the
survival strategies of its inhabitants, and the lack of
public recognition and investment.

25. Symptomatic of the dual nature of many such cities, the
poor strata of population have come to experience a double
brunt of environmental pollution and degradation. The
increasing poverty related environmental hazards of poor
housing, overcrowding, sanitation and sewerage, have been
supplemented by the more modern types of environmental
degradation to which the poor seem also to be much more
exposed, such as air and water pollution from industry and

transport, noise, long hours of travel to and from work,
etc. This exposure is often accentuated by the siting of
marginal settlements next to industries, a fact
demonstrated dramatically by great loss of life and human
suffering in various environmental and industrial accidents
in the Third World., such as those that have occurred in
Cubatao, Mexico City and Bhopal.

26. In sum, then, the urban crisis in the Third world has its
roots in underdevelopment and the development gap between
North and the South, and in the domestic political, social,
economic structures and processes, which often fuel and
reproduce social and economic inequalities, in particular
when it comes to employment and income, satisfaction of
basic needs and access to land, housing and services.

Key Points
FOCUS ON THIRD WORLD CITY

* An urban crisis is sweeping developing countries; its management and resolution hold one of the keys for prospects of sustainable development in the Third World.

* This crisis is embedded in the broader development dilemmas faced by the developing countries.

* Rapid urbanization is taking place in a situation of low per capita incomes, decelerated economic growth, competing social objectives and significant growth of urban population.

* Models of urban development transmitted from the developed countries have contributed a share in shaping the current crisis.

* There is a marked element of inequity in the urban situation in the developing world.

* International economic relations and the world economic crisis have played a key role in triggering and aggravating the urban crisis in the Third World, and in limiting options at the disposal of developing countries to deal with their urban situation.

a.   **Rapid Urban Growth in Developing Countries**

27.   The Third World is undergoing a process of rapid urban
       growth. As recently as 1950, only 286 million people, or
       17% of the total population in less developed regions lived
       in urban areas. By 1985, it is estimated that this figure
       had risen to 1.1 billion, or 29% of the total population of
       less developed regions; only during the past few years,
       more than 350 million people have been added to this urban
       population, most of them below the poverty line. According
       to the current set of projections, 1.9 billion or 39% of
       total developing countries population will be urban by the
       year 2000.

BOX 1.

PROPORTION OF POPULATION LIVING IN URBAN AREAS
1950 - 2025

		1950	1985	2000	2025
1.	World total	29.2	41.0	46.6	60.1
2.	More developed regions	53.8	71.5	74.4	77.8
3.	Less developed regions	17.0	29.2	39.3	56.5
4.	Africa	15.7	29.7	39.0	55.3
5.	Latin America	41.0	69.0	76.8	84.2
	(Temperate South America)	(64.8)	(84.3)	(88.6)	(92.6)
	(Tropical South America)	(35.9)	(70.4)	(79.4)	(86.4)
6.	Asia	16.4	28.1	35.0	52.9
	(China)	(11.0)	(20.6)	(25.1)	(43.7)
	(India)	(17.3)	(25.5)	(34.2)	(53.6)

URBAN POPULATION 1950-2025
(in millions)

		1950	1985	Projections 2000	2025
1.	World total	734.2	1982.8	2853.6	4931.7
2.	More developed regions	447.3	838.8	949.9	1086.5
3.	Less developed regions	286.8	1144.0	1903.7	3845.2
4.	Africa	35.2	164.5	340.0	894.1
5.	Latin America	67.6	279.3	419.7	655.6
6.	Asia	225.8	791.1	1242.4	2396.8

Source: "Urban and Rural Population projections, 1984" Unofficial assessment, Population Division, United
           Nations, New York.

28.   Large urban agglomerations are a worldwide phenomenon.
      They are becoming an important issue in some developing
      countries, where some of the so-called "runaway
      megacities" are to be found. Indeed, in 1985 of the 30
      world cities with the population of 5 million or more, 20
      were in the less developed regions. In 1950, some 35
      years ago, there were only eight world cities with a
      population of 5 million, or more i.e. New York, Shanghai,
      London, Tokyo, Beijing, Paris, Tianjin and Buenos Aires.

BOX 2

A sample of rapidly growing cities of the Third World

	1950	1985	2000
Mexico City	3.05	17.30	25.82
Sao Paulo	2.76	15.88	23.97
Bombay	2.95	10.07	16.00
Jakarta	1.82	7.94	13.25
Delhi	1.41	7.40	13.24
Manila	1.57	7.03	11.07
Lagos	0.36	3.65	8.34
Bogota	0.70	4.49	6.53

Source: "Urban and Rural Population Projections", op.cit.

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29.   It is projected that by the year 2000 the 100 largest
      world cities will shelter and accommodate 657 million
      people. Of these, 450 million, or 68% will be in the
      less developed regions. This places an important
      challenge in front of developing countries. Improving,
      or simply maintaining the quality of life for people in
      large urban agglomerations, and indeed the very
      efficiency and nature of economic and social processes
      taking place in such settlements, is closely linked with
      their manageability. The "megacities" illustrate

vividly the logistics and requirements of coping with
the size, complexity, large population numbers and
multiplying and diversifying needs of such human
settlements. In some developing countries, the large
primate cities have emerged as one of important social
and economic problems, and a cause cum effect of
structural imbalances in their economic and social
development.

30. The increasing number of million cities in developing
countries does not however mean that the majority of
their urban population lives there. Indeed, the cities
with between 100,000 and 1 million inhabitants now dot
the landscape of Third World regions which were sparsely
settled until a few decades ago. In 1980, there were
127 such cities in Africa, 181 in Latin America and the
Caribbean, 117 in East Asia, and 391 in South Asia. It
is these intermediate urban centres and those with less
than 100,000 inhabitants, that have sustained very high
growth rates.

31. These broad figures and generalizations are meant to
illustrate the scale and pace of urban change which has
affected many Third World nations. They do not deny the
extreme diversity of situations between countries, nor
the fact that many small developing countries are
predominantly rural and have not experienced
urbanization process.

b. The Declining Ability to Meet Urban Needs

32. The rapid urban growth has occurred in a situation of
declining ability of most Third World governments to
respond to mounting needs, problems which require their
attention, and increasing complexities of their urban
settlements. Confronted by an often dramatic shortfall

in resources needed to build, maintain and manage cities,
and to pursue an effective and assertive urban policy,
compounded by a parallel increase of per capita cost of
settlement, housing and job creation, the governments
hardly manage to keep up with the tide. In the process,
some resigned themselves to a spiralling urban crisis and
a fire-fighting strategy, sometimes overlooking whatever
few opportunities existed for more assertive action and
for directing the process of urban change.

