REPUBLIC OF GHANA

NATIONAL PLAN OF ACTION
ON
HUMAN SETTLEMENTS

Habitat II

UNITED NATIONS CONFERENCE
ON
HUMAN SETTLEMENTS

ISTANBUL, TURKEY 3-14 JUNE 1996
EXECUTIVE SUMMARY

1. INTRODUCTION

From the early nineties to the mid-nineties, Ghana produced a number of national reports and passed statutes which addressed quite a number of issues emanating from two United Nations international conferences: the UN Conference on Human Settlements (Habitat I), Vancouver 1976 and the UN Conference on Environment and Development, Rio 1989. The national reports and statutes mentioned above include:

- Civil Service Law (PNDCL 327).
- Strategic Plan for the Greater Accra Metropolitan Area, 1992
- A National Strategy for Sustainable Human Settlements in Ghana, 1993
- National Shelter Strategy, 1993
- Local Government Act, 1993
- National Development Planning (Systems) Act, 1994
- National Action Programme for Poverty Reduction, 1995 (Draft)

This National Plan of Action (NPA) in connection with Habitat II has borrowed substantively from the preceding Reports prepared by the Ministry of Local Government and Rural Development, the Ministry of Works and Housing, the Environmental Protection Council, the Town and Country Planning Department and the National Development Planning Commission. It was considered unnecessary to re-invent the wheel where the strategies, policies and programme activities formulated in the reports addressed the current priority issues. Where necessary, information was updated and new issues were dealt with.

2. DECENTRALIZATION AND GOVERNANCE

Prior to 1987, Ghana had a highly centralized administrative system with sectoral ministries/departments organized as territorial hierarchies or as pyramids with their apexes in Accra, and subordinate levels in the regions and districts. This system had a number of shortcomings as follows:

- encroachment on the rights and responsibilities of weaker local government by the central government bodies;
- insufficient consultation between central and local government bodies, and between central government agencies themselves;
- a poor image of local governments as poor, inept, inefficient and worthless development partners of central government; and
- lack of participation of the citizenry in their own development process.
Before the attainment of independence in 1957 and for some time thereafter, various Commissions and Committees of Enquiry which were appointed to enquire into the administration of the country made recommendations for the devolution of central administrative authority to the Regional/District/Local levels. In spite of the far-reaching nature of the recommendations, attempts at decentralization could not materialize in view of the unwillingness of those entrusted with power to divert part of their authority to the lower levels of administration. Other factors which militated against the decentralization process were:

- dual allegiance of district departmental officers to their regional and national heads on the one hand, and to the District Chief Executive on the other.
- poor channels of communication in reporting.
- lack of well trained and experienced departmental staff to work at the district level.
- inadequate office and residential accommodation at the district level to attract officers.
- lack of financial resources to match the authority delegated.

2.1 Administrative Reform

Ghana has, since 1988, embarked on a major administrative reform to make it more responsive to and supportive of public and private sector development initiatives. The reform aims at creating an effective environment for the attainment of national and sub-national goals and objectives. Specifically, it seeks to:

- restructure the public administrative system to enhance the service delivery capacity of the public sector to plan, manage and monitor social and economic development;
- redefine functions and responsibilities of the various levels of government;
- tap the vast potential resources of its people in the rural areas and mobilize a great proportion of resources and energies for the development of human settlements; and
- bring about institutional co-ordination for the socio-economic development of Ghana as a whole.

The restructuring of the public administrative system is designed to achieve a number of objectives:

- decentralize political and state power to promote participatory democracy through local level institutions;
- decentralize administrative development planning, and implementation to the District Assemblies;
- introduce an effective system of fiscal decentralization which gives the Assemblies control over resources;
- establish a national planning system to integrate and co-ordinate development planning at all levels and in all sectors, and
- incorporate economic social, spatial and environmental issues into the planning process on an integrated and comprehensive basis.
2.2 Decentralization Policy

Recognizing the critical role which decentralization plays in ensuring that a government remains in touch with its people, the present administration has initiated a process of decentralization to promote genuine popular participation in public decision making.

The decentralization concept places an increased emphasis on local (urban and rural) development. The message which is being clearly conveyed is that the people themselves must be primarily responsible for initiating and implementing the development efforts desired by them. Their active involvement must be obtained in all aspects of the development process - planning and project identification, resource generation project implementation and monitoring, and subsequent operation and maintenance of investments.

Development is seen as requiring shared responsibility between central government, local governments, parastatals, non-governmental organizations, the private sector and the people who are the ultimate beneficiaries of development.

The reform in governance, including decentralization and participatory democracy, is fully backed by the following enabling legislation: the Local Government Law, 1988 (PNDCL 207), superceded by Chapter 20 of the 1992 Constitution of Ghana; the Local Government Act, 1993 (Act 462); the National Development Planning (Systems) Act 1994 (Act 480); and the Civil Service Law (PNDCL 327).

The new laws have put in place 110 district assemblies, which are the highest political and administrative authorities at the district level. Representation at the district assembly is either by election (70% of the members) or by appointment (30% of the members). Female representation in the Assembly is about 8.0 percent.

In order to provide the District Assemblies with the requisite funds to carry out development a District Assembly Common Fund has been set up under Article 252 of the 1992 Constitution. At least 5% of all government revenues is paid annually into this fund and this is distributed amongst all the 110 district assemblies on the basis of a formula drawn up annually by the Common Fund Administrator and approved by Parliament. The money so distributed is used for financing the implementation of approved development programmes of the district.

2.3 Other Strategies

Within the framework of the decentralization policy each district capital is expected to play its role as focal point for the economic and social development of the district. With this has come the need for improved infrastructure in the district capitals to enable them to cope with the increased functions. Despite the interventions mentioned above, gaps still remain between realities (urban service delivery) and revenue. A number of programmes are being pursued to address these needs. These include: (a) a district focussed development programme; and (b) an urban management programmes. 
3. INCREASING ACCESS TO LAND AND SHELTER

3.1 Introduction

Rapid population growth and increasing urbanisation have made housing one of the most critical problems currently facing Ghana. Particularly in the urban areas, inability of the housing delivery system to meet effective demand over the years has created strains on the existing housing stock and infrastructure. The Government has duly recognized the crisis as a major problem.

In the past, various attempts solutions to the problems have failed to make an impact on the situation because, from the period of colonial administration to 1987, the stated objectives of the housing programme only gave the broad aims of the need for the public sector to provide adequate housing for the people. No needs assessments were given. As a result there were no indications of projected output. The activities of public housing agents such as, The State Housing Corporation, Tema Development Corporation, Department of Rural Housing, etc., have not contributed to more than 15% of the total housing stock. It is not surprising that with mounting deficits estimated at 250,000 units in 1985, the problem caused the Government concern.

In 1987, the Government recognized the need to solve the problems facing the housing sector and the Draft national Housing Action Plan was prepared. This Action Plan introduced a new dimension in the housing sector, especially by establishing the Home Finance Company and Ghana Real Estate Developers Association, and using SSNIT to initiate pilot actions in housing construction with emphasis on serviced land development.

3.2 Shelter Strategy

In 1992, the Ministry of Works and Housing prepared a comprehensive housing policy document. The document identified key issues and implications for land delivery, finance and materials. The critical issues are as follows:

- there is no absolute shortage of land but there are supply bottlenecks;
- there is an absence of financial intermediaries with the ability to channel funds to households most in need of financial assistance; and
- there is still over dependence on external markets particularly for building materials.

The National Shelter Strategy, which is the result of a commitment made by the Government, evaluated current trends and development efforts in the housing sector and has identified policies strategies required to deal with the situation.

The Government has recognised its role as a facilitator and has introduced mechanisms which access to serviced land and finance, and facilitate the production of local building materials in to housing developers. It is also the prime objective of the Government to foster private part and initiation in land development, finance and materials production in the housing sector.
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### Abbreviations/Acronyms

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<tr>
<td>AESC</td>
<td>Architectural and Engineering Services Corporation</td>
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<td>AMA</td>
<td>Accra Metropolitan Assembly</td>
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<td>APDP</td>
<td>Accra Planning and Development Programme</td>
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<td>BNP</td>
<td>Basic Needs Project</td>
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<td>BOD</td>
<td>Biochemical Oxygen Demand</td>
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<td>BRRI</td>
<td>Building and Road Research Institute</td>
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<td>CIP</td>
<td>Community Initiative Projects</td>
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<td>DRH</td>
<td>Department of Rural Housing</td>
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<td>EGP</td>
<td>Employment Generation Project</td>
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<td>EIA</td>
<td>Environment Impact assessment</td>
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<td>EIP</td>
<td>Education Infrastructure Project</td>
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<td>EMPs</td>
<td>Environmental Management Plans</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>ERP</td>
<td>Economic Recovery Programme</td>
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<td>FGBS</td>
<td>First Ghana Building Society</td>
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<td>FUSMED</td>
<td>Fund for Small and Medium Enterprises Department</td>
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<td>GAMA</td>
<td>Greater Accra Metropolitan Area</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GEDC</td>
<td>Ghana Enterprises Development Commission</td>
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<td>GERMP</td>
<td>Ghana Environmental Resource Management Project</td>
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<td>GLSS</td>
<td>Ghana Living Standards Survey</td>
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<td>GNP</td>
<td>Gross National Product</td>
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<td>GOG</td>
<td>Government of Ghana</td>
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<td>GREDA</td>
<td>Ghana Real Estate Developers Association</td>
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<td>GPRTU</td>
<td>Ghana Private Road Transport Union</td>
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<td>GSS</td>
<td>Ghana Statistical Service</td>
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<td>GWSC</td>
<td>Ghana Water and Sewerage Corporation</td>
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<td>HFC</td>
<td>Home Finance Company</td>
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<td>IDA</td>
<td>International Development Association</td>
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<td>ILO</td>
<td>International Labour Organisation</td>
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<td>ISE</td>
<td>Informal Sector Enterprises</td>
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<td>MCH/FP</td>
<td>Maternal and Child Health/Family Planning</td>
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<td>MEST</td>
<td>Ministry of Environment, Science and Technology</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MOLG</td>
<td>Ministry of Local Government</td>
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<td>MOWH</td>
<td>Ministry of Works and Housing</td>
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<td>NBSSI</td>
<td>National Board for Small-Scale Industries</td>
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<td>NEDECO</td>
<td>Netherlands Engineering Consultancy</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NSS</td>
<td>National Shelter Strategy</td>
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<td>NTF</td>
<td>National Task Force on Human Settlement</td>
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<td>PAMSCAD</td>
<td>Programme of Action to Mitigate the Social Cost of Adjustment</td>
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<td>Acronym</td>
<td>Full Form</td>
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<td>PHN</td>
<td>Primary Health and Nutrition</td>
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<td>PNDCL</td>
<td>Provisional National Defence Council Law</td>
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<td>REDCO</td>
<td>Ghana Real Estate Development Company</td>
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<td>RP</td>
<td>Redeployment Project</td>
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<td>SAP</td>
<td>Structural Adjustment Programme</td>
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<td>SSE</td>
<td>Small-Scale Enterprises</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNCHS</td>
<td>United National Centre for Human Settlement</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<td>WDR</td>
<td>World Development Report</td>
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<td>WFP</td>
<td>World Food Programme</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WS/S</td>
<td>Water Supply and Sanitation</td>
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The basic objectives of the National Shelter Strategy are:

- to accelerate home improvement and the upgrading and transformation of the housing stock in order that shelter quality may be available to the population as a whole;
- to make the shelter programme more accessible to the poor; and
- to create an environment conducive to investment in housing for rental purposes.

3.3 Shelter Programmes

The programme to be offered by Government will respond to a wide range of shelter needs. In addition to upgrading, extension and the provision of basic amenities, greater effort will be made to provide solutions targeting income groups more than has been the case hitherto.

Housing provision for the low-income sector will focus on low-cost solutions for a range of options structured to meet the affordability for the target income groups including:

- sites with minimum services;
- sites with full services;
- extendable core units which can be built and expanded by self-help means;
- settlement upgrading; and
- Home improvement.

The supply of serviced land, and development of a housing finance system capable of financing shelter for the majority of the population will be improved through the following:

- Suitable innovative legal and administrative mechanisms, such as land pooling and re-adjustment, will be adopted.
- A specialized primary mortgage institution as an integral part of the national finance system will be developed to increase the flow of funds for the creation of new housing stock as well as for renovation, upgrading and expansion of the existing stock.

In order to mobilize resources for shelter, Government will promote partnership with the private sector, the communities and the people themselves as sources of funds by creating an environment conducive to saving. The Government will put in place an effective institutional framework that will establish broader coordination and outreach functions emanating from housing agencies. Regional and district assemblies will therefore be reoriented to act more as promoters, and facilitators of housing activity. They will play an increasing role in:

- development and supply of serviced land;
- distribution of building materials and components at reasonable rates, and
- provision of technical and advisory services; and development and extension of appropriate construction technology.
The coordination of policy and programmes will be provided through the establishment of a Housing Policy Authority.

4 POVERTY REDUCTION AND EMPLOYMENT GENERATION

Until recently, Ghana's post independence development strategies emphasized industry over agriculture, public over private enterprise, large over small-scale operations, capital-intensive over labour-intensive technology, and centralized over decentralized management. Economic performance over the period was poor: most indicators showed trends of negative annual growth rates from 1960 to 1982: GDP, -0.1; agriculture, -0.2; industry, -1.5. Only the services sector (1%) and the small manufacturing sector (4.4) showed some growth. The cedi was overvalued; inflation eroded people's incomes; unemployment rose; and social services deteriorated.

4.1 Economic Recovery and Adjustment

To arrest these trends, the government in 1983 initiated an economic recovery and structural adjustment programme. ERP/SAP consisted of 3 phases: stabilization, rehabilitation, and the orientation of the economy towards a decentralized system. Economic growth was revived: during 1984-92, GDP rose 5% a year, industry 8%, services 7.4% and agriculture 2.6%. Exports were stimulated, and inflation was reduced. But employment declined drastically, by 52% in the public sector (due to retrenchment), and by 40% in the private sector. Real earnings stagnated, and public expenditure on social services was reduced. Unemployment, poverty and hardship rose especially in the formal sector and urban areas, and among women and other disadvantaged groups. The informal sector of the economy swelled up, without explicit supporting mechanisms.

From the Ghana Living Standards Surveys I to III conducted by the Ghana Statistical Services, the poverty profile of Ghana may be described thus:

(a) the majority of the poor live in rural areas, but urban poverty (20% of total) is not insignificant;

(b) geographically, the North is much poorer than the South;

(c) occupation: over 85% of the poor are in self-employment or in the informal sector;

(d) women suffer poverty more widely and more intensely than men: they are over-represented (92%) in non-wage employment, have high fertility rates, have less access to assets, and suffer more deprivation and discrimination;

(e) the urban poor suffer residential stress, poor sanitation, and more open unemployment.
4.2 Review of Measures to Address Unemployment and Poverty

The main policies, strategies and actions implemented to address these problems included:

(a) The Programme of Action to Mitigate the Social Costs of Adjustment (PAMSCAD); 
(b) Programmes for private enterprise development; and 
(c) Population Policy; and (d) Ghana-Vision 2020, a perspective plan.

PAMSCAD was a short-term programme launched in 1987 with the following components:

(a) Community Initiative Projects; 
(b) Employment Generation Projects; 
(c) Redeployment Projects (programmes of retraining and assistance for redeployees); 
(d) Basic Needs projects; and 
(e) Education Infrastructure Projects.

PAMSCAD has to some extent been successful in employment generation through public works (etc.), and in creating public awareness and participation. Some criticisms have also been noted in various evaluation reports, from which lessons can be learnt for future programmes; e.g., the need for better targeting, design, management, and local involvement.

A population policy was initiated in 1969 with the aim of reducing the growth rate from 3% to under 2% by 2000. Much is being done; but progress is slow. The policy is under review; e.g., Ghana-Vision 2020, for example.

For private sector development, policies and programmes have been established to provide services in enterprise financing, technical assistance, technical and management training, regulation, and extension aimed at easing constraints facing the sector. Among the institutions and programmes providing support are the National Board for Small Scale Industries, Women's World Banking (GH), EMPRETEC and Savings and Loans Company Limited (CITI).

Finally Ghana-Vision 2020, recently published, provides a 25-year perspective plan for the transformation of the country to a medium-income economy. Its basic themes are: human development, economic growth, rural development, urban development and a facilitating environment. It provides guidelines for the preparation of a series of medium-term programmes, beginning with 1996-2000 based on these themes, which also cover employment generation, poverty reduction, population management, and women in development.

4.3 Recommended Action

The medium-term goal is to enable the urban poor to achieve secure and sustainable livelihoods. Strategies and policies should be based on approaches which are labour-oriented, address the constraints facing the poor, and recognize the possibilities of rural/urban and inter-sectoral linkages. The strategic components of this goal are:
poverty reduction actions to improve access to basic social services and productive assets; credit; job-oriented skills training and/or retraining; enhanced employment opportunities; participation in decision-making; and means to rapid productivity increases, especially in the informal sector.

actions for employment generation to include: education and skills training; an enabling environment- e.g., stable economic policies, stable prices infrastructure and incentives; access to assets; labour-intensive technologies; public works programmes; assistance to disadvantaged groups; linkages between rural and urban enterprises; and assistance to the informal sector (training, technology, credit, information, market development).

5. **ENVIRONMENTAL MANAGEMENT**

In the urban areas of Ghana, there are serious environmental problems which, if not systematically tackled now, may even disrupt urbanization in the long term in the country. These problems relate to the management of solid and liquid waste and the uncontrolled gaseous emissions and discharge of particulate matter as well as domestic and industrial effluents into the environment. This has led to the gross pollution of most surface water bodies in the urban areas.

Priority environmental problems which have been identified relate to water and sanitation, housing, solid waste management, pests and pesticides, hygiene behaviour, industrial pollution and social and economic problems.

The urban water supply coverage at the Regional levels is rather poor. Critical areas affected are in the Upper West, Eastern, Northern and Volta Regions, where the coverage is less than 70%. But the coverage is as high as 86% in the GAMA and 93% in the urban areas of the Upper East.

The average sanitation coverage of 61% in the urban areas is even lower than the water supply coverage of 76%. In the Upper West Region only 20% of urban dwellers have access to sanitation facilities.

As a result of the poor water supply and sanitation coverage hygiene standards are low in the low income sections of the urban areas. There are serious shortfalls in solid waste collection and it is not uncommon to see mounds of garbage in most of the urban areas of the country. Much of the garbage is made up of putrescible organic matter. Serious health hazards are therefore being posed by the poor sanitation facilities. It is only a matter of time before serious epidemics break out in the urban areas of the country.

Air pollution is not a major problem in the urban areas because of the low level of industrialisation in the country. But at the household level, especially, in the low income areas, women and children are being exposed to potentially damaging levels of respirable particulates and CO through the use of fuelwood, charcoal and kerosine for cooking. Untarred roads in some places in the urban areas could be aggravating the situation as plumes of dust are raised with the passage of vehicles.
As far as health is concerned, low income residents in urban settlements live in substandard and overcrowded dwellings which may have serious impacts on human health. Most of the diseases in the urban areas are health-related with malaria and upper respiratory tract infections being predominant.

Malaria, respiratory and diarrhoeal disease are all major childhood killer diseases in the urban areas. The high proportional mortality from respiratory conditions may be partly due to the proportion of the population living in densely settled conditions and to increasing deaths from TB and pneumonia due to AIDS-related opportunistic infections.

On the gender issue, women and children are the most vulnerable victims of poor environmental conditions as they spend most of their time in the home. In the severely degraded areas, such as the mining towns, it is known that certain forms of pollution can impede the mental development of children right from birth. Although women are the main stakeholders in urban environmental management in Ghana they play a minimal role in development planning.

In recent years several policies have been initiated to arrest environmental degradation in the country. These include the frequent use of the media, particularly by Environmental Journalists and Communicators and Environmental NGOs, to generate environmental awareness.

**Recommended Actions**

The establishment of the Ministry of Environment, Science and Technology (MEST), which formulates policies on the environment, and the Environmental Protection Agency (EPA) has created a focus for environmental management in the country. The EPA has also formulated an Environmental Action Plan for the sustainable use and management of natural resources and the protection of the environment.

The current Environmental Action Plan aims at ensuring a sound management of resources and the environment, and the exploitation and use of these resources in a sustainable manner. This National Plan of Action has added specific objectives and proposed activities to address issues pertaining to water supply, sanitation, waste water management, solid waste management and the protection of women and vulnerable groups. The framework and strategies for environmental protection in the country have also been re-inforced by the Presidential Report to Parliament as spelt out in Ghana-Vision 2020. This aims at ensuring a sound management of resources and the environment and the exploitation and use of these resources in a sustainable manner.
6. DISASTER PREPAREDNESS AND MITIGATION

Ghana is susceptible to disasters but probably not on the more serious scale experienced in some parts of the world. But in recent years some disasters induced by either natural or anthropogenic actions such as flooding, bush fires, household fires, influx of refugees, erosion and others have been noticeably on the increase. Although there are several seismically active areas in the country, the only serious earthquake in recent years was that of 1939 in Accra, which registered 6.5 on the Richter Scale.

In order to mitigate the impact of these disasters a contingency Plan was formulated by the National Disaster Relief Committee in 1992. The Plan sets out the procedural, infrastructural and legal framework to deal with disasters.

In addition a National Oil Spill Contingency Plan has been prepared by the Ministry of Environment, Science and Technology to deal with oil spillage in the marine environment, and inland waterways as well as spillages from off-shore and in-shore pipelines in an integrated manner.

7. INTERNATIONAL COOPERATION AND ASSISTANCE

International cooperation and assistance should take into consideration

(a) a holistic approach in dealing with the problems of human settlements;
(b) self-reliance as part of any project's logic;
(c) rural-urban linkages; and
(d) sharing of ideas, and technical cooperation among developing countries and between LDC's and MDC's.

Priorities for international funding have been identified under:

(i) water and sanitation;
(ii) transport and telecommunication;
(iii) environment;
(iv) shelter;
(v) land;
(vi) poverty reduction;
(vii) decentralization; and
(viii) capacity building.
PART A: INTRODUCTION

1. The Consultative Process

From the early nineties to the mid-nineties, Ghana produced a number of national reports and passed statutes which addressed quite a number of issues emanating from two United Nations international conferences: the UN Conference on Human Settlements (Habitat I), Vancouver 1976 and the UN Conference on Environment and Development, Rio 1989. The national reports and statutes mentioned above include:

- Disaster Preparedness Plan for Ghana, 1992
- Strategic Plan for the Greater Accra Metropolitan Area, 1992
- A National Strategy for Sustainable Human Settlements in Ghana, 1993
- National Shelter Strategy, 1993
- Local Government Act, 1993
- National Development Planning (Systems) Act, 1994
- National Action Programme for Poverty Reduction, 1995 (Draft)

This National Plan of Action (NPA) in connection with Habitat II has borrowed substantively from the preceding Reports prepared by the Ministry of Local Government and Rural Development, the Ministry of Works and Housing, the Environmental Protection Council, the Town and Country Planning Department and the National Development Planning Commission. It was considered unnecessary to re-invent the wheel where the strategies, policies and programme activities formulated in the reports addressed the current priority issues. Where necessary, information was updated and new issues were dealt with.

2. Participants

The preparation of the above-mentioned documents received inputs from a large number of interested parties - representatives of key government ministries and departments, academic, research and scientific institutions; the media, and the private sector, including NGOs. The preparatory process for each of the reports involved several or all of the following participatory activities:

- a multi-disciplinary national team of experts prepared reports on specific subjects.
a steering committee consisting of representatives from various sectoral ministries and NGOs provided direction and made comments.
- field trips made it possible to obtain first-hand information and views of communities, opinion leaders, chiefs, local authorities and community based organizations.
- submissions and comments were sought from the general public.
- national workshops/seminars were held to obtain broad views and consensus.

Apart from the preceding preparatory activities in connection with the background documents, a draft of this Report was presented at a national workshop on Habitat II in November 1995, to obtain views and comments. The workshop participants included representatives from all the ten regions of Ghana. Nine out ten District Chief Executives from the regional capitals also attended. The chairmen of the workshop discussion groups comprised three District Chief Executives, and two representatives from the private sector. The closing plenary session was chaired by the Chairman of the Parliamentary Committee on Environment. A list of the workshop participants is presented in Annex.

3. **Major Thrust of the Report**

Following this introductory Part A, the Report provides an assessment of current conditions and priorities, starting with a Broad Setting, Chapter B.1, which assesses the relationship between settlements and socio-economic trends and policies at the national level and sets a broad strategic framework for the National Plan of Action. Chapter B.2 gives an assessment of current settlements and shelter conditions based on urban and shelter indicators, Chapter B.3 reviews the past 20 years - the national experience in implementing the plan of action from Habitat I (1976). Chapter B.4 presents two examples of best in-country practices in improving living environments; and Chapter B.5 deals with priority issues, covering decentralization and governance, access to land and shelter, urban poverty reduction and employment generation, environmental management, and disaster mitigation. Gender issues and the needs of vulnerable groups have been treated as cross-cutting themes throughout the report.

The National Plan of Action is presented in Part C. It deals with the priority issues mentioned above (under Chapter B.5) and includes specific actions to be implemented and monitored during the 1996-2000 period. Part D, which concludes the Report, deals with international cooperation and assistance.

While contributing to the adoption and implementation of a Global Plan of Action in support of national plans of action, the preparatory process has made it possible to bring into one frame of reference, key human settlements issues facing Ghana and the strategies which have been proposed.
B.1 THE BROADER SETTING:

Settlements and Socio-Economic Trends

Ghana has a total land area of 23.9 million hectares covered by five main vegetation zones: moist semideciduous forest, interior wooded savannah, rain forest, coastal scrub and grassland and the strand and mangrove zone. Rainfall in the country is generally torrential and the extreme southwestern part of the country is the wettest, receiving more than 190 cms of rain a year. The driest area lies in the south-east coastal plains with a mean annual rainfall of about 75 cms.

The current population of the country is estimated at 17 million and is projected to reach 20 million by the year 2000. The annual growth rate was 3.1% between 1984 and 1992. Accra is the primate city of Ghana and it is the only settlement with a population of over 1 million people. The estimated population is 1.9 million; constituting 11% of the national total. The next three largest settlements (Kumasi, Takoradi, Tamale) have populations ranging between 100,000 - 500,000 people. The mean population density is 51 persons per sq km.

A recent study undertaken by the National Task Force on Human Settlements (NTF) showed that Ghana’s population of 14 million (1986 estimate) lived in 47,800 towns and villages. About a third of the population (32.4%) were dispersed in over 40,000 small settlements, each having a population of fewer than 500. Slightly over one-third, (35.6%), lived in 7,000 settlements, each with a population ranging between 500 and 5,000. The remaining population (32%) lived in the 189 settlements, which are classified as urban, with populations of 5,000 or more. See also Box 1 below and Chapter B.2 (Introduction).

According to the NTF the working and living conditions in both rural and urban settlements are visibly unsatisfactory with gross inadequacies in access to basic shelter, utilities and employment or income-earning opportunities. The problems have been compounded by at least three factors, all occurring on an unprecedented scale; namely, the high rate of population growth, the massive scale of urbanization and its chronic consequences in the cities and the abject poverty of a majority of the population in both rural and urban areas. The observed deficiencies in the spatial system have grown in magnitude over the last two decades; in 1970-1984, especially, the economy of Ghana suffered a severe decline. An explanation for the apparent decline in the structures of many towns, the functions they perform, and the services they deliver may be derived from the reduced activity of local and central government in many small towns over those years. See also Box 2.

