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REVIEW OF SECTORAL CLUSTERS, FIRST PHASE: (a) HEALTH,
HUMAN SETTLEMENTS AND FRESHWATER

Assessment of progress achieved in promoting sustainable
human settlement development

Report of the Secretary-General

SUMMARY

This report covers progress achieved in the implementation of chapters 7
and 21 of Agenda 21, on promoting sustainable human settlement development and
environmentally sound management of solid wastes and sewage-related issues.
It is based in large measure on information supplied by the United Nations
Centre for Human Settlements, acting as task manager for the Inter-Agency
Committee on Sustainable Development (IACSD) and other agencies of the United
Nations system with programmes and activities related to chapters 7 and 21.
The full report of the task manager is supplied as a background paper for the
information of the Commission. This report also incorporates, to the extent
possible, information provided in country reports and reports of
non-governmental organizations. Particular attention is invited to
section IV, containing conclusions and recommendations.

CONTENTS

INTRODUCTION

1.   The Commission on Sustainable Development adopted a multi-year thematic programme of work at its first session in June 1993 as the framework to review progress achieved in implementing Agenda 21. Under the terms of the programme of work, the Commission requested that a number of thematic reports be prepared for its sessions between 1994 and 1996. The present report is one of the five thematic reports requested by the Commission's programme of work for 1994. It is based on a background paper on human settlements prepared by the United Nations Centre for Human Settlements (UNCHS) (Habitat). 1/

2.   The present report reviews the trends and needs in implementing chapter 7 of Agenda 21, on promoting sustainable human settlement development. It also summarizes a number of reports received from Governments and discusses the role and contribution of major groups concerned with human settlements, including non-governmental organizations, business and industry, and two organizations of local authorities.

3.   The report focuses on the main trends that can be observed in the governmental, intergovernmental and non-governmental spheres and presents a number of recommendations for the consideration of the Commission.

I. GENERAL OVERVIEW

4.   Chapter 7 of Agenda 21 contains over 100 activities under eight programme areas:

    (a) Adequate shelter for all;

    (b) Human settlement management;

    (c) Sustainable land-use planning and management;

    (d) Environmental infrastructure;

    (e) Sustainable energy and transportation in human settlements;

    (f) Human settlement planning in disaster-prone areas;

    (g) Sustainable construction industry activities;

    (h) Capacity-building for human settlement development.

The chapter's estimated financial needs constitute one third of the annual estimated cost of implementing the entire Agenda 21 and is the highest cost estimate (over US$ 200 billion per year 2/) among all the chapters of Agenda 21.

5.   The chapter's programmes advocate an enabling approach as well as cooperation with a wide range of public, private and community partners in the pursuit of sustainable development. The accent is on broad-based participation

and on an intersectoral and integrated approach to human settlements management and development.

6.   Statistical figures illustrate the growing importance of human settlements issue in sustainable development efforts. About 1.3 billion people, mostly in developing countries, live in urban areas that do not meet World Health Organization (WHO) standards for airborne dust and smoke. Globally, one out of five individuals lives in cities that exceed WHO standards for sulphur dioxide. Currently, 1.4 billion people are living below the poverty line and up to one third (and sometimes more) of urban populations live in substandard housing. Global population is expected to increase by 3.7 billion people by 2030. Ninety per cent of this increase is estimated to take place in developing countries, of which 90 per cent will be urban. This puts the sectoral programme activities of Agenda 21 against the background of the human settlements issue: most Agenda 21 activities are likely to be implemented, coordinated, and managed in cities and towns.

7.   Human settlements are increasingly the focus of attention in dealing with national and international problems such as poverty alleviation, unemployment, population growth and consumption patterns at the source - that is, at the local level. However, breaking the cycle of poverty and environmental decline will, paradoxically, require further economic growth, most of which is likely to take place in the towns and cities of developing countries. This places chapter 7 in a central place in the implementation of Agenda 21.

II.   REVIEW OF PROGRESS ACHIEVED IN THE PROGRAMME AREAS OF CHAPTER 7

A.   International cooperation

8.   United Nations system-wide activities relevant to chapter 7 seem to concentrate on human settlements management, environmental infrastructure, and capacity-building. New initiatives in other programme areas, such as urban transport and land resource management, are somewhat fewer. Similarly, although there is general agreement that shelter is an important issue to be addressed, this has not been followed by accelerating the implementation of activities in programme area (a) (adequate shelter for all) through programmes such as the Global Strategy for Shelter by the Year 2000.

9.   In the majority of United Nations agencies, there appears to be limited change in work programme priorities specific to the programme areas of chapter 7. Some important exceptions include, inter alia, the Secretary-General's decision, in early 1993, to foster a closer working relationship and joint programming between UNEP and UNCHS (Habitat). 3/ Similarly, the World Bank created a vice-presidency for environmentally sustainable development, also in 1993. 4/ These new initiatives are facilitating the type of cross-sectoral approaches to settlements management which is essential to the successful implementation of Agenda 21. Another initiative, UNDP's Capacity 21 Programme, launched in direct response to Agenda 21, appears to have the potential to contribute to the implementation of

chapter 7, especially if it is part of a broader inter-agency partnership for human settlements activities.

    Programme area (a)

10. The objective is to achieve adequate shelter for rapidly growing populations and for the currently deprived urban and rural poor through an enabling and environmentally sustainable approach to shelter development and improvement. Success in this programme area depends largely on the degree of collaboration and partnership between the Government and the wide range of economic agents and social groups involved in the construction of housing.