33. Today there is a large and increasing gap between the
     growth in the Third World's urban population and actions
     and investments by governments to provide even the most
     basic pre-conditions for an adequate life for most urban
     dwellers. The deterioration in housing and living
     conditions, in people's access to the basic services which
     are essential for urban life (water supply, sanitation,
     garbage disposal, health care, etc) and in the number of
     adequately paid, stable income earning opportunities
     relative to the number of economically active people is
     apparent in most Third World cities. The deteriorating is
     made visible through:
       (i)   Growing squatter settlements(or other forms of
             illegal or informal settlements) and increasing
             overcrowding in tenements, boarding or rooming
             houses and other forms of cheap, rental
             accommodation;
       (ii) Deterioration of the urban fabric, in particular
             the existing housing stock, roads and public
             services and facilities; and
       (iii) Chaotic and uncontrolled processes by which
             cities' physical areas expand, especially with
             the illegal occupation of peripheral land sites by
             low income people and illegal land developments by
             land owners and real estate companies.

34.   To achieve short-term savings by sacrificing
        infrastructure maintenance, the cities incur long-term
        costs and liabilities. The costs to public authorities
        in addressing the backlog in infrastructure and service
        provision are enormously increased by the fact that no
        parameters are provided and implemented to guide cities'
        physical growth. For every year that there is a lack of
        government action and investment, it becomes
        increasingly difficult and costly to deal with these
        problems.

c.   The Shelter Gap and the Illegal city.

35.   The way in which city inhabitants in Third World cities
        get access to accommodation and the extent to which they
        obtain access to publicly funded services and facilities
        reflects the different political and social orientations
        of governments. In most cities, lower income households
        or individuals find accommodation in one of two ways:
        through renting rooms (in tenements, cheap boarding
        houses, shared houses/apartments or squatter
        settlements); or through building or purchasing a house
        or shack in a squatter settlements (where the land
        occupation is regarded as illegal by local and national
        government) or in an illegal subdivision (where the
        occupation of the land is with the permission of the
        land-owner or land-developer but where no permission has
        been given to build by the municipal authorities).
        While no reliable figures exist, it is estimated that in
        most Third World cities, at least one third of the
        population live in houses, shacks or rooms in one of
        these two broad categories; in many there are also
        sizeable numbers of people who sleep in some public
        space - such as on the pavement, in the recess of a
        public building, in a park, graveyard or piece of
        wasteland.

36.   Virtually the only way in which the poorer households
       can obtain their own house in most Third World cities is
       by organizing the construction of the house themselves.
       This is done incrementally, and with considerable degree
       of self-help from household members to reduce costs.
       This process is almost always illegal. The land site is
       either illegally occupied or illegally subdivided. The
       cheapest and most widely available building materials
       available are often those that are illegal according to
       official building norms and standards. The house
       usually fails to meet official standards with regard to
       building design or structural requirements.

37.   Cities are a social product, and the poor and the
       well-off organize the construction of their living
       environment according to the resources at their
       disposal, using their influence to receive public help
       and public investment in infrastructure and services.
       The city of the poor is considered as illegal and
       usually does not qualify for any support.

d.   Decaying Urban Fabric.

38.   One of the common signs of social stress and economic
       hardship in the Third World cities is a notable decay of
       the urban fabric. It is caused by little or no
       investment in maintenance by city authorities in
       publicly owned infrastructure, services or buildings, or
       by landlords in rented properties. The decay is speeded
       up by the intensity with which houses, services and
       facilities are being used.

39.   The decay in rented housing is usually most visible. In
      renting to low-income people, the landlords minimize
      capital expenditure on maintenance and maximize the
      number of people squeezed in limited space. Tenements
      districts are thus often characterized by buildings in
      poor state of repair, with rotten doors and windows,
      peeling plaster, leaking roofs, damp walls and broken
      sanitary facilities. Public housing suffers from
      similar problems, with public agencies showing similar
      neglect for or inability to provide maintenance.

40.   The lack of maintenance and decay is also notable in the
      infrastructure and capital equipment of cities for which
      government agencies are responsible, for example,
      sidewalks, roads, means of public transport, bus and
      train stations, etc. Public transport services are
      overcrowded and overused, and with shortage of capital
      investment, especially for imported capital goods, it is
      difficult to replace worn out equipment or to expand the
      system's capacity. Existing water systems have leaks
      and decrease the volume of water available. The
      existing sewage systems also have leaks, and contaminate
      water sources used for drinking, washing and cooking.
      The expansion in public services and facilities is
      virtually always far slower than the growth in need.
      Combined with inadequate maintenance, this lag can mean
      an absolute deterioration in the quality of service
      provision and in the number of people reached.

e.   Health, disease and poverty.

41.   Human condition and quality of life in settlements, for
      individuals and for the collectivity, encompass such
      vital issues as the fulfilment of basic needs, provision
      of work and employment opportunities, and supply of
      basic services including housing, water, electricity,

sewerage, transport, health and education facilities,
etc. Those who benefit from these services and
opportunities tend to take them for granted. However,
for the great masses of people that live in marginal
settlements in the Third World, and who have to struggle
with poverty and lead a precarious daily existence, with
inadequate and unstable income, these basic entitlements
are usually out of reach. In their absence, they also
face many environmental hazards associated with poverty
and the lack of development, such as biological
pollution and communicable diseases, which the citizens
of the industrialized North have virtually forgotten to
exist.

42.   These hazards are pronounced in densely populated urban
        areas in the Third World where they represent one of the
        major causes of morbidity and mortality, especially
        among the children. The situation has deteriorated
        notably since the days of the Stockholm Conference, when
        international attention was drawn to the "pollution of
        poverty" for the first time. Today, more people face
        environmental health risks of this kind.

BOX 3

Poverty related risks to
human health in Third World urban settlements

*   contaminated drinking water
*   unregulated disposal of human waste, waste water,
     and garbage
*   lack of drainage and stagnant pools of water which
     act as breeding grounds for disease vectors
*   contaminated fruits and vegetables through
     irrigation with sewage water
*   indoor pollution by smoke from fires and stoves
*   inadequate personal hygiene due to lack of facilities
*   dust
*   disease vectors and parasites living in housing
     structures, with access to food, occupants, water
*   overcrowding and poor ventilation of housing
*   housing sites exposed to floods, slides, industrial
     accidents
*   nutritional deficiencies
*   no access to health advice and primary health care.

f.   Environmental Degradation, Pollution and Risk.

43.   Simultaneously, environmental pollution problems common in
      the urban areas of industrialized countries in the 1960s,
      and which are being progressively managed and controlled
      there, have also spread to the Third World cities. Some of
      these cities have gained the unenviable status of world
      showplaces of environmental pollution and stress.

BOX 4

Some sources of health risk in modern urban environment

*   outdoor air, water and soil pollution from stationary
        sources (e.g. electricity generating facilities,
        various industries located in human settlements,
        heating or cooling of buildings), and from mobile
        sources (e.g. automobiles, buses, trucks), including
        sulphur oxides, carbon monoxide, nitrogen oxides,
        hydrocarbons, leads, fluorocarbons, sludge, solid
        wastes, toxic gases and toxic chemicals, radioactive
        releases, etc;
*   toxic vapours, fluids, dusts and aerosols released in
        the working environment, which affect primarily
        workers but also escape to the nearby settlements;
*   indoor pollution from PCVs and other materials,
        asbestos, radon, unventilated gas stoves, etc.,
        occurring at higher concentrations due to insulation
        meant to improve energy efficiency of households and
        buildings;
*   psychological and mental stress of urban living.