This view is based on the fact that public administrative services and supply of basic infrastructure have always been the indicator to the private sector of the feasibility of investments in towns. When these declined with the economy, investment in small towns generally declined. Whenever the magnitude and effectiveness of governmental activity in towns have changed, this has inevitably affected the functions and structures of those towns; e.g., Akuse and Kete Krachi. The small towns cannot be effective for several reasons. Among them is the fact that the level of social and technical infrastructure they possess is inadequate to serve the population in their empirical service areas. See Box 1. As a result of this inadequacy, the basic interaction between small town and village that is essential for the growth of centres and other settlements does not take place.
Efforts were made in the 7-year Development Plan 1963/64-1969/70 to improve the level of economic activity in many declining towns through either state-sponsored modernized economic activity or the location of some technical and social infrastructure. Saltpond, for example, acquired a ceramics factory while Komenda gained a sugar factory. Many other towns were equipped with secondary schools and some form of medium or small scale industrial activity. These efforts to stop the decline of towns were based on the conviction that socio-economic benefits of those industries and facilities would trickle down to the surrounding rural areas. Unfortunately, the industries were often designed so that they depended more on imported inputs than on local ones and subsequently had few or non-existent linkages with their immediate environment. As a result, the hopes of stimulating production, employment and diversification of regional economies failed to materialize. Even in their "boom" periods many of the facilities provided under the plan had little impact on their service areas.

The attempt to provide urban functions in basically rural regions, under a goal of accelerated industrialization, led to small urban centres not performing adequately the functions expected of them. The policy of spreading resources to satisfy social demands throughout the regions in the early years of independence undermined the basic premise of the industrialization strategy. The shift of resources in many areas was often in the form of isolated services such as a new clinic, school or district administrative office, in a basically rural centre.

The unplanned shift of resources affected regional development at both the urban and the rural levels. It reduced what was available for the industrialization and urbanization processes and at the same time did not aid rural settlements to become effective urban centres due to the large inefficient spread of those resources and capital. Populations from the rural areas continued to move into the regional capitals and national capital. The result was fast-growing, poorly-serviced municipalities and cities, and a still backward rural area. Thus the desire to appease rural settlers, which led to the scattering of such investments without any distinct locational pattern, and which did not even permit the consideration of growth in the middle and lower ranks of the centre-hierarchy, bore no fruit. Subsequently, an appropriate spatial structure resulted. This is not meant to imply that it is the only way such "dualistic dependency" was created, but it does explain to a large extent the development gap between Ghanaian regional capitals and other settlements in the regions. See Box 2

Indeed the effects of public actions on urban growth can be compared to the effects of past and present governmental policies on inter-regional investment allocations. Government's resource allocation was based on the view that there was a rapidly growing disparity between a core region comprising some southern administrative regions and a periphery of northern investment projects in regional capitals in northern Ghana, as may be illustrated by the case of Bolgatanga and, more recently, Wa. With this development, the momentum of development investment in the core regions slackened at the same time that governments were interested in promoting administrative centres (regional capitals) in the north.

Without any corresponding investment in the lower level centres of those regions, and with a deterioration in the already existing facilities, such as transportation, the development gap between these relatively new urban centres and the rest of the settlements in these regions certainly widened. In the new regional capitals, it is obvious to the casual observer that almost all new construction is
PART B

ASSESSMENT AND PRIORITIES

1. The Broader Setting
2. Urbanization and Housing Conditions and Trends Based on Indicators
3. The Past 20 Years
4. Best Practices
5. Review of the Effectiveness of Existing Policies and Strategies for
   5.1 Decentralization and Governance
   5.2 Increasing Access to Land and Shelter
   5.3 Urban Poverty Reduction and Employment
   5.4 Environment Management
   5.5 Disaster Preparedness and Mitigation
   5.6 Gender-Specific Roles and the Needs of Vulnerable Social Groups
undertaken on behalf of the central government in the pursuit of increased centralized administrative services.

Box B1.1: Spatial Organisation

The spatial organization of human settlements, the density distribution of population, and spatial/functional linkages, especially rural-urban interaction are closely related to economic development. The following are some of the existing conditions of human settlements in relation to productive activities and the delivery of basic services:

In Bongo District (Savanna Zone), 57.4% of the total population of 95,263 live in 292 settlements (84.4% of the total number of settlements), each of which has a population of less than 500. In Tepa District (Forest Zone) nearly all the settlements (99%) are small, each with a population of less than 500. The situation is about the same in Techiman District (Transition Zone) and in Ada District (Coastal Zone). Bongo District has only one settlement with a population between 2001-5000; Techiman District has four; Tepa District has none; and Ada District has eight. Tepa District has 1,513 settlements out of which 1,369, representing 90%, are tiny villages each with a population of less than 50. There are thousands of settlements in the country whose individual population does not exceed 50.

The existing size distribution of settlement population has implications for the equitable distribution of services and facilities, and the promotion of productive activities. Every service or facility requires a threshold population (that is, the minimum population) to support it effectively and efficiently. For example, given the limited financial resources, 40,000 (representing 83.7%) out of the total number of 47,800 towns and villages in the country can be supplied with only hand-dug wells because each of the 40,000 villages has a population of less than 500 and it would not be cost effective to provide a piped system of water supply. To give another example, none of the 40,000 villages has the threshold population required to support a school. (A primary school, with a single stream of 6 classes, a pupil/teacher ration 40:1, and an enrolment rate of 100%, will have a capacity of 240. The threshold population for the school would be 1,600 assuming that the school-going age population is 15% of the total population. In other words, none of the 40,000 settlements can have their own school). Given the limited financial resources, not every village with a population of less than 500 can be provided with a school, a health centre or piped water.

In conclusion, it should be pointed out that Ghana faces a serious problem with regard to the large number of human settlements lacking the threshold population required to support basic services and facilities and to achieve economies of agglomeration.


Following the fact that government could not, for financial reasons, adequately maintain capitals in all regions, facilities in the southern regions, which were much older and often constructed before independence, have deteriorated without any replacement. It is this trend that strengthens the hypothesis that the rise and fall of urban centres, measured by the level of interaction with their hinterlands may be directly linked to the degree of sustained public investment in the urban centres. But other factors such as economic considerations have contributed to this process. For example, it must be noted that such active organizations as the United Africa Company and Cadbury and Fry, around whom the economic life of many towns like Nsawam and Agona Swedru were centred, are hardly active today in those towns and no adequate replacements for their roles in town growth have as yet evolved.
Box B1.2 Spatial Imbalances

The legacy of the colonial system was a structure characterised by spatial polarization. Investment and development were limited to a few cities and enclave economies, with stronger linkages to overseas economies than to their own hinterlands. Since Independence, however, development policies have consistently supported greater equity in the distribution of the social benefits. Nevertheless, the geographical pattern of resource investment has not changed significantly. Investment has principally been aimed at maximising economic growth, which tended to consolidate polarization and an inequitable distribution of resources.

The Economic Recovery Programme was not designed to redress the spatial imbalances in the economy and society, with the result that despite the progress made over the past decade, investment in the "golden triangle" bounded by Accra-Tema, Kumasi and Sekondi-Takoradi continues to dominate and compounds the problem of polarization. In consequence, many of the nation's human and physical resources (which are to be found in the rural areas) remain under-utilised or unused and are not integrated into the national economic system.

Spatial imbalances are reflected in the skewed population distribution. The process of urbanization is dominated by the four main cities: the conurbations of Accra-Tema, Kumasi and Sekondi-Takoradi (which form the golden triangle") and the city of Tamale. These four urban centres increased their share of total population from 12.1% in 1960 and 15.7% in 1970, to 16.35% in 1984. Their share of urban population was 45.6% (1960), 49.2% (1970) and 49.8% (1984). Accra-Tema has continued to exercise an increasingly high level of dominance; polarization of development appears to have deepened since late 1970s, thus inhibiting the efficient utilization of human and physical resources.

The structure of Ghana's economy and the geographical pattern of investment has resulted in a particularly uneven level of urbanization, both geographically and hierarchically, with wide variation in the level of services provided by towns. The provision and use of appropriate economic and social services located in service centres represents a strong linkage between urban centre and hinterland. Conversely, the constant supply of primary and processed products from rural area to urban households and industries represents a strong linkage between hinterland and urban centre.

In Ghana these linkages are largely absent or, at best, are weak and underdeveloped. The national system is dominated by Accra and Kumasi, with a one way flow from these centres to the hinterland. Benefit to the rural areas is minimal. Generally speaking, towns do not adequately fulfil their potential role as engines of growth within the local or national economy.


The issue of low private investment in small towns needs careful consideration and this inevitably should be related to the element of risk-taking in business, which tends to be higher in less developed areas. Certainly, there is a factor of "poor attraction" about most small Ghanaian towns to discourage many long-term private investments in such centres. Source: A National Strategy for Sustainable Human Settlements in Ghana, MOLG, 1993
Rural-Urban Disparities and Rural Deprivation

At present over two-thirds of Ghana's population live in rural settlements. Investments have historically been polarised in favour of urban areas. This has resulted in rural-urban disparities in the distribution of services and infrastructure and in employment opportunities. As a result, the rural environment is host to the worst problems of poverty, disease, illiteracy, and deprivation. The rural areas further suffer from lack of productive services, especially agricultural and technical services, storage and marketing facilities and roads. The rural situation is further worsened by the absence of a hierarchy of settlements and strong, well distributed, rural service centres for extending both economic and social services to support and promote rural production and social life.

The tendency towards urban bias is still pronounced and strong. Policy makers are becoming increasingly sensitive to the fact that policies and technical strategies representing an urban bias, however slight, exaggerate and reinforce the trend. This increasing sensitivity is in part due to the awareness that the self-sustaining trend of excessive urban growth has brought in its wake some political, social and economic disorders and problems. Thus, policies are being put into place to moderate this trend with a view to attaining a balanced strategy which will exploit the complementarity of urban and rural systems and societies and acknowledge the symbiotic nature of their relationship.

Medium-Term Policies in Relation to Human Settlements

The medium-term policies in relation to human settlements are threefold: first, to facilitate effective coordination in regard to economic, social and physical aspects of town development, including policies on housing to ensure cost-effective and seemly development; secondly, to provide for the accelerated growth of human settlements selected for support of the transformation of the rural sector; and thirdly, to ameliorate adverse economic, social and environmental conditions in key settlements.

Specific objectives are as follows:

- Recognize the role of towns as a dynamic component in national development and nation-building and ensure that this recognition informs policy formulation, administration and management at all levels of development planning.

- Stimulate the pivotal roles of all urban settlements as economic, social and cultural catalysts and as vehicles for growth and development of the neighbouring hinterlands.

- Achieve a more spatially equitable and rational distribution of population between settlements of varying sizes, with special attention to small and medium-sized towns, to provide the human resources required to construct and operate the economic and social infrastructure essential for their own development and that of their rural hinterlands.

- Encourage the development of a hierarchy of settlements, providing at each level services appropriate to the size of the population concerned.
- Ensure healthy environments in all urban areas by the appropriate provision of public utilities, effective waste management and adequate provision of open spaces for tree cover and recreation.

- Encourage the growth of diversified, stable economies in human settlements in both urban and rural environments.

These urban development policies aim at stimulating the growth of appropriately located small and medium-sized towns serving rural areas, particularly those with a pronounced development potential and a propensity to grow, or areas with significant social deficiencies. Service centres are required as catalysts and engines of growth in the process of accelerated rural development.

Urban development policies, therefore, have two main medium-term aims. The first is to underpin the process of rural transformation by giving priority to the progressive provision of services and infrastructure in small and medium-sized towns in support of economic and social improvements to the rural environment, including more diversity in opportunities and choice and in social well-being. The second is to promote non-agricultural and non-traditional agricultural jobs in selected small and medium-sized towns, which will assist in beginning to ease population pressure on the large towns and conurbations by the end of the five year period. This will also help in reducing adverse economic, social and environmental conditions in the main centres.

The basic purpose of the medium-term development programme is to create sufficient dynamism in the economy and society to embark on a course of sustainable development targeted to ensure increased production, enhanced capacity to meet social needs and a more ecologically balanced and sound environment. In addition, urbanisation policies will be implemented to underpin accelerated rural development in order to redress the previous lack of balance in investment. The objectives will be achieved by strategies emphasizing human development, economic growth, accelerated rural development and urbanisation policies in support of rural development, and by a dynamic enabling environment.
B.2 URBANIZATION AND HOUSING CONDITIONS AND TRENDS BASED ON INDICATORS

2.1 INTRODUCTION

Indicators have been used as a measure of development quite extensively in Ghana. The present exercise, therefore, attempts to utilize this well known methodology using a minimum set of indicators that have been prepared to produce a factual description and analysis of the process of urbanization and the quality, quantity, availability, accessibility and affordability of shelter, and to diagnose urban and human settlement conditions through the use of a minimum set of indicators.

The urban and housing indicators have been divided into modules. The modules are: Population; Poverty, Employment and Productivity; Social Development; Infrastructure; Transportation; Environmental Management; Local Government; Housing Affordability and Adequacy; and Housing Provision. The list of key indicators is quite comprehensive but while it is important to adhere to the use of the set of indicators for each policy field in achieving the goal of this exercise, it became necessary to adapt some of the indicators and also use other proxies because of data availability, and measurement problems and also to reflect the peculiar circumstances of the country.

2.2 URBANIZATION

2.2.1 Trends in the Growth of Towns:

Ghana has over 47,800 towns and villages. Settlement sizes are generally small. Reckoning by the 1984 census, no single human settlement of the country had a population that reached a million. According to the 1970 population census report, there were 134 settlements whose population sizes reached or exceeded 5000 persons, the size that is statistically and officially classified as urban. The number of urban centres had increased to 189 in 1984. In 1984 forty-two (42) of the urban settlements had populations ranging between 10,000 and 20,000. There were nineteen (19) settlements with populations within the range of 20,000 and 50,000 persons. Three (3) had populations within the range of 50,000 and 100,000 and four (4) had sizes with populations above 100,000 but below 500,000. The national capital, with a population of 984,000 persons (1984), is the only settlement whose population exceeded 500,000. See Box B2.1

Only 23 per cent of the national population lived in urban centres in 1960. This proportion increased to 29 per cent in 1970 and 32 per cent in 1984.

The indicators also show that urbanization was greatest during the period in the metropolitan area of the capital city, Accra, and Tema and the regional capitals. These eleven centres alone captured about 60% of the urban growth between 1970 and 1984. The overall dominant characteristic has been that of primate growth and distribution. The Accra-Tema metropolitan area, with the largest concentration of urban population, contained about 30% of the national urban population. The three metropolitan areas of Accra-Tema, Kumasi and Sekondi-Takoradi had 42% of the 1984 urban population.
Box B2.1 Urban Population Growth

In Ghana the urban population is growing at an estimated annual rate of 4.1%, compared with overall population growth of 3%. The urban population in Ghana is currently estimated at about 33% of total population, compared with 23% in 1960. The problem in Ghana is not urbanization per se but the rate of urban growth and its distribution. The source of urban growth has changed. During the period 1948 to 1960 migration contributed over 90% of urban population growth. This dropped to about 50% between 1960 to 1970 and to only 8% between 1970 to 1981. Urban growth is now mostly attributable to natural increase. Distribution of population between urban areas is heavily skewed, with increasing concentration of population growth in the two largest cities, Accra/Tema and Kumasi. Rapid growth in these centres and in Sekondi/Takoradi and Tamale has led to adverse social, environmental and economic conditions, particularly for the underprivileged and population at risk. However, growth in these four major urban centres is now slightly slower on average than in small and medium-sized towns. Source: Ghana - Vision 2020 (The First Step: 1996-2000)

2.2.2 Trends in Basic Urban Infrastructure and Services

The basic supporting urban infrastructure and services considered here are (a) potable drinking water, (b) health, (c) education, (d) electricity, and (e) telecommunication, all of which are key to the development of towns in Ghana. Statistics are a little sketchy but the few available can portray the past trends.

2.2.2:1 Potable Water

In 1970, 60% of the urban population had access to potable water. This figure increased to 72% by 1980 and to 83% by 1990, thus portraying an increasing improvement in the standard of living of the urban population. In 1970, 69 urban centres had water. The number increased to 79 by 1980. By 1990, however, as many as 23 or 20% of the 110 district capitals had no potable water. The situation has now been improved a bit following the implementation of the Water Sector Programme which has raised the urban access to potable water to 92.7% (1994). Yet some district capitals and a host of smaller urban centres still are without it.

Currently, urban population access to potable water stands at 93% (1992), compared to the 35% for the rural population. In the case of the large urban centres, including all the regional capitals and some district capitals, the access rate is 100%. The smaller towns, i.e., those with population between 5000 and 20,000, however, have an access rate of 70%. Distribution of households by source of drinking water in the urban areas stands as follows: Accra: inside plumbing - 45.7%, water vendor and truck - 23.0%, natural sources - 13.1%, and other sources - 18.2% (1990). Other urban areas: have inside plumbing 23.0%, water vendor and truck - 2.1%; natural sources - 25.0% and other sources - 49.9%. It can be seen from these figures that more efforts need to be expended on providing water for individual houses. In spite of relatively high urban access to safe water, to a large section of the urban population access is only nominal as there are several disruptions in the supply. (See Box B2.2)
Box B2.2
Water and Sanitation

Disparities between urban and rural areas are particularly marked in the case of water supplies. Most urban dwellers -- 93% -- have nominal access to safe water, though there are frequent disruptions in supply. In rural areas, on the other hand, only 39% of the population have even nominal access to safe water. There are also inter-regional disparities. For example, whereas 81% of the population of Greater Accra -- urban and rural -- have access to safe water, in Eastern Region the figure is only 38%. Over the past decade, the government has directly, and indirectly through encouragement to non-governmental organisations (NGOs), improved access to water supply in the rural areas by involving local communities in water and sanitation management projects. In the urban areas, rehabilitation work has already commenced on Accra and Tema water and sewerage systems, and improvement is being made to water supplies in regional and district capitals and other towns.

Source: Ghana Vision 2020 (The First Step p8)

2.2.2.2 Sanitation

Current conditions of garbage disposal and toilet facilities in urban areas are described in Chapter B.5.4.

2.2.2.3 Health

Each district capital is expected to have a district hospital to service the whole district. However, by 1970, only 59 district capitals had the facility. The number increased to 70 by 1990. On the national scale, the number of persons per physician increased from 9,920 in 1970 to 22,970 in 1990 while the corresponding figures for persons per nurse were 690 in 1970 and 1,670 in 1990. The doctor-population ratio in Accra was, however, 1:5764 in 1970 thus showing the excessive concentration of doctors in Accra.

2.2.2.4 Education

According to the GSS, 87% of rural households live in communities where there is a primary school and 64% live in communities with JSS. The percentages for the four most deprived regions are as follows with regard to primary school: Upper East: 67%; Northern: 75%, Volta: 78%; and Upper West: 80%. With regard to JSS: Upper East is also the most deprived: 33%; Upper West: 40%; Western: 46%; and Eastern: 57%. In terms of the distance rural households travel to reach the nearest middle school/JSS, 64% of all rural households are within one mile. Accessibility for the remaining households is 1-2 miles: 14%; 3-4 miles: 13%, 5-6 miles: 3%, 7-8 miles: 1%, and 9+ miles: 4% (GLSS 3, 1993)

2.2.2.5 Electricity

In 1970 there were 57 urban settlements with electricity in the country. These were the regional capitals, a few district capitals and the main commercial centres. By 1990 the number had increased to 80 to include more district capitals and commercial centres. Urban population access to electricity increased from 48% in 1970 to 66% in 1990 with most of the beneficiary urban settlements occurring in the southern region of the country. Over 76 per cent of non-industrial consumers of generated
electricity are resident in Accra-Tema, Kumasi and Sekondi-Takoradi. With the on-going implementation of the Northern Electrification Programme, however, the trend is now changing as more and more urban centres in the northern region of the country are getting electricity supply.

Electricity supplies about 10% of total energy consumed and the consumption is rising by 5% a year. Existing hydro-electric schemes are having difficulty in meeting demand and additional thermal stations either are planned or are now being implemented. There is an increasing use of small solar power generators in some rural areas, though the output is negligible. Source: Ghana Vision 2020 (The First Step p19)

Urban population access to electricity is 88% (1992) compared to the national average of 33.3%. But, as in the case of water, electricity supply has been confined to the large urban centres, and especially to the southern towns. Over 76% of non-industrial consumers of generated electricity are resident in the three cities (Accra-Tema, Kumasi, Sekondi-Takoradi). Thus the other 186 towns, together with the rural settlements, share the remaining 24% of the supply. However, with the current Expanded Electrification Programme, reinforced by the Northern Electrification Project, the situation is changing very fast.

Power is generally cut for two main reasons: (i) to make normal repairs to the system and (ii) to conserve power as a result of the low levels of the Akosombo dam. On average, power is cut for about 4 days per month in Accra, which is about the average situation in the whole country.

2.2.2.6 Telecommunication

Telecommunication service as a supporting facility to urban development has been a problem in this country as telephone lines are woefully inadequate for the needs of the urban population. In 1970, only 30 urban centres had telephones. The number increased to 59 in 1990. Currently (1995) as many as 32 district capitals have no access to telephones. This makes district administration exceedingly difficult.

2.2.3 Urban Poverty, Employment and Productivity

While incomes are generally low in the country, urban poverty is not as serious as rural poverty. Urban households below the poverty line are estimated at 25% as against 43% for rural households (1990). While only 3.9% of Accra households are below the poverty line the corresponding figure for the rest of the urban areas put together is 26.5%. The poor spend 50% of their income on food. Income disparity is quite high as the highest 20% households earn about 6 times the income of the lowest 20%. See chapter B.5.3 below. About 92% of the economically active urban population is employed. While Accra's employment level is 90.0% the rest of the urban areas put together have 93.5%. Employment participation rates for Accra are 39.9% for males and 29.6% for females. The corresponding figures for the rest of the urban areas put together are 32.6 for males and 32.3% for females. The problem, however, is the low productivity in the sector. Over 80% of wage employment is in the three cities: Accra-Tema, Kumasi, Sekondi-Takoradi. See chapter B.5.3 below.
Ghana's GDP was US$6884 million in 1992. Non-agricultural activities, mainly urban, contributed about 50%. Thus per capita urban productivity was US$8000 compared with the national per capita GDP of US$4000.

2.2.4 Social Development

2.2.4.1 Sustainable Demographic Growth

The national life expectancy at birth was 56 in 1992 compared to 52 in 1970 and 47 in 1960. The national child mortality rate was 81 in 1991 compared with 111 in 1970 per 1000 live births. Fertility rate was 6.1 in 1992 compared with 6.7 in 1970. In all cases improvements have occurred, thus pointing to sustainable demographic growth. The urban figures are not available.

2.2.4.2 Education

In 1970, the % of age group enrolled in primary school was 64 total and 54 female. The corresponding figures in the case of secondary school were 14 total and 8 female. By 1991 the % had risen to 77 total and 69 female in primary school, and in secondary school the % had also risen to 38 total and 29 female. Primary pupil/teacher ratio dropped from 30 in 1970 to 29 in 1991, all portraying progress during the two decades.

Literacy rates, including those of the urban areas, are quite low. Urban literacy rate stood at 52% in 1990 compared with the national average of 32%. For Accra, literacy rates were 71.7% for males and 54.9% for females. The corresponding figures for the rest of the urban areas were 49.0% for males and 28.8% for females. Urban adult literacy rates were 51% for Accra compared with 26% for other urban areas put together. The sex comparisons for Accra and other urban areas in adult literacy are: Accra: male - 66.7%, female - 31.7%. Other Urban: male - 41.4%, female - 10.4%. Primary school enrolment rates stands at 61% for Accra and 67.2% for Kumasi compared with the national average of 69.7% (1990). In terms of proportion of females in school-age population, the situation is as follows: Accra: Primary - 52% and Secondary - 48%. Other Urban: Primary - 47% and Secondary - 41%. (See Box B5.2 in chapter B.3 below)

2.2.4.3 Single Parent Households

The available information on the percent of female - headed households by locality is as follows:- Accra: 24.8%, other urban - 32.0%, national: 29%.(1990)
2.2.5 **Source of Lighting**

As depicted in Table B2.1, whilst electricity is used by most urban households, the situation is different in the rural areas, where the real source of lighting is kerosene/oil lamps and other means.

Urban households by the source of lighting are as follows:

*Table B2.1*

<table>
<thead>
<tr>
<th>Source of Lighting</th>
<th>% of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accra</td>
</tr>
<tr>
<td>Electricity</td>
<td>79.5</td>
</tr>
<tr>
<td>Kerosene/Oil Lamps</td>
<td>20.5</td>
</tr>
<tr>
<td>Candles/Torch</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
</tr>
</tbody>
</table>

2.2.6 **Fuel for Cooking**

This is a great national problem, considering its impact on the environment and especially on the nation's forestry. Urban households using the various types of fuel are distributed as follows:

*Table B2.2 Household use of Cooking Fuel, 1990*

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Accra</th>
<th>Other Urban</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood</td>
<td>1.1</td>
<td>42.1</td>
<td>68.7</td>
</tr>
<tr>
<td>Charcoal</td>
<td>81.0</td>
<td>49.7</td>
<td>25.6</td>
</tr>
<tr>
<td>Gas</td>
<td>4.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Electricity</td>
<td>1.7</td>
<td>1.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Kerosene</td>
<td>10.8</td>
<td>5.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Other</td>
<td>0.6</td>
<td>1.3</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Table B2.2 shows that in both urban and rural areas the main sources of fuel are wood and charcoal, which account for more than 90% of all households, thus posing a great threat to the environment through the excessive exploitation of the country's forests.

2.2.7 **Transportation**

A Ministry of Transport and Communications study assessing the transport and mobility needs of the urban poor in 1992 gives the proportion of work trips undertaken by the various modes of transportation as follows: motorcycle - 1%; bus/trotro - 47%; bicycle - 2%; walking - 26%; other including taxi - 24%.
The Government set out in 1987 to establish the Department of Urban Roads under the Ministry of Roads and Highways. During this period the conditions of the arterial roads of the capital city's (Accra) road network were recorded in terms of lengths as 22% in good state of repair, 37% with slight failures, 23% with moderate failures, and 18% in a condition of severe failure. The Department has since initiated programmes to arrest the deterioration in the road networks of the four most utilized urbanized settlements - Accra, Kumasi, Sekondi-Takoradi and Tema - with a total composite targeted achievement of 2110 kilometres of periodic maintenance and minor works (comprising regraveling, rescaling, resurfacing, improvement, concrete and block drains) for the period 1989-93.

2.2.8 Environmental Management

The existing conditions of urban environmental management are presented in chapter B5.4 below, covering urban water quality, solid waste management and dwellings on land subject to natural disasters.

2.2.9 Local Government

2.2.9.1 Intergovernmental Institutional Arrangements

Because of the financial weakness of the local authorities, most of the basic services in settlements are provided by the central government agencies. Examples are: water by the Ghana Water and Sewerage Corporation; electricity by the Electricity Corporation of Ghana; health by the Ministry of health; education by the Ministry of Education; and roads by the Department of Urban Roads under the Ministry of Roads and Highways. The local authorities directly provide services especially in the area of sanitation (that is, garbage collection) as well as primary school and junior secondary school buildings, and basic equipment such as furniture, home-science equipment.