11. The major global programme for achieving adequate shelter for all is the Global Strategy for Shelter to the Year 2000, developed by UNCHS (Habitat) in 1988. This Strategy calls for the establishment of an enabling legislative and regulatory environment that can facilitate accelerated improvement and construction of housing, particularly by the urban and rural poor. Numerous examples of post-UNCED inter-agency collaboration exist. Among these are the Shelter Strategy Support Programme (Habitat/UNDP); Housing Indicators Programme (Habitat/World Bank); shelter-related lending operations of the World Bank; and the building standards and regulations projects (UNIDO/Habitat). However, the existing level of national and international work on shelter for all is below the current demand and future needs.

    Programme area (b)

12. The main objective is to ensure sustainable management of urban settlements so as to improve the living conditions of people as a way to reach economic development goals. A strategic approach in this area has been the Urban Management Programme (Habitat/World Bank/UNDP). The Programme emphasizes research, information dissemination and capacity-building through regional networks of expertise. It focuses on five core issues: land management, infrastructure management, municipal finance and administration, urban poverty alleviation, and the urban environment. Its main environmental arm is the Sustainable Cities Programme which works with local authorities and their public and private partners.

13. Other relevant international projects are the Healthy Cities Programme (WHO); 5/ the Municipal Development Programme for Africa (World Bank); Urban Poverty Partnership (ILO/Habitat/UNDP/United Nations Volunteers); Urban Basic Services and the Area-based Programmes (both of UNICEF); 6/ and the growing environmental lending programme of the World Bank in the urban sector. A continuing problem area is reaching a common vision of urban development shared by the multilateral and bilateral institutions. 7/ A common vision in this area is also likely to improve governmental, intergovernmental and non-governmental partnerships.

    Programme area (c)

14. The objective is to provide for the land requirements of human settlements through environmentally sound physical planning and land use that facilitate

access to land and, where appropriate, the encouragement of communally and collectively owned and managed land.

15. Activities in the programme area involve promoting advancing, monitoring and assessing land policies and strategies, studying the impact of land-related activities on human settlements development, analysis of procedures, regulations and instruments for the progressive modernization of land-tenure systems, and the formulation and implementation of land policies. An innovative approach relevant to this programme area has been "land sharing". 8/ Other efforts include the Urban Management Programme, which provides advisory assistance on land tenure and land development policies and mechanisms. Bilateral assistance in this area also appears to be growing.

16. Matching the challenge of rapid urban growth and its multiple and conflicting demands on land poses a problem. The ongoing bilateral and multilateral efforts appear to be below the level of current needs.

Programme area (d)

17. This programme area is closely related to that of chapter 21 of Agenda 21, on solid waste management, which is also slated for review by the Commission on Sustainable Development in 1994. Instead of a separate report, a brief note on chapter 21, prepared by UNCHS (Habitat), is to be found in the annex below.

18. This programme area targets the year 2025 for the provision of adequate environmental infrastructure facilities in all settlements. Agency initiatives mentioned earlier, such as the Sustainable Cities Programmes and the Community Development Programme, direct their activities towards local capacity-building, addressing equity concerns through standard-setting, and building partnerships among the range of institutional actors. The World Bank, UNDP and UNCHS (Habitat) are taking steps to assess the potential role of the private sector and to develop programmes that would strengthen this sector's involvement in infrastructure development.

19. The ongoing programmes have produced a number of lessons which need to be integrated into future programme design. Among them are the limitations of sectoral planning; lack of community involvement in project development; emphasis of investments in new provision at the expense of maintenance; and inadequate financing for infrastructure suppliers.

Programme area (e)

20. This programme area aims for the wider use of new and renewable sources of energy and efficiency in the household and in the transportation of people and goods in the human settlements.

21. Numerous United Nations agencies are involved in promoting new and renewable energy systems and technologies; UNIDO promotes their manufacture, UNESCO provides training in their use and development, FAO is involved in fuelwood production, and UNCHS (Habitat) promotes wider use of biomass energy technologies. The World Bank has extensive lending for urban transportation, and the assistance is accompanied with considerable research on the issue. This

is an area where regional economic commissions carry out a number of activities such as workshops (ECE), guidelines for sustainable energy and transportation (ECA), and manuals for sustainable human settlements (ESCWA). The existing multilateral work appears to lack common policies and strategies. Furthermore, there are inadequate monitoring mechanisms and lack of a comprehensive approach to energy efficiency in human settlement development.

Programme area (f)

22. Long-term environmental disaster reduction is relatively new to United Nations policies on disaster mitigation and preparedness. Most United Nations-system activities are responses to sudden natural disasters rather than long-term preventive strategies.

23. Among the contributions to more long-term results are developing risk and vulnerability assessment methods (UNICEF and UNDRO); incorporating hazard reduction into human settlement planning and management (UNCHS); developing and disseminating know-how on disaster-resistant construction materials (UNIDO); and improving preparedness (UNDRO).

24. Future activities in these and other United Nations programmes need to be better linked to sustainable development programmes. Additional areas to be addressed are orienting technical assistance programmes to build local capacity for natural hazards management; supporting the establishment of early warning systems; and improving cooperation between United Nations agencies, international non-governmental organizations and multilateral institutions.

Programme area (g)

25. The primary objective is to enable policies, strategies and technologies for the construction sector to meet human settlement development goals while avoiding harmful side-effects on human and environmental health.

26. A post-UNCED inter-agency initiative in this area is the Global Consultation on the Construction Industry, organized jointly by UNCHS and UNIDO. Other initiatives include UNDP's database for urban technologies, including data for construction, ECE's promotion of environmentally friendly building regulations, and ECA's efforts to disseminate information on sustainable construction practices.

Programme area (h)

27. Two issues are of particular importance in this programme area: basic services related to urban infrastructure, and municipal solid waste management. The key actor is the local urban authority.