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44. Unplanned and uncontrolled, frequently haphazard expansion
of cities and of their economies; high concentration of
industry, commerce, services, government administration and
investment in one or a few metropolitan areas; rapid
increase and concentration of motor vehicles in cities and
streets that were not planned for automobile traffic; urban
transportation which converges in core areas contributing
to saturation and pollution; poorly maintained and older
vehicles with high levels of pollutant emissions; growing
and diversifying demands of the urban population; the lack
of effective planning and regulation systems and of
necessary resources to deal with pollution problems;
deliberate or reluctant decisions to overlook pollution
hazards of foreign and domestic investment; local climatic
conditions, etc., have all contributed their share to a
dramatic increase of air, water, noise and solid waste
pollution, and urban congestion in major Third World
cities. Because of greater exposure of population and high
concentration of sources the health effects of pollution in
some major cities in developing countries have come to be
very pronounced.

45. The uncontrolled city growth, expansion of illegal
settlements, and the survival strategies of the poor
inhabitants have also notable impacts on the local
environment, such as deforestation of the surrounding
areas, loss of green space within the cities, erosion,
flooding and loss of valuable landscapes. Illegal
subdivided land and small plots, often perched on steep
hillsides, have no infrastructure and provisions for
entrapment of rain. Without curbs, gutters, drainage
system or pavement, rain opens furrows, carries away soil,
clogs existing drainage system, causes mudslides and floods.

46. Spontaneous expansion of cities results in urban sprawl
     which creates a pattern and density of development to which
     it is very expensive to provide infrastructure and
     services. In many cities, large tracts of favourably
     located land remain undeveloped in anticipation of accrued
     value and future land speculation. This leads to
     irrational patterns and densities of settlements, which
     often prevent cost-effective provision of basic services.
     In a number of Third World cities, prime agricultural land
     is eaten up by rapid urban sprawl, often with important
     tracts of land within the city remaining unoccupied.

g.   Incomes and Jobs.

47. Urbanization in most Third World nations has created far
     fewer stable, adequately paid jobs than would have been
     required to match the growth in the economically active
     population. The lack of income underpins city inhabitants'
     poor housing conditions. Without opportunities to obtain
     an income in the formal sector, the poor have to create
     their own sources of income, through self-employment or in
     some "informal" enterprise. The poor in Third World cities
     cannot remain unemployed; governments seldom provide them
     with unemployment benefits, nor are they members of social
     insurance schemes again unemployment.

48. Thus, while they may not be employed in registered
     enterprises, they are working, whether in unregistered
     enterprises, or selling goods on street corners, or making
     clothes in their homes, or whatever. An important informal
     sector is thus emerging, wholly outside the mainstream of
     the urban economy, which engages in production, trade and
     commerce, and services. The formal sector and the legal

city use the informal sector and the labour provided by the
poor from the illegal city. They are usually
"over-worked", but grossly underpaid. Indeed, one of the
major complaints of the urban poor in many Third World
cities is not so much about the poor housing and living
conditions they experience, but more about being ignored by
the official city and about the exploitation and the "wages
of slavery" which they are paid in their efforts to make a
living.

h.   Institutions.

49.   In most Third World nations, city or municipal government
      is the public institution responsible for ensuring that
      city inhabitants have reasonable living and housing
      conditions, access to services and facilities, unpolluted
      air and water, and so on. In the period of rapid urban
      growth and the concurrent need to manage this growth
      through a steady and coordinated government action, there
      has been little change and improvement in the power,
      resources and trained personnel available to local
      governments.

50.   In fact, there has emerged a growing gap between the legal,
      institutional and operational responsibilities in planning
      and maintenance of urban areas, and investment in
      infrastructure and services, and the ability of local
      governments to fulfil these responsibilities. It is the
      city governments that are responsible among other things to
      control environmental pollution, and to decide on location,
      characteristics and sequence of public and private
      investments within the area of their jurisdiction.

51.   In reality, local government fulfils few of these
      responsibilities. There has been a trend in many urban
      settlements for the role of local government to decline,
      reflecting in part the growing centralization of power and
      resources in the hands of national government and sectoral
      agencies. The task of local governments has been often
      complicated by lack of coordination between investment
      programmes of different sectoral agencies. Also, the power
      of local government to raise revenue is limited.
      Frequently it is not in a position to collect much of the
      local taxes that it is empowered to collect. In some
      cities more than 50% of built-up area is not included in
      cadastral maps, and property tax assessments are outdated
      and revenue to be collected is far less than its
      theoretical yield.

52.   In sum, local governments generally have difficulties in
      covering their operating expenses, training the personnel
      they need, purchasing equipment, making organizational
      improvements, expanding the range of public services.
      Their investment capacity is limited and inadequate. They
      are thus seriously constrained in playing their many roles
      which are of such critical importance for the process of
      urbanization and urban growth in the Third World.

i.   Prospects and Liabilities of Third World Cities

53.   Interacting causes and effects have combined to intensify
      urbanization and urban growth in the developing countries,
      and at the same time disequilibrate the process and weaken
      national response and ability to manage it. A series of
      legacies and accomplished facts have thus emerged in many
      developing countries, which will be difficult to manage and

change, which will be hard on these societies and their
peoples, and which represent important liabilities in their
development process. Their options have been narrowed down
considerably. Even if the next few years see an end to the
economic crisis, its impact will affect cities, their
development and the quality of life and of the environment
within their cities for many years and decades to come.

54. The inevitable fact remains that the urban population of
    the Third World will continue to grow rapidly for the
    foreseeable future. According to the most recent
    projections there will be 800 million additional
    inhabitants in the cities of the Third World by the end of
    this century. How precise these projections are is
    essentially unimportant. Even were they to be off by say
    40%, still close to 0.5 billion new inhabitants will need
    to be accommodated and integrated into the urban economy
    and society of developing countries during the next fifteen
    years. In itself this is a monumental development task
    that will have to be undertaken in an already unfavourable
    situation, with scarce resources and coping at the same
    time with many novel issues related to functioning and
    management of modern urban settlements.

55. To sum up the prospects for the future on a somewhat
    contradictory note, urbanization will spearhead the
    development process in the Third World, and will result in
    more production, more healthy children, more educated and
    skilled workforces, and cities and countries better
    prepared to respond to development opportunities and
    challenges. However, without significant modifications in
    prevalent approaches of governments and without changes in
    the global economic situation, these prospects will be
    offset by more urban degradation and poverty, more

shanty-towns and more poor people, more pollution and pressures on local environment and natural resource base. In some instances, where institutions and structures persist which foster social and economic inequalities, with regard to income levels and employment, satisfaction of basic needs, access to housing, services and land, etc, and where the government plays a weak or inappropriate role in channelling the urbanization process, the situation may lead to social discontinuity.