2.2.9.2 Financial Viability

The major sources of local government income are: licences/permits, rents from Assembly properties; investments, lands, and grants, i.e., from the central government. The relative importance of these sources can be seen from the table below for the three metropolitan areas of Accra, Kumasi and Sekondi-Takoradi in 1994.

It can be seen from Table B2.3 that the main sources of income of the local authorities are central government grants, fees, fines and charges.

The average per capita income for the three metropolitan areas are: Accra: 4.6 (US$); Kumasi: 5.8 (US$); and Sekondi/Takoradi: 5.1 (US$). These incomes are quite low considering the basic needs of the Metropolitan Assemblies. The per capita capital expenditure averaged over the past three years is as follows for the three metropolitan assemblies. Accra: 2.03 (US$); Kumasi: 1.06 (US$); and Sekondi/Takoradi: 1.23 (US$). These figures are also extremely low and thus restrict the metropolitan assemblies to a low level of achievement in the provision of basic services.
Table B2.3  Local Revenue Sources

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Accra %</th>
<th>Kumasi %</th>
<th>Sekondi/ Takoradi %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>46.8</td>
<td>17.0</td>
<td>42.7</td>
</tr>
<tr>
<td>Fees, Charges &amp; Fines</td>
<td>21.2</td>
<td>47.8</td>
<td>15.8</td>
</tr>
<tr>
<td>Rates</td>
<td>9.4</td>
<td>8.1</td>
<td>14.5</td>
</tr>
<tr>
<td>Lands</td>
<td>2.9</td>
<td>5.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Licences</td>
<td>11.1</td>
<td>7.8</td>
<td>11.6</td>
</tr>
<tr>
<td>Rent</td>
<td>0.20</td>
<td>0.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Interest on Savings (Investments)</td>
<td>0.7</td>
<td>1.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Reimbursement from Govt.</td>
<td></td>
<td></td>
<td>11.9</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>7.6</td>
<td>0.9</td>
<td>0.3</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Ministry of Local Government and Rural Development

2.2.9.3 Democratic Participation in Decision Making

To promote democratic participation in local government decision making, national administration has been decentralized to the grassroots level. The local government institutions are the Metropolitan/Municipal/District Assemblies, the Zonal/Urban/Area Councils and Unit Committees. Of these bodies, the Assemblies, numbering 110 in all, are the most important as they constitute the local political and administrative entities. See chapter B.5.1. These Assemblies are made up of elected and appointed members. By law, one-third of their members are appointed by the President in consultation with local interest groups and with the approval of the elected representatives.

2.2.9.4 Local Government Employees

Now that all the staff of the decentralized departments have been placed at the disposal of the local authorities it is difficult to estimate the number of local government employees per 1000 population. Statistics for the 3 metropolitan assemblies show that their average is 10 employees per 1000 population.

2.3 HOUSING TRENDS

2.3.1 Introduction

One of the features of housing in Ghana is the little information and the lack of accurate and reliable statistics on it. This is partly due to the absence of a workable framework for housing development demanding monitoring and evaluation. Either data relating to such vital issues as the nature and number of housing stock, tenurial arrangements, density levels and the quality of housing are non-existent or their reliability is suspect. (MLOG/UNCHS, 1990)
Rising population growth and increasing urbanization have made housing one of the most critical problems currently facing Ghana. It has been estimated that current (i.e., in 1986/87) housing needs (nationally) are 70,000 and there is an accumulated backlog of 250,000 needed to de-crowd urban units from 12.81 to a household occupancy rate of 7. An average annual delivery of 133,000 units is required if adequate housing is to be provided within the next 20 years as against the current annual delivery of 28,000 which yields a performance rate of 21% (MOWH, 1986).

Demand pressure on housing in urban areas has been growing. This is due largely to the inability of supply to match demand. For instance, the output of the formal housing sector over the period 1985-1988 is estimated to be less than 1000 units per year. The formal private sector, though growing, is still quite small and accounts for no more than a few hundred units per year (MOWH/UNCHS National Shelter Strategy). Shelter delivery performance of the formal sector, though small, is beyond the reach of low income earners. This sector takes care of roughly 5 percent of total housing delivery while the remaining 95 percent is provided by numerous small builders and individual owners. At the same time upgrading has been minimal. Very few households have improved or expanded the units they own. In urban areas such as Accra, Kumasi where the majority of households are renters of their accommodation, this situation has had a serious impact on the rental market. The mainstay of Ghana's housing supply is individual private effort. Almost the entire housing stock in rural areas has been provided through this. Private individuals also contribute over 80 per cent of housing in the three cities in Ghana and much more in the other urban centres except Tema and Akosombo, which are new towns built by Government.

The inability of the housing delivery system to meet effective demand over the years has created strains on the existing housing stock and infrastructure particularly in the large urban centres. In the urban centres, choice of habitation is often restricted to substandard structures and unsanitary environments in squatter and slum communities. In the rural areas, however, where much of the housing stock is produced by private individuals and families using mostly traditional building materials, the problem is one of a qualitative nature. Here the rate of improvements, replacements and new additions to the existing stock appear to have fallen to extremely low levels. See chapter B.5.2 below.

2.3.2 Housing Occupancy or Quantity Indicators

Increasing overcrowding, declining quality and declining access to services characterize much of the housing stock of Ghana. During the intercensal period 1960-70 the number of persons per dwelling fell from 10.6 to 9.1 but this increased from 9.1 in 1970 to 10.1 in 1984, indicating that the performance during the 1970 to 1984 period declined compared to the previous period. During the period 1970-1984 the rate of growth in population exceeded the rate of growth of the occupied housing stock in every region with Upper West, Upper East being the worst areas. Here population grew four times as fast as the housing stock. In the northern region it was nearly double (Ministry of Works and Housing, ladb n.d.). Overcrowding is a more serious problem in urban than in rural areas. In 1984 there were on the average 13.5 persons per house in urban as against 9 in rural areas. The occupancy rate for Greater Accra Metropolitan Area (GAMA) is among the highest in the country. In 1960, 1970 and 1984, the house occupancy rates were 17.0, 14.7 and 15.0 persons per house respectively. Dwelling occupancy rates in Accra are now estimated to be about 20 persons per
house (pph) and that of Tema is estimated to be 13 pph in 1990. The total housing stock for GAMA was estimated to be 94,732 in 1990 and this meant an increase of 68,340 since 1960. This is equivalent to a house production rate of about 3.2 percent per annum between 1960 and 1990 showing a declining trend since 1960. The 1960/70 and 1970/84 rates were 7.55 and 4.48 percent per annum respectively (MOLG/TCPD).

2.3.3 Housing Density Indicators

The above would suggest that occupancy per dwelling has risen in many urban areas over the years. Average household size is slightly higher in rural than in urban areas. In 1984 the average household size was 5.3 and 4.4 for rural and urban areas respectively. In the 1980's the average household size in Accra, (3.9) was slightly less that the average for other urban areas (4.7). At the beginning of the 1990's, the mean household sizes for rural and urban areas were 4.59 and 4.3 respectively while it was 3.75 for Accra and 4.52 for other urban areas. These show that the mean household size for all localities in the country has reduced slightly from that in the 1980's (GSS 1995).

In the 1980's the mean area of housing per person in the whole country was 7.4 square meters. The mean for households in Accra (10.4 square meters) was higher than that of households in other urban centres (7.3 square meters) (G.S.S. 1989).

The situation had changed by the beginning of the 1990's. According to the results of the GLSS3, the mean area of housing per person was 5.3 square meters for the whole country while it was 5.0 and 5.7 square meters for rural and urban areas respectively. In urban areas the situation in Accra (6.24 square meters) was slightly better than that of all the other urban centres (5.5 square meters).

Another housing density indicator is the mean number of rooms per household. According to the GLSS (1987/88) 48.3 percent of households in Ghana lived in one room. However, it must be noted that one-third of households are one person households. In the GLSS3 (1995) the mean number of rooms per households for the whole country was 1.86. The rural and urban means are 1.76 and 1.80 respectively. In the urban areas the mean number of rooms per household is 1.76 and 1.80 for Accra and the other urban centres respectively. The mean number of persons per room for the whole country in the early 1990s was 2.4 persons per room. The highest average room density (2.61) is found in rural areas while the mean for urban areas is 2.39 (Accra - 2.13, other urban -2.49).

An important housing density indicator is the proportion of households sharing a dwelling. For the country as a whole the GLSS3 (1995) found that 30 percent of households in Ghana shared their dwelling with another household. This is more a feature of rural areas than urban areas. In rural areas 37 percent of households as against 16 percent of households in urban areas share their dwellings with other households.

2.3.4 Housing Quality Indicators

Housing quality relates to the structural conditions of the housing stock and the services to which households have access in the houses themselves or in their surrounding areas. Unfortunately, no data are collected by the Census on structural conditions or the degree of dilapidation of the housing
stock in any locality. Because of the lack of importance of on-going maintenance, a large percentage of the housing stock is in such bad condition that it cannot be easily repaired. Two important indicators of the quality of housing are the adequacy of water supply and sanitation facilities available to each house and the households.

Few households in Ghana, as a whole, have access to piped water supply. The proportion of localities and population with access to piped water did not change significantly between 1970 and 1984. The proportion of the population which had access to piped water was 30.99 and 36.57 per cent in 1970 and 1984 respectively. With respect to homes the results of the GLSS 1987/88 shows that 20.8 per cent (3.9 inside plumbing and 16.9 inside stand pipes) and 0.5 per cent of homes in urban and rural areas respectively had access to piped water in the middle to the late 1980s. These figures had changed to 38.3 and 2.5 for all urban and rural areas respectively in the early 1990s. (GLSS3 - GSS 1995).

In Accra, however, the situation is much better than in other urban and rural areas. About 46 per cent and 22 percent of homes in Accra and other urban centres had their water supplies through inside plumbing in the 1980's. This had improved to 59.7 percent and 39.5 per cent for Accra and other urban centres during the GLSS3 1995). The difference in the results of GLSS 1987/88 and GLSS3 - 1991/92 may be due to differences in sample size and sample design. 

The availability of toilet facilities for all localities in Ghana is a difficult issue. About 51 per cent of urban households were served with flush toilets in 1987/88 (GLSS. - 1989). The proportion, however, was highest (64.7) for urban centres in coastal areas (including Accra) and lowest (19.3) for urban centres in the interior savanna areas. Only 5.4 percent of all households in rural areas had access to flush toilet in the same period. In 1995 only 17.6 and 1.4 percent of urban and rural households had access to flush toilets, 30.8 percent of households in Accra had access to flush toilets while only 12.1 percent of households in other urban areas were in that category. The situation in the two main urban centres in the early 1990s depicts the seriousness of the sanitation problem.

The third indicator is the household accessibility to amenities such as kitchens and bathrooms. In 1985 an average of 45.9 percent and 50.6 percent of households in Accra and Kumasi respectively had exclusive use of kitchens, while the figures for the exclusive use of bathrooms were 47.8 percent and 55.9 percent for Accra and Kumasi respectively (Agyapong 1990).

The fourth indicator is the availability of basic services such as the source of energy for lighting and for cooking in households. In 1987/88 26.7 percent of the sample households in Ghana were connected to electricity. In the urban areas, 79.5 percent of households in Accra as compared to 54.7 percent of households in other urban areas were connected to electricity. This situation had improved somewhat by the early 1990s. In the GLSS3 (1995) 28.5 percent of the sample households in the country were connected to electricity; 67.4 percent of sample urban households had electricity (89.6 percent for Accra and 58.3 percent for households in other urban areas) as against only 7.5 percent of households in rural areas.
Throughout the country 94.5 percent of all sampled households used wood fuel as the main source of fuel for cooking (GLSS 1987/88). This is the case in both rural areas (97.4 percent) as well as urban areas (over 80 percent). Even in Accra, 82.1 percent of the households used woodfuel as the main source of fuel for cooking. By the early 1990s this situation had not changed significantly from what it was in the 1980s. While 72.4 percent of households in Accra used woodfuel, as high as 92.5 percent of households in other urban areas were in this category. This has serious implications for the household environment and the health of households, particularly that of women and children.

Table B2.4 below summarises the key indicators of urban housing quality and quantity in the major urban centres in Ghana. Household disposal of waste is one way of judging the quality of the housing environment. In the whole country only 1.5 percent of all household have their household garbage or refuse regularly collected from their homes by the municipal/local authorities. It is only in Accra that a significant number of households enjoy this facility. In 1987/88 9.9 percent of households had access to this facility; by 1995 this proportion had increased to 12 percent (GLSS).

### Table B2.4  Selected Indicators of Housing Quantity and Quality in Urban Areas in Ghana 1960-1984

<table>
<thead>
<tr>
<th>Urban Area</th>
<th>Increase in Pop.</th>
<th>Increase in Houses</th>
<th>Average Hold Size</th>
<th>Rooms per House</th>
<th>Persons per House</th>
<th>Person s per Room</th>
<th>% of Houses with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Water</td>
</tr>
<tr>
<td>Accra</td>
<td>479,063</td>
<td>34,587</td>
<td>6.5</td>
<td>9.5</td>
<td>26.6</td>
<td>3.6</td>
<td>41.1</td>
</tr>
<tr>
<td>Kamasi</td>
<td>158,074</td>
<td>7,224</td>
<td>5.9</td>
<td>11.6</td>
<td>28.5</td>
<td>3.5</td>
<td>39.6</td>
</tr>
<tr>
<td>Sekondi/Takoradi</td>
<td>70,089</td>
<td>2,542</td>
<td>6.1</td>
<td>9.1</td>
<td>21.5</td>
<td>3.6</td>
<td>31.6</td>
</tr>
<tr>
<td>Tema</td>
<td>72,925</td>
<td>6,538</td>
<td>6.2</td>
<td>7.2</td>
<td>18.9</td>
<td>3.3</td>
<td>75.1</td>
</tr>
<tr>
<td>All</td>
<td>113,576</td>
<td>214,768</td>
<td>5.8</td>
<td>5.5</td>
<td>23.7</td>
<td>3.4</td>
<td>39.8</td>
</tr>
</tbody>
</table>


However, according to officials of the Waste Management Department of Accra, about 55 percent of households enjoyed regular solid waste collection service. This proportion had risen to 60 per cent by 1994.
2.3.5 Housing Affordability and Adequacy

According to GLSS3 (GSS 1995) the mean annual income of a household in Ghana (in 1991-92) was $480,000 ($517,000 for urban and $460,000 for rural areas). With respect to urban areas, Accra had a mean household income of $563,000 while households in the other urban centres had a mean income of $499,000. In 1990 the average selling price of a formal sector house type of 2 bedroom semi-detached and produced by both public and private formal sector developers ranged from 4.0 to 6.5 million cedis. (Ministry of housing 1991 table 30) If a price of 4.9 million cedis is used, we get a ratio between the mean annual household income and the median price of two bedroom house as 1:10.21 for the whole country, 1:9.48 for urban areas and 1:10.65 for rural areas. This situation obviously precludes the poor from participating in the market for formal sector housing.

The GLSS3 (GSS 1995) provides figures for mean income and expenditure for households in the country as a whole as well as in different localities. For the whole country the mean expenditure on housing per household was $14,000 representing only 1.8 percent of the total expenditure per household. Expenditure on housing accounts for 2.7 (4.7 in Accra and 1.8 in other urban areas) and 1.2 percent of the mean total household expenditure for urban and rural areas respectively. On the basis of the above the ratios of the median annual rent and median annual income of renters for the country, urban and rural areas are 1:34.3; 1:21.9 (Accra - 1:13.2; other urban - 1:32) and 1:56.4 respectively.

These figures show that Accra had the highest ratio of the median annual rent to the median annual household income of renters in different localities in the country at the beginning of the 1990's. It must be pointed out that the data on income may not be reliable. Most surveys have found income to be understated by a factor of 2 or 3. Surveys conducted for the housing needs assessment study of GAMA suggest that between 15 and 35 percent of income is spent on rent.

The mean proportion of urban household income spent on rent in 1985 was 16.3 percent (for Accra, Kumasi, Sekondi-Takoradi and Tema (Agyapong 1990 p.365 table 5.32). There were variations among the residential sectors - indigenous areas, tenement, public high income areas and government bungalows. Unlike the rural ones, most urban households rent their dwellings. In Accra less than 15 percent of households own their houses while less than 25 percent of households in other urban centres are in this category (GLSS 1987/88). The results of GLSS 1991-92 (GSS 1995) show that only 7.6 percent of households in Accra own their homes. The report also indicates that male-headed households are more likely than female-headed households to own their own home.

2.3.5.1 Adequacy of Housing

The indicators used for this are the amount of living space per person (m²); proportion of permanent structures of the total housing stock; percentage of total housing stock, in compliance with current regulations, and expenditure on housing infrastructure.

The amount of living space has already been discussed above. The point has also been made above that a large percentage of the total housing stock in the country is in a very bad condition. The
available information shows that almost 50 percent of dwellings in the rural sector need demolition and replacement and another 26.5 percent require massive upgrading. This is largely due to lack of maintenance. In the urban area, the results of studies done in low income housing areas in selected urban areas (including Accra-Tema) show that about 30 per cent of low income housing is in very poor condition.

In Accra between 70 and 75 percent of the housing stock in the 1980's was built with permanent materials. This situation improved to about 85 percent in the 1990's.

Much of the development in many urban centres, particularly the cities, has occurred without a permit from the appropriate authorizing institution or agency. Data on the proportion of urban development without a permit is difficult to come by. It has been pointed out earlier that in Ghana the private individual efforts account for 80 percent of the housing output. An appreciable proportion belongs to the informal housing sector. Informal sector housing is usually provided or developed outside the official regulation or permission. According to information obtained from the Accra Metropolitan Assembly (AMA), the proportion of the total housing stock in compliance with the building and planning regulations increased from 60% on the average in the 1980's to 65 percent on the average in the 1990's. Data on other urban centres, on this issue, is generally not available.

2.3.5.2 Housing Provision

This section uses indicators on housing finance, housing production, housing investment and land development to show what has happened to housing delivery. (See the attached list of indicators).

Ghana is not served with a network of financial institutions that mobilise savings which are channelled either directly or indirectly into housing and mortgage markets. The contributions of the various financial institutions to financing housing is insignificant. See Box B2.3.

Surveys conducted in Accra have revealed that less than 2 percent of house owners had access to mortgage finance and this was almost exclusively confined to the higher income group. Most of the financial Institutions, including the banks, do not have the deposits to release funds for mortgage. Even if they do, they are inhibited by lending ceilings imposed by the Bank of Ghana and they are not able to give adequate loans for housing development. The banks therefore prefer to issue short-term commercial loans rather than long-term loans for Housing (MLOG).

Full and accurate information on the total flow of resources into the housing sector is not readily available, particularly information on the bulk of housing investment that comes out of private savings. Since the total value of contribution of the private informal sector is not known, the indicator used here is the ratio of the formal private sector (i.e., established real estate developers) investment in housing to the total public sector capital investment in housing for 1991. In 1991 the ratio was 1:28.1 (The ratios were 1:109.6 in 1989 and 1:100.3 in 1990). This shows an improvement in the contribution of the established real estate developers (i.e., the formal private sector) to total investment in housing from the formal sector.
Box B2.3 Capital Investment in Housing

1. Bank for Housing and Construction
Between 1985 and May 1990, the Bank for Housing and Construction extended 68 mortgage loans amounting to £339.67m. The average per person moved from £1.5m in 1985 to £60m in 1988 reflecting the escalating cost of a house.

2. State Insurance Corporation
Between 1985 and August 1990, SIC provided 36.5 mortgage loans totalling £731.1m. The average loan per person ranged from one half million cedis in 1985 to £7.5m in 1990.

3. The First Ghana Building Society (FGBS)
Between 1987 and 1992 FGBS provided 421 mortgage loans totalling £364.1m. The average loan per person ranged from £432,022 in 1987 to £1.8m in 1992.

4. Home Finance Company Ltd (HFC)
HFC was set up to: (a) operate and manage a fund for the provision of long-term resources for home mortgage financing, and (b) issue and deal in bonds and other financial instruments. Between July 1991 and July 1994, the HFC approved 1460 mortgage loan applications through Originating Servicing Institutions (OSIs) totalling £9,884.585m, with an average loan per applicant being £6.838m.

5. Commercial Banks
Their role is very minimal with less than 5 percent of their total loan portfolios invested in housing

source: Ministry of Works and Housing

Another way of showing the flow of resources into housing is by calculating the total investment in housing (in both the formal and informal sectors) as a percentage of the gross domestic product (GDP). The percentage rose from 0.1 percent in 1985 to 0.4 percent in 1988. It is estimated that if the share of household resources was added, housing construction would average between 2 and 3 percent of GDP during the 1985-88 period.

Another method of estimating the total flow of resources into housing investment is by ascertaining the total volume of housing produced by both the formal and informal sectors. It is difficult to come up with the actual number of housing units produced in the country in any one year. Census information is the most reliable but the last census was carried out in 1984. The 1984 census report shows that between 1970 and 1984 the total national housing stock grew by 271,000 units, an annual rate of 19,000 units (or 1.8 percent) per year. Assuming that this rate of production has been maintained since 1984 and assuming also that the total population of the country was 16 million in 1994, the housing production performance becomes 1.19 houses per 1000 population in 1994.

Land is the basic requirement for investment in urban development. Land is a finite and a valuable resource which is affected by numerous legal, physical, cultural and environmental constraints. There is great difficulty in gaining access to land especially in urban areas and particularly in Accra. The
existing land and real property market is very complex and it lacks an efficient delivery system, security of tenure, a well organized market and capital (Min of Local Govt. n.d.).

Reliable information on land prices in urban areas is difficult to obtain. However data provided by the Accra Metropolitan Authority (AMA) indicate that currently the price of an acre of plot in the inner area of GAMA is between 100 and 150 million cedis; for services/plots at the urban fringe it is between 30 and 40 million cedis an acre while unserviced land in areas with planning approval where some development has started ranges between 10 and 25 million cedis per acre. The average ratio between the median land price of a serviced plot at the urban fringe and unserviced plots in areas currently being developed is about 2:1. According to information obtained from the Land Valuation Board, serviced plots in the first class residential areas of Accra (e.g., Airport, Cantonments, Labone etc) currently (i.e., 1995) range between 150 and 180 million cedis per acre. (leasehold of maximum term of 99 years) while building plots in middle class residential areas (e.g., new Achimota, Domi, Taifa, Tantra Hill) range between 9 and 14 million cedis per acre for the same term as indicated above. In Kumasi land values of leasehold lands of maximum term of 99 years as at 1995 are as follows: for first class residential areas (e.g., low density Nyiaso, Ahodwo, Ridge) an acre of land ranges between 17.5 and 37.5 million cedis while the for developing middle class residential areas (eg Boodi, Daban etc) land values range between 12.5 to 18.75 million cedis per acre. For building plots in low class residential areas (eg. Akrom, Kokoben, New Kegyase, etc.) the values are between 4.3 and 10.9 million cedis per acre.

The prices quoted above show clearly that the poor cannot have access to land for housing at the current price levels. A one-acre plot costs about ten times the total annual average income of households in Accra. The picture portrayed above shows that all is not well with housing, particularly urban housing in Ghana, and particularly for the poor. They cannot afford housing at current rent levels. They have little or no ability to access land at current prices and therefore they have no choice but to live in crowded rooms and houses and in unhealthy living environments. What follows is a summary of the current housing conditions outside the use of indicators.

2.4 CURRENT HOUSING CONDITIONS

2.4.1 Housing Deficit

The major feature of housing in Ghana is a serious housing shortage or deficit. The housing deficit consists of the number of dwellings required to make up for the loss from the existing stock, to improve dwelling quality and to reduce crowding to acceptable levels. Housing production levels have fallen far behind the rate of growth of population particularly in urban areas. It has been indicated above that the country will have to produce about 133,000 housing units between 1986 and 2000 if housing is to be provided for all by the year 2000. Despite this requirement the formal housing sector's production level is currently very low. This sector accounts for less than 20 percent of housing delivery in the country. On the other hand, the informal sector, which accounts for the bulk of housing delivery (over 80%), faces severe constraints. In the urban areas the problem is mainly one of quantity though housing and environmental quality also are issues. Particularly in low income areas, housing leaves much to be desired. The conditions in AMA vividly describe this.
The general conditions of houses and housing areas for the metropolitan area are poor. Major problems affecting houses are poor roofs, floors, foundation and wall construction, poor orientation and inadequate provision for ventilation and light, poor ablation design and dangerous electrical fittings. Major site problems associated with housing are inadequate drainage, drains undermining foundations, solid and sanitary waste disposal and inadequate spacing of houses. When these conditions are experienced over a wide area; serious problems occur with local flooding, sanitation, access and public health. (TCPD/MOLG)

In the rural areas the problem is more of quality of housing and environmental services than the quantity of housing. Here the rate of housing improvement, replacement and new additions to the existing stock appear to have fallen to very low levels. The study by the Department of Rural Housing came out with the following:

- Nearly 50% of all houses have excessive structural defects to the point that they require demolition and another 25% require massive upgrading.
- 28% of the buildings have no foundations while 30% have defective foundation requiring repairs.
- Nearly 38% of all houses do not have suitable materials for the floors, relying on unstabilized solid mix and not surprising over 80% of the houses required repairs on the floors.
- About 32%have walls which are unrendered.
- 48.7%are roofed either fully or partially in thatch and as many as 76% require replacement of their roofs.
- About 27% of the buildings are threatened with walls proned to structural failure while 33% have repairable cracks.

It has been estimated that the non upgradable housing constitutes 10 percent of the total housing stock in Ghana (10 percent for Accra, 7 percent other urban centres and 15 percent in rural areas).

2.4.2 Tenancy Status

According to the Ghana Living Standards Survey GLSS 1987/88 (GSS 1989) 23.4 percent, 35.3 percent of urban residents were owners and renters respectively of their accommodation. 41.3 percent of residents belong to other tenancy status - either they have their housing provided free of charge or it is paid for by someone else. The corresponding figures for rural areas were 58.9, 7.1 and 3.4 for owner occupiers, renters and "others" respectively.

In GLSS3 1991/92 (G.S.S. 1995), over a third of households own their homes but owning a home is more a feature of rural area (47.8 percent) than urban areas (17 percent). Two-fifths of all households live in rent-free housing. This has both a positive and negative impact on housing the
poor and on maintenance of the housing stock, particularly "family homes" (Korboe, 1992; Tipple and Wallis 1991). A larger proportion of residents in Accra (43.0 percent) rent their accommodation than do residents in other urban (38.0 percent) centres.

2.4.3 Type of Dwelling

The housing stock in Ghana is dominated by compound housing. About 67.4 percent of all households live in rooms in compound houses and in other type of rooms. In GAMA these account for about 52 percent of the housing stock; a fifth of all households live in apartments or flats and in other urban areas almost a tenth do so. Female-headed households are less likely than male-headed ones to be occupying family houses or huts/buildings, but they are more likely to be occupying rooms.