28. United Nations agencies, particularly UNCHS, have ongoing programmes that provide training services as well as other capacity-building technical assistance to local authorities. Most of the programmes already mentioned involve capacity-building in the urban context. There are also specialized programmes at the regional levels, such as the Training of Trainers in Support of Municipal Management for Arab States by UNCHS/UNDP and bilateral donors.

29. It is uncertain whether the above-mentioned and other relevant initiatives entail significant human and financial resource allocations to human settlements-related issues by agencies. The ongoing trend of reduced multilateral aid flows and reduced budgets of funding agencies is likely to be an obstacle. The recent shifts in the style of work of some agencies towards increased demand orientation, consensus-building and capacity-building could be the beginnings of increased resource allocation and sharing. The UNCHS working paper indicates the need for more effective inter-agency coordination, which would respond to the scope of coordination and monitoring required to implement Agenda 21, including the area of human settlements. Given the shrinking of multilateral resources, it appears that joint programming should become the order of the day. The working paper also indicates a need to consider establishing funding mechanisms that reward multi-agency programmes which pursue Agenda 21 goals in cooperation with the "major groups".

B. National experience

30. On the whole, the information received from Governments justifies observations rather than strong and reliable trends. 9/ Reports received from developed countries were in general more detailed and more focused on the programme areas of chapter 7. This may be an indication that developing countries require further assistance, cooperation and other technical support in monitoring Agenda 21 implementation to balance the information from developed and developing countries.

1. Developing countries

31. A programmatic review of activities related to sustainable human settlements in the developing countries will require more specific and detailed information. Of the reports received, none had specific programmatic information, and few reports had distinct sections relevant to chapter 7 as a whole. Furthermore, more reports would be needed to make geographical comparisons or identify regional trends.

32. Some developing countries indicate that they have formulated national housing strategies, land tenure bills, agricultural and land development zoning regulations and infrastructure investment programmes. One country indicates having designed an infrastructure investment programme for small and medium-sized towns and cities.

33. No information was provided on energy and transport, on management of disaster-prone areas or on the role of the construction industry, even though these issues were raised by developing countries in the UNCED process. Many developing countries indicate their need for financial and technical assistance in the area of setting sustainable human settlements policies and providing the related services. However, the magnitude and the content of their requirements need to be specified. In addition, although developed countries claim that their bilateral programmes involve local communities and capacity-building in developing countries, this information is not reflected in the developing country reports.

2. Countries in transition

34. In the reports of the countries in transition, there is the same lack of specific programmatic information and lack of overall information on chapter 7.

35. Two reports were received from this group of countries. One did not have information on the human settlements issue. The information from the other report indicates an urgency to integrate human settlement issues into the ongoing process of transition to a market economy. While the latter report does not raise shelter as a universal problem, the need for maintenance of existing buildings and the need to build new ones with greater energy efficiency are mentioned. It also mentions regional planning and the need to coordinate the various recently autonomous local authorities. The preservation of historic monuments is a matter of concern. Although this is a "traditional" pre-UNCED focus to a "human settlements" issue, it may also be an indication of the detrimental effect of air pollution in that part of the world. The country also reports that it has established technical standards for new buildings and has initiated an architectural information programme to assist local authorities and professional groups vis-à-vis the construction industry.

3. Developed countries

36. In the developed countries the emphasis was on maintaining the existing housing and human settlements infrastructure rather than building new housing; increasing the energy efficiency of existing housing; recycling building materials and in other ways collaborating with the construction industry and the relevant professional associations; promoting preventative policies to deal with urban issues through community participation and support; and reducing household waste through recycling and the management of hazardous waste in urban settings. More often than not, the programmes related to these issues are ongoing rather than specifically designed to respond to Agenda 21. Information provided by this set of countries enabled the following programmatic review.

Programme area (a)

37. Most developed countries seem to have relatively few needs with respect to shelter for all, although the figures given are scant and difficult to compare. Nevertheless, there are indications that housing is relatively adequate, with an average ratio of roughly 400 housing units per 1,000 persons. The figures also indicate that, despite the problem of homelessness, relatively universal housing is an achievable goal in most developed countries.

Programme area (b)

38. Activities on human settlement management are focused on preventative and pro-active efforts. Among them are programmes and efforts to reduce urban sprawl and the erosion of rural populations, programmes supporting community involvement, experiments in designing sound residential areas such as eco-villages, and decentralizing efforts to increase the role and contribution of local government.

Programme area (c)

39. Land-use planning and management are covered by varied legislation and institutional capacity. Institutionally, there is no common element, since the administrative and economic bases of land management are not uniform. There is a trend to integrate land management with environmental impact assessments. Some developed countries find their urban planning satisfactory but indicate the need for further work in rural settings.

Programme area (d)

40. On the whole, developed countries indicate adequate coverage of infrastructure needs. At present, waste minimization and management appear to be priorities. Some have set waste reduction targets to be reached by local governments. There is adequate coverage of energy supply where the focus is on efficiency and alternative energy supplies rather than achieving universal electrification goals. Again, the focus is on maintaining and improving the existing infrastructure. Some countries indicate their need for more decentralized but regionally coordinated approaches to improving the existing infrastructure. (See annex for a review of progress in solid waste management and related recommendations.)

Programme area (e)

41. Energy and transport are highlighted issues. Efforts seem to focus on providing adequate public transportation to reduce the use of personal transport, which leads to urban air and noise pollution. There are efforts to design comprehensive energy policies, compulsory energy conservation requirements and other energy-saving measures, and support for related research and development of alternative technologies and systems. Many indicate that they have technical and financial programmes to transfer related knowledge and technologies to developing countries.