III   **CONFRONTING THE URBAN CRISIS IN DEVELOPING COUNTRIES**

56.   In the light of the above analysis, and the Commission's own experience and observations in the field, a number of conclusions stand out concerning some essential strategic directions to manage the transition to more livable and sustainable cities in the Third World:

(a)   Although there is a strong correlation between the degree of urbanization in a nation and its level of development and income, the processes of urbanization and urban development have not yet obtained a solid footing in the national development strategies and priorities of developing countries. The issues are seldom given consideration in the context of macroeconomic planning. Instead, cities are treated as a residual. They find themselves at the tail-end of many independent sectoral decisions and acts, whose effects overlap and converge on them.

(b)   While physical planning often reflects the goal of spatial decentralization, infinitely more powerful public policies and public investments often run counter to these goals. Indeed at the national level, macroeconomic and sectoral policies usually serve to accelerate metropolization and centralization.

(c) At the urban level, city authorities have seen their
     power, their responsibilities and their ability to
     manage eroded. Among the prominent reasons for this
     is the overcentralization of power and resources at
     the centre, the failure to build up urban technical
     cadres and institutional capacity needed, and a
     massive shortfall in resources;

57. There is a need for a greater and more effective government
     role in the process of urbanization. The process of
     urbanization and urban change in developing countries
     cannot be simply left to its own dynamics, spontaneity and
     free market forces. Indeed, the past and present
     experience with urbanization process in different parts of
     the world demonstrates that the government is the only
     actor which can guide and channel the urban growth.
     Government, at all levels ranging from national to
     municipal, holds in its hands many levers which if used
     properly can cope with many problems encountered in the
     urbanization process and facilitate the attainment of the
     shared objectives.

58. Unless the above realities are confronted, most countries
     will find it politically and institutionally difficult both
     to implement national responses to their growing urban
     problems and to deploy the greatly increased international
     support needed to make these responses effective. Among
     the most urgent national measures needed in many countries,
     the Commission would highlight:

- the full integration of urbanization and urban development with macroeconomic and sectoral goals and priorities, planning and policies;

- the adoption of alternative models for urban development that reflect unique national and local conditions and are more sustainable;

- the development of small and intermediate urban centres;

- the improvement of housing and living conditions for lower income groups, focusing on marginal settlements, by

    * providing land plots with secure forms of tenure for urban migrants and lower income groups;

- * bringing building codes within reach of low income neighbourhoods;

- * bringing housing finance and credit systems within reach of low income groups

    -    the devolution of more effective power and resources
to city government and the evolution of new forms of
local governance;

    -    the generation of greater self-reliance.

59. Internationally, the dominant concern remains with the
international economic setting, which has a strong though
mostly indirect influence on the urban situation in
developing countries. In addition, however, direct
international support for urban development in developing
countries has been hesitant, ill-defined and negligible
compared to real needs. The former is addressed in Chapter
XI but a transition to more livable and sustainable cities
in the Third World depends critically on extending support
for national action.

60. At the present juncture in the evolution of the urban
situation in the Third world, the basic trends are not
likely to change fundamentally for many years. Developing
countries confront a huge and rapidly growing backlog of
unattended needs, a rising number of urban dwellers, a
serious resource squeeze and economic stagnation. The
traditional responses have not worked and governments have
not been in a position to perform their roles. The
question then arises as to what governments can do to
address various needs and facilitate the transition to more
sustainable urban settlements under existing conditions of
economic retrenchment and scarcity. In rethinking possible

approaches, it is necessary to start from the fact that the cities of developing countries are for the most part being built from the bottom up, by the poor majority who get little if any help, and are often blocked in their own efforts.

61.   In this situation, there are no quick-fix solutions, nor are there ready-made models, manuals and guidelines that a country can follow. The accompanying box illustrates the diversity involved in the urban situation. The above mentioned directions imply a process of development, social transformation and institutional change which will involve search, learning, trial and error and significant political choices. Custom-made approaches will need to worked out locally, corresponding to local conditions, socio-political orientation and the phase of development of the country in question. The following is offered with these caveats in mind.

BOX 5

Factors shaping diversity of environment-development situations in urban settlements

(i)   Nature of socio-political system and institutions, including powers of central and local governments; national development strategy; national strategy of human settlements and urbanization; ownership of land and of means of production; history, culture, tradition, infrastructure and other heritage from the past; etc.;

(ii)   Level of national and local development and economic prosperity; per capita GNP; natural resource endowment; motor car population; etc;

(iii)   Physical and spatial characteristics of a settlement, including its size, geographical and micro-location, topography, climate, ecosystem, exposure to natural disasters, original layout and its objectives, etc;

(iv)   Demographic characteristics of a country and of a settlement, including the size of its population, its growth and composition, migration flows, etc.;

(v)   Social characteristics of a country and of a settlement, including its class character, occupational profile, unemployment situation, etc.;

(vi)   The position and weight of a settlement in the country's economy and political set-up, support it gets, investment it receives, subsidies it obtains, its relationship with other cities and with the rural areas, conditions in other cities and in the rural areas etc.;

(vii)   Models of urban development that it follows, technologies and energy sources that it relies upon, etc.;

(viii) Its linkages with the world economy, with whom it trades, what is exports and what it imports, the role of TNCs and of foreign capital in its industrial development and services, etc.

A.   NATIONAL RESPONSES

a.   Integrate Urban and Macroeconomic Policy and Development

62.   As a matter of priority, governments should bring the
         process of urbanization and urban development into the
         mainstream of macroeconomic planning, development
         strategy and policy-making. They should strive for more
         effective coordination and cooperation between different
         levels of government, and between different sectors and
         ministries of governments. They should work for greater
         awareness of interactions between policy options and
         domains, for a more informed and deliberate balancing of
         these and of various actions and social objectives,
         including short-term and longer-term goals, and avoid
         situations where policies and actions act at
         counter-purposes and neutralize each other.

b.   Adopt Local Models for Sustainable Urban Development.

63.   The dominant models of urban development followed
         implicitly or explicitly by developing countries have
         contributed to and exacerbated the dilemmas faced by
         many cities. As a matter of priority, given the
         resource, energy and other transitions underway, these
         models should be evaluated critically against their
         implications for national development objectives,
         resource and environmental impacts, and social and
         economic costs.

64.   Alternative models should be devised that take fully
         into account local climate and environmental conditions,
         traditional and proven house designs, habits and customs
         of people, stage of development and societal priorities,
         social equity, etc. Alternative models should be based,

among other things, on a set of basic goals and
indicators for energy and resource efficiency and
conservation in industry, housing, transport, urban food
sytem, recycling of waste, the need to cut down imports
and reduce the burden on balance of payments. They
should reflect traditional objectives concerning the
quality of life and human conditions such as
entitlements to adequate shelter, employment, social
services including health and education, public services
including electricity, water, sanitation, as well as new
objectives emerging from environment/development
interface, such as those related to air, water and food
quality. The elaboration of alternative models should
be the first step in their integration into
macroeconomic, employment, trade and sectoral policies.
They may also serve in the longer run as a dynamic tool
and a basic reference to guide the development of
cities, comparing the normative objectives with the
existing situation.

c.   Improve Housing and Living Conditions for Lower Income
        Groups, Focusing on Marginal Settlements.