2.4.4 Projection of Housing Needs (1990-2010)

In view of the severe shortage of housing, it has been estimated that by the year 2010 the country would need a total housing stock of 4,109,300 with an average annual requirement of 195,600 between 2006 and 2010. In the urban areas the same estimates put the total housing stock by the year 2010 at 1,658,600 at an annual production requirement of 101,800 between 2006 and 2010. In the rural areas, the total housing needs at the end of the period are projected to be 2,431,600 with the annual requirement for the period 2006-2010 being 95,600 housing units. These projections are based on three basic assumptions: the replacement of stock; the reduction of crowding in the existing stock; and the demand arising from net family formation (based on Ministry of Works and Housing: National shelter Strategy Ibid table 2.7 p34).
B.3 **THE PAST 20 YEARS: NATIONAL EXPERIENCE IN IMPLEMENTING HABITAT I PLAN OF ACTION**

3.1 **Introduction**

The following is a brief report on Ghana's responses to past UN (Habitat I, 1976) declarations on national actions on human settlements, focussing on:

a. Settlement Policies and Strategies;
b. Settlement Planning;
c. Shelter, Infrastructure and Services;
d. Land;
e. Public Participation; and
f. Institutions and Management.

It includes actions taken in response to the Global Strategy for Shelter to the Year 2000;

3.2 **Settlement Policies/Strategies and Settlement Planning**

The Vancouver Conference called upon all countries to establish as a matter of urgency a national policy on human settlements embodying the distribution of population and related economic and social activities over the national territory. In response to this, Ghana has formulated a National Strategy for Sustainable Human Settlements. The overall objectives are to make towns/cities the engines of growth, to support well planned investment programmes, to strengthen rural-urban linkages, to reduce inter-regional growth disparities and to promote a balanced and sustainable development within a hierarchy of settlement. The following four key sub-programmes have been designed:

i. Economic growth in settlements;
ii. Basic needs in rural and urban settlements;
iii. Poverty alleviation in rural and urban settlements; and
iv. National and local capacity strengthening to plan and manage settlements.

In the area of (local) settlement planning, the strategic Plan for the Accra Metropolitan Area set the pace in settlement planning in the country. It has addressed a wide range issues for example, the urban environment, local economic development, transportation, engineering services and energy; social services; urban management; and the rural fringe. The Strategic Plan included a Five-Year Development Plan. There is no doubt that other efforts in settlement planning in the country will benefit from the plan — its form, scope/content and innovative approaches.
3.3 **Shelter, Infrastructure and Services**

Ghana already has a national shelter strategy which is consistent with the Global Strategy for Shelter by the year 2000. Its main components include issues and strategies on land, building materials, finance, infrastructure services, rural housing and non-conventional approaches to housing delivery. See Part B section 5.2 below.

Habitat I declarations called for integrated planning and provision of shelter, infrastructure and services. Between 1985 and 1992, a number of projects were implemented including:

a. The Accra District Rehabilitation Project consisting of infrastructure rehabilitation, revenue mobilization and assistance to Land Valuation Board for valuation of properties in Accra-Tema.

b. Pilot Site and Services Schemes for residential and industrial development in Tema with the objective of replicating the success in other urban areas.

c. Infrastructure Support to developers amounting to 3.2 billion cedis under the Public Investment Programme (1988-1992).

d. The Preservation of Existing Housing Stock and Consolidation of on-going programmes and investment, under which 21,960 government bungalows and public buildings in the country were to be rehabilitated over a period of 10 years (1988-1997).

e. The Urban Transport Project, currently being implemented, in to increase the quality and efficiency of urban transport services, make their delivery more equitable and sustain the improved levels of service. The project includes the rehabilitation of roads and transport facilities, improved access to low-income areas and capacity building in the responsible institutions.

3.4 **Basic Needs in Rural and Urban Settlements**

With regard to the declarations on basic needs, a number of policies and programmes have been initiated as follows:

3.4.1 **Water Supply and Sanitation (WS/S) Programme**

The programme strategies are directed towards:

- increased physical access to safe water and sanitation facilities;
- enhanced sustainability of WS/S services;
- development and diffusion of low-cost and appropriate technologies;
- intensified mobilization and education of the population;
- improved coordination among funding and implementing agencies, and
- more community participation.
3.4.2 Primary Health and Nutrition (PHN) Programme

The PHN Programme is designed to benefit the whole population, but priority will be given to under-five children and women of child bearing age (15-44). On the whole, access will increase to 85% by the year 2002. The population coverage would be 95% urban and 8-9% rural. The strategies are directed towards:

- accelerated restructuring of the government health system;
- integrated planning and delivery of services within a decentralized, district-level health care system;
- expanded physical access to health facilities;
- improved strategies for dealing with major health and nutrition problems;
- strengthened and re-oriented support services for decentralized operations;
- increased efficiency in resource allocation use;
- enhanced sustainability of PHN services; and
- expanded utilization of services.

3.4.3 Basic Education

The Government initiated an Educational Reform Programme in 1987 based on an earlier Paper entitled "The New Structure and Content of Education for Ghana (1974)". The principal objectives are, inter alia, to (a) increase the enrolment rate in pre-school from about 10 to 30%; and (b) increase the net enrolment rate in primary schools from 67% to 98%; The programme strategies are directed towards:

- increased emphasis on pre-school education;
- expanded physical access to primary schools;
- continued improvements in the quality of basic education;
- efforts focussed on disadvantaged groups; and
- improved management of educational services.

3.5 Land

The UN Conference called on governments to exercise the political will to evolve and implement innovative and adequate urban/rural land policies, as a cornerstone of their efforts to improve the quality of life in human settlements. Government has formulated a Land Strategy. The overall objective of the strategy is to achieve an efficient land management and delivery system. To date a number of legislative measures have been put in place to improve the land delivery system, the most significant being the Land Title Registration Law (PNDCL 152), 1986. See Part B, section 5.2 below.

3.6 Public Participation, Institutions and Management

The UN Conference called upon governments to regard public participation as an indispensable element in human settlement, especially in planning strategies and in their formulation, implementation
and management, and to further the political, social and economic growth of human settlements.

Ghana has set-up decentralised structures at local, sub-district and district levels. The objectives of the policy are, inter alia, to promote participatory democracy and collective decision-making at the grassroots. The District Assemblies, established in 1988, with political and administrative authority, are 110 in number. Sub-district structures, which are in the various states of establishment, consist of 34 urban councils, 102 zonal councils, 250 town councils, 826 area councils and 16000 unit committees. See Part B, section 5.1 below.

3.7 Human Settlement Policy as Integral Part of Broad Socio-Economic Development Policy

The Vancouver Conference called for the formulation of a national policy on an integral part of the national economic and social development policy. The 1990's has witnessed the preparation of a coordinated programme of economic and social development policies for Ghana which was presented to Parliament by the President in a report entitled Ghana-Vision 2020. The document is quoted extensively in various chapters of this National Action Plan. One of the major thrusts of the programme, whose first phase has been scheduled for 1996-2000, is a response to the weaknesses identified in implementing the ERP and an attempt to consolidate the gains already achieved as well as lay the foundations for accelerated growth for the country. See Part B.1 above, Section B5.3 and Part C.
B.4 BEST PRACTICES IN IMPROVING THE LIVING ENVIRONMENT

In connection with the national preparatory process a half-page announcement was inserted in one of the national newspapers. Television and radio announcements were also made. The number of responses received was rather disappointing, given the number of innovative community-based and self-help projects which are initiated every year in the country. The following is a summary report on two Best Practices directed toward (a) Community-Based Environmental Management in Accra; and (b) Strengthening Community Management in the Development and Operation of Facilities and Services in seven districts in three regions of Ghana.

4.1 COMMUNITY-BASED ENVIRONMENTAL MANAGEMENT

City: Accra

Names of Key Organisations:

i. Centre for Community Studies, Actions and Development (CENCOSAD), an NGO

ii. Accra Metropolitan Assembly (AMA), City authority

iii. Ga Mansaamo Kpee, Community Groups


KEY DATES

CENCOSAD began work in the community in 1990. In 1991/92 they introduced into the community animation and facilitation processes and identified informal clubs and associations as the focus of responsibility for environmental cleanliness and general sanitation. The first individual club efforts of environmental clean up started in 1993, and the launching of the competitive zonal environmental and sanitation programme, in 1995.

Ga Mashie, is a low income indigenous community located in the central area of Accra, the capital of Ghana. It covers an area of 98 hectares and comprises two traditional settlements: Ngleshie (James Town) and Kinka (Usher Town). The community is well-knit with a network of affinity groups and mutual help associations (solidarity networks). A strong sense of belonging and association permeates the entire community. Until 1962 the Ga Mashie area of Central Accra was a booming and vibrant economy supported by years of lagoon and marine fishing, a port and related services. In 1962 port activities were relocated 40 km away. The local economy collapsed leading to a drastic deterioration not only in living conditions but also in the community, generally. It is now a distressed economy.

The traditional fishing industry continues to form the base of the local economy supported by numerous meso and micro enterprises in food processing and entertainment. Despite a strong thrift and savings habit, low levels of capital formation and lack of access to formal credit have limited the growth of the local economy. The area has an estimated population of 80,000 inhabitants and a density of 728 inhabitants/ha. Children below 15 years form 44% of the population whilst 43% are
between the active working age of 15 - 44 years. There is a 42.9% illiteracy rate, and a high school drop-out rate due to a perceived prohibitive cost of education.

Housing conditions are generally poor. The houses are mainly overcrowded family houses: the average room density is 7.0 persons per room with an average population of 39 persons per house. 90% of the buildings need massive rehabilitation. 50% of the residents have no direct piped water connection. Over 80% of the population do not have access to domestic latrines. There are only seven public toilets with 220 holes serving 11,000 people. Refuse disposal is indiscriminate.

The resulting poor insanitary and overcrowded conditions are a major contribution to the prevalence of environmentally related diseases. Endemic diseases include respiratory tract infections, skin infections, diarrhoea, malaria and anemia.

Five major issues of poor sanitation and environmental degradation are waste generation, collection, clearance, conveyance and disposal. These were primarily the responsibility of the city authorities in the past. Due to the absence of a good sewerage system people are compelled to put both solid and liquid waste into the same waste containers or bins.

In addition to the volume of waste created, there is no effective system of collection in the city. There is an absence of street by street, house-to-house waste collection for a large part of the city, especially the extensive low-income, inner-city and peri-urban neighbourhoods.

DESCRIPTION OF LIVING ENVIRONMENT AFTER BEST PRACTICE

Conditions of the living environment since implementation of the best practice have improved considerably over those described above. During the past two years, local community groups with the assistance of the Centre for Community Studies, Action and Development (CENCOSAD), a facilitating NGO, UNICEF and the city authority, the Accra Metropolitan Assembly (AMA), have managed to turn the situation around. Through constant meetings a number of community groups and their leaders are being supported by CENCOSAD in sustainable environmental cleanliness through clean up exercises. Community groups are now cooperating with each other under a management group to undertake monthly clean up and clearing up exercises. The monthly sanitation activities have also become a folk event in which people from different neighbourhoods of the community come together to work and interact. After the clean up there is sharing of food and drinks with a musical background.

There is a fiesta atmosphere as music and dance bring community people together. The meetings sensitize local residents to sanitation issues, provoking discussions among groups, families, and friends. The consensus generated enables people collectively to undertake determined sanitation activities. Community residents are now responding favourably to calls for environmental cleanliness. Open places, lanes and drains are kept clean. There is a strong environmental consciousness among residents.
PROJECT STRATEGY

Shift in Responsibility

There has been a successful take-over by inhabitants of the Ga mashie area of waste clearance management, a traditional function of the city authorities.

Sanitation exercises were formerly initiated, planned and organized by the city authority (Diagram 1). These processes have now been taken over by local residents.

The control and ownership of tools and equipment is also changing hands, to the extent that the metropolitan assembly is now formally decentralizing much responsibility, giving it to sub-metropolitan assemblies and communities.

The practice relates to how residents have zoned their community into environmental sanitary zones and assigned particular zones to neighbourhood groups, youth clubs, affinity associations and other community organisations. The Most Environmentally Clean Sanitary Zone Competition is the key to this practice, which is organized and managed by residents themselves through a management group that consists of representatives of the groups, and associations: AMA, UNICEF and the facilitating NGO - CENCOSAD. A monthly award scheme has been instituted for the most clean sanitary zone.
4.2 STRENGTHENING COMMUNITY MANAGEMENT IN THE DEVELOPMENT AND OPERATION OF FACILITIES AND SERVICES

City/Districts: The SCMP is located in 3 regions; viz, Central, Eastern and Western. In these regions, seven districts have to been selected: Agona, Juabeso Bia, Wassa Amanfi (Western) Birim-North, Asuogyaman (Eastern). In the above districts eleven (11) communities are participating in the Project: Twifu-Heman, Mokwaa, Mankrong, Kwamang, Daboase, Ahinbenso, Nkwanta, Moseaso, New Akrude, Nyaforman and Kotokuom.

Names of Key Organisations: 1) Ministry of Local Government and Rural Development
2) United Nations Centre for Human Settlement (Habitat)
3) Danish Development Agency (Danida)
4) Selected District Assemblies
5) Community Based Organizations (CBOs)
6) MEST
7) Department of Rural Housing
8) Department of Community Development
9) Community Members
10) Private Organisations/Individuals

KEY DATES:

The SCMP took off in September 1992 and is in its third year of operation. The present status is that the project philosophy of imparting management skills, capacity building, participatory principles, problem solving methodologies, and fostering partnership, negotiation, sharing of experiences, leadership skills, mobilization of community members, artisanal skills, communication skills, identification and judicious use of resources including managing small scale enterprises, among others, has been accomplished and is still on-going.

DESCRIPTION OF LIVING ENVIRONMENT BEFORE BEST PRACTICE

Most communities in the selected districts continues to be trapped somewhat in an institutional dependency syndrome, unable to chart their own course of development. They are alienated from the process of decision making. There also is no effective link between the decentralized and other specialized agencies of government and the community at the local level.

Basic social facilities and services are virtually non-existent, and the few that are provided by the central district authorities could not be maintained by the local communities as they lack the technical expertise to do so. Also, in most cases, such projects do not represent the felt needs of the people and therefore do not seem to address the fundamental problem(s) that confront the communities.

Another sore area is ineffective leadership, lack of accountability and transparency on the part of community leaders who arrogate to themselves the repository of knowledge as to what development
programmes should be embarked upon. There is, therefore, a general feeling of inertia, which ultimately stifles community initiative.

Consequently, there is widespread despondency, resignation and helplessness among the people as they make desperate but uncoordinated effort to break this "cycle of poverty" and change their standard of living, malnutrition, high population rate, poor housing conditions and low incomes.

LIVING ENVIRONMENT AFTER BEST PRACTICE

During the past 3 years (the intervention of) SCMP has achieved considerable impact in terms of institutional reorganization, attitudinal change, conscientization and organizational culture. The project has established an effective working partnership arrangement between local government institutions, departments and the communities. Ideas are frequently exchanged between communities and relevant decentralized departments such as the Department of Community Development and Department of Rural Housing, thus assisting communities to develop their environment. The communities have captured the basic essence of development in terms of cause-effect relationship, scale and resources needed for intervention. They have developed a high sense of maintenance culture. For example, the artisanal skills trainees at Kwamang have rehabilitated the community's postal agency building which had been left to decay all these years.

Communities identified their peculiar problems and devised their own interventions. Thus there is a variety of projects as portrayed by the facilities under construction, listed below, and other forms of intervention in the various communities. The variety of projects included:

- **Rehabilitation/Construction Works:** School blocks, markets, footbridge, clinic, multi-purpose community centre, micro drainage system and KVIP.
- **Technical Skills Training Involving about 154 Men and Women:** About 154 men and women have been trained at the community levels in carpentry, masonry and painting skills, and are assisting in the construction of selected community facilities. Aside from this, those trained have acquired employable skills, which also guarantees availability of technical skills for the future maintenance of the facilities.
- **Support to Micro Enterprises:** Women in income generating activities ranging from food processing to marketing of general goods. (It should be noted that 47% of the women were heads of households).
- **Community Participation Training:** About 165 community members have been trained in group dynamics, leadership skills, conflict resolution, communication, community mobilization, negotiation, organization of meetings and resource mobilization for community improvement. Those trained have also been training other community members.
- **Family Life and Environmental Health Education** in counselling on AIDS and STD's and sale of family planning products.
PROJECT STRATEGY:

The Project Strategy has been based on participatory training to identify, plan, implement, operate and maintain needed community facilities and services. This approach is an informal way of imparting knowledge as against the formal classroom approach in which one person is seen as the sole repository of knowledge. The problem solving cycle approach was adopted for the project. This involved situation assessment, identification of problems and objectives, analysis of potentials and constraints, up to an evaluation of the process through the cycle.

A unique approach in the community participation training at the community level has been the idea of gender balance; i.e., where there is gender separation at the initial stages of discussion and merging ideas at a general forum. This has allowed women to be articulate in the decision making process as against the "passenger" stance taken previously. Field trips, case studies, and local and international workshops have provided rich ideas for project staff, local government personnel and community members.

A Video Documentary dubbed "A Ray of Hope" tells it all.
B.5 REVIEW OF THE EFFECTIVENESS OF EXISTING POLICIES AND STRATEGIES

B.5.1 DECENTRALIZATION AND GOVERNANCE

5.1.1 Background

Prior to 1987, Ghana had a highly centralized administrative system with sectoral ministries/departments organized as territorial hierarchies or as pyramids with their apexes in Accra, and subordinate levels in the regions and districts. This system had a number of shortcomings as follows:

- encroachment on the rights and responsibilities of weaker local government by the central government bodies;

- insufficient consultation between central and local government bodies, and between central government agencies themselves;

- a poor image of local governments as poor, inept, inefficient and worthless development partners of central government; and

- lack of participation of the citizenry in their own development process.

Before the attainment of independence in 1957 and for some time thereafter, various Commissions and Committees of Enquiry which were appointed to enquire into the administration of the country made far-reaching recommendations for the devolution of central administrative authority to the Regional/District/Local levels. In spite of the far-reaching nature of the recommendations, attempts at decentralization could not materialize in view of the unwillingness of those entrusted with power to divert part of their authority to the lower levels of administration. Other factors which militated against the decentralization process were:-

- dual allegiance of district departmental officers to their regional and national heads on the one hand, and to the District Chief Executive on the other;

- poor channels of communications in reporting;

- lack of well trained and experienced departmental staff to work at the district level;

- inadequate office and residential accommodation at the district level to attract officers, and

- lack of financial resources to match the authority delegated.

5.1.2 Administrative Reform

Ghana has, since 1988, embarked on a major administrative reform to make it more responsive to and supportive of public and private sector development initiatives. The reform aims at creating an
effective environment for the attainment of national and sub-national goals and objectives. Specifically, it seeks to:

- restructure the public administrative system to enhance the service delivery capacity of the public sector to plan, manage and monitor social and economic development;

- redefine functions and responsibilities of the various levels of government; tap the vast potential resources of its people in the rural areas and mobilize a great proportion of resources and energies for the development of human settlements; and

- bring about institutional co-ordination for the socio-economic development of Ghana as a whole.

The restructuring of the public administrative system is designed to achieve a number of objectives:

- decentralize political and state power to promote participatory democracy through local level institutions;

- decentralize administrative development planning, and implementation to the District Assemblies;

- introduce an effective system of fiscal decentralization which gives the Assemblies control over resources;

- establish a national planning system to integrate and co-ordinate development planning at all levels and in all sectors; and

- incorporate economic social, spatial and environmental issues into the planning process on an integrated and comprehensive basis.

5.1.3 Decentralization Policy

Recognizing the critical role which decentralization plays in ensuring that a government remains in touch with its people, the present administration has initiated a process of decentralization to promote genuine popular participation in public decision making.

Decentralization is the devolution of central administrative authority to the district level in order to ensure popular grassroots participation in the administration of the various areas concerned from the standpoints of planning, implementation, monitoring and achievement of those services which go to improve the living conditions of the people and the orderly, fair and balanced development of the whole country. Under the policy, all governmental agencies in any given district/region/locality are brought together into one administrative unit, through the process of institutional integration, manpower absorption, composite budgeting and provision of funds for the decentralized services.
The decentralization concept places an increased emphasis on local (urban and rural) development. The message which is being clearly conveyed is that the people themselves must be primarily responsible for initiating and implementing the development efforts desired by them. Their active involvement must be obtained in all aspects of the development process - planning and project identification, resource generation project implementation and monitoring, and subsequent operation and maintenance of investments.

Development is seen as requiring shared responsibility between central government, local governments, parastatals, non-governmental organizations, the private sector and the people who are the ultimate beneficiaries of development.

The reform in governance, including decentralization and participatory democracy, is fully backed by the following enabling legislation: the Local Government Law, 1988 (PNDCL 207), superseded by Chapter 20 of the 1992 Constitution of Ghana; the Local Government Act (Act 462); the National Development Planning (Systems) Act 1994 (Act 480); and the Civil Service Law (PNDCL 327).

The new laws have put in place 110 district assemblies, which are the highest political and administrative authorities at the district level. Representation at the district assembly is either by election (70% of the members) or by appointment (30% of the members). Female representation in the Assembly is about 8.0 percent.

The district assembly has an Executive Committee and a Public Relations and Complaints Committee. An assembly also has 5 statutory sub committees - a Development Planning sub committee, Social Services sub committee, Works sub committee, Justice and Security sub committee and a Finance and Administration sub committee. In addition, an assembly may have such other sub committees as it may determine. The composition of each (sub) committee comprises assemblymen and the appropriate sectoral and government departmental heads, which creates a forum to evolve district plans which amalgamate the various interests in the communities.

Also as part of the decentralization programme, a number of government departments have been decentralized to the district level. Officials of the decentralized departments sever direct links with their parent departments in Accra, become officers of the district assembly and therefore come directly under the latter's supervision and control. This is intended to provide the district assembly with the right calibre of personnel to undertake developmental activities independent of central government intervention.

In order to provide the District Assemblies with the requisite funds to carry out development a District Assembly Common Fund has been set up under Article 252 of the 1992 Constitution. At least 5% of all government revenues is paid annually into this fund and this is distributed amongst all the 110 district assemblies on the basis of a formula drawn up annually by the Common Fund Administrator and approved by Parliament. The money so distributed is used for financing the implementation of approved development programmes of the district.

Besides, a National Development Planning Commission (NDPC) has been established, (Act 479, National Development Planning Commission Act, 1994), which is the national coordinating body of
a decentralized national development planning system.

This National Development Planning System comprises the District Planning Authority at the district level, the Regional coordinating Council at the regional level, and sector agencies, ministries and the NDPC at the national level.

5.1.4 **Structure of the New Local Government System**

5.1.4.1 **The Structure**

The new local government system is a four-tier and three-tier Assemblies structure consisting of -

- **Metropolitan/Municipal/District Assemblies**
  District Assemblies in Ghana are either Metropolitan (population over 250,000), Municipal (one-town Assemblies with population over 95,000) or District (population 75,000 and over). There are three (3) Metropolitan Assemblies, four (4) Municipal Assemblies and one hundred and three (103) District Assemblies.

- **Sub-District Political/Administrative Structures**
  These being subordinate bodies of the District Assemblies, perform functions assigned to them by the Instruments setting up the Assemblies or delegated to them by the Assemblies. They are constituted by the Sub-Metropolitan District Councils, Urban/Town/Zonal/Area Councils, and Unit Committees.

- **Sub-Metropolitan District Councils**
  These structures are immediately below the Metropolitan Assemblies. There are thirteen (13) of these structures, six within AMA, four within Kumasi Metropolitan Assembly, and three within Shama Ahanta East Metropolitan Assembly.

- **Urban Councils**
  Urban Councils are peculiar to settlements of "ordinary" District Assemblies. They are created for settlements with population above 15,000 and which are cosmopolitan in character, with urbanisation and management problems, though not of the scale associated with the metropolises. Thirty-four (34) of such councils are created/established.

- **Zonal Councils**
  The Zonal Councils are in the "one-town" Municipal Assemblies of Cape Coast, New Juaben, Tamale and Tema, for which the establishment of Town/Area Councils will raise problems of parallel administrative structures. There are one hundred and eight (108) of such Councils for the four (4) Municipal Assemblies. They are based on the National Commission for Democracy criteria of commonality of interest, population of 3,000 and identifiable streets, land marks, etc.
Town/Area Councils
These are found in the Metropolitan and District Assemblies. In the District Assemblies, Town Councils are established for settlements with population between 5,000 and 15,000 and Area Councils for a number of settlements/villages which are grouped together but whose individual settlements have population of less than, 5,000. They are essentially rallying points of local enthusiasm in support of the development objectives of the District Assembly.

Unit Committees
Unit Committees form the base structure of the new Local Government System. A unit is normally a settlement or a group settlements with a population of between 500 - 1,000 in the rural areas, and higher a population (1,500) for the urban areas. Unit Committees being in close touch with the people, play important roles in education, organisation of communal labour, revenue raising and ensuring environmental cleanliness, registration of births and deaths, implementation and monitoring of self-help projects.

5.1.4.2 District Assembly

Every one of the newly established district assemblies is a forum where the representatives of the people, a team of development agents and other agencies will agree on the development problems of the district/area and their underlying causative factors, and decide on the combined actions necessary to deal with them.

Charged with the responsibility for the overall development of a district, a District Assembly is required, inter alia, to:

- improve and manage of human settlements and environment in the district;
- formulate programmes and strategies for mobilization and utilization of human, physical, financial and other resources in the district;
- promote and support productive activity and social development in the district;
- initiate programmes for the development of basic infrastructure and provide municipal works and services; and
- initiate, sponsor or carry out such studies as may be necessary.

5.1.4.3 Decentralization and the Development of Human Settlements

In order to resource the districts in support of decentralization, a number of programmes and projects, administered mainly by MOLG, have been initiated and they have had a significant impact on human settlements directly or indirectly. The programmes/projects include the following:

- District Resourcing Programme to provide basic district management training, basic physical infrastructure, equipment and funding support to enable districts to function effectively.
Urban I Project supported infrastructure rehabilitation/development and urban management in Accra.

Urban II Project - This project benefitted five (5) Assemblies i.e., Accra, Tema, Kumasi, Tamale and Sekondi-Takoradi. It was multi-sectoral and designed to improve municipal infrastructure and the capacities of the beneficiary assemblies.

Urban III Project - The project upgraded urban infrastructure and services and also strengthened the capacities of 12 secondary towns i.e., Cape Coast, Elmina, Agona Swedru, Koforidua, Ho Keta, Anloga, Techiman, Sunyani, Wa, Bolgatanga and Bawku.

Promotion of District Capitals I:- This project seeks to develop the infrastructural and institutional base of 4 district capitals.- Ejura, Attebubu, Kintampo and Nkoranza.

PAMSCAD Projects and Programmes were designed to alleviate the hardships suffered by vulnerable groups due to the implementation of the E.R.P.

District Telecommunications Programme:- aims at connecting all district capitals through a telephone network.

The Micro-projects Programme aims at meeting the real priority needs of local communities as identified by the people themselves.

Strengthening Community Management:- This project seeks to evolve a mechanism at the community level for sustained human settlement development and management.

The National Electrification Scheme seeks to extend electricity to all parts of the country by the year 2020.

Community Water and Sanitation Project being implemented by the G.W.S.C. It aims at providing potable water in every District Capital and provide protected hand-dug wells to communities with population of 5,000 and below.

5.1.5 Implementation Strategies

The decentralization policy as outlined above redefines roles and responsibilities, between central and local governments, to avoid duplication of efforts. It also establishes roles of local governments in settlement management including delivery of basic infrastructure, provision of basic social services, and management of land use and environment. This has implications for mobilization of adequate financial resources and decision-making practices at the local level. With its avowed aim of initiating "transformation of the political, social and economic order and to creating an opening for real democracy" the "logic of the country's situation and facts of its history and the past experience at decentralization demand that the process of implementation be gradual". (From Centre to the
Grassroots, MOLG) Three strategies are being pursued. These are transfer of power, transfer of competence, and transfer of means.