Programme area (f)

42. Only a few developed countries provide information based on the geographical circumstances of disaster-prone areas. Several, located on geophysically active land or frequently affected by rising sealevels, seem to have early warning systems and other national policy instruments in place to prevent unnecessary damage. Those countries are also engaged in technical and financial assistance to developing countries affected by similar geographical conditions.

Programme area (g)

43. Cooperation with the construction industry appears to be integral to reported efforts. The focus is on increased use of secondary materials, overall recycling and efficiency of resource use and various incentives and targets to reach these goals. One country cites cooperation with the private sector to reduce homelessness in urban settings. Another country mentions the role of professional associations with regard to the construction industry. Energy efficiency in the urban setting is highlighted.

Programme area (h)

44. Capacity-building is part of the efforts noted above. Many capacity-building efforts are focused on international collaboration through United Nations agencies such as joint bilateral programmes with UNCHS (Habitat) and international non-governmental organizations such as the International Council for Local Environmental Initiatives. Bilateral efforts are also carried out regionally with neighbouring countries. However, more information on the financial and administrative details of these efforts is needed.

C. Roles and initiatives of major groups

1. Local authorities

45. Reports were submitted by two organizations of local authorities: the United Kingdom chapter of the International Union of Local Authorities (IULA), and the International Council on Local Environmental Initiatives (ICLEI).

46. The first report focuses on the local Agenda 21 initiative in the United Kingdom. Efforts involve five local authority associations, the local government management board and the local Agenda 21 steering group. The steering group has also asked a number of other organizations to join in the efforts. Among them are organizations that represent women, industry, trade unions, educators and environmental concerns. 10/

47. The work programme of this group of local authorities involves development of sustainability indicators, training programmes, conducting a series of round tables to formulate practical guidelines, and studies on examples of good practice. Included among the guidelines are a guide to local Agenda 21, a practical guide to design and construction, and a guide to eco-management and audit schemes. These are widely shared among the participating local governments. Through the international structure of IULA, there are efforts to disseminate the findings and the tools developed to local authorities in other countries.

48. The International Council on Local Environmental Initiatives report focuses on needs and potential contributions by local authorities to the programme areas of chapter 7. For example, under capacity-building, the report suggests four main needs: decentralization; stabilization; financial strengthening; and productivity enhancement, technology transfer and new product development. Among the specific recommendations are enabling local authorities to establish new sources of revenue (for example, by reforming the user fees to cover cost of services); supporting and integrating innovative (public or private) approaches in the context of "public enterprises" such as local authority-run utilities. The report also makes some tangible suggestions: for example, local authorities might facilitate negotiations between land owners and squatters; secure leases for squatter communities; train poor communities on the financial and legal aspects of land purchasing and management; and establish land banks and revolving loan funds for land purchases.

49. According to the background paper of UNCHS (Habitat), twinning programmes of local authority associations have led to exchanges and projects between the North and the South. Many of them are directly focused on human settlements development, especially on the improvement of management and technical skills at the administrative level. These efforts could be further strengthened by cultivating better linkages with developing country networks of local authorities and professionals in order to avoid parallel efforts that are duplicative or even contradictory. The existing regional and national networks also need to be strengthened. A regional focus that involves the Asian Coalition for Housing Rights and the Settlements Information Network Africa (SINA), among others, could be a start in that direction.

2. Non-governmental organizations

50. The positive initiatives of community groups, including women's groups, to develop local solutions to locally defined problems are being reported from several countries. Local groups are active in renewable energy technologies, energy-efficiency projects, recycling and the reuse of wastes, and many other areas.

51. There has been a continuation and strengthening of trends, experiences and experiments in the non-governmental organization sector which were evident prior to 1992. Three trends are worth noting:

   (a) Greater dialogue and cooperation between non-governmental organizations and government institutions, including national and local governments and other state organizations;

   (b) Increased knowledge of and sophisticated use of the media, market mechanisms and the private sector;

   (c) Greater awareness of the links between environment and development objectives, leading to liaison between local environment and development non-governmental organizations and environment components within community development projects in urban areas.

52. The preparatory process for major international conferences seems to have the potential for "reaching down" or "breaking through" to the local level and mobilizing non-governmental organization and community support for sustainable development goals, as evidenced by the process leading up to UNCED. The national preparatory process for the second United Nations Conference on Human Settlements (Habitat II), to be held in Turkey in 1996, could be one of another avenue for building up local and national multi-actor coalitions for sustainable human settlements development.

53. The partnerships of United Nations agencies with non-governmental organizations are gradually increasing. The recent trend of direct bilateral funding to non-governmental organizations may increase the potential for more equal partnerships and positive collaboration between United Nations agencies and non-governmental organizations in the pursuit of sustainable human settlement development.

3. Business and industry

54. At the international level, the trade and environment debate has increasingly focused attention on the ways in which environmental legislation can act as "green protectionism". Greater focus is also being placed on competitiveness and environment policy which will have important human settlement implications in the areas of construction materials, recycling and reuse of wastes, energy conservation, and pollution control in the construction sector. An important way forward, and one in which business and industry are already making strides, is internalizing environmental costs through the use of economic instruments and mobilizing financial markets for sustainable development.

55. There appears to be growing activism in some industry sectors as to pollution control, waste management, energy use and water supply. Notable are the activities of the Business Council for Sustainable Development, the World Industry Council for the Environment and the International Network for Environmental Management. These organizations, supported by initiatives of sectoral, industrial and trade associations, especially in the areas of construction, chemicals and tourism, are playing an important role at the international level.