65.   Degraded human habitats are often perceived as something
        inevitable and natural, as a part of the linear process
        of development, a problem which will be taken care of
        and solved as countries develop. This belief is
        convenient as it justifies status quo, non-action and
        non-expenditure to improve the conditions of the poor.
        There may be a relationship between higher levels of
        development and affluence and improved habitat for the
        poor majority, but given urbanization trends in most
        developing countries, there is no time to wait for slow
        and uncertain processes to resolve problems. A
        "business as usual" approach is no longer tenable.

66.   The urban poor will soon become the new majority. they
       represent an enormous resource for development, a
       resource that is currently underrated and underused.
       They are building the cities in the Third World. The
       so-called informal sector, made up for the most part of
       the urban poor, has clearly demonstrated a great
       capacity for innovation and development, finding
       solutions beyond the reach of conventional wisdom. The
       basic problem is not a lack of new ideas, creativity, or
       innovation, but a need to improve institutional capacity
       in order to make the solutions provided by these
       enterprising people more effective.

67.   It is urgent to rethink the ways in which governments in
       developing countries can intervene in the process of
       urbanization, so that limited resources are put to
       maximum effect in addressing the problems and the cities
       which are built are ones where conditions for lower
       income groups are greatly improved at a cost the nation
       can afford. Such rethinking, makes it necessary for
       governments to address the three interlinked aspects of:

       (i)   enabling the urban majority to improve their
               housing conditions and the provisions of basic
               services for their neighbourhoods;

       (ii)   enabling lower income groups to increase their
               real incomes; and

       (iii)   improving the efficiency with which the city's
               infrastructure and services support economic
               expansion.

68.   Given the great shortage of capital for investment,
        perhaps the most important resource available to local
        government is a local population willing and motivated
        to improve their own conditions. Indeed, these groups
        have already manifested self-reliance, solidarity, and
        grass root organization, without which they would not
        have survived. This process of self-reliance by the
        poor contributes to national capital formation; it
        mobilizes under-utilized labour, capital and land and it
        provides much needed housing, having important
        multiplier links to other economic activities. In
        cooperation with local populations, and by supporting
        processes by which low income groups acquire, maintain,
        improve and extend their homes, there are strategies
        which can considerably increase the scale of
        government's impact on the problems in far more cost-
        and resource-effective ways than the traditional system
        of production and construction of shelter.

69.   Effective government intervention in addressing city
        problems would facilitate and not hinder this process.
        It is impossible to sustain improvements in housing
        conditions unless lower income households have legal,
        affordable alternatives to invading private or public
        land or living in overcrowded, deteriorating inner city
        tenements or other forms of rental accommodation. The
        combination of high land prices within cities and low
        incomes are the two factors which underpin poor
        housing. Squatter settlements or other forms of illegal
        settlement exist largely because their inhabitants have
        no chance of affording a legal land plot. Inner city
        slums exist largely because land prices there are
        relatively high and there are many low income people who
        need easy and cheap access to jobs closeby.

70.   Given the low income of the people who need to live
       there, it is through the very high densities of
       occupation and minimal investment in repairs,
       maintenance and provision of services and facilities
       that landlords obtain the return they expect from their
       relatively valuable site. In addition, it is impossible
       to mobilize people living in illegal settlements to
       improve conditions there and work with public agencies
       in installing infrastructure and services if their
       tenure remains illegal or uncertain. Without some form
       of secure tenure, neither the formal nor informal sector
       can afford to invest time and money in improving housing
       and associated services. Without a defensible claim to
       land, settlements will always be illegal and temporary,
       always in fear of processes that will force their
       citizens to move on. Finally, without government action
       to guarantee urban migrants and lower income groups
       access to cheap, legal house plots and without some
       public control over land use and/or land sales, the
       problems caused by cities' haphazard physical growth
       cannot be addressed effectively.

71.   The small-scale construction sector is often dubbed
       "informal", because of its tendency to ignore,
       circumvent or consciously break the formal rules set for
       the housing sector in planning regulations and building
       codes. In the process, it demonstrates that in many
       cases these codes and standards are unreasonable and are
       a barrier to effective low-cost development of shelter
       for people.

72.   Any attempt at developing more apprioriate standards
       must understand the complexities of this system, and the
       best results may come from institutional changes. For
       example, if they are genuinely representative, local
       governments are more likely to adopt appropriate
       standards and regulations than are central governments.

Some standards may be necessary to protect public health
and can even be supportive of economic development.
What is important is that standards should be absolutely
the minimal necessary, in order that they should not act
as a barrier to the participation of lowest income
households in shelter.

73.   Tenured land and reasonable standards determined by the
people living in an area can facilitate the provision of
basic infrastructure such as clean water, drainage and
access to an electrical tap. This process encourages
self-help and makes more effective use of scarce public
sector funds than full-scale public housing projects.
In some cases, infrastructure lags because of a lack of
co-ordination between a number of public agencies,
perhaps even at different levels of government. Setting
up further layers of bureaucracy to achieve this
co-ordination usually leads to even more inter-agency
confusion and rivalry. This is a case where
institutional learning is essential. More commonly, the
problem is simply a matter of financial priorities.
Infrastructure competes with industrial and rural
development, schooling and health services for scarce
budgetary resources. One great advantage of
infrastructure in legal settlements is that it usually
results in some fairly direct increase in wealth for the
neighbourhood.

74.   Government support to community groups formed by lower
income residents can provide the most coherent and
effective ways of improving existing "illegal
settlements" and developing new low income settlements.
To mount such support, it would be necessary to :

(a) Recognize the legal right of those living in illegal
    settlements to be there, with secure forms of tenure
    complemented by the public provision of basic
    infrastructure and services guided by their
    inhabitants' expressed priorities and with their
    collaboration in implementation;

(b) Release unutilized or underutilized land and other
    measures to ensure that land sites for housing are
    available, which provide legal alternatives to
    squatter settlements; in this, care needs to be taken
    to ensure sufficient space for sport, recreation and
    children's play and good connection to the main
    centres of employment or income for lower income
    groups;

(c) Reformulate building and planning codes so these do
    not demand unrealistically high standards which lower
    income groups cannot attain;

(d) Support the widespread production of cheap building
    materials and common components, fixtures and
    fittings;

(e) Change housing finance systems so these make
    available cheap loans to lower income groups and to
    community groups without unrealistic demands for
    collateral, subsidize interest rates on such loans,
    etc.

75. This implies a different form of government intervention
    in shelter and housing. It means that government agencies
    should work to support the efforts of low income groups
    and their community organizations in improving their
    condition. It means public agencies working directly with
    the community organizations which usually exist within the

largely self-built neighbourhoods or tenement districts,
in designing and implementing responses to these needs and
in agreeing on the relative contribution of each to the
implementation. It implies that government acquires a
major new resource to help in all investment and
maintenance programmes - the support of its citizens who
will contribute their skills and energy to such investment
and maintenance programmes. But citizens will only do so
if they judge such programmes to be in their interest and
to be addressing their problems.