5.1.5.1 Transfer of Power

The core of Ghana's effort directed towards participation in social and economic policy and implementation has a devolution of non-subsidiary power to the district level/District Assembly. To transfer power, the following interventions were made and are being pursued:

(a) Political/administrative units have been created. The districts were increased from 65 to 110;

(b) The government has put in place successfully the mechanism for electing Assemblymembers, their operating guidelines, legislations and public awareness of their rights and responsibilities with respect to the operations of the District Assemblies;

(c) The various legal/legislative framework have also been laid; and

(d) Efforts are now focussed on strengthening the mechanism to link the sub-district structures to the Districts. This has, however, been stifled by a court injunction on the unit committee elections.

5.1.5.2 Transfer of Competence

Competency involves the expanded and improved human and institutional capacity in management and administration. As noted above, the public administrative system is being decentralized and transformed to perform a number of functions:-

- to be responsible primarily for the implementation of development policies and programmes co-ordinated by the National Development Planning Commission;

- to enhance the delivery capacity of the public sector to plan, manage and monitor social economic development; and

- to provide strong support for the development.

The following interventions are being made to transfer competence to the districts:

- to transfer the functions, authority, responsibility and resources of twenty-two line agencies of central government, at the district level, to the District Assemblies and merge them with those of the representative local governments.

- to build management, technical and planning capacities of District Assemblies through new appointments, transfers and postings of personnel, and
to overhaul laws and regulations which centralize departments in Accra.

5.1.5.3 Transfer of Means

Power and competency are closely related to the amount of financial resources at the disposal of local governments. The statutory basis for local government revenues is provided for under the following acts of Parliament: The 1992 Constitution (Acts 245 - 252); the Local Government Act, 1993; and the District Assemblies Common Fund Act, 1993 (Act 455).

Local governments derive their revenues from two principal sources: (a) Local sources from rates, fees, licences, rents, land and Ceded Revenues; and (b) Central Government Transfers including District Assemblies Common Fund.

5.1.5.4 Other Strategies

Within the framework of the decentralization policy each district capital is expected to play its role as focal point for the economic and social development of the district. With this has come the need for improved infrastructure in the district capitals to enable them to cope with the additional functions. Despite the interventions mentioned above, gaps still remain between realities (urban service delivery) and revenue. A number of sectoral, urban management programmes are being pursued to address these needs. These are: (a) a district focused Development Programme and (b) urban Management Programmes.

5.1.5.5 District-focussed Development Programme

Under the district focussed development programme every district capital and town with a population of 5000 is, in the medium term, being provided with the basic needs of water, health care, education and electricity. Also being provided is telecommunication. Again under the programme, a district resourcing programme to provide infrastructural support, such as office and residential accommodation, was planned and implemented in the short term. Under this programme two new bungalows each were constructed and furnished for each of the forty-five new districts, old local council buildings were renovated/rehabilitated, offices/Assembly halls were constructed and logistic support was provided to the Assemblies. The programme, however, suffered from lack of finance and the inability of contractors to keep to construction schedules due to lack of finance.

5.1.6 Effectiveness of the Decentralization Policy

The evaluation of the effectiveness of the decentralization programme so far suggests successes and constraints. The programme has to a large extent succeeded in achieving the district-focussed development strategy. The programme has:

(a) increased access to secondary education through the establishment of at least 2 new secondary schools per district;
B.5.2 INCREASING ACCESS TO LAND AND SHELTER

5.2.1 Introduction

Rapid population growth and increasing urbanization have made housing one of the most critical problems currently facing Ghana. The inability of the housing delivery system to meet effective demand over the years has created strains on the existing housing stock and infrastructure, especially in urban areas. The crisis in the housing situation, resulting from the widening gap between housing supply and demand in Ghana, has been recognized by Government to be a major problem. Many aspects of the housing delivery system face severe constraints, including institutional capabilities, the provision of land, finance, infrastructure, and materials and skills. In addition, the inadequacy of data for the planning of housing sector activities has made it difficult to effectively formulate policies and design appropriate programmes for the sector. See Chapter B2.

5.2.2 Public Sector Housing Programme Prior to 1987

The need for a comprehensive shelter strategy for Ghana in which housing development can take place in a coherent and sustainable manner has long been realized. In the past various attempts at solutions to the problems have failed to make an impact on the situation, which continues to worsen.

During the period 1954-1986 the stated objectives of the housing programme only gave the broad aims of the need for the public sector to provide adequate housing for the people during national development plan periods. No needs assessments were given and as a result there were no indications of projected outputs. From the pre-independence years through to 1986, programmes emanating from such objectives were put in place by various public housing-agents such as:

- The State Housing Corporation
- Tema Development Corporation
- Prefab Concrete Products
- Department of Rural Housing and Cottage Industries
- REDCO
- Institutional Housing, Corporations etc.

During this period also other public schemes were introduced for improvement to old dwellings that were fast deteriorating. These were in the form of wall protection loan schemes and roof loan schemes. This scheme relied on the cooperative spirit of the rural folk. Creditworthy individuals were advised to form housing cooperative societies, which then applied for houses to be built for the members who wished to own houses in the rural areas. The applicants were required to pay an agreed deposit per head and the balance was spread over a period of ten to twenty years.

But with mounting delivery deficits estimated at 250,000 units in 1985, it can be surmised that the aforementioned schemes did not meet their objectives. (see Chapter B.2) A critical appraisal reveals that the housing programmes that were instituted did not incorporate measurable input/output targets that could facilitate effective monitoring of performance.
5.2.3 Public Sector Housing Programmes: Period 1987 - 1990

In 1985, the Government of Ghana recognized the need to address the problems facing the housing sector and in 1987 the Draft National Housing Policy and Action Plan 1987 - 1990 was prepared. The objectives of the programmes arising from the Draft National Housing Policy and action plan 1987 - 1990 tried a turn-round to meet the "unmeasurable" handicap in previous programmes. This time the national housing needs assessment was undertaken in terms of:

- annual population increase and its subsequent new housing requirements at predetermined household capacity;
- annual replacement of existing stocks indexed to projected economic life of dwellings; and
- annual requirements to decongest existing stocks to predetermined unit occupancy rates.

The failure of previous programmes in which the public sector was directly involved in the provision of housing provided the signal to search for other alternative public sector roles with potentialities that would enhance national delivery performance. Thus the new programme assigned to the public sector the facilitating role of providing relief from the private sector delivery constraints. This enabling approach was to complement the private sector's already dominant delivery role to take better advantage of its acquired ingenuity, marginal savings, and resources so that sector participants would be willing to invest to gain access to adequate housing. Despite these improvements, the 1987-1990 programme ended with very little impact as not enough attention was paid to the strategies and policy initiatives that would have been required to support the action plan and programme.

The opportunity to prepare a comprehensive National Shelter Strategy (NSS) came during the GOG/Donor Review Meeting in 1987, when it was formally established that housing should not be viewed as a consumption good but as productive investment providing national economic health and creating a base for attaining several national policy goals; such as, stimulating economic activity and creating conditions conducive both to the achievement of crucial goals in health and sanitation, and to the promotion of social stability.

5.2.4 Key Factors Affecting Shelter Provision

5.2.4.1 Land for Shelter

5.2.4.1.1 Introduction

The rapid increase of population, the changing structure of the economy and the process of urbanization and commercialization all combine to exert severe pressure on available land resources, especially in urban areas. A wide variety of factors affect the availability and use of land for housing. These factors have significant impact on the volume and location of housing investment and the growth of the housing stock. In Ghana the problems of land and housing availability for the poor are not due to the lack of land but rather to the lack of a system of developing this land which makes it legally accessible to the poor; viz:-

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the cheapest lot on the open market is too expensive for a large proportion of households; the average prices of standard building plots measuring 30m x 36m; or 24m x 30 m ranged from G£500,000 to G£5,000,000 in Accra in 1992;

- government is unable to undertake land acquisition and development at a cost affordable to the poor;
- land costs in suitable locations for low-income housing are high; and
- land use controls and regulations constrain large scale, low standard development.

There are four main categories of land holding in Ghana: (a) State lands, which are lands acquired by Government and held in trust for the people of Ghana; (b) vested lands, which are lands vested in State in Trust for the original owners under the Administration of Lands Act, 1962 (Act 123); (c) Stool/family lands, which are group-owned lands governed by customary tenure systems and held by stool/family heads in trust for all members of the group; and (d) private lands held by individuals in varying degrees of quantum by individuals, corporate bodies, institutions, etc. The land market in Ghana is in effect two markets, traditional and modern, operating side by side. Stools have retained their customary right to use and administer land and to allocate it according to prevailing social customs.

With the increase of migration to urban areas, customary land in and around the cities has become the focal point of settlement and shelter construction. As a result, accessibility to land in both the modern and customary sectors has become increasingly difficult. The major problems of the urban land management system, which contribute to the above, can be categorized under the following headings:

- Security of Title and the Title Process;
- Land Acquisition and Disposal;
- Land Use Controls and Standards;
- Land Information System; and
- Legal/Institutional Problems.

5.2.4.1.2 Security of Title and the Title Process

The lack of adequate information about land, particularly urban land, creates problems which constrict the urban land market and interfere with the delivery of shelter. Security of land titles in the traditional sector is found to be poor owing to the large number of owners operating in the market. Stools may be different land owning institutions, adjacent stools may not be certain of their boundaries; stools may inadvertently, or otherwise, allocate the same piece of land to more than one person; or there may be chieftaincy disputes in a particular stool area which may compromise the security of land grants in the area. In addition, the poor identification of roots of title and the poor demarcation of land title boundaries often lead to protracted litigation.

The institutional and administrative arrangements for regularizing and perfecting titles are so varied, diverse and over-lapping that the process involved is an extremely lengthy one. The major reason for
this is the multiplicity of agencies, processes and procedures involved in land title process, and the lack of coordination between agencies and procedures. The main agencies are the Lands Commission, the Department of Town and Country Planning, the Land Valuation Board, the Internal Revenue Service, the Deeds Registry and the Survey Department.

5.2.4.1.3 Land Acquisition and Disposal

Land acquisition is structured according to whether one operates in the state/formal sector or in the traditional/informal sector. Land transactions are hampered by unclear laws on ownership, use-rights, transfer formalities and mortgage procedures. The acquisition of land for development can therefore be an enormously cumbersome, time-consuming and, not infrequently, uncertain process. In the traditional sector, the process is not streamlined and is expensive both in terms of time and money. First one has to identify a prospective land holder, who may be a chief or family head, willing to sell land. The acquisition process itself, from the initial contacts to completion, can take between 6 months and 15 years or more.

In Accra, in particular, landowners are increasingly not making land available for housing the poor. In the face of an apparent shortage of land (resulting in high land costs), there are large areas of undeveloped land held by individuals and institutions. Land is often considered one of the safest forms of investment against inflation and is acquired as a hedge against economic insecurity. Hoarding and speculation therefore distort the land-supply process. For example, along the Ring Road (opposite the Nima Police Station) in Accra, 1992, a piece of land measuring 20m x 30 m was attracting a value of 15,000,000 cedis. Similarly, in the Ridge Hospital Area, another parcel of land measuring 36m x 30m with foundations and erected columns has been sold for a down-payment of 35 million cedis.

As mentioned earlier, the cheapest plot on the open market is too expensive for a large proportion of households. The development fee of 500,000 cedis per plot charged by the Lands Commission as the current rate for government plots seems an attractive area for investment. Such lots, after a year or two, attract $2.5 million. In the East Legon residential area, a lot measuring 30m x 30m in 1982 was sold for 350,000 cedis; now a similar lot in the same area attracts a price of 6 million cedis. Many land speculators use the open market system to acquire lots to sell them in the future instead of making them available when they are required for housing development.

5.2.4.1.4 Land Use Controls and Standards

Many urban development planning strategies and standards tend to restrict the possibilities of low-income families to obtain land. The Town and Country Planning Law is obsolete and does not allow for development in the light of current needs and affordability by the majority of the population. The result of lengthy delays and bottlenecks in the approval process is that most development takes place outside of the legal system. In addition, there is a great deal of ignorance of the public in land matters, particularly in relation to planning and building regulations and land acquisition procedures.

The influence of stool land owners on planning scheme preparation often results in substandard subdivisions, as insufficient provision is made for infrastructure and services such as schools garbage
disposal, open space, etc. Land is often subdivided without approval by the proper authorities and there is poor identification and rectification of unauthorized development, due to wrong demarcations of plots and poor linkage between development and preparation of planning schemes. The shortage of staff in the state institutions responsible for development control and the bureaucracy involved in ensuring compliance with development control measures make the process extremely slow and cumbersome.

5.2.4.1.5  Land Information System

One of the main factors affecting the land delivery system is the lack of adequate information about land. There are a number of problems associated with land supply mechanisms such as:

- basic maps and plans are inadequate because the departments involved in the production of basic maps have very little or no funds; the Survey Department being the most affected;

- the Survey Department does not have enough licensed surveyors;

- information about land is unreliable because the market in land is weak, and commercial land trading is not geared to a large volume of transactions; price structures are therefore haphazard and capricious, and those needing land have no institutional system for locating it where and when it is needed; and

- public authorities often have no coordinated programme for extending infrastructure that will convert raw land into useable land. Land developers are therefore unable to plan ahead for an assured flow of buildable land at predictable prices.

The operation of the land market has been negatively affected by the lack of good, up-to-date land boundary records as well as registration of titles. Delays in land transfers and registrations of titles have slowed down investment and construction, and because of interviewing inflationary effects such delays have severely affected development costs. The security of registered titles, with clear declaration of boundaries, is essential in all forms of land development. Cadastral and land registration systems are therefore as important as physical infrastructure to economic development.

5.2.4.1.6  Legal/Institutional Problems

The absence of machinery to supervise the land market has been responsible for many of the distortions in urban land supply. In some areas, radical changes in thinking and procedures will be called for. Capacity building is urgently needed in the Lands Commission, the Survey Department and other Government Departments dealing with land. In addition, consideration must be given to the identification of equipment and new technologies for increasing the productivity of government staff.

The multiplicity of laws relating to land in the country, some of which are completely outdated, makes it difficult for those dealing with land to understand the process. In addition many of the problems
related to land have led to disputes and there are as many as 16,000 cases in litigation at the present, some cases dating as far back as 1947. The major factors contributing to this situation are the scarcity of judges at the High Court, and poor methods for recording evidence in court. Such litigation freezes land and acts as a break on land supply.

Another problem stems from the poor coordination exhibited between government agencies directly concerned with land management. In addition, there is lack of coordination between the development agencies such as the Lands Commission Secretariat, City Engineer’s and Planning Departments, Electricity Corporation, Water and Sewerage Corporation etc. There is also little coordination occurring between local government agencies. The efficiency of the system is constrained by centralization of activities of the Lands Commission in Accra with consequent loss of some documents.

5.2.4.1.7 **Key Issues and Implications**

- There is no absolute shortage of land but there are supply bottlenecks in the delivery of affordable serviced land in appropriate locations.

- The supply of land is further constrained by the inefficient use of existing land stock by the housing parastatals, stools/families and individuals.

- Several state organizations are also holding key developable land which they cannot develop for lack of funds.

- The state now lacks the human and logistic resources and funds to undertake further land acquisition to sustain the land banking concept and pay compensation within the Accra Metropolitan Area and other urban areas.

- Rising and high prices for land increasingly makes land less and less affordable to the moderate and low income groups who face the added problem of having no access to the limited available credit facilities.

- Indications from the performance of the land market as regards the delivery of serviced land are that there is a case for a state/stool cooperation programme for development of serviced land for low and moderate income housing.

- The performance of the parastatals has not had the desired effect and some policies on which the agencies operate are unrealistic.

- Residential lands delivered in the private/traditional sector are usually without infrastructure. As far as the grantors are concerned they do not have any obligation to provide such services so they continue to parcel and grant land in its unserviced form. Yet, the grantor stands to reap, among other things, scarcity value which accrues from the provision of infrastructure with the taxpayers’ money and also to receive drink money for each grant made.
The provisions of the Administration of Lands Act (Act 123) are now scattered in several enactments. Some of the sections have been amended; others have been repealed without being repealed. The result is that the provisions of the Act are now confused and in complete disarray.

Inadequate institutional arrangement exists for land management and administration to speed up the land title registration process and, if possible, to bring these institutions under an umbrella body.

Information and resources for mapping are lacking.

One of the main obstacles to the land reform process in the country has been the complexity and excessive duration of the expropriation process. The procedures set out in the State Lands Act 1962 (Act 152) are cumbersome and render the process of compensation difficult.

Among the factors which limit the supply of land for housing development is litigation in land disputes. Currently, there is an enormous backlog of such cases pending in the courts which has virtually locked up vast stretches of land.

The multiplicity of laws relating to land in the country makes it difficult for those dealing with land to understand the process.

With respect to mapping, the lack of adequate information about land, particularly urban land, creates problems which constrict the urban land market and interfere with the delivery of shelter.

Security of land titles in the traditional sector is found to be poor owing to the large number of owners operating in the market.

The delivery of land in the open market is one of the factors contributing to land speculation and hoarding, which have in turn increased the price of land, making it less affordable to the target groups.

5.2.4.2 Financing Arrangements and Affordability

5.2.4.2.1 Estimates of Resource Flows

Ghana is not served with a network of financial institutions that mobilize savings which are channelled either directly or indirectly into the housing and mortgage markets. This has been due in large part to the unstable uneconomic environment of the past decade and a half, which has witnessed extreme instability in incomes and the price level. It has been widely accepted in Ghana that lack of housing financing reduces the available supply of housing. Overall financial policy, including housing finance policy, comes under the regulatory authority of the Bank of Ghana. The First Ghana Building Society and, to a lesser extent, commercial banks extend retail loans. The Social Security and National
Insurance Trust has in the past financed and built some flats, but has recently taken on a wholesale role. The Bank for Housing and Construction has played wholesale and retail roles.

Full and accurate information on the total flow of resources into the housing sector is not readily available. While data pertaining to the investments made by government can be obtained, there is no ready source of information for the bulk of the housing investment that comes out of private savings. The output of the formal sector over the period 1985-1988 is estimated to be fewer than 1,000 units per year. The formal private sector, though growing, is still quite small and accounts for no more than a few hundred new units per household belonging for the most part to upper income groups.

5.2.4.2.2 Key Issues and Implications

- There is an absence of financial intermediaries with the ability to channel funds to the households most in need of financial assistance.
- Current institutional lending reaches and caters only to credit-worthy, upper and middle-income groups.
- There has been very little development of loan and savings schemes adapted to the needs and financial capacities of moderate and low-income groups.
- There are few programmes or initiatives which expand the availability of home improvement financing for moderate and low-income groups.
- Sufficient attention has not been paid to making resources available for loans for purchasing land, for upgrading and improving existing housing, or for constructing core houses.
- Incentives have not been created which allow for the mobilization of savings from non-conventional sources which would allow low-income families to increase access to homeownership finance and also encourage them to use existing institutions to enhance their savings capacity.
- Private sector developers and financing institutions have not been extensively involved in serving households with average incomes, which is critical if Ghana is to come close to addressing its current and future housing needs.
- Rent Control has acted as a disincentive to the expansion of rental housing, which is an important housing market for a large majority of the population in the major urban centres of Accra and Kumasi.
- An information system for housing investment and financing is lacking.
- No system exists for channelling funds from Ghanaians residents outside into housing investment exists.
5.2.4.3 Building Materials and Construction Technologies

Economic growth is directly related to the level of efficiency of fixed capital formation. In developing countries the share of fixed capital formation pertaining to construction can be as high as 80 per cent. Therefore, the construction sector must be regarded as one of the backbones of the development process. An indication of this situation is that, in most developing countries, the annual growth is higher, and often considerably moreso, than the growth of population and gross domestic product (GDP). Building materials constitute the single largest input into the construction sector, accounting for about 50 to 80 per cent of the total value of construction. In Ghana, however, a large variety of items are imported into the country for use in the building materials industry. They include cement clinker, lime galvanized, iron and asbestos, cement roofing sheets, sanitary ware and fittings, electrical fittings and fixtures, glass, steel reinforcing bars, paints and varnishes.

5.2.4.3.1 Key Issues and Implications

- There is still an overdependence on external markets particularly for building materials for which local substitutes can be developed or for which there is comparative advantage for localization of production.

- The vast raw material resources of the country have not been exploited to maximum advantage by the local building industry.

- Building materials production based on the comparative advantage that each region/district has with respect to a specific building material has not been a policy which has been pursued.

- Not enough encouragement has been given to the promotion of small-scale technologies.

- Not enough attention has been given to prioritization of building materials which are likely to have an impact on the construction market generally and with special reference to the basic requirements of low income earners; namely; walling, roofing and binding materials.

- Timber as an export commodity affects the general price levels of timber for housing purposes.

- The problem of energy is critical for the clay products industry, which has traditionally depended on firewood as a fuel for firing bricks. Increasing concern about environmental degradation caused by the exploitation of wood has heightened the need for critical consideration of the energy needs of the brick industry.

- The absence of a lead agency is compounded by the fact that there is a multiplicity of institutions playing varying roles within the building materials sector. In addition, there are also cases of duplication. Institutions have not been operating in a structural and coordinated manner in order to achieve any meaningful results.
- Currently, virtually all the numerous agencies supporting the building materials sector operate in isolation of one another. Even in the areas of obvious overlap, such as research and technology information dissemination, units operate without any coordinating arrangements.

- The high cost of credit has had adverse effects on the cash flows of a number of building materials enterprises. Thus a common factor cited for low plant capacity utilization was the lack of working capital to purchase raw materials.

- Not enough effort has been made to promote the use of local building materials in construction projects, particularly those in the public sector, e.g., burnt clay bricks.

- Social and cultural contradictions in taste and preference in choice of using building materials restrict the use of locally produced building materials.

- An information system on the performance of building materials is lacking.

- Construction economics in the production of materials and on constructions relative to efficient utilization of energy consumption are unknown.

5.2.4.4 Some Gender Dimensions

In designing policies and projects to increase access to land and shelter, it is important to consider the different needs of men and women. In Ghana, there are regional differences regarding women’s access to land. Only 2% of women in Northern Ghana are holders of land as against 50% in Ashanti. The situation in Northern Ghana is due to family land tenure practices unfavourable to women and a system of patrilineal inheritance. (Prah, 1995). There is the need for the promotion of enabling policies which will help break down such barriers which deny women equal access to and control over land. It is difficult to determine the degree of gender differentiation in land ownership patterns in urban and rural areas due to lack of adequate gender desegregated data on level acquisition. UN statistics show that women own 1% of the world’s property. While the percentage of women landowners in Ghana may not be so low, it is to be expected that a wide gender differential exists. The collection of gender-desegregated statistics on housing will facilitate a gender responsive approach to the delivery of shelter.

Regarding financing, indications are that there is a gender based difference in access to credit (Haddad 1991). It will be necessary to take this factor into consideration in addressing the financing of moderate and low-income target groups.

PROPOSED ACTIONS

Part C presents recommended policies, strategies and activities to address the preceding issues. Some of the activities are on-going and require strengthening, re-direction and/or replication.
B.5.3 POVERTY REDUCTION AND EMPLOYMENT GENERATION

5.3.1 Introduction

Although difficult to document, there is a consensus that unemployment is high in spite of the fairly high GDP growth rates recently experienced. Traditionally, unemployment has primarily been a rural/agricultural problem which took the form of underemployment. However, in recent times Ghana has undergone rapid urbanization and while rural underemployment has remained considerable, much of the increase in unemployment has occurred in urban centers, and is manifested as open unemployment as well as underemployment. According to official data, about 3.1% of the labour force are unemployed and 24.1% are underemployed. But estimates do vary. [Note: official data refers to recorded employment in the formal sector only]. The underemployed in rural areas are generally able to eke out subsistence, are generally unorganized and do not pose a visible social problem. Unemployment, underemployment and poverty in an urbanizing context, however, do pose a problem. The causes of the present unemployment situation include the following: the high population growth rate (3%); total population estimated at 16.5 million, 1994; mismatch between supply of and demand for (employable) skills; low productivity of agriculture and industry; neglect of the informal sector in development policy, etc. In Ghana, a number of policies and programmes have been implemented to address this problem. How effective have they been? And what more can be done?

A review of the economic policies adopted by the country prior to the early 1980s and their effect on the economy and its social indicators provides a background to the need for and the nature of the Economic Recovery Programme (ERP) introduced in 1983. The policies emphasized industry over agriculture, public over private enterprise, large over small-scale operations, and centralized over decentralized management. The economic consequences and problems arising from these approaches were declining output in all sectors, persistent budget deficits, overvaluation of the cedi, black marketing in foreign currencies and loss of domestic supplies and public revenue through smuggling. In the period 1970-79, the average annual growth rate (%) of selected indicators was as follows: GDP, -0.1; agriculture, -0.2, industry, -1.5; manufacturing, 4.4; and services, 1.0. The GNP figure for 1960-82 was -0.8.

To arrest these trends the government initiated the Economic Recovery and Structural Adjustment (ERP/SAP) in 1983 in order to create conditions for economic revival and accelerated growth. The programme was divided into three phases: (a) stabilization phase, (b) rehabilitation phase, and (c) liberalization and growth phase. Aspects of the ERP/SAP included the following:

- the cedi was floated to allow its value to adjust to other currencies towards an equilibrium rate in accordance with prevailing economic conditions;

- export and import tariffs and controls were reduced to encourage trade and make the economy more outward-looking;

- administration of prices was removed to allow more market-oriented price determination; and
cocoa prices were improved for farmers due to the depreciating value of the cedi.

The programme achieved some notable successes. In 1983 the growth rate was 0.7%; by 1985 it was 5.4%. The budget deficit was reduced substantially and the rate of inflation brought down from 123% in 1983 to 30% in 1994.

In response to these incentives, traditional exports in cocoa and timber went up by over 60% up to 1992. GDP growth rate was 6%, and GNP per capita was $450 (1992) compared to $310 in 1983. The services sector, with a growth rate of 6%, has outstripped the other sectors. There have been some increases in expenditures on education, health, and other social services; and there has been progress in the rehabilitation of physical infrastructures.

Under the ERP/SAP and the Public Service Reform Programme, 65,000 posts were abolished. State-owned and private enterprises also reduced their labour force. The result was a drop in the recorded number of public-sector employees by 50%; that is, from 464,000 in 1985 to 230,000 in 1990. In the private sector employment declined by 40%. Other groups of people who have been adversely affected are: (a) food producers: the withdrawal of subsidies has raised input prices and inflation has eroded their output prices and incomes; this group contains a large proportion of women; and (b) petty traders: these are predominantly women; their incomes have been eroded by continuous devaluation of the cedi and inflation. Petty trading is the dominant activity in the urban informal sector, and has absorbed retrenched workers and out-of-school youth.