4. Scientific and technological communities

56. Recent scientific and technological developments in such areas as geographical information systems for land resource management, natural hazard assessment and prediction, in the area of resource management and pollution control, and most importantly, the revolutionary advances in information technology, can together lend valuable support in providing for a more sustainable habitat. Agenda 21 has stimulated an extensive debate on the scientific and technological implications of sustainable development among professional bodies world wide. Through this debate, the scientific and technological community is already doing what they do best: disseminating information, creating awareness among the public and policy-makers alike, and stimulating research and development of new technologies through their association in the industry.

D. Capacity-building, technology and finance

1. Capacity-building and technology 11/

57. Efforts related to the transfer of environmentally sound technologies are reviewed in greater detail in the progress report and background papers on chapter 34. Here, a sample of trends and priority areas related to human settlements issues is presented.

58. Available information shows some recent technological trends and potentials that are relevant to the programme areas on sustainable energy and transport systems and a sustainable construction industry.

59. A major development with regard to energy and transport involves increasing commercial availability of renewable energy systems and technologies. In decreasing order, the following technologies appear to be commercially available today: biomass and biogas fuels, solar water heaters, photovoltaic systems, and wind-generated electricity. On the other hand, the following technologies require more efforts in order to increase their commercial availability: biomass-based cooking stoves, solar thermodynamic water pumps, wind energy-based irrigation pumps, and electricity generators and mini/micro-hydro technology.

60. Obstacles to achieving greater energy efficiency are more linked to decision-making (supply or demand side) and to whether efforts have a long-term or short-term perspective than to availability of technologies. Energy efficiency in the context of households needs greater demand-side focus and long-term perspectives.

61. Energy is one of the most costly aspects of the construction process. 12/ Several new technologies that produce cement, steel and glass more efficiently are now available in the public and private domain. But the production of other materials (bricks, tiles and lime) remains highly energy-inefficient in many developing countries, even though more efficient alternatives are available, both in the public and private domain. A number of low-energy materials present great potential for energy saving, including low-energy extenders in partial replacement of cement, stabilized earth construction, and structural use of secondary species of timber.

2. Finance

62. Developing countries invest approximately $150 billion annually in urban infrastructure, excluding investments in housing. This figure is insufficient to accommodate the continuing growth of the urban population and to catch up with the service and infrastructure deficiencies that have accumulated due to the relative neglect of urban investments over the years. The overall cost implications of heightened attention to environmental sustainability of urban growth have yet to be defined. However, forward-looking informative planning and investments are more cost-effective than "upgrading" after the fact.

63. Donor assistance is likely to remain a small portion of the total. The World Bank is planning to finance 150 urban development projects for a total of $15 billion in the period of 1991-1995. The expected doubling of commitments from the current $3.5 billion represents 9 per cent of the Bank's total lending, which was 5 per cent in the preceding five-year period. UNDP's commitments for urban activities varied between 2.8 and 4.7 per cent of total funding commitments from 1987 to 1989. UNDP's commitments in this area are not likely to change. In addition to these financial obstacles, bilateral donors have not yet identified urban development investments as a priority.

III. CONCLUSIONS AND RECOMMENDATIONS FOR ACTION

64. The overall impact of a number of promising activities and new initiatives is not sufficient to deal with the enormous scale of human settlement problems, especially in the developing countries. The explosive growth of urban areas in the developing countries is likely progressively to complicate and exacerbate interrelated problems of human settlements and the environment.

65. The above review and analysis of progress in the implementation of chapter 7 of Agenda 21 has identified some major priority issues, management approaches and delivery strategies for effective implementation of the human settlements programmes of Agenda 21. In considering the recommendations below, it should be kept in mind that they are based on little more than a year's experience in the implementation of Agenda 21.

A. Emerging priority issues

66. Bridging the resource gap. The urbanization trends in developing countries require enormous investments in urban infrastructure and basic services. This places a premium not only on additional external financing but also on effective use of domestic resources. The Commission could consider urging that technical assistance work be channelled into identifying the locally appropriate ways to mobilize domestic resources and discovering untapped sources. This might involve increasing the real value of existing and future investments as well as better management practices, clearer lines of accountability, improved operations and maintenance capabilities and appropriate technologies which can exploit effective demand.

67. Linking technical assistance to capital investment. The Commission might also consider suggesting that technical assistance programmes focus on preparing the ground for capital investment. This might involve broadening the range of actors, beginning with regional development banks, through joint programming and coordination of activities. Such cooperation should be extended to the private financial and business sector. 13/

68. Focusing on the "brown agenda". The Commission might consider drawing the attention of Governments and intergovernmental bodies to the health impacts of urban pollution, collectively referred to as the "brown agenda". Underlying issues in this context involve inappropriate land use, precarious housing, deficient public transportation and road congestion and accidents. Such an approach would also allow for linkages to "human settlements" components of Agenda 21 that are outside chapter 7. 14/

69. Comprehensive approach to urban poverty. The Commission might wish to reiterate the Agenda 21 message on the need for a comprehensive approach that links community economic development and employment generation with the provision of housing, health and other basic services. 15/ The role of the non-governmental sphere, particularly the community organizations, should also be re-emphasized.

70. Balanced implementation of chapter 7. In the follow-up to the review of chapter 7, the Commission might consider urging Governments and intergovernmental bodies to adopt a more balanced approach. Land management and transportation are two programme areas that would benefit from increased agency, private sector and national focus and collaboration.

71. Strengthening the institutions and organizations of civil society. Implementation of Agenda 21 can only be sustained by national and local community organizations and institutions, which remain weak in many developing countries. Institution-building at the local municipal level is thus a particular priority. A number of United Nations agencies have been contributing in this area. 16/ Local authorities and international professional associations have also been active supporters of their counterparts in developing countries. However, there is need for further strengthening and creation of national and regional networks of civil society institutions for greater exchange and sharing of resources. The focus here should be on broad-based and meaningful participation of civil society. In relevant policies, the needs of vulnerable groups should also be given a particular priority.