Box 6

An illustration of alternative ways to use $20 Million
to improve housing and living conditions of the poor
in a city of 1 million

Option 1: 2,000 public housing units for low income families (6
people) are built at $10,000 each. Conditions thus
improved for 12,000 people. If city population grows
at 5% annually, 630,000 new inhabitants will be added
in a ten year period: only a tiny fraction of these
will have benefited from the housing project.

Option 2: A site and service scheme is undertaken, with
families responsible to build a house on an allocated
site, which is supplied with piped water, connection
with sewage and electricity grid, road and drainage.
At $2000 per plot, this means housing for some 60,000
people, or about 10% of the population increment in a
period of ten years.

Option 3: A neighbourhood organization grouping 1000 houses
(i.e. 6000 people) is allocated $100,000 to improve
its site as it chooses, (e.g. improve site drainage,
roads and pathways, build health clinic, establish
small cooperatives to produce inexpensive building
materials, reblock the neighbourhood and provide new
housing sites, etc.). With $10 million, 100 such
community initiatives can be supported reaching a
total of 600,000 people, 5000-10000 new housing plots
added, many jobs established, and various multiplier
effects achieved. The remaining $10 million could be
used for a major investment, such as piped water for
the neighbourhoods.

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d.   Develop Small and Intermediate Urban Centres

76.   More than half of urban population in many Third World
      nations lives in small and intermediate urban centres, and
      given the trends through the year 2000 and beyond, a large
      number of new centres will be needed and built. The main
      challenge in managing their growth is to ensure they become
      foci of economic and social development.

77.   Many Third World countries have been attracted to spatial
      policies that could develop small and intermediate centres
      and, at the same time, limit the growth of the nation's
      often overwhelming dominant major city. A grossly
      unbalanced pattern of urban growth can not only increase
      interregional economic and environmental disparities but
      also have serious consequences for national unity and
      political stability.

78.   Although far from conclusive, the evidence suggests that
      most attempts to plan the physical decentralization of
      growth have been unsuccessful. The reasons for this are
      many but most relate to the institutional and political
      divorce of macroeconomic and urban policy. Fiscal and
      sectoral policies are much more powerful than physical
      planning and regional development programmes and usually
      run in direct opposition to their decentralization goals.
      Public investment, in the main, follows the same
      centralizing logic as private investment, building urban
      infrastructure, health and education facilities where the
      demand exists, in the primate city. Subsidies and price
      controls on food, energy and other services result in an
      effective transfer of income from the rural areas and small
      and intermediate centres to the major cities.

79. If decentralization is to be pursued as a major goal,
     policies must be concerted and interventions which have the
     effect of increasing the attractiveness of the major centre
     need to be avoided. The best way to encourage the growth
     of small and intermediate centres is to build on the
     national economic advantages of their regions and to
     decentralize the power, to plan the region and provide
     essential infrastructure and services. National agencies
     or ministries are not adequately equipped to understand and
     assess the mix of resources, constraints and linkages which
     is unique to each centre and to date they have shown little
     effectiveness in this regard. If governments based in
     small and intermediate urban centres are to realize their
     considerable potential in working with local populations to
     formulate and implement local development initiatives and
     mobilize local resources, national governments must
     guarantee them the power, resources and trained personnel
     to do so.

80. Macroeconomic, urban and rural development strategies can
     be made fundamentally complementary rather than opposed.
     The development of small and intermediate centres can play
     a strategic role in the development process, expanding
     income and employment opportunities in the regions they
     serve and absorbing population growth that both rural areas
     and the major centres cannot cope with. As discussed in
     Chapter VII, strong, small and intermediate urban centres
     are vital to support growth in agricultural production.
     They are the locations from which farmers can be reached
     with better access to productive services, inputs, credit,
     storage, marketing and processing facilities. They are
     also the best location through which the population outside
     large cities can get access to many health and educational
     services or facilities.

e.   Practice greater self-reliance

81. Self-reliance of developing countries- collective, national
     and local - can play a very special role in coping with
     their urban problems and managing the urban crisis.
     Tapping the underutilized human potential and resources in
     the urban areas would ease some of their difficulties,
     contribute to their environmentally sustainable development
     and ease the drain on their scarce financial resources.
     Indeed, cities should view environmental action as an
     economic opportunity. Two areas illustrate this : waste
     recycling and urban agriculture.

82. Solid waste has become one of major urban problems in many
     developing countries, with large portions of it dumped and
     uncollected. An organized and efficiently run system of
     waste management and recycling would yield a number of
     development and environment benefits. It would help in the
     collection of waste; it would result in significant savings
     of raw materials which could be reprocessed and recycled;
     it would contribute to foreign exchange savings by reducing
     the need for importing various materials; it would bolster
     the local energy situation through biogas production; it
     would yield fertilizer for urban agriculture through
     composting of organic waste; it would provide a number of
     new jobs, etc.

83. The promotion and organization of urban agriculture as a
     complement to food security strategies provides another
     immediate and feasible type of response to urban poverty
     and blight in Third World cities. Urban agriculture should
     be given official recognition and support, and access to
     available land within cities assured. New technological
     breakthroughs and experience from intensive gardening
     practiced in many countries should be diffused and applied
     to the extent possible.

84.   Urban agriculture has a long history. For example, it has
      been promoted and organized in some industrialized and
      developing countries during periods of emergency and war.
      Their experience should be drawn on. In many Third World
      countries agricultural activities are kept out of city
      bounds, and urban agriculture is limited to cash crops
      planted at city perimeters mainly for consumption by
      better-off sectors of population. The primary purpose of
      an organized urban agriculture should be to help improve
      the nutritional standards of underprivileged strata of
      population, to help their family budgets, and where
      possible to enable them to earn some additional income.
      Among secondary beneficial impacts, urban agriculture would
      result in more green space, clearing of garbage dumps,
      recycling of household waste, tilling of compacted soil,
      etc.

85.   There is a great deal that Third World cities can learn
      from each other in these and other areas. The management
      and organization of urban agglomerations offers great scope
      for mutual cooperation. The exchange of information and
      knowledge, comparative analysis of experience and
      approaches, pooling of forces in trying to work out
      solutions to common problems, exchanging technical
      expertise, jointly training of cadres of urban managers and
      technicians are all candidates for the agenda. The
      Commission is convinced that measures to promote
      cooperation in these areas are essential to overcome the
      present difficult situation.

f.   Devolve More Effective Power and Resources on City
      Government

86.   Past and present experience with urbanization in all parts
      of the world demonstrates the fundamental role of social
      organization, strong institutions, and effective government

to guide and channel urban growth and development. In many
developing countries this essential precondition for
managed urban processes simply does not exist. Moreover,
the gap between the rate and scale of urbanization in the
Third World and the institutional capacity to manage it is
now large and is growing at a dangerous pace.

87. In the present context of rapid urbanization and economic
crisis facing most Third World nations, the developmental
role of the local government and of local democracy assumes
great importance. The promotion of new ideas on local
government reform is a critical part of the wider effort to
counter the deterioration in housing and living conditions
and to develop more livable and sustainable cities.