Table B5.3.1 Relative Shares Of Modern, Intermediate And Informal Employment - 1984

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Modern employment</th>
<th>Intermediate/ informal employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry</td>
<td>5.3</td>
<td>94.7</td>
</tr>
<tr>
<td>and fishing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>95.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Commerce</td>
<td>8.2</td>
<td>91.8</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15.8</td>
<td>84.2</td>
</tr>
<tr>
<td>Construction</td>
<td>64.5</td>
<td>35.5</td>
</tr>
<tr>
<td>Transport, Storage and</td>
<td>61.4</td>
<td>38.6</td>
</tr>
<tr>
<td>Communications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Services</td>
<td>90.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Other Services</td>
<td>76.3</td>
<td>23.7</td>
</tr>
<tr>
<td>All Sectors</td>
<td>16.2</td>
<td>83.8</td>
</tr>
</tbody>
</table>


Accompanying these trends, real average earnings in all sectors stagnated between 1986 and 1988 and rose slightly in 1989. As the formal sector declined in employment, the informal sector was
growing at an estimated rate of 5.6% a year. Always the largest, it is now estimated to account for at least 80% of all employment. Some 69% of all men and 92% of all women are in non-wage employment (WDR '95, p.73), and most of them are in the informal sector. (Tables B5.3.1 and B5.3.2) This sector, in fact, was expected to absorb the labour retrenched from the public sector, and as part of the private sector, is accorded the role of providing expanding employment opportunities for the growing labour force. To that end, a number of policies and programmes were initiated. These are reviewed in another section below.

Table B5.3.2  Shares Of Men And Women Workers In Nonwage Employment (Percentage Of Total)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Verde</td>
<td>1990</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>Egypt</td>
<td>1989</td>
<td>46</td>
<td>74</td>
</tr>
<tr>
<td>Ghana</td>
<td>1989</td>
<td>69</td>
<td>92</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1988</td>
<td>84</td>
<td>95</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1989</td>
<td>36</td>
<td>51</td>
</tr>
</tbody>
</table>

Source WDR'95, p 73 (adapted)

5.3.2  Poverty Line and Some Characteristics of Poverty

5.3.2.1  General

Data on the nature of poverty and trends are now available from three surveys: Ghana Living Standards Survey from 1988 (GLSS 1 to GLSS 3). In GLSS 1, the poor were defined as those living in households with per capita expenditure per annum below 2/3 of the mean and the hard-core poor as those below 1/3 of the mean. The poverty line was established at ₦32,981 or $162.99 in 1988; the hard-core line was thus ₦16.491 ($81.50) per year. About 35.9% of the population, 27% of the urban (excluding Accra) and 44% of the rural population fell below these thresholds. Of the 10% of "very poor", 66% lived in rural areas; 19%, in urban and semi-urban areas. Thus, the poor in Ghana are predominantly rural, but are growing in urban areas. On an occupational basis, 85% and 87% of the "very poor" and "poor", respectively, are self-employed, with only 4% and 6% respectively in government employment. Absolute poverty is not limited to a small minority. It is pervasive and hence difficult to resolve without a major and broadly-based increase in productive activity. (See Box B5.3.1)
Box B5.3.1 Some Characteristics of Poverty

In terms of a non-monetary definition, poverty, on the personal level, is the inability on the part of an individual or household to acquire the basic necessities of life — food, clothing and shelter; while on the community level, it is manifested by the absence or low level of basic community services, such as health, education, water and sanitation and/or the existence of slums.

The large majority of the poor who are in the rural areas are characterized by low productivity, underproduction and low incomes. In agriculture, subsistence production predominates among the poor. There is very little or no surplus production. Some sales occur but purchases are made later in the season, signifying insufficient production and low food self-sufficiency, food insecurity and low living standards, especially in the northern zones. Low productivity is also a characteristic in the following sectors: fisheries, livestock, non-farm and informal sectors. Farm sizes are small with over 73% cultivating below 1.6 ha/yr. The predominant power source is labour aided by simple tools and implements such as hoes, cutlasses and knives.

There is also a lack of non-farm employment opportunities for school leavers resulting in rural-urban migration with its attendant socio-economic problems such as increased unemployment, high residential densities, squatter settlements and slums.

Human settlements are perhaps the most visible signs of well-being and poverty. The urban poor live in squatter and slum areas, with very high residential densities, squalid conditions and generally poor environmental sanitation and they pay more than 25% of household income towards housing rent unless they share the rent with two or more friends in overcrowded conditions.


There are significant regional differences in the incidence of poverty. The North is much poorer than the South. With 40% of the population, it produces only 14% of total agricultural GDP. GLSS 2 and GLSS 3 show that poverty has fallen a little in the coastal and savannah zones, though the north is still far behind the south.

5.3.2.2 Women and Poverty

Several general features of the women's situation merit mention. First, a higher proportion of them (92%) are in non-wage employment than men (69%). Secondly, they generally have less access to productive resources. Thirdly, gross fertility rates are high with an average of 6.7 per woman. Fourthly, women in poor rural and urban households have heavier burdens, more responsibilities, and less credit. Because of these circumstances, women in situations of deprivation tend to be poorer than men. In addition, roughly 25.9% of urban and 30% of semi-urban households are headed by women, with similar implications for the households.

5.3.2.3 Urban Poverty

Urban poverty has grown since the ERP/SAP as the groups most affected include redeployed workers, the urban unemployed and those working in the formal sector. As a result, it has become common practice for urban dwellers to hold or engage in two or more jobs to meet consumption requirements. Because of the semi-legal nature of such jobs, however, it is difficult to define the
incidence of poverty. The urban poor have a harsh life. They live in slum areas (e.g. Nima in Accra, Kwenimintsim in Sekondi-Takoradi, Zongo in Kumasi, and Ward E in Tamale). The reported cases of malnutrition are higher: 83% in Accra compared to 27% country-wide. Also the urban poor experience high levels of residential stress, poor sanitation, unreliable water supply, and unemployment.

5.3.3 Access to Social Services

The poor have limited access to basic services: health, education, water and sanitation, especially those who live in scattered and isolated settlements. (See Box B5.3.2 and sections 4.2 and 4.3, chapter B.2 above). The enrolment rates of girls seem to be declining on the educational ladder, possibly due to teen-age pregnancy, or fear of it, or other factors.
Box B5.3 Accessibility Of Social Services

The inadequate provision of basic services, in qualitative and quantitative terms, is a serious problem in more than 85% of the towns and villages in the country. During group interviews conducted in six regions of the country in 1994, four major priority needs were identified as follows: clean drinking water, all-weather motorable road connections to markets and service centres, and the provision of educational and health facilities. There were other priorities, but these came within the first four in every community. [Note: where facilities and services exist, poor roads and hence poor accessibility may impede utilization, eg. access to hospitals from villages around Techiman]

Water
Existing information shows that only about 40% of the rural population had access to potable water supply as compared to 93% of the urban population. The problem related to a) water quality; b) inadequate supply; c) lack of maintenance, resulting in broken hand pumps and silted dams; d) the long distances women and children have to walk to fetch water; and e) the existence of water-borne diseases. Report of a national rural community survey carried out as part of the third phase of the GLSS (1991/92) shows that 84% of rural households lived in areas where none of the residents had pipe-borne water. Only 6% of the rural households lived in areas where all the residents had pipe-borne water.

The lack of threshold population has implications for rural water supply as follows: out of 15,334 rural settlements which require water, only 770, representing 5% of the total, can be supplied with piped system because each has the required threshold population (ranging from 1500 to 5000). Each of the remaining 14,564 settlements, representing 95%, has a population ranging between 100 and 1500 and can be served with hand pumps only. (These calculations are derived from a Table in Discussion Draft, Rural Water Supply and Sanitation Sector Strategy and Action Plan. UNDP/World Bank, 1990)

Health
It is estimated that 8.36 million people living in 47,000 rural settlements do not have any or ready access to the basic government-provided health facilities which are largely urban based, as opposed to mission facilities which are generally rural-based. The accessibility standard of the Ministry of Health (MOH) is one health facility within a walking/travel distance not exceeding 8kms. The primary health care coverage was estimated, in 1989, to be 92% for the urban sector and 45% for the rural sector. The Annual Report of the MCHFP Unit, MOH, states that 48% of the total number of villages had MCHFP services in 1992, compared to 41% in 1991.

In 1987 the doctor-population ratio was 1:5764 in Accra; 1:56,682 in Central Region; 1:24,930 in Western Region; and 1:63,095 in Northern Region. While the entire population of the Accra Metropolitan Area has access to health facilities, only 11% of the population in the North had access compared with 77% in the Central Region and 26% in the Western Region, (UNICEF, Accra, 1990). Only 3% of rural households lived in communities with a resident doctor. For 36% of rural households access to a doctor, in terms of travel distances, was 1-9 miles away; for 31%, 12% and 18%, access was 10-19, 20-29 and 30+ miles away respectively. In the case of a pharmacist, the accessibility pattern was similar. (GLSS, 1993).

Box 2 continued next page
Box B5.3.2 contd.

Education

Statistics on gross enrolment give the estimates for primary and junior secondary schools (JSS) as 79.1% and 55.1% respectively. Girls represent 45.5% and 41.1% of enrolment in primary and JSS respectively. The gross Primary One intake rate for both public and private schools put together increased from 75.7% in 1989 and 1990 to 82.5% in 1990 and 1991, and to 89.4% in 1991 and 1992 (Ministry of Education, 1993, 1994). Enrolment in public primary schools has increased considerably since the educational reform initiated in 1987 and directed towards improving access, among other things.

The indices of change in public primary school enrolment from 1988/1989 to 1991/92 show that the increase in enrolment is higher among girls than boys - an improvement in the gender gap. There are also spatial disparities. For example, in Greater Accra and Central Region, the gross enrolment rate is over 95%, including private schools, while in the Upper East Region only 43% of the school-age children are in school.

About 87% of rural households live in communities where there is a primary school and 64% live in communities with JSS. The percentages for the four most deprived regions are as follows with regard to primary school: Upper East: 67%; Northern: 75%; Volta: 78%; and Upper West: 40%; Western: 46%; and Eastern: 57%. In terms of the distance rural households travel to reach the nearest middle school/JSS, 64% of all rural households are within one mile. Accessibility for the remaining households is 1-2 miles: 14%; 3-4 miles: 13%; 5-6 miles: 3%; 7-8 miles: 1% and 9+ miles: 4% (GLSS 1991/92 and 1993).

Recent surveys have identified the major reasons for non attendance as follows: poverty and school fees; age and condition of buildings; schools without buildings; and long walking distances to school.

Rural Transport

Rural transportation is a key element in the integration of the economic functions of urban and rural areas, especially in conveying farm produce to markets, access/travel to health and school facilities and to trading centres; and in commodity flows and service delivery generally. But the large number of scattered human settlements population and scattered productive activities make it difficult (a) to closely relate rural transportation network to the location of productive activities; and (b) to develop road links that would directly serve every town and village. Of the country's transportation system, the road network, road network, road vehicle fleet and the inland waterway are the most important for personal and business travel, goods transport and delivery of services in the rural areas. The main means of conveying foodstuff to produce markets is by head porterage. This reduces the farmer's potential income while a large tonnage of food rots on the farms.

According to GLSS 3 (1993), 18% and 46% of households living in rural communities had no access to a motorable road and public transport respectively. The most deprived households in terms of access to motorable roads are Eastern, Upper West and Northern Regions; and in terms of access to public transport, the worst deprived communities live in Upper East (which has a zero service), Northern, Brong Ahafo and Volta Regions. 54% of rural households are within a distance of one mile to the nearest public transport; 30% are within 1-9 miles; and 9% are 10-19 miles.

5.3.4 Review of Policies and Strategies for Poverty Reduction and Employment Generation

5.3.4.1 Introduction

Government and donors became concerned about the negative effect the reforms were having on the poorer groups of the population, and the prospects for the sustainability of the adjustment process if the hardship persisted. Therefore, over the past decade, Government has initiated a number of policies and strategies aimed at addressing the needs of vulnerable groups. The major policies, strategies and programmes include the following:

- The Programme of Action to Mitigate the Social Costs of Adjustment (PAMSCAD)
- Population Policy
- Programme for Private and Informal Sector Enterprises
- Decentralization Programme
- The Constitution of Ghana
- Strategy for Human Development
- Ghana - Vision 2020

This section deals with PAMSCAD, Population Policy, Entrepreneurial Development programmes and Vision 2020, while other sections review the remaining items (4, 5 and 6), among others.

5.3.4.2 PAMSCAD

PAMSCAD was developed as a short-term action programme to address the immediate problems of the poor and vulnerable groups arising from the adjustment process. Its target groups were the rural poor, the unemployed and under-employed in urban areas, and retrenched workers. The management of the programme was the joint responsibility of the Ministry of Finance and Economic Planning, and the Ministry of Local Government with the participation of district assemblies and chief executives.

The programme had the following components, each one with its projects:

- Community Initiative Projects (CIP)
- Employment Generation Project (EGP)
- Redeployment Project (RP)
- Basic Needs Project (BNP)
- Education Infrastructure Project (EIP)

The CIP's were designed to involve rural communities themselves to identify and implement projects that would rehabilitate and construct social infrastructure and generate employment. The target groups were the rural poor and small farmers especially women in some programmes. The EGP's were geared to employment creation mainly via public works projects and indirectly through credit lines for small-scale enterprises and farmers. One project combined the employment focus with an education focus in labour-intensive rehabilitation of schools, cutting across all groups.
The Redeployment Project was geared to redeployment with a training component, including agriculture and nutrition within a resettlement project, and the Basic Needs Projects addressed basic needs (i.e., water, health, nutrition and shelter). This component included children. There was also a programme category in education, including commodity aid (paper and training materials) and institutional feeding.

PAMSCAD has been declared as successful by donor review missions in terms of generating employment, building infrastructure and creating public awareness and participation. Among the main weaknesses identified are the following:

a. Projects were too many and too widespread relative to funds and implementation capacity;
b. Targeting was poor: the programme as a whole did not reach the poor as intended;
c. It favoured urban communities: 34% of the funds went to redeployees, 10% to nutrition, 6% to rural areas, 2% to women, and 2% to wells;
d. Decision-making was concentrated in the central ministries and agencies; and

PAMSCAD has generated some useful lessons relating to the need for better targeting, design and management; use of participatory methods; and incorporating poverty reduction in development programming.

5.3.4.3 Population Policy

Ghana has a high population growth rate of about 3.2% (1988-92), which tends to make poverty reduction difficult. This was recognized much earlier in 1969 when Ghana initiated a population policy with the aim of reducing the rate to 1.7% by the year 2000. The main focus has been on family planning, with some activities in health, education and the role of women in development. The strategy is to incorporate population programmes into development planning. The impact so far has been marginal because Ghana has not yet reached a fertility transition; the population growth rate remains high; both the implementation and grassroot support need strengthening; and there should be greater awareness of the interactions between population dynamics and development. The population policy is under review.

5.3.4.4 Programmes for Private and Informal Sector Enterprises (ISEs)

A number of programmes and measures were also initiated and have been put in place to support enterprise development in the private and informal sectors. The informal sector accounts for 80% of employment, provides opportunities for skills training, and contributes 22% to 25% of GDP, producing a wide range of goods and services to meet the needs of most people (Tables 1 and 3). Most operators are sole owners but there is a trend towards partnerships which may facilitate pooling of resources. Most operate from their homes or in rented premises (especially in the case of shops). Increasingly visible are the street hawkers. Previously dubbed "dog chain sellers", they now sell almost anything -- dogs, fresh fish, newspapers, electrical goods, etc., operating from pavements, street sides, between streets, between vehicles, and carrying goods on their heads and bodies.
Incomes vary widely, from subsistence to middle-income, with many being acutely poor and economically insecure.

Until recently ISE's were not considered as integrated with the national economy. Institutions were not set up solely or even primarily to assist the informal sector, although there are several institutions with programmes which may influence the activities of informal sector operators; namely; programmes in finance, technical assistance, technical training, management training and extension as follows:

(i) industrial development institutions to promote small scale industries; e.g., National Board for Small-Scale Industries (NBSSI) which, inter alia, provides credit services; and the Ghanaian Enterprises Development Commission (GEDC);

(ii) financial institutions such as the traditional commercial banks, the Rural Banks, Women's World Banking and FUSMED, which provide credit to some of the operators of the sector;

(iii) training institutions and programmes for potential entrants to the informal sector as well as existing operators in the informal sector (e.g. Accra Technical Training Centre, EMPRETEC, Entrepreneurship Development Programme of NBSSI, Food for Hunger Campaign (FFHC), and Enhancing Opportunities for Women in Development).

These programmes and other support services tend to concentrate on the large end of the small-scale enterprises. There is a need to support ISE activities.

5.3.4.5 Formal Credit Institutions

The banks, performing traditional roles, have generally been ineffective in promoting SSE's and ISE's. Most of the banks have development finance departments but do not have any articulated schemes for the sector, though encouraging signs are appearing. For example, the Bank for Housing and Construction (BHC) has plans to get more involved with the sector. The amount of credit flowing to the informal sector from the formal banks is low. A 1990/91 Accra Survey of informal sector enterprises indicated that only 1.1% of the entrepreneurs obtained capital from banks and government institutions to start their business. At the BHC only about 1% of the loan applications received come from the informal sector, and only half of these are approved. The Cooperative Bank performed a little better. In 1990 30% of loans went to the informal sector; but the Bank is progressively reducing lending to the sector.

The banks prefer to deal with the formal sector, for reasons such as the following:

(i) large loans are cheaper per cedi to develop, appraise, disburse, monitor and collect; SSEs and ISEs need small amounts which have high transaction costs;

(ii) the bigger institutions are well known clients with good collateral and thus are less risky than smaller ones;
(iii) the SSE's and ISE's do not keep business records and are not suitably organized; and

(iv) most of the entrepreneurs in the informal sector are not deemed literate enough to understand what the banks ask of them -- a view not supported by empirical evidence on the educational background of informal sector entrepreneurs.

5.3.4.6 Other Credit Schemes

There are other sources of funding for ISE's. These are the traditional credit associations grouped together under the Ghana Cooperative Credit Union (CUA) and the indigenous susu scheme. The CUA coordinates the activities of various societies organizing workers and communities into credit societies to mobilize resources from workers and members of the community in order to give out loans for productive purposes. These informal sector entrepreneurs depend to some extent on the associations to establish their enterprises.

5.3.4.7 Training Institutions

Skills acquisition in the informal sector is mainly through the apprenticeship system. Nearly half of the entrepreneurs acquire their training from the informal sector itself; less than 10% are trained in the formal sector such as the vocational schools. Technical institutes and other training programmes oriented towards self-employment exist for potential entrants into the informal sector. There are many vocational and technical institutes supervised by the Ghana Education Service. Their training programmes include: (a) a block release program which is a 4-year training scheme for apprentices and other workers from industry; and (b) a pre-employment program offered to both part-time and full-time trainees who have no previous trade knowledge, ranging from 2-6 years. The problem with these programs is that they prepare graduates for jobs in the modern industrial sector which has limited capacity to absorb them. Training programmes for women tend to be traditional ones, such as catering, typing and sewing. There is a need to reorient the programs of technical institutes to the labour requirements and self-employment patterns of the informal sector, and also to encourage girls and women to branch out into non-traditional occupations which may give them better income opportunities. The lack of finance to run the institutes has been a major constraint to the normal running of the institutes. The tools are obsolete while the staff strength is below requirement. At a higher level are the polytechnics, which are further away from the informal sector than the technical institutes. They train technicians not meant for the informal sector although a few of them might enter the sector.

The enterprise development programmes have had some positive effects but lack full effectiveness. Among the reasons are the following: First, knowledge or awareness of the programmes by intended beneficiaries is limited: it is realized by implementing agencies, NBSSI for example, that only 5% to 10% of micro-enterprise operators know of its existence; Second, outreach to its targets has been slow. In the first two years, only 17 out of a target of 500 women had been reached. Project staff are too few. Third, training programmes are located too far from possible participants. And Fourth, the requirements of collateral and equity contribution "not exceeding $100,000" effectively excludes many small enterprises, especially in the informal sector.
Obvious lessons arise from these limitations for needed improvements in public campaigns, staff strengthening, decentralized and flexible training schemes, more realistic targeting criteria, and national resource mobilization.

5.3.2.5 Ghana - Vision 2020: Long-Term and Medium-Term Development Policies:

PAMSCAD was a short-term programme for alleviating the hardship suffered by various groups immediately affected by the ERP/SAP reforms, with limited reference to long-term development. A long-term programme was presented this year in Ghana-Vision 2020 -- A Presidential Report on a Coordinated Programme of Economic and Social Development Policies. The Report, among other things, has strategies, policies and objectives related to the priority issues of poverty and employment generation. It is, of course, too early to assess the effectiveness of Vision 2020. Its broad policy framework, objectives and strategies which are relevant to poverty reduction are presented in section 5.3.3 below.

PROPOSED ACTIONS

Part C presents recommended policies and strategies and activities to address the preceding issues. Some of the activities are on-going and require strengthening, re-direction and/or replication.
B.5.4 ENVIRONMENTAL MANAGEMENT

5.4.1 Introduction

In recent years much public awareness and concern have been generated with respect to environmental pollution and other environmental issues in Ghana by the media, the Environmental NGO's and particularly by the Ministry of Environment, Science and Technology (MEST) and the Environmental Protection Agency (EPA). In order to formulate relevant strategies to mitigate some of these critical environmental problems, various studies in recent years have been commissioned in the major urban centres and particularly in Accra. Some of the studies are: Environmental Study of Accra Metropolitan Area, 1989; Coastal Management Plan for Accra, 1991; Environmental Profile of Accra, 1991; Sustainable Cities Project for Accra, Ghana, 1991; Preparation of Waste Management Projects in Sekondi-Takoradi, Tamale and Tema. Overall information on the status of the environment in urban centres other than Accra is scanty.

From these studies it is quite apparent that, in the urban centres like Accra, Kumasi and Sekondi-Takoradi, serious environmental problems exist which if not tackled now may pose health hazards for the city dwellers and even disrupt urbanization in the country. Some of the problems relate to the evacuation and disposal of both solid and liquid wastes and the uncontrolled gaseous emissions and discharge of particulate matter as well as domestic and industrial effluents into the environment.

As a result of these critical environmental problems, it is not uncommon to see mounds of uncleared garbage, drainage systems which are silted and choked with weeds and solid waste and polluted streams and rivers in the environs of human settlements. Inadequate drainage systems have also led to situations where sullage waters collect in pools, thus facilitating the breeding of mosquitoes and flies which transmit diseases. The use of the existing drains as a conduit for the discharge of untreated domestic and industrial wastes which ultimately end up in streams and rivers has put fragile ecosystems in the country under severe pressure.

The overall rapid growth in population and built-up areas of the largest cities and towns places a major burden on government in its attempt to provide adequate housing, efficient services and infrastructure for the urban population. Some of the most critical areas of need relate to housing, water supply, garbage removal, sanitation, health and educational facilities. This situation has led to the development of slums and the degradation of the urban environment with negative impacts on the health and well-being of the population.

The establishment of the MEST has created a focus for the formulation of all national environmental policies. The EPA, whose sector Ministry is MEST, is responsible for coordinating the implementation of environmental policies. The Agency has regulatory and enforcement functions. Several other Institutions which have a role to play in the protection of the environment are being strengthened. These include the National Development Planning Commission, the research institutes, AESC, the Ministry of Mines & Energy and the Town & Country Planning Department. Their capabilities for researching and data collection of related environmental matters are being fortified. Third cycle training institutions are also being developed to carry out programmes in environmental
education. The District Assemblies and NGO's are being supported to increase their roles in the management of the environment.

Currently, the country's priority environmental problems in the area of human settlements emanate from the following:

- the water and sanitation complex
- housing problems
- solid waste disposal
- pests and pesticides
- hygiene behaviour
- industrial pollution.

A contingent valuation analysis in the study by Benneh et al, 1993, covering water quality, water availability, solid waste, outdoor air, indoor air and insects indicates the extent to which households valued specific environmental improvements. For all the households put together, the share of households willing to pay for improvements was highest for insects, followed by garbage, water quantity, water quality, indoor air and outdoor air in descending order of importance. (Table B5.4.1)

<table>
<thead>
<tr>
<th></th>
<th>Water Quality</th>
<th>Water Quantity</th>
<th>Outdoor Air</th>
<th>Indoor Air</th>
<th>Insects</th>
<th>Garbage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Wealth</td>
<td>72</td>
<td>74</td>
<td>52</td>
<td>59</td>
<td>88</td>
<td>76</td>
</tr>
<tr>
<td>Middle Wealth</td>
<td>68</td>
<td>64</td>
<td>45</td>
<td>50</td>
<td>81</td>
<td>73</td>
</tr>
<tr>
<td>High Wealth</td>
<td>85</td>
<td>79</td>
<td>49</td>
<td>40</td>
<td>89</td>
<td>72</td>
</tr>
<tr>
<td>All Households</td>
<td>72</td>
<td>73</td>
<td>51</td>
<td>57</td>
<td>87</td>
<td>75</td>
</tr>
</tbody>
</table>


5.4.2 Air Quality

Air pollution affects humans, animals and plants, and also contaminates soils and surface waters, including the marine environment. The most ubiquitous atmospheric pollutants with the greatest environmental impact are sulphur dioxide, oxides of nitrogen and particulates such as dust, grit, tar and aerosols. Air pollution monitoring in the country has not been systematic and dates only to 1979, when the quality of the air over the industrial and a residential area both in Tema and a commercial area in Accra were monitored over a 5 month period. (Amuzu and Leitmann, 1991) But overall, studies thus far have found the concentrations of particulates in ambient air in residential areas to be
below the suggested limits. It is quite possible that as industrialization and motorisation increase, air pollution in the urban areas may become a hazard, although currently there is no evidence that it is a major health problem.

Although ambient air pollution is not a major health problem in the urban areas, the Environmental protection Agency has proposed Air Quality Standards for selected pollutants in Ghana. However, at the household level air pollution from the smoke emanating from the use of wood fuel may be accounting for a larger share of global human exposure to airborne particulates than does ambient air pollution (Smith 1993). A recent survey (Benneh et al 1993) in the Greater Accra Metropolitan Area (GAMA) reported that both charcoal and fuelwood, but especially fuelwood, which is extensively used in the low income areas of the urban areas, give rise to potentially damaging levels of pollution exposure for women and children in the GAMA. In this survey the respirable particulates and carbon monoxide (CO) exposure for users of fuelwood, charcoal and kerosene were measured at the household level.

The survey showed that wood users were exposed to a mean concentration of respirable particulates of 587.1 μg/m³, charcoal users to 341.2 μg/m³ and kerosene, LPG and electricity users together to 195.2 μg/m³. There are no directly applicable international standards or guidelines with which to compare these concentration levels. However, for outdoor air, WHO recommends that the mean daily concentration of total suspended particulates (TSP) should not exceed 150-230 μg/m³ more than seven days per year. The United States government has set a 24-hour standard of 150 μg/m³ that should not be exceeded more than once a year. The maximum permissible level of TSP in residential areas in Ghana is 150 μg/m³ (averaged over 24 hours). In view of these figures the levels measured are disturbingly high (Benneh et al, 1993). For carbon monoxide (CO), charcoal users were the group most exposed to the highest level of CO at 24.1 ppm for 1 hour compared to the other fuel users which were much lower. The exposure level was however below the WHO guideline of 25 ppm for 1 hour (Benneh et al, 1993).

From December to March, dust laden winds blowing from the Sahel induce the phenomenon of Harmattan, causing low visibility and excessive particulate matter in the atmosphere. The phenomenon may be hazardous in that it may be exacerbating upper respiratory tract infections. In the urban areas also some roads in some residential areas are not tarred and vehicular traffic raises plumes of dust, which is an area of concern. The health impact of these needs further studies.