B. Effective management approaches

72. Strategic interventions. The Commission may wish to consider suggesting cross-cutting issues such as land management as strategic areas for future work.

73. Good governance. Human settlements development, in particular, and sustainable development, in general, require many social, political and economic changes. Legitimacy and compliance with these changes is the basis for successful efforts. The Commission may wish to consider officially recognizing examples of "good governance" (transparency, accountability and participation) at the local level to support these efforts.

74. Strengthening local authorities. Local authorities in many countries are financially and politically dependent on the central government. Efforts to improve the efficiency and responsiveness of urban service delivery by local authorities should go hand in hand with political decentralization and with measures that clarify the lines of responsibility, increase municipal government access to financing for capital investments, and institutionalize systems of accountability for responsiveness to local constituencies.

75. Partnership and collaboration. Partnerships that link the public and private sectors; external, national and local institutions; and public organizations with non-governmental organizations and community groups are essential for sustainable human settlement development. More than simple administrative "coordination", this means an active and interactive collaboration in which the partners share responsibilities, duties, and rewards. The Commission should consider inviting proposals to this end from governmental and non-governmental stakeholders.

76. Building "capacity-for-capacity". Many United Nations agencies have identified capacity-building as a priority for sustainable development. To support this trend and to take it a step further, the Commission may wish to

suggest building "capacity-for-capacity" as the priority. This involves strengthening the capacity of local training institutions for capacity-building in all aspects of human settlement management. Such capacity-building could also include non-governmental organizations and others groups of civil society. 17/

C. Efficient delivery mechanisms

77. Consortium approach. A number of strategic issues, such as the "brown agenda", can serve as an umbrella to implement the objectives of programme areas of chapter 7 cohesively and effectively. The Commission could consider suggesting that consortia of agencies be formed around particular issues for long-term support in implementation.

78. "Best practice" in delivery mechanisms. Trends in best practice favour demand-driven systems, increased networking, "bottom-up" capacity-building, demonstration/replication strategies, regional coordination and decentralized local management. The Commission may wish to request a thorough review of "best practice" applications in human settlements development activities. Such a review might provide a basis for systematic dissemination of effective models.

79. Greater local orientation. Emphasis should be given to delivery mechanisms that allow agencies to work directly with and for local communities and local governments, in genuinely decentralized activities which promote greater development and utilization of local resources. The Commission could recommend that the IACSD focus on such local orientation in coordinating agency activities in sustainable development.

80. Utilization of "Habitat II" opportunities. The second United Nations Conference on Human Settlements will offer an opportunity to raise awareness, coordinate approaches, and marshal support. The Commission should consider the ways in which this forum could be used to focus the attention of all relevant actors and stakeholders on a tightly focused and results-oriented agenda for human settlements follow-up.

Notes

1/ UNCHS (Habitat) is the task manager for chapter 7, per a decision of the Inter-Agency Committee for Sustainable Development (IACSD) at its second session, in 1993.

2/ This total includes both public and private funding. According to the background paper, approximately three fourths of the total ($150 billion) is already being mobilized and invested by developing countries. Bridging the gap will depend on availability of international assistance, which has been shrinking. The working paper suggests that, when available, such assistance should be "strategic and catalytic" for most effective results.

3/ For example, the Sustainable Cities Programme is a joint initiative of UNCHS (Habitat) and UNEP to provide municipal authorities and their partners in

the public, private, and community sectors with an improved environmental planning and management capacity.

    4/   An example of World Bank/Habitat cooperation is the co-executing of the Urban Management Programme, which also receives funding from UNDP and a number of bilateral agencies. The Programme concentrates on capacity-building in the areas of urban land management, urban infrastructure management, municipal finance and administration, urban environmental management and urban poverty alleviation.

    5/   The Healthy Cities Programme is focused on the management of urban health issues through participatory approaches such as coalition-building at the municipal level and networking among cities.

    6/   The area-based programmes approach seeks sustainable social action by combining community participation, empowerment of women, capacity-building and cross-sectoral interventions to improve the condition of children and women in poor rural and urban settlements.

    7/   A common and shared vision of urban development was a discussion topic at a recent meeting of the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD).

    8/   Land-sharing involves the negotiation of agreements between landowners and slum dwellers in which the latter gains formal land tenure in return for reduced housing plots. Landowners avoid long eviction cases and gain immediate access to land development.

    9/   At the time of drafting of this report, 14 national reports had been received. Their geographical distribution was: six from developed countries, six from developing countries and two from countries in transition. Those that included a specific section on human settlements were mostly from developed countries.

    10/   The list includes the following: Confederation of British Industry; Advisory Committee for Business and the Environment; Royal Society for Nature Conservation; National Council for Voluntary Organizations; Committee of Vice-Chancellors and Principals/Council for Environmental Education; Trade Union Congress; the National Alliance of Women's Organizations.

    11/   This information is based on a separate report made by UNCHS (Habitat) in response to the request of the secretariat of the Commission on Sustainable Development for information on chapter 34 of Agenda 21 on transfer of environmentally sound technologies, cooperation and capacity-building.

    12/   The production of building materials consumes over 75 per cent of the energy used in construction and much of it goes to the manufacture of a small number of high-energy materials such as cement and steel, burnt clay and concrete products, glass and plastics.

13/ The UNDP/UNCHS/UNEP Public/Private Partnership Programme (PPP) proposal with the Business Council for Sustainable Development may be considered as a step in this direction.

14/ For instance, improved infrastructure and services for both small communities and urban centres are a critical part of chapter 6. These issues are also a part of chapters 18-21. A focus under the umbrella of the "brown agenda" could reduce duplicate efforts under these separate chapters.