88. While many things will be required, experience generally
indicates that city government cannot be effective unless
it has full access to the political power and financial and
revenue sources needed to perform those roles and provide
those services that can best be undertaken at the level of
the urban region. Given the present situation in, and the
enormous pressures on many Third World cities, effective
city government will also require novel forms of local
governance, recognizing and supporting the institutions
that spring up to fill the vacuum of government in
spontaneous and illegal settlements.

89. There are a large number of functions and services that can
best be delivered at the level of the urban region; but
which city governments in the Third World rarely have the
powers or the resources to fulfill. These include:

(i)   provision to all citizens of those services and
        facilities which are essential for a healthy and
        productive life within a city: shelter, a plentiful
        supply of clean water, sewers, or other means to
        dispose of human wastes, drainage, collection and
        disposal of household wastes, and health and
        educational services and facilities, etc;

(ii)   provision and maintenance of the infrastructure and
        services essential for the efficiency and
        functioning of a city's economy and to the expansion
        of employment, e.g. (roads, electricity supply,
        telephones, public transport services and traffic
        management, water supply, solid and liquid waste
        disposal services for industries and commerce, etc.;

(iii)   measures to ensure the orderly physical growth of
        the city which in turn demands that land is
        available in appropriate locations and appropriate
        prices to provide for new housing and new
        enterprises.

90. In many instances, national governments have assigned local
     governments many of these tasks and responsibilities, but
     without corresponding political power, decision-making
     capacity and access to resources. This leads to
     frustration, to continuing criticism of local government
     for insufficient and inefficient services and a downward
     spiral of weakness feeding on weakness. The needs are
     staggering; the means available limited. Through what
     means can local government come to play effectively its
     dual role as a key developmental institution, and as the
     institution through which local inhabitants are involved,
     their needs identified, local development plans formulated
     and implemented?

91. The ability of city governments to fulfill these roles
     needs to be bolstered through a variety of means. Access
     to various sources of revenue, tapping more of the wealth
     generated in the city, for public uses is essential.
     Developing sufficient power to attract scarce but essential
     leadership resources at all levels is also necessary. The
     more deliberate application and use of a vast array of
     tools which have been applied successfully in many
     countries needs to be facilitated, especially those having
     to do with control of land use and the real estate market,
     taxation and cross-subsidies. These instruments assume
     special importance in view of the polarized urbanization
     and marked inequities common to many cities in the Third
     World.

92. At the same time, it must be recognized that there is
     little scope to improve fundamentally the situation in
     these settlements without dynamic and balanced development,
     provision of employment, jobs and incomes for their
     residents, and increasing economic and financial resources
     to meet the existing and emerging needs. Flexibility of
     action is increased and new options become available
     through greater and expanding resources, and a broader
     spectrum of societal goals can be pursued.

93. There exists a great diversity among developing countries
     in their ability and opportunities to create wealth, and in
     the levels of development which they have already
     attained. In a number of large cities of the Third World,
     per capita incomes are relatively high, a solid industrial
     base exists, and often a highly skewed distribution of
     resources occurs, tellingly illustrated in one city that
     the Commission visited where 1000 square meters apartments
     were being built and sold within looking distance of
     teeming marginal settlements and poverty. In these urban
     areas, though they may often appear as being on the brink

of a disaster, there are also opportunities, scope and
margin for internal mobilization of resources and
redistribution exists, and dynamic self-reliant
settlements' strategies are possible. At the other end of
the spectrum, however, there is a large number of Third
World cities with low per capita incomes, no solid economic
base and prospects, and little to redistribute. Very few
options exist there, if any.

g.   Strengthen Local Governance and Community Participation

94.   One of the approaches which is of special importance
      concerns the link between local government and the
      community organizations. For the poor inhabitants of
      cities, their scale of action is confined to their
      neighbourhood and community and it is here that they
      organize, often to fill gaps in services which the local
      government does not provide. Among other things, community
      groups mobilize and organize fund raising or mutual self
      help to address environmental and health problems within
      the immediate area.

95.   Community organizations could help greatly in improving
      housing and living conditions, in building, maintaining and
      improving infrastructure, and in providing basic services.
      Such organizations usually have the capacity to mobilize
      labour and to organize a whole range of activities. The
      local governments should recognize this potential, should
      support these organizations, acknowledge their rights,
      powers and roles, and work jointly with them in managing
      and solving city problems. The decentralization of tasks
      and responsibilities to neighbourhood level with government
      agencies playing a major role in supporting and advising
      community organizations makes the scale of the problem seem
      more manageable.

96. Much more needs to be known about the resources the poorer dwellers of cities need, or about the skills and resources that they can contribute. More needs to be known about the ways and means to maximize use of local skills and local resources in producing inexpensive and durable building materials. The lessons derived from the design and technology of vernacular architecture need to be applied, which have been developed over the ages in response to local needs and utilizing local resources. What is needed above all, however, is to give a full policy recognition by governments to the need to develop new approaches and partnerships with low income inhabitants and their organizations.

B.   INTERNATIONAL CO-OPERATION

97. The ability of developing countries to deal with their problems of urbanization and urban development, like their ability to deal with problems in many other areas, is influenced, sometimes critically, by their position in their regional and in the world economic system. While this is the subject of another chapter, the Commission would stress here that sustainable patterns of economic recovery and the fulfilment of development objectives charted over the years in the United Nations would provide the most critical support needed for more effective national responses to the challenge of urbanization in the Third World. A major expansion of cities' exports, for example, could do more to generate the employment income and revenues needed for housing, urban services and development than anything else. Given these and other links to the system and the trends underway, the world community of nations needs to recognize a basic principle of a shared responsibility for dealing with the urban situation in the Third World. This principle should be the very foundation of international strategy and action

on human settlements. It should help introduce a degree of
reciprocity into the deliberations on the subject, and
provide a policy foundation for mounting systematic and
ample assistance to developing countries.

a.   Increased Financial Assistance for Urban Development

98.   Developing countries have enjoyed a degree of direct
      international support for their efforts to manage
      urbanization and urban development. This has taken many
      forms and has been funded principally through bilateral and
      multilateral assistance and voluntary agencies. The UN
      Centre for Habitat and Human Settlements provides planning
      and technical support for projects funded by UNDP.

99.   Development assistance for human settlements has been
      flowing to the developing countries, in both
      non-concessional and concessional form. Monies have been
      disbursed for projects involving construction and
      improvement of shelter, for water supply, sanitation and
      garbage disposal, for public transport, for improved urban
      management through tax collection schemes and cadastral
      surveys, for equipment and training, and so on. In the
      absence of reliable figures, the total amount of this
      financial assistance has been estimated at about $3 billion
      annually, disbursed by multilateral, bilateral and
      voluntary agencies. Of this, $1.6 billion was in
      concessional form, or less than 5% of total concessional
      assistance; $1.4 billion was non-concessional, or 6.5% of
      total non-concessional development assistance. This has
      been minimal compared to the real needs. Moreover, it has
      reached only a very small percentage of cities in the Third
      World, often national capitals and industrial centres with
      populations of one million or more, and it has been
      parcelled up between many needs.