5.4.3 Water Quality: Water Bodies

Pollution of surface water directly affects aquatic biota, reduces biodiversity, increases treatment costs of water supplies for domestic and industrial use and also affects the use of surface water for a local amenity such as recreation. Acute pollution is confined mostly to waters in the urban and industrial areas.

Serious pollution of surface waters in the urban areas is the result of the uncontrolled discharge of untreated domestic and industrial effluents into the water bodies which drain these areas. In the GAMA, for example, the problem has been aggravated by the concentration of about 32% of the
country's total manufacturing industries in the Metropolis which covers less than 1% of the land area of Ghana (Amuzu and Leitmann, 1992).

As a result of improper planning, the lack of a system of secondary drainage works to channel water to drainage outlets, and the clogging of the few built drainage channels and natural water courses with garbage and silt, flood hazard is common in low-lying urban settlements.

A study of the network of lagoons and river systems in the GAMA showed gross pollution of these water bodies (AMA, 1990). In cases where there were fewer anthropogenic contacts with the water bodies in the area the water quality was quite good. Where there is anthropogenic contact the water bodies showed depressed levels of dissolved oxygen (DO) and elevated levels of Biochemical Oxygen Demand (BOD).

The Korle Lagoon/Odaw River catchment, for example, which is the largest of six principal drainage basins in the GAMA is grossly polluted. Before the onset of pollution the lagoon waters supported a thriving fishery of both fin and shell fish. Table B5.4.2 shows the water quality status of some water bodies in the area. Sea water and the sea front in the GAMA and most probably in the other coastal urban areas are also most likely grossly polluted due to the indiscriminate dumping of faecal matter and other household wasties in these areas.

Table B5.4.3: Physico-chemical characteristics of the Subin River

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>31.0°C</td>
</tr>
<tr>
<td>pH</td>
<td>6.5</td>
</tr>
<tr>
<td>Conductivity (µS/cm)</td>
<td>1133</td>
</tr>
<tr>
<td>Turbidity (NTU)</td>
<td>53</td>
</tr>
<tr>
<td>Suspended Solids (SS)</td>
<td>300</td>
</tr>
<tr>
<td>Nitrate (NO₃-N)</td>
<td>0.14</td>
</tr>
<tr>
<td>Ammonia (NH₄-N)</td>
<td>64.00</td>
</tr>
<tr>
<td>Phosphate (PO₄-P)</td>
<td>4.20</td>
</tr>
<tr>
<td>Dissolved Oxygen (DO)</td>
<td>0.0</td>
</tr>
<tr>
<td>Biochemical Oxygen Demand (BOD)</td>
<td>650</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>800</td>
</tr>
<tr>
<td>Grease &amp; Oil</td>
<td>37</td>
</tr>
</tbody>
</table>

In Kumasi, DO in the Subin River near the Railway Station is completely depleted. In addition, BOD, COD and Ammonia and other nutrients are present in high concentrations (Table B5.4.3).

As no signification attempts are being made to treat industrial and domestic effluents in the urban centres, pollution of the surface waters will continue for a long while yet.

In the Greater Accra Region most of the industries discharge their effluents into the Korle/Odaw River systems. In Tema industrial effluents are discharged into the Chemu Lagoon or into the central sewerage system. In the Ashanti Region, where most of the industries are located in Kumasi, effluents are discharged into the River Sisai and its tributaries Subin and Aboabo. In the Western
Region the industries are located in the industrial area of Takoradi. Effluents are discharged into swampy areas or into drains. In other parts of the country industrial effluents are discharged into water bodies. In most of these cases the effluents are discharged untreated, which increases pollution levels in the environment. The EPA in 1995, however, commissioned an Industrial Waste Study for the whole country. This study will enable environmental standards to be set for industrial effluents in the country.

**Table B5.4.2: Water Quality in the Accra Metropolitan Area**

<table>
<thead>
<tr>
<th>Location</th>
<th>pH</th>
<th>DO</th>
<th>BOD</th>
<th>PO₄-P</th>
<th>NH₄-N</th>
<th>NO₃-N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lagoons:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korle</td>
<td>7.1</td>
<td>4.4</td>
<td>98.9</td>
<td>0.86</td>
<td>3.8</td>
<td>0.30</td>
<td>0.80</td>
</tr>
<tr>
<td>Kpeshie</td>
<td>8.0</td>
<td>7.3</td>
<td>6.0</td>
<td>0.11</td>
<td>0.29</td>
<td>0.48</td>
<td>0.65</td>
</tr>
<tr>
<td>Makwe</td>
<td>7.9</td>
<td>6.4</td>
<td>3.2</td>
<td>0.09</td>
<td>0.20</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>Sakumo II</td>
<td>8.2</td>
<td>8.0</td>
<td>12.5</td>
<td>0.08</td>
<td>0.15</td>
<td>0.18</td>
<td>0.34</td>
</tr>
<tr>
<td>Chemu</td>
<td>8.1</td>
<td>0.5</td>
<td>7.12</td>
<td>0.59</td>
<td>1.3</td>
<td>0.38</td>
<td>2.2</td>
</tr>
<tr>
<td>Gao</td>
<td>8.1</td>
<td>6.1</td>
<td>6.4</td>
<td>0.04</td>
<td>0.11</td>
<td>0.96</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Seawater:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inshore - Botianor</td>
<td>7.6</td>
<td>6.9</td>
<td>4.7</td>
<td>0.101</td>
<td>0.02</td>
<td>0.48</td>
<td>0.77</td>
</tr>
<tr>
<td>Chorkor</td>
<td>7.8</td>
<td>7.8</td>
<td>11.5</td>
<td>0.013</td>
<td>0.06</td>
<td>0.39</td>
<td>0.77</td>
</tr>
<tr>
<td>James Town</td>
<td>8.0</td>
<td>7.3</td>
<td>16.0</td>
<td>0.011</td>
<td>0.18</td>
<td>0.46</td>
<td>1.0</td>
</tr>
<tr>
<td>Labadi Beach</td>
<td>7.7</td>
<td>6.9</td>
<td>4.8</td>
<td>0.019</td>
<td>0.03</td>
<td>0.45</td>
<td>0.44</td>
</tr>
<tr>
<td>Nautical College</td>
<td>7.0</td>
<td>6.7</td>
<td>4.0</td>
<td>0.014</td>
<td>0.08</td>
<td>0.35</td>
<td>-</td>
</tr>
<tr>
<td>Paradise Beach</td>
<td>7.9</td>
<td>7.5</td>
<td>5.5</td>
<td>0.010</td>
<td>0.03</td>
<td>0.39</td>
<td>-</td>
</tr>
<tr>
<td>Torna Manhean</td>
<td>7.8</td>
<td>7.3</td>
<td>45.0</td>
<td>0.21</td>
<td>0.17</td>
<td>0.41</td>
<td>0.98</td>
</tr>
<tr>
<td><strong>Freshwater:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Densu Reservoir</td>
<td>7.2</td>
<td>6.8</td>
<td>4.5</td>
<td>0.13</td>
<td>0.08</td>
<td>0.56</td>
<td>0.49</td>
</tr>
<tr>
<td>River Odaw</td>
<td>8.9</td>
<td>2.1</td>
<td>55.0</td>
<td>1.28</td>
<td>0.40</td>
<td>0.37</td>
<td>0.67</td>
</tr>
<tr>
<td>Nima Creek</td>
<td>8.9</td>
<td>7.1</td>
<td>5.8</td>
<td>0.26</td>
<td>0.42</td>
<td>0.40</td>
<td>-</td>
</tr>
<tr>
<td><strong>Natural Background Levels:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea Water</td>
<td>8.0</td>
<td>7.0</td>
<td>2.5</td>
<td>0.01</td>
<td>0.01</td>
<td>0.25</td>
<td>1.3</td>
</tr>
<tr>
<td>River Water</td>
<td>7.0</td>
<td>7.0</td>
<td>1.3</td>
<td>0.02</td>
<td>0.02</td>
<td>0.23</td>
<td>0.1</td>
</tr>
</tbody>
</table>

*Source: Environmental Management Associates, 1990*

### 5.4.4 Water Supplies for Domestic Use

Water supplies in the urban areas are derived from surface waters which are subjected to conventional treatment of alum dosage for clarification, sedimentation, filtration and pH adjustment and disinfection. The quality meets the WHO guidelines for potable water. Groundwater, which is used in a few of the urban areas, is generally of good quality with low levels of dissolved minerals and needs no treatment. However, there are some areas where the groundwaters are corrosive due to lack of carbonate buffering. In these areas non-corrosive structures are used for the pumping and storage systems.
The high and medium class neighbourhoods have indoor plumbing; inside stand pipes are more common in low-income residential areas. In the high-income areas, with flush toilets, there is adequate water supply and a greater awareness of personal hygiene practices. In contrast, in the low-income areas where water is frequently purchased and/or water supply is irregular, hygiene standards are rather low.

Table B5.4.4: Water Supply Coverage by Region

<table>
<thead>
<tr>
<th>REGION</th>
<th>URBAN</th>
<th></th>
<th>Coverage %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Coverage Population</td>
<td></td>
</tr>
<tr>
<td>1. Ashanti</td>
<td>991,293</td>
<td>784,622</td>
<td>79</td>
</tr>
<tr>
<td>2. Brong Ahafo</td>
<td>469,401</td>
<td>282,740</td>
<td>60</td>
</tr>
<tr>
<td>3. Central</td>
<td>532,381</td>
<td>419,938</td>
<td>79</td>
</tr>
<tr>
<td>4. Eastern</td>
<td>706,670</td>
<td>407,368</td>
<td>58</td>
</tr>
<tr>
<td>5. Greater Accra</td>
<td>1,709,897</td>
<td>1,472,867</td>
<td>86</td>
</tr>
<tr>
<td>6. Northern</td>
<td>296,646</td>
<td>189,404</td>
<td>64</td>
</tr>
<tr>
<td>7. Upper East</td>
<td>148,936</td>
<td>139,163</td>
<td>93</td>
</tr>
<tr>
<td>8. Upper West</td>
<td>44,288</td>
<td>22,144</td>
<td>50</td>
</tr>
<tr>
<td>9. Volta</td>
<td>382,413</td>
<td>263,189</td>
<td>69</td>
</tr>
<tr>
<td>10. Western</td>
<td>344,014</td>
<td>266,940</td>
<td>78</td>
</tr>
</tbody>
</table>

Ghana
<table>
<thead>
<tr>
<th>Population</th>
<th>Coverage Population</th>
<th>Coverage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,625,966</td>
<td>4,248,435</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: GWSC, National Water and Sanitation Survey, 1992

On the average, urban supply coverage in the country is 76% but it is as high as 86% in the GAMA and 93% in the urban areas of the Upper East (GWSC, 1992). The urban area with the least coverage is in the Upper West (50%). The urban water supply coverage by Regions is listed in Table B5.4.4. The coverage takes account of the total urban population at the regional level served by the following water supply systems: conventional pipe borne, mechanised drill well, drilled well with handpump, handug well with handpump and hand-dug well without handpump.

Access to piped water supplies is linked not only to the degree of planning but also to household wealth (Benneh et al., 1993).

A sample survey in Accra (Benneh et al., 1993) showed that whereas 98% of the people in high income areas have access to indoor piping only 25.7% of those in the low income areas were served with the facility (Table B5.4.5).

In the poor areas, due to the absence of indoor piping, water is stored in a variety of containers (Table B5.4.6). Dip-cups and ladles are used to fetch water from these containers. The multiple use of dipping cups and the storage of the cups under unhygienic conditions could cause in-house bacterial contamination of the water and possible cross-contamination across family members (Benneh et al., 1992). The inadequate sanitation facilities in the these areas coupled with illegal connections to the main water lines, which are often improperly made, cause secondary contamination of the supplies. Diarrhoeal diseases are therefore prevalent among children in these areas, as shown by the sample survey in Table B5.4.7.
### Table B5.4.5: Relationship between Principal Source of Drinking Water and Household Wealth

<table>
<thead>
<tr>
<th>Source</th>
<th>Wealth Index of Household</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Indoor Piping</td>
<td>25.7</td>
<td>70.2</td>
</tr>
<tr>
<td>Standpipe (Private)</td>
<td>27.1</td>
<td>-15.3</td>
</tr>
<tr>
<td>Water Vendor</td>
<td>32.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Communal Standpipe</td>
<td>9.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Others</td>
<td>5.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>(N)</td>
<td>(818)</td>
<td>(131)</td>
</tr>
</tbody>
</table>

*Data Source: Questionnaire Survey of GAMA, Benneh et al., 1993*

Some of the surface waters from which the supplies are derived have become eutrophic and are progressively silted up on account of unregulated farming practices in the catchment of the rivers which feed the water supply impoundments. Run-off from the catchment of the rivers carries high nutrient concentrations into the rivers. Lake Weija, which supplies Accra, has a high proliferation of the weeds *Pistia stratiotes* (water lettuce), *Impomoea aquatica, Typha australis, Ludwigia stolonifera* and other planktonic species that have an adverse impact on such water quality parameters as colour, iron and manganese, which tend to increase because of the presence of the weeds.

### Table B5.4.6: Relationship between type of Storage Container used and Household Wealth in percentages

<table>
<thead>
<tr>
<th>Source</th>
<th>Wealth Index of Household</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Overhead Tank (2,250)</td>
<td>2.6</td>
<td>16.3</td>
</tr>
<tr>
<td>Barrel (225 litres)</td>
<td>48.6</td>
<td>48.0</td>
</tr>
<tr>
<td>Pig Feet Container (45 litres)</td>
<td>15.0</td>
<td>15.4</td>
</tr>
<tr>
<td>Jerry can (22.5 litres)</td>
<td>8.4</td>
<td>9.8</td>
</tr>
<tr>
<td>Pot (13.5-100 litres)</td>
<td>6.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Bucket (13.5-18 litres)</td>
<td>19.2</td>
<td>7.3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
<tr>
<td>(N)</td>
<td>(778)</td>
<td>(123)</td>
</tr>
</tbody>
</table>

*Data Source: Questionnaire Survey of GAMA, Benneh et al., 1993*

Decaying remnants of the weeds also cause anoxic conditions especially towards the deeper sections of the water supply impoundments. Some of the weeds are known to harbour vectors that transmit various diseases. For instance, water lettuce encourages the spread of the mosquito (Manson) that carries the filarial worms known to cause elephantiasis; the snails that spread bilharzia sometimes live on the floating roots of *L. stolonifera*.  

75
Table B5.4.7: Relationship between Drinking Water Source and prevalence of Diarrhoea in Children Under Six

<table>
<thead>
<tr>
<th>Water Source</th>
<th>Number of Households with Children &lt; 6</th>
<th>% two week prevalence of Diarrhoea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Piping</td>
<td>162</td>
<td>6.8</td>
</tr>
<tr>
<td>Private Standpipe</td>
<td>139</td>
<td>14.0</td>
</tr>
<tr>
<td>Water Vendor</td>
<td>165</td>
<td>10.1</td>
</tr>
<tr>
<td>Communal Standpipe</td>
<td>50</td>
<td>42.0</td>
</tr>
<tr>
<td>Others</td>
<td>21</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>537</strong></td>
<td><strong>13.8</strong></td>
</tr>
</tbody>
</table>

Data Source: Questionnaire Survey of GAMA, Benneh et al. 1993

5.4.5 **Waste Management**

5.4.5.1 **Solid Waste**

This remains one of the most visible and intractable problems in all towns and the metropolitan areas in Ghana. Much of the garbage consists of residential domestic wastes. The capacity to handle garbage is grossly inadequate; and there is unauthorized and indiscriminate dumping of wastes along water courses, drains and waste grounds. The problems associated with indiscriminate waste dumping and the existence of mounds of uncollected garbage include odour nuisance, and unsightly conditions in the urban environment (more especially in low income areas). These mounds provide breeding grounds for insect vectors and rodents.

In all the urban areas, the infrastructure for waste management is grossly inadequate. Solid waste generations, which are relatively high, are estimated to be about 0.5 kg per capita per day (TNC, 1993).

In most settlements, open-burning is practised. This generates a lot of smoke on account of the high moisture content of domestic solid waste in the Country. The wastes are mainly organic in nature with vegetables/putrescible matter forming between 70-90% of the total refuse produced (Doe et al, 1988). But there is a serious shortfall in the collection rates. Table B5.4.8 shows the waste generation and collection rates for the eleven urban centres in Ghana. Collection rates as low as 9 and 10% have been recorded for Wa and Bolgatanga respectively. As a result it is not uncommon to see mounds of garbage in some of the urban areas. The poor performance of the sector is due to poor infrastructure and funding. The range of cost recovery is between 8% and 77%.

5.4.5.2 **Sewerage and Sanitation**

There is a paucity of information on night soil generation rates and collection in Ghana. Figures available for the GAMA show that the average volume of sewage in the AMA is 0.74 m³/capita/day in high income areas and 0.19m³ in other areas. The most common forms of human waste disposal
in the country are pit latrines, pan/bucket latrines, KVIPs, Aqua privy, water closets and open range defaecation. A sample survey of the mode of disposal of human wastes in Accra is shown in Table B5.4.9. The shortage of toilets in many urban areas leads to overcrowding of the existing toilets, which in turn may be spreading diseases. Regarding sanitation technologies, the method of disposal of night soil from pan latrines is not properly organised. Pan latrines are being progressively phased out and replaced with other technologies.

**Table B5.4.8: Summary of Solid Waste Generation and Collection Per Month.**

<table>
<thead>
<tr>
<th>Town</th>
<th>Generation (Tons/month)</th>
<th>Collection (Tons/month)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accra</td>
<td>20,100</td>
<td>16,080</td>
<td>80.0</td>
</tr>
<tr>
<td>Kumasi</td>
<td>13,800</td>
<td>4,830</td>
<td>35.0</td>
</tr>
<tr>
<td>Tema</td>
<td>4,545</td>
<td>2,235</td>
<td>49.2</td>
</tr>
<tr>
<td>Tamale</td>
<td>2,410</td>
<td>280</td>
<td>11.6</td>
</tr>
<tr>
<td>Sekondi-Takoradi</td>
<td>4,440</td>
<td>1,850</td>
<td>41.7</td>
</tr>
<tr>
<td>Koforidua</td>
<td>3,060</td>
<td>612</td>
<td>20.0</td>
</tr>
<tr>
<td>Sunyani</td>
<td>3,000</td>
<td>330</td>
<td>11.0</td>
</tr>
<tr>
<td>Cape Coast</td>
<td>1,450</td>
<td>435</td>
<td>30.0</td>
</tr>
<tr>
<td>Ho</td>
<td>1,590</td>
<td>227</td>
<td>14.0</td>
</tr>
<tr>
<td>Wa</td>
<td>1,440</td>
<td>129</td>
<td>9.0</td>
</tr>
<tr>
<td>Bolgatanga</td>
<td>1,410</td>
<td>141</td>
<td>10.0</td>
</tr>
</tbody>
</table>

3. Field Surveys, 1992-93*

In Accra, most of the waste is treated in oxidation ponds and composted. The KVIP technology has been introduced in some towns and cities. It has been found to be unsuitable in some areas because of poor soil drainage. Poor construction techniques and overloading have also affected the efficiency of the system in some areas. There are inadequate septic tank desludgers in most towns to cope with the situation. Tema is the only city with a central sewerage system. Accra is partially sewered. The construction in Accra was carried out in 1973 and it covers about 1% of the city. The poor state of the assets such as the pumping stations and the sea outfalls, and poor cost recovery as a result of inadequate connection to the system are some of the problems affecting the operation and maintenance of the system.

**Table B5.4.9: Distribution of Households by Sanitary Practice**

<table>
<thead>
<tr>
<th>Type of Sanitation</th>
<th>Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flush toilet</td>
<td>16.2</td>
</tr>
<tr>
<td>Pit latrine</td>
<td>27.3</td>
</tr>
<tr>
<td>Pan/bucket</td>
<td>19.6</td>
</tr>
<tr>
<td>Other a/</td>
<td>36.9</td>
</tr>
</tbody>
</table>

*a/ 'other' includes any household that did not have a toilet facility, or had one different from those listed above. Source: Derived from Ghana Living Standards Survey 1989*
A survey carried out by the GWSC in 1992 showed a low sanitation coverage of 61% in the urban areas. The survey covered the different types of latrines, the number in place and the number of people using the facilities. In the Upper West Region only 20% of urban dwellers have access to sanitation facilities. (Table B5.4.10).

Individual institutions and communal sewage treatment systems also exist in some parts of the country but most of these systems are in various stages of disrepair and are not being operated or maintained according to their design specifications. The state of repair of the systems in Accra is shown in Table B5.4.11.

5.4.6 Grey Water

Grey water (sullage) is the liquid waste water discharged from households, consisting of effluents from kitchens, bathrooms and laundries. It accounts for the largest share of household water demand in the country. It has been estimated that sullage represents 60% of household water demand in the country (Sam, 1990). In high and medium-income residential areas, concrete channels and pipes drain grey water into roadside ditches that convey the sullage to water courses. In poor neighbourhoods, grey water normally flows through holes in household walls onto the ground outside and is then channelled to a roadside ditch or forms a separate channel. Poor sullage disposal gives rise to waterlogged soils and stagnant pools that harbour diseases such as hookworm and provide breeding grounds for many pests such as mosquitoes (Songsore 1991).

Table B5.4.10: Sanitation Coverage by Region

<table>
<thead>
<tr>
<th>REGION</th>
<th>URBAN</th>
<th>Coverage Population</th>
<th>Coverage %</th>
<th>TOTAL Coverage Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Coverage Population</td>
<td>Coverage</td>
<td></td>
</tr>
<tr>
<td>ASHANTI</td>
<td>991,293</td>
<td>666,307</td>
<td>67</td>
<td>876,035</td>
</tr>
<tr>
<td>BRONG AHAFO</td>
<td>469,401</td>
<td>188,105</td>
<td>40</td>
<td>265,248</td>
</tr>
<tr>
<td>CENTRAL</td>
<td>532,381</td>
<td>256,235</td>
<td>48</td>
<td>331,179</td>
</tr>
<tr>
<td>EASTERN</td>
<td>706,670</td>
<td>394,879</td>
<td>56</td>
<td>605,822</td>
</tr>
<tr>
<td>GREATER ACCRA</td>
<td>1,709,897</td>
<td>1,255,895</td>
<td>73</td>
<td>1,291,003</td>
</tr>
<tr>
<td>NORTHERN</td>
<td>296,646</td>
<td>155,107</td>
<td>52</td>
<td>197,015</td>
</tr>
<tr>
<td>UPPER EAST</td>
<td>148,936</td>
<td>110,014</td>
<td>74</td>
<td>124,312</td>
</tr>
<tr>
<td>UPPER WEST</td>
<td>44,288</td>
<td>8,857</td>
<td>20</td>
<td>30,579</td>
</tr>
<tr>
<td>VOLTA</td>
<td>382,413</td>
<td>177,144</td>
<td>46</td>
<td>290,330</td>
</tr>
<tr>
<td>WESTERN</td>
<td>344,041</td>
<td>205,824</td>
<td>60</td>
<td>407,916</td>
</tr>
<tr>
<td>GHANA</td>
<td>5,625,966</td>
<td>3,418,367</td>
<td>61</td>
<td>4,420,305</td>
</tr>
</tbody>
</table>

Source: GWSC, National Water and Sanitation Survey, 1992

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5.4.7 Industrial Pollution

Industrial pollution is also becoming a problem in the Greater Accra Metropolitan Area, Kumasi and Sekondi-Takoradi Metropolitan Areas. The most common forms of pollution relate to water, air and noise pollution. Although the problem has not assumed very serious dimensions there is still some cause for concern, particularly in the industrial zones of the country. By contrast, mining activity, especially mineral processing, has various environmental effects in the mining towns because of water and air quality changes among others. Improper management of cyanide-bearing wastewaters (and to some extent mercury in the small scale mining sector) from gold processing and the discharge of arsenic and particulate matter into the atmosphere through ore roasting can have negative life-threatening consequences in the work and home environments of mining towns. However, in recent times, arsenic removal plants have been installed which capture arsenic and particulate emissions, thus radically improving the air quality in the affected areas and hence the health of people.

The EPA has also instituted Environmental Management Plans (EMP’s) as a mechanism to ensure the incorporation of environmental concerns into existing industrial and other development activities. The EPA Act, 490 also makes this mandatory for Environmental Impact Assessment (EIA) before the commencement of all development activities. These two requirements have initiated waste management plans to recycle or treat effluents from gold processing plants. In some of the urban areas of the country, industrial zones have been created for the siting of major industries. However, small artisanal workshops are haphazardly scattered throughout the towns and cities. These include garages that cause noise nuisances from the constant movement of vehicles in and out of their premises.

The garages also discharge spent oil into the network of drains in these towns. The oils cause depletion of oxygen and also adversely affect the flora and fauna of water bodies. In Accra, for instance, the small garages dispose of about 500 gallons of spent oil per month, into the drainage network in the city, which ultimately end up in the Korle Lagoon and cause serious pollution of that water body. This oil could have been easily recycled for industrial use.

5.4.8 Sand and Gravel Pits and Quarries

The Economic Recovery Programme initiated in 1983 generated a boom in the construction of houses and roads. In some areas mineral deposits lie close to residential areas. In the coastal towns and cities the winning of sand on the coastline has aggravated shore-line erosion although to a large extent sand winning on the beaches has been stopped. These mining activities have caused extensive environmental degradation. In almost all cases, no attempts are made to reclaim the land after the deposits are exhausted and the landscape has been degraded. The depressions are known to collect pools of water during the rainy seasons and become favourable breeding grounds for mosquitoes which spread malaria and other diseases.
Table B5.4.11: Condition of Sewage Treatment Works, 1988

<table>
<thead>
<tr>
<th>Sewage Works</th>
<th>Type a/</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burma Camp</td>
<td>TF &amp; WSP</td>
<td>Operating</td>
</tr>
<tr>
<td>Korle Bu Hospital</td>
<td>TF</td>
<td>Abandoned</td>
</tr>
<tr>
<td>University of Ghana</td>
<td>TF</td>
<td>Not Operating</td>
</tr>
<tr>
<td>State House</td>
<td>ASP</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Labone</td>
<td>TF</td>
<td>Not Operating</td>
</tr>
<tr>
<td>The Ministries</td>
<td>ASP</td>
<td>Not Operating</td>
</tr>
<tr>
<td>Accra High School</td>
<td>ASP</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Roman Ridge</td>
<td>ASP</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Military Hospital</td>
<td>TF</td>
<td>Abandoned</td>
</tr>
<tr>
<td>Trade Fair Site</td>
<td>ASP</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Achimota</td>
<td>TF</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Mental Hospital</td>
<td>WSP</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Presby Boy's Sec. Sch.</td>
<td>ASP</td>
<td>Not Operating</td>
</tr>
<tr>
<td>Teshie-Nungua Estate</td>
<td>TF</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Ashiaman</td>
<td>WSP</td>
<td>Operating</td>
</tr>
<tr>
<td>Accra Central</td>
<td>SA</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Sewerage System</td>
<td>SA</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td>Terna Central</td>
<td>SA</td>
<td>Malfunctioning</td>
</tr>
</tbody>
</table>

a/ SA = Sea outfall; WSP = Waste stabilization pond; ASP = Activated sludge process; TF = Trickling filter; ST = Septic tank

Source - Engmann, 1990

5.4.9 Health Aspects of Housing Problems

Most low income residents in urban settlements live in substandard dwellings where crowding, leaking roofs, poor ventilation and physical weakness of walls are common features of houses. These physical conditions of dwelling units, crowding and poor ventilation have an impact on human health.