15/ An existing example in this direction is the Urban Poverty Partnership programme which has recently been initiated by UNDP, UNCHS (Habitat) and the ILO.

16/ UNDP and UNICEF's work with non-governmental organizations, UNIDO's work with the construction industry, WHO's work with the health sector, Habitat's Community Development Programme, focusing on training community leaders, and the World Bank's work on institution-building are examples.

17/ Such an approach has been jointly pioneered by UNCHS (Habitat), the World Bank and UNDP and has begun to open the door to public and private human settlement training institutions in developing countries, linking with others in forms of South-South cooperation for capacity-building.

<u>Annex</u>

SOLID WASTE MANAGEMENT AND SEWAGE-RELATED ISSUES

INTRODUCTION

1.   Many of the activities under solid waste management are a subset of the
activities under the broader topic of human settlement management. Thus the
review and recommendations below should be considered together with the
information in the main text reviewing chapter 7.

2.   Chapter 21 of Agenda 21 on solid waste management and sewage-related issues
comprises four programme areas:

     (a) Waste minimization;

     (b) Promotion of waste recycling and reuse;

     (c) Promoting environmentally sound waste disposal;

     (d) Extending waste disposal service coverage.

3.   Waste minimization is linked to reducing unsustainable consumption
patterns, and as such, requires national level policies. Waste recycling and
reuse requires the collaboration of local authorities with the local informal
sector, given this area's presence in income-generation potential, particularly
in the developing countries. Environmentally sound waste disposal requires the
collaboration of local and national authorities, based on appropriate and
sustainable legal instruments and their effective implementation. Such legal
instruments may need to reconsider the application of the "polluter pays
principle" to the case of solid waste management. Waste disposal service
coverage is an area of joint programming, with both the formal and informal
waste management sectors playing a key role. Efforts in this area need to take
into account income-based differences in willingness to pay.

I. GENERAL OVERVIEW

4.   Rapid urbanization and the associated growth of industry and services are
key features of economic and demographic development in many developing
countries. Cities are currently absorbing two thirds of the total population
increase throughout the developing world. At this rate 1.9 billion people are
estimated to populate the urban areas of developing countries by the year 2000,
in addition to the already heavy urbanization level in the developed countries.

5.   One of the most important environmental problems of urbanization is the
amount of solid waste that is generated, at a rate that outstrips the ability of
the natural environment to assimilate it and municipal authorities to manage it.
The resulting contamination affects all environmental media and has a direct
negative effect on human health and the quality of urban life. Current
approaches to solid waste management are by and large, unsustainable.

6.   Despite such apparent neglect, solid waste currently consumes a large proportion of most municipal budgets - in some cases, as much as 50 per cent. Efforts to reduce this expenditure would free some municipal funds for other services, such as primary health care, and encourage further development of reuse and recycling techniques that highlight solid waste as a valuable resource.

7.   The primary responsibility for solid waste management rests with city authorities who are the single most important actors to implement the activities of chapter 21. Successful outcomes will require the delegation of special responsibilities and financial resources to the local authorities by central governments. This, in many cases, will involve policy changes, legal reform, institutional capacity-building, the use of modern management approaches and appropriate technologies to improve the efficiency and effectiveness of current solid-waste management practices.

8.   In many cities of the developed world, solid and liquid waste management is undertaken by the private sector under contract to the local authorities. Similar private-sector involvement also appears to be increasingly the case in developing countries. There are, however, risks related to the infrastructure preceding such privatization. For example, an inefficiently run public service (often the case in waste collection) is susceptible to being replaced by a private monopoly over which the municipal council would have little control. The use of competitive tendering, retaining several different companies for the service needed, and monitoring the contractor's performance might ensure acceptable and effective services.

9.   There is much scope for improving the real value of current and future investments made in the formal and informal waste management sector. For example, studies carried out by UNCHS (Habitat), UNDP and the World Bank have shown that highly developed and active informal waste management networks exist, particularly in the developing countries. a/ Similarly, many local authorities and their organizations are taking initiatives to share techniques through partnerships and twinning, to deal with the growing solid waste issue. Encouraging and supportive policies from central governments would assist the efforts of both the formal and the informal solid waste management sectors. In the case of the latter, further support could not only drastically reduce waste collection costs but also improve income-generation and employment opportunities of the urban poor.

          II.   REVIEW OF PROGRESS ACHIEVED IN THE PROGRAMME AREAS
                OF CHAPTER 21

                    A.   International cooperation

10. The principal role of United Nations agencies in catalysing action under chapter 21 of Agenda 21 should be to strengthen the indigenous capacities of developing countries to manage wastes, a task that is frequently within the informal sector. The challenge for United Nations agencies is to act as a vehicle for technology transfer among developing countries and to draw the attention of formal waste management authorities to the technological potentials

of the informal sector. Further technology development must adapt indigenous research and development.

11. Several United Nations agencies have been focusing on the management of solid waste. Concern for municipal solid waste management has been a key element of UNEP's human settlements programme. It has organized many training courses on municipal waste management, through its Technology and Environment Branch (TEAB), before the onset of UNCED or Agenda 21. Under the auspices of the Secretariat for the Basel Convention on hazardous waste, UNEP undertook some activities pertinent to municipal waste management. WHO has a similar track record of reporting on technical options for waste management and of organizing regional workshops on a number of specialized topics, including medical waste. WHO is currently cooperating with the International Maritime Organization (IMO) on a global waste survey. The World Bank has been involved in a variety of infrastructure development projects for solid waste management.