100. In view of the earlier analysis and projected trends, it is
     evident that there is a need for a continuing
     re-examination of the need for and scope of development
     assistance for human settlements and of the effectiveness
     of the policies and actions of multilateral and bilateral
     development institutions and banks in supporting
     sustainable modes of urban development in developing
     countries. In addition, taking into account the
     unavoidable gap between the requirements and what is likely
     to be available through classical modes of international
     development financing, new approaches to financing should
     be given serious consideration, including possible reliance
     on automatic financing schemes. This continuing review
     might be conducted by the UN Centre on Habitat and Human
     Settlements, in co-operation with the institutions, and
     should lead to recommendations both for development
     assistance targets and for policy and programme changes.

101. In the meantime, the bilateral and multilateral development
     institutions should greatly increase their support in the
     following areas:

     -    institution building aimed at strengthening local
          government;

     -    new low-cost urban development technologies tailored
          to the needs of Third World cities;

     -    information and technology exchange programmes between
          Third World cities.

b.   Support for Institution Building

(To be written after discussion in Harare.)

c.   Low-Cost Urban Development Technologies.

102. There is a growing need for technologies geared to the
     specific social, economic and environmental conditions
     prevailing in a given setting; their basic characteristics
     and functions should be determined in collaboration and
     consultation with the representatives and the people in the
     social milieu in which they will be ultimately utilized.
     Special programmes should be launched, with international
     support, to develop such technologies. R&D should be
     carried out on the principle of networking of competent
     institutions, academic and research groups, public and
     private enterprises. Such technologies should be available
     on favourable terms and conditions, and should be widely
     diffused.

d.   Information and Technology Exchange Programmes among
     Developing Countries.

103. Developing countries have a lot to learn from each other.
     They also can do a great deal together towards resolving
     their urban settlements problems and jointly developing
     their management and technical capabilities. While
     industrialized countries have many regional co-operative
     programmes involving urban ministries and officials, urban
     institutes, private development bodies and others, at
     national, state and city level, developing countries have
     few, if any. Such programmes would contribute to
     self-reliant approaches to urban problems in developing
     countries, and to a joint quest for sustainable patterns of
     development and approaches suited to Third World cities.
     Most effectively, they would be centred in existing

regional bodies, supported by bilateral and multilateral funding.

IV. **A CALL FOR A GLOBAL STRATEGY FOR SUSTAINABLE CITIES**

104. Mankind finds itself on the threshold of a new era of human settlements and faces a historical challenge to devise appropriate strategies and to implement them. The transition will be a difficult and uneven one, taking place as it does in a global setting which is characterized, on the one hand, by the immense promise for all inherent in high levels of development, prosperity, advanced social organization and S&T achievements and potential, and, on the other hand, by misuse and waste of societal achievements and of environmental and natural resource capital, of global, national and local power, economic and social disparities, inequities and injustices, and of poverty and destitution in which the majority of mankind continues to live.

105. By their very nature and because of their being both a cause and effect in many relationships, cities offer a very convenient handle with which to pursue an integrated and "anticipate and prevent" approach to goals of sustainable development. In fact, cities span different levels of action, ranging from an individual's lifestyle and behaviour to such global issues as the functioning of the world economy. They also encompass such varied effects as those concerning health and well-being of city dwellers and global climate change. To achieve sustainable development goals in cities would concern not only the micro level and the people directly involved but would also go a long way towards fulfilment of global and macro-objectives of sustainable development.

106. For these reasons, and spurred by the ongoing urban crisis
and the failure of the customary human settlements paradigm
to provide explanations and solutions, a conceptual shift
has been taking place. Cities are beginning to be
perceived in their many dimensions; the influences and
factors that drive and shape them, and the visible and less
obvious linkages that bind them are also becoming
progressively better understood. This is not to say that
our ability to act upon this new understanding has improved
much. However, the very fact that this understanding is
crystallizing means also that an important step forward has
been made and that mankind and the international community
have a more solid and balanced perception from which to
evolve the approaches needed to meet the urban and
sustainable development challenge.

107. The Commission focussed its comments on the urban situation
in the Third World as the most pressing and urgent
concern. Though the urban crisis in developing countries
is a difficult and complex one, coping with it and bringing
it to a successful resolution is not a mission impossible.
Solutions are within reach provided high political priority
is assigned to the subject, adequate financial, manpower
and institutional resources put aside for the purpose,
social organization applied, civil society and people fully
involved in the undertaking, and international cooperation
and solidarity practiced.

108. The Commission calls for a <u>global strategy for sustainable
cities composed of a series of regional strategies to be
elaborated, agreed to and implemented over the decades to
come.</u> Starting from the urban crisis in the Third World,
as the burning issue of the day, the strategy should
involve <u>all</u> countries and <u>all</u> urban settlements in a common
effort to rethink and reshape the cities of today and to
prepare the cities of the future.

109. Such a strategy should highlight the needs and objectives, and provide a broad framework to guide national and international action and responses to urban challenge. Responsibilities and benefits should be shared, while tasks should be divided or jointly undertaken. The strategy should contain such functional objectives as improving the data and analytical framework needed to plan and manage cities, and establishing a global reference base of the profile and performance of major world cities as an essential aid in implementing strategy and directing future action. The strategy should focus on critical issues at a given point in time. For example, the objective of supporting the construction of low cost housing for people in the marginal settlements in the Third World cities makes it possible to establish targets and follow their implementation and offers a basis for a major national and international undertaking at the present time. One of the components of the strategy should be that of education and training, both as a way to address and shape the behaviour at the level of the citizen and to sensitize public opinion, and as a means to build-up the necessary talent and technical knowledge needed to manage and run contemporary cities.

110. The strategy should deal with enduring issues such as human health and environmental pollution in cities. It should be aware of the role of transnational corporations in the global urban network. In particular, it should aim at harnessing the S&T potential for the purpose of sustainable cities, and as an essential back-up to socio-economic approaches that are likely to evolve. In this context, the urbanization of the countryside assumes importance on account of technological and communication advances and the changing nature of economic activities which are making it possible.

111. Cities have a human face. They are of concern to everybody and a good catalyst for action. They are linked evermore tightly through a worldwide economic, transport and communications network, and through the global environment. Cities that provide incomes, better living, healthy and fulfilling environment for their inhabitants, which are less costly and wasteful in terms of energy, time, money, land, and which are less harmful in their impacts on the nature and the environment, are in the interest of all. Their prospects are intertwined. They should offer an opening for new types of international cooperation and solidarity, which would cut across traditional institutional and physical boundaries, and via a worldwide network of key points in fact provide access to the very heart of many issues on the agenda of sustainable development. Most of all, cities offer an opportunity to involve directly the people and the grass-root organizations, which would provide the true driving force in the joint undertaking towards and sustainable future of their habitat and of the planet Earth.

112. In conclusion, on the eve of the 21st century, the city should be used as a focus around which to mobilize and build a massive global initiative on sustainable development.