12. UNCHS (Habitat) has been actively contributing to related environmental infrastructure issues from the point of view of both research and development and technical cooperation. The activities and projects of the Settlement, Infrastructure and Environment Programme (SIEP) focus on specific areas such as the development of management tools for solid waste, innovative approaches to waste recycling and reuse, and capacity-building through training workshops. UNCHS has also produced computer software for refuse vehicle selection, promoted indigenous technologies, organized international workshops, and expanded its City Data Programme to improve the efficiency and operability of solid waste management in developing country cities.

13. The UNCHS Sustainable Cities Programme (SCP) has assisted in the move towards privatization of solid waste management in selected cities and has established an innovative framework for city consultations leading to improved city management functions.

14. The joint World Bank/UNCHS/UNDP Urban Management Programme is currently preparing publications on private/public partnerships on solid waste management, and regional activities have addressed technical cooperation between developing countries for municipal waste managers. Under the auspices of the joint Panel of Experts on Environmental Management for Vector Control, b/ UNCHS has also been closely involved in activities related to urban disease vectors, especially those relating to waste.

B. Role and initiatives of major groups

15. Many non-governmental organizations in developing countries are playing an increasingly important role in development projects, especially in community-based initiatives where communities prioritize their requirements independently. International agencies have recognized that the execution of projects through non-governmental organizations has many benefits, including cost-effectiveness. United Nations and non-United Nations international agencies should recognize and promote greater non-governmental organization involvement in this area. The private sector is also becoming increasingly

involved in environmental infrastructure, in part driven by the "greening" industry.

III. CONCLUSIONS AND RECOMMENDATIONS FOR ACTION

A. Conclusions

16. Further research on new and indigenous technologies that decrease waste and waste products is needed. A particularly crucial area of research is the treatment of medical waste, involving the collaboration of UNCHS and WHO.

17. Recycling of liquid waste presents various alternatives of "waste to resource" processes. For example, in water-scarce countries, domestic wastewater provides an excellent irrigation potential with extended possibilities for urban poverty alleviation in the urban agricultural environment. Expertise from UNCHS on technical methods for wastewater treatment could combine effectively with the expertise of FAO and WHO on wastewater reuse in agriculture and health-related activities.

18. Good interactive data is an essential management tool in dealing with solid waste problems. The information that exists in the United Nations system and elsewhere needs to be tapped, particularly with the aim of developing indicators that can assist waste producers and handlers to optimize their management systems.

19. Action plans for waste management need to be considered in an integrated manner. For example, the possibilities of implementing separate industrial and domestic wastewater treatment facilities could free more water for irrigation and enable water authorities to maintain a tighter control over highly polluting industries. Cooperation with FAO, UNEP and UNIDO in this respect is most important.

20. Legislative updating is also an urgent need, given that in many countries waste treatment/disposal standards and practices for waste treatment and disposal tend to be outdated. Cooperation between UNCHS and other United Nations agencies with programmes in environmental law could help to reduce restrictive legal practices and modernize the related environmental standards.

21. Such inter-agency collaboration will require greater exchange of information between the agencies, including the use of electronic media. The use of modern information systems is likely to improve project development and strengthen inter-agency projects. Further collaboration is also needed in coordinating activities at the national level in order to avoid unnecessary duplication.

B. Recommendations

22. Promote increased synergy between the formal and informal sectors. Despite the significant role of the informal sector in solid waste management, there are few attempts to capitalize on its potential. United Nations organizations

should assist municipal authorities to recognize and integrate the potential of the informal sector.

23. <u>Promote greater awareness of environmental and health risks from poor solid waste management</u>. Applied research shows that the methods of waste disposal that have been used over the past decades have caused death and disability to many. Greater awareness of solid waste issues are likely to influence consumption patterns and improve the application of sustainable policies. The increasing amount of hazardous materials in domestic waste should be given a higher profile.

24. <u>Promote the development and use of indigenous technologies</u>. Many developing countries are dependent on imported technologies for infrastructure improvements, including those in waste management. This requires high initial capital investment, which then reduces the private investment potential. Yet, many of the most appropriate technologies are available locally in forms that can be easily and cheaply adapted to the relevant needs. This points to greater potential for technical cooperation - including regional and international cooperation - between developing countries.

25. <u>Focus on strategic programme areas</u>. The programme areas on the promotion of waste recycling and reuse and on increasing service coverage appear to offer the most promise for the short-term implementation of Agenda 21. This is, in part, because these areas offer good opportunities for community-based initiatives. The promotion of waste recycling and reuse provides a unique opportunity in waste management; it solves the problem of environmental degradation and has the potential to alleviate urban poverty and generate income among the urban poor. Success will, however, require supply-side policies aimed at promoting and supporting resource recovery and demand-side policies aimed at stimulating markets for recovered materials and products.

26. <u>Promote information systems that can accelerate the implementation of Agenda 21</u>. The implementation of Agenda 21 in sustainable development can be improved by a major commitment to inter-agency cooperation. Unlike non-governmental organizations, the private sector, academia and research institutions, the agencies have been hindered by lack of information systems that are responsive and non-restrictive.

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<u>Notes</u>

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<u>a</u>/ "Informal sector" in solid waste management is a reference to the [mostly urban] poor who make a living from scavenging waste dumps or collecting reusable household or small business waste for reuse by local manufacturers. It, in effect, functions as a micro-enterprise. Despite its apparent low cultural status, the informal sector in waste management in developing countries has been instrumental in recycling a range of materials such as glass, metal, paper, and aluminium, long before recycling became the centrepiece of urban waste management policies in developed countries. More recently, the concept appears to also include community voluntary initiatives to deal with local solid waste problems, particularly when a formal system does not exist or is insufficient.

<u>b</u>/ The Panel includes WHO, FAO, UNEP and UNCHS (Habitat).

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