5.4.10 Environmental-Related Diseases

Although data on illnesses related to specific causes disaggregated by rural and urban is not readily available, existing data appears to suggest that the pattern of morbidity differs slightly between rural and urban communities with environment-related diseases, fever presumed to be malaria tops the list in both rural and urban areas. The profile of the ten most common health problems reported at outpatient facilities in the Greater Accra Region where over 90 per cent of the population lives in the highly developed urban agglomeration of the Greater Accra Metropolitan Area is quite instructive as most of the diseases are environment-related and preventable (Table B5.4.12). Of these, malaria is the most prominent. This may be due to the fact that some varieties of Anopheles mosquito, which
is the vector of malaria, have been adapting to urban breeding sites such as water-filled domestic containers and even polluted water habitats created as a result of urbanization. Malaria is followed by upper respiratory tract infection, diarrhoea and skin diseases in descending order of importance. Other environment-related diseases include accidents and intestinal worms. Accidents may be due to road traffic accidents, natural disasters and industrial or domestic accidents.

Table B5.4.12: The Ten Most Common Health Problems Reported at Outpatient Facilities in the Greater Accra Region in 1990 and 1991

<table>
<thead>
<tr>
<th>Diseases in 1990</th>
<th>% of total</th>
<th>Diseases in 1991</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Malaria</td>
<td>41.0</td>
<td>Malaria</td>
<td>45.9</td>
</tr>
<tr>
<td>2. Upper Respiratory Tract Infections</td>
<td>9.1</td>
<td>Upper Respiratory Tract Infections</td>
<td>9.0</td>
</tr>
<tr>
<td>3. Diarrhoea</td>
<td>5.9</td>
<td>Diarrhoea</td>
<td>5.5</td>
</tr>
<tr>
<td>4. Skin diseases</td>
<td>5.3</td>
<td>Skin Diseases</td>
<td>5.3</td>
</tr>
<tr>
<td>5. Pregnancy and Related Problems</td>
<td>4.1</td>
<td>Pregnancy &amp; Related problems</td>
<td>4.1</td>
</tr>
<tr>
<td>6. Accidents</td>
<td>3.9</td>
<td>Accidents</td>
<td>2.8</td>
</tr>
<tr>
<td>7. Hypertension</td>
<td>2.4</td>
<td>Hypertension</td>
<td>2.3</td>
</tr>
<tr>
<td>8. Intestinal Worms</td>
<td>2.1</td>
<td>Diseases of the oral cavity</td>
<td>1.9</td>
</tr>
<tr>
<td>9. Anaemia</td>
<td>2.0</td>
<td>Rheumatism</td>
<td>1.7</td>
</tr>
<tr>
<td>10. Pyrexia of Unknown Origin</td>
<td>2.0</td>
<td>Intestinal Worms</td>
<td>1.6</td>
</tr>
</tbody>
</table>


Malaria, respiratory and diarrhoeal diseases are all major childhood killer diseases in both urban and rural settlements. Urban slums and squatter settlements are, above all, endemic areas of infectious hepatitis, cholera and typhoid. Also, in the special case of mining towns (especially gold mining activity) tuberculosis and silico-tuberculosis become significant (Songsore et al. 1994; Avotri, 1993).

The overall mortality profile for Accra in 1991 shows circulatory problems for the first time displacing infectious and parasitic diseases as the single most important cause of death (24.2%). This is followed by infectious and parasitic diseases (18.2%) and respiratory conditions (12%). Respiratory, infectious and parasitic diseases are environment-related. The high proportional mortality from respiratory conditions may be partly due to the proportion of the population living in densely settled conditions and increasing deaths from TB and pneumonia due to AIDS-related opportunistic infections. (Stephens et al. 1994, pp.14-15).

Accra is the only city in Ghana where intra-urban differentials in morbidity and mortality have been systematically linked to differences in environmental conditions in different ecological zones of the city through two pioneering works (Benneh et al, 1993; and Stephens et al, 1994). Both studies show a high level of correspondence between the socio-environmental conditions of residential areas and
the health status of residents; with poor slum, and low income unplanned and unserviced areas of low
environmental quality having a disproportionate share of the health burdens of the city.

5.4.11 Gender, Environment and Health

It is an undeniable fact that the first and most vulnerable victims of degraded neighbourhood
environments and poor housing conditions are children and women who spend most of their time in
the home and neighbourhood, especially slum dwellers who live in unsanitary conditions.

Poor and unhygienic environmental conditions increase the vulnerability of children to many diseases
such as diarrhoea, ARI, malaria, intestinal worms and the other six childhood killer diseases. Because
of the ready availability of health care delivery services, urban areas have lower infant, childhood and
under-five mortality rates than rural areas (DHS1993, p.87). In the specific case of mining towns,
it is suspected that certain forms of pollution can impede the mental development of children right
from birth. However, it is interesting to add that measures such as retrofitting pollutant removal
technologies have in some cases been put in place to deal with the problem. Women are the main
stakeholders in urban environmental management in Ghana, yet they are often ignored in development
planning. It is women who manage the household environment and care for children, the sick and
the elderly, thereby exposing themselves in the process to serious health risks. For example, even
though ambient air quality in residential areas of non-mining towns is generally acceptable, a recent
study in the Greater Accra Metropolitan Area has demonstrated that poor women and children are
exposed to exceedingly high levels of indoor air pollution from cooking fires using wood and charcoal
in poorly ventilated cooking locations. The main pollutants that were monitored were particulates
and carbon monoxide.

5.4.12 Pests and Pesticides

Given the insanitary environmental conditions and accumulations of uncollected garbage and waste
water under high temperatures, numerous insect vectors and pests find suitable ecological niches for
breeding. The most common ones include mosquitoes transmitting malaria, houseflies, cockroaches,
bed bugs and lice. Others are mice, which can also pose some problems including the occurrence of
plagues. The widespread and inappropriate use of mosquito coils, spray insecticides and rat poisons
can also pose some health risks.

5.4.13 Hygiene Behaviour

The inadequate supply of potable water, sanitation, waste water and garbage disposal facilities
promote poor personal hygiene. The improper handling of food at home and by vendors all affect the
transmission of water related diseases such as diarrhoea. Hygiene in urban settlements is not a simple
matter of household habits as it is intimately linked to the water and sanitation conditions. Open
defecation is linked to inadequate access to toilet facilities while poor handwashing practices are
linked to inadequate water supply. A recent study in Accra suggests that while factors such as
education may be associated with better handwashing practices, the type of water supply has an
independent and probably more significant effect.
PROPOSED ACTIONS

Part C presents recommended policies and strategies and activities to address the preceding issues. Some of the activities are on-going and require strengthening, re-direction and/or replication.
B.5.5 DISASTER PREPAREDNESS AND MITIGATION

5.5.1 Introduction

Ghana is susceptible to disasters but probably not on the wide scale reported in some parts of the world. Hurricanes, typhoons, severe earthquakes, oil and spills which afflict other parts of the world and cause large scale destruction are unknown in the country. But in recent years some disasters have been on the increase in some parts of the country and need contingency plans to mitigate their impact.

Bush fires caused by anthropogenic activities increased recently causing wide spread damage to property, loss of human lives, damage to tree stocks and a reduction of the nutrient status of soils.

Soil erosion is prevalent in many parts of the country. Many human settlements suffer from gully and sheet erosion. Coastline erosion is a major problem in the coastal areas.

Except for the earthquake of 1939 which devastated parts of Accra no major earthquakes have been recorded since then.

5.5.2 Earthquakes

There are several seismically active areas in the country. (See Annex Fig.1) Seismic events in Accra have been better documented than in other parts of the country. Large to medium earthquakes were recorded in 1862, 1906 and 1939 in Accra. The 1939 incident registered 6.5 on the Richter Scale. Appreciable damage was done to property in some parts of Accra and there were a few losses of life. The population of Accra was then only 77,000, which may have accounted for the low loss of lives. Recent improvements in local monitoring facilities have revealed that minor quakes occur more frequently than previously thought. For example between July 1987 and June 1989, 28 events around Accra were recorded with intensities of 1 to 3 on the Richter Scale. Based on the frequency of the events a major earthquake has been predicted for Accra in the near future.

5.5.3 Coastal Erosion

Coastline erosion in Ghana has become critical especially in the Keta area since the beginning of the century and severe on the immediate fringes of the west of the Volta Estuary in the 1970's (Anthonio, 1993). As a result of long shore drift, material transport occurs along the coast, caused principally by the Guinea current. Coastline erosion particularly in the Keta area has been studied in the past (Code, 1929; Batley, 1947; NEDECO, 1964, Delft Hydraulics Laboratory, 1980).

The problem of coastal erosion has been exacerbated by the winning of sand on the shoreline for construction purposes. Recession rates reported for various parts of the coastline range from 6m/year west of Accra to 3.3 to 5m/year in the Keta area. In some parts of the coastline in the Greater Accra Region and in the Central Region revetments and groynes are being used to stabilize the shorelines. In Keta previous measures at stabilising the shoreline with artificial structures such as rubble mound revetments and steel sheet pile walls have failed.
5.5.4 Flooding

Urbanization increased impervious surfaces and the total volume of direct storm run off, which causes flooding. The causes of flooding in this country have been attributed to:

- an inadequate network of storm drains;
- flooding of main drains;
- the lateral spread of the urban areas into the rural fringes without adequate consideration for drainage;
- inadequate channel capacity;
- culvert siltation;
- the non-maintenance of flood channels; and
- the growth of aquatic weeds in flood channels which reduces the floodwater carrying capacity of these channels;
- construction along water courses thereby preventing free flow of water, leading to flooding; and
- uncontrolled development without due regard for the planning regulations.

In recent years flooding has been on the increase in several urban areas of the country as a result of accelerated urbanization. The uncontrolled development without due regard for the planning regulations has led to the construction of building in natural drainage channels, exacerbating the flooding problem.

In most of the urban areas, due to the shortfall in the collection of solid waste by the waste management authorities, the uncollected waste is dumped into drains and other channels, which impedes the flow of floodwater. These uncontrolled situations have aggravated flooding.

Not many studies have been carried out in the management of floodwaters in the urban areas. But in Accra several Master Plans have been prepared to mitigate flooding in the Metropolis. Over 1,300 properties, both residential and industrial, are frequently flooded in the Metropolis. An estimated population of 17,080 people are at risk from flooding.

To mitigate flooding in the Metropolitan areas of Accra, the Architectural and Engineering Services Corporation recently initiated a short term programme to desilt all primary drains within the Metropolis. Government has approved some financial support for this programme.

The Accra Metropolitan Authority will also start desilting the minor drains; these programmes are to ensure the free flow of floodwaters. Similar measures have failed in the past because they were more or less adhoc and were not sustained.

5.5.5 Bushfires

Bushfires are of frequent occurrence throughout the year especially in the rural areas. These fires occur mostly during the drier months of the year. Anthropogenic activities such as clearing bushes for farming and hunting have been known to cause extensive damage to forests. The re'afforestation
programme is being seriously defeated as not only mature trees are affected but also saplings. Charcoal burning also contributes to the spread of forest fires.

5.5.6 Household Fires

Household fires have been on the increase recently, leading to the loss of property and life. These are mainly caused by faulty electrical connections, overloading of electrical points and the storage of flammable substances in poorly ventilated areas. The inadequate distribution of hydrants in the urban areas has sometimes hampered fire fighting.

Until recently the Fire Brigade was poorly equipped. Although this situation has been rectified to some extent there have been occasions in the past when the fire fighters have woefully failed to control fires. In large buildings fire escape routes have also not been given due attention.

5.5.7 Slope Instabilities

Unstable ground conditions, expansive soils, chemically active soils/rocks, differential settling of soils and rocks, rocks with potential liquefaction properties are known to cause slope failures (van landewijk, 1980). In some areas of the country also the slopes of hills are farmed, exposing the soils surfaces, and this may induce landslides.

Several examples of slope failures have occurred in Ghana in recent years: Adaklu landslide, 1963; Kamù in the Kwahu Region rockslide, 1972; and the frequent landslides at Aburi and on the Accra-Kumasi roads.

5.5.8 Oil Spills

Ghana has not experienced any major oil spills in recent memory. But the Chemu Lagoon, a major recipient of industrial effluents in Tema including those from the Oil Refinery, and the beaches are sometimes contaminated with oil and tar balls. Tar balls originate from the emptying of the bilge of tankers on the high seas. Wave action rolls the oil into tar balls, which land on the coastline.

5.5.9 Other Disaster Threats

Rainstorms and high winds, droughts and food scarcities, accidental spillages of chemicals, dam failures, general fire outbreaks, refugee influxes and civil and ethnic strife are some of the recent disaster threats which have occurred in the country.

5.5.10 Disaster Mitigation

Until 1992 Ghana had no adequate, effective disaster plan and its executive organization in place to deal with disasters. There was also no legal and infrastructural framework to deal with disasters. Disaster relief has more or less been adhoc in the past with instant committees being formed to mitigate the consequences of disasters.
B.5.6 GENDER-SPECIFIC ROLES
AND THE NEEDS OF VULNERABLE SOCIAL GROUPS

Gender issues and the needs of vulnerable groups have been considered throughout chapters B.5.1 - B.5.5 above and Part C below as a cross-cutting theme. Thus general issues have been dealt within an integrated manner while at the same time attention has been paid to the special circumstances of women and vulnerable groups.
The National Disaster Relief Committee in 1992 therefore organized a workshop in Accra to prepare a national Disaster Preparedness Plan for Ghana. Participants were drawn from the Ministries, the Armed Forces, the Police and Prison Services, the National Development Planning Commission, the University of Ghana, the Media, NGOs, the GPRTU and the Ghana Red Cross.

The Plan proposes an eleven-member National Disaster Management Board with a chairman not below the rank of a Minister of State.

The composition of the Boards is as follows: Representatives of

1. National Security Council
2. Ministry of Finance
3. Ministry of Health
4. Ministry of Interior
5. Ghana Armed Forces
6. Ghana Police Service
7. Ghana National Fire Service
8. National Development Planning Commission
9. Department of Social Welfare
10. Ghana Universities and Research Institute
11. Locally represented NGOs

There is a need to add to the Board a representative each of the mining and chemical industries. The plan proposes the establishment of a permanent secretariat with executive and coordinator function. An Act to establish a National Disaster Management Secretariat is urgently required.

In order to pre-empt disaster the Plan proposes several pre-disaster activities including preventive, mitigation and preparedness activities. The proposed Plan sets out the procedural, infrastructural and legal framework to deal with disaster.

The channels for communication flows, emergency relief measures, rehabilitation, monitoring and evaluation have all been clearly spelt out in the proposed Plan.

As seen in the chart above the Disaster Management Board has to establish its own organization as well as to acquire the support of independent bodies. The intervention organizations are already in place and have a role within the disaster management framework.

PROPOSED ACTIONS

Part C presents recommended policies, strategies and activities to address the preceding issues. Some of the activities are on-going and require strengthening, re-direction and/or replication.
PART C: THE NATIONAL PLAN OF ACTION

1. INTRODUCTION

A large number of the policies and strategies on human settlements presented below were prepared long before the beginning of HABITAT II Preparatory Committee meetings and the global call for the preparation of national reports. As mentioned earlier, this National Plan of Action has incorporated sections from the existing documents which address the major issues of concern to HABITAT II. See Part A.1 Some of the activities are currently being implemented. Others are new proposals to address current issues.

2. DECENTRALIZATION AND GOVERNANCE

The policies and strategies directed towards decentralization have already been formulated as reviewed above (Chapter B.5.1). The following actions are required in order to strengthen the ongoing decentralization process:

- institute and install the Sub-district Structures of Urban/Zonal/Town/Area Councils and Unit Committees. It is when these Structures function that the human settlement management functions will be carried out or performed;
- review existing legislation that centralizes functions and departments in Accra, and simultaneously enacts new laws to effect decentralization;
- establish local government service with the necessary means to hire, fire, transfer and discipline staff;
- strengthen the technical and managerial capacity of the District Assemblies through new recruitments, and training;
- ensure that staff development includes gender training to increase gender awareness and enable staff to develop tools for gender analysis which they can apply in developing policies and programmes;
- improve and strengthen the financial base of the local governments through:
  - restructuring revenue collection and mobilization, planning and training of staff of the Assemblies;
  - improving financial management training, restructuring of local government accounting systems, computerization and related staff training;
  - introducing fiscal decentralization of the public financial management system; and
  - implementing a composite budget for the District Assemblies.
- pursue the district-focused development programme to develop the district capitals as alternative growth centres to the large centres of Accra, Kumasi, Sekondi-Takoradi;
PART C

THE NATIONAL PLAN OF ACTION

1. Introduction
2. Decentralization and Governance
3. Increasing Access to Land and Shelter
4. Urban Poverty Reduction and Employment Generation
5. Environmental Management
6. Disaster Preparedness and Mitigation
PART C: THE NATIONAL PLAN OF ACTION

1. INTRODUCTION

A large number of the policies and strategies on human settlements presented below were prepared long before the beginning of HABITAT II Preparatory Committee meetings and the global call for the preparation of national reports. As mentioned earlier, this National Plan of Action has incorporated sections from the existing documents which address the major issues of concern to HABITAT II. See Part A.1 Some of the activities are currently being implemented. Others are new proposals to address current issues.

2. DECENTRALIZATION AND GOVERNANCE

The policies and strategies directed towards decentralization have already been formulated as reviewed above (Chapter B.5.1). The following actions are required in order to strengthen the ongoing decentralization process:

- institute and install the Sub-district Structures of Urban/Zonal/Town/Area Councils and Unit Committees. It is when these Structures function that the human settlement management functions will be carried out or performed;
- review existing legislation that centralizes functions and departments in Accra, and simultaneously enacts new laws to effect decentralization;
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  - restructuring revenue collection and mobilization, planning and training of staff of the Assemblies;
  - improving financial management training, restructuring of local government accounting systems, computerization and related staff training;
  - introducing fiscal decentralization of the public financial management system; and
  - implementing a composite budget for the District Assemblies.
- pursue the district-focused development programme to develop the district capitals as alternative growth centres to the large centres of Accra, Kumasi, Sekondi Takoradi;
rehabilitate and upgrade community infrastructure such as roads, markets, waste management facilities, drains and lorry parks to improve urban infrastructure delivery, and
intensify and pursue programmes to develop the lower-order towns as service centres and production centres.

3. **INCREASING ACCESS TO LAND AND SHELTER**

3.1 **Introduction**

Ghana already has a National Shelter Strategy which is the result of a commitment made by the Government to evaluate current trends and development efforts in the housing sector and to identify the policies and strategies required to deal with high priority national shelter needs. It is recognised that housing is not only a consumption good but also a productive investment, promoting economic activities as well as creating the base for attaining several national policy goals; namely:-

- providing shelter and raising the quality of life;
- stimulating economic activity and creating substantial additional employment opportunities;
- increasing productivity;
- acting as a strong motivating force to generate voluntary savings;
- creating conditions conducive to the achievement of crucial goals in health and sanitation; and
- promoting social stability.

The Government of Ghana has affirmed that it has a basic responsibility to ensure that all Ghanaians have access to safe and sanitary shelter. Government objectives for the sector on the macro economic level are to stimulate overall economic activity by encouraging housing investment and, on the micro economic level, to improve the efficiency and equity of the current housing delivery system. To achieve these objectives Government is pursuing programmes aimed at redirecting the role of the public sector and providing incentives to private estate developers to invest more in housing. The public sector will now focus on the provision of infrastructure; facilitation of land acquisition; and development of a viable housing finance system consequent to this shift in role. The public sector is embarking on selective sale of existing public housing and other real estate assets; completion, demolitions, or sale - as is - of unfinished public housing. In accordance with the above objectives, the NSS identified a number of strategies for achieving sustainable shelter and human settlement growth.

3.2 **Objectives**

The basic objectives of the existing National Shelter Strategy are:

- to accelerate home improvement and the upgrading and transformation of the housing stock in order that shelter of adequate quality may be available to the population as a whole;
- to make shelter programmes more accessible to the poor;
to improve the environment of human settlements with a view to raising the quality of life through the provision of drinking water, sanitation and other basic services;

to encourage greater participation by the private sector, formal and informal, by creating an enabling environment which eliminates constraints and develops an efficient and accessible system for the delivery of inputs to maximize housing efforts.

to create an environment conducive to investment in housing for rental purpose;

to improve the data base and information for housing programmes;

to promote orderly consolidated urban growth with acceptable minimum provision of physical and social infrastructure; and

to promote rational and sustainable utilisation of urban land.

3.3 Activities to Achieve Objectives

In order to achieve the objectives outlined above, Government will undertake the following initiatives:

• improve the supply of serviced land to the poor;
• promote savings and investment in housing by developing suitable saving instruments and providing appropriate fiscal incentives;
• target more funds to low and moderate income households;
• support programmes and initiative that expand the availability of house construction and home improvement financing for target group (low-income) households;
• encourage production of building materials based on local resources and of standardized low-cost building materials and components;
• improve and upgrade construction skills, and
• modify relevant laws and regulations, wherever necessary, with a view to removing constraints to housing activity; namely, review of rent control laws, building regulations, etc.

3.4 Strategic Shelter Programmes

Programmes to be offered by Government will respond to a wide range of shelter needs. Greater effort will be made to provide solutions targeting low income groups than has been the case hitherto. Housing provision for the low-income sector will focus on low-cost solutions for a range of options structured to be affordable to the target income groups. The strategic programmes are as follows:
- sites with minimum services (access ways and drains, water, cesspit);
- sites with full services (household connections plus septic tank);
- extendable core units which can be built and expanded by self-help means;
- settlement upgrading; and
- home improvement.

3.4.1 Rural Housing Programme

Having regard to the distinguishing features of the rural housing sector, the rural housing strategy will focus on target groups with moderate and low incomes as follows:

- improvement of the institutional arrangements for the delivery of shelter;
- accessibility to institutional finance for house construction;
- accessibility to institutional finance for upgrading, expansion and renewal of existing housing;
- provision of institutional mechanisms for mobilizing funds for rural housing through housing cooperative societies spread through the country;
- promotion of appropriate technology and the necessary institutional support in a more structured framework, with greater coordination between BRRI, DHPR, Forest Products Research Institution and DRH;
- development of designs of houses and layouts of human settlements with due regard to ecological conditions, economic activities of the households and other socio-cultural factors;
- research in, and development of, building materials based on local resources and promotion of their production and use;
- strengthening of the supply and delivery systems of essential building materials and components not easily available locally;
- skills development and upgrading programmes to promote house construction on a self-help basis; special effort will be made to upgrade the skills of women construction workers;
- training to facilitate maintenance and improvement of the rural housing stock on a self-help basis, and
- provision of potable water supply.

3.4.2 Urban Housing Programme

A sizeable proportion of the urban population have inadequate housing. Many of them live in slums and earn their livelihood in the informal sector. To tackle the multi-faceted problem of housing for this section of the population, the strategy will include:-

- assembling and allocating serviced land for housing development so as to reduce overcrowding in slums and informal settlements and provide for new household formation;
- providing easy access to institutional finance for informal settlement dwellers to upgrade or redevelop their dwelling units;
- promoting savings schemes for housing;
- stepping up programmes for the provision of a minimum level of basic services;
- disseminating information regarding low-cost building materials and construction techniques;
• providing non-formal training for facilitating the maintenance and improvement of dwelling units on a self-help basis;
• developing a home improvement loan programme to encourage landlords to improve and upgrade their dwelling units;
• creating an environment conducive to housing development;
• encouraging local government participation in innovative housing programmes, and
• providing incentive inducement to real estate developers in the private sector.

3.4.3 Land

The supply of serviced land available for housing, particularly for the target groups, will be improved through the following:

• suitable innovative legal and administrative mechanisms, such as negotiated settlements and land pooling and readjustment, will be adopted. Under a land-readjustment programme unserviced stool land is vested in public or private institutions which subsequently provide it with basic infrastructure. Part of the serviced land is returned to the previous owner, who is able to develop it for profit. The remainder of the land is utilized for the development of low and moderate income housing through the following mechanisms:

• rationalizing and simplifying the existing legislative provisions and procedure relating to acquisition of land with a view to instituting a fair and speedy process of acquisition.

• having Government, through land banking, acquire and maintain stocks or banks of land which are sufficiently large to meet future public-sector indigenous development needs. In this regard land banking can be used to acquire sites with a high potential for housing on the periphery of cities.

• providing base maps to cover existing housing areas and land for housing development in human settlements.

• evolving a system of incentives and disincentives to promote rational utilization of unutilized and vacant land in urban areas.

3.4.4 Housing Finance

The development of a housing finance system capable of financing shelter for the majority of the population requires a three-pronged approach: the mobilization of resources at the national as well as the beneficiary levels; the creation of financial intermediaries with the ability to channel funds to the households most in need of financial assistance; and the development of a loan and savings scheme adapted to the needs and financial capacities of low-income groups. The major strategies to be considered therefore are:

3.4.4.1 A specialized primary mortgage institution as an integral part of the national finance system will be developed to increase the flow of funds for the creation of new housing
stock as well as for renovation, upgrading and expansion of the existing stock in rural and urban areas. While doing so, suitable mechanisms will be designed to increase the access of the poor to institutional finance for housing.

3.4.4.2 * In order to mobilize resources for moderate income households, Government has embarked on a pilot housing programme to determine the feasibility of a partially indexed mortgage finance system in Ghana. The system is to be administered by a new entity, the Home Finance Company, jointly owned by the Bank of Ghana, Social Security and National Insurance Trust and the Merchant Bank of Ghana. Funding will be through 91 about 4 billion cedis in long-term bonds sold to SSNIT and (20 bonds sold to Bank of Ghana and financed through US$6 million in loans from IDA to the Government. These amounts are used to fund loans on 3000 houses over 3 years as part of Government's Housing Finance Pilot Programme. It is anticipated that this programme will open up housing options to a wide band of moderate income salary earners who currently have no prospect of owning a formal sector house.

3.4.4.3 * Possibilities for improving the housing finance system in a number of areas still exist. What is required is to improve the structure in such a manner that institutional lending does not reach and cater only to credit-worthy, middle-income groups. There is adequate evidence that low-income dwellers will make a significant investment in shelter under certain circumstances. Innovative savings and mortgage instruments will be developed for this purpose.

3.4.4.4 * Special attention will be paid to timely recovery of loans to ensure the viability of the housing finance system and to maximize coverage.

3.4.4.5 * In order to facilitate low-income housing programmes to be administered at the district level, Government will allocate more resources from budgetary sources to these programmes. These resources will be used to make short term soft loans for the purchase of land; for the upgrading and improvement of existing houses, for the construction of core houses; and for the improvement of various services.

3.4.4.6 * A Compulsory Payment Savings Plan will be introduced in order to increase resources for shelter for those employees unable to meet down-payment requirements of HFC and those in need of rental advances.

3.4.4.7 * In order to mobilize resources for shelter, Government will promote partnerships with the private sector and the people themselves as sources of funds by creating an environment conducive to saving. Appropriate institutions etc., at the local, district and regional levels will be promoted, for mobilizing savings and advancing and recovery home loans. A two-tier community-based shelter development fund will be established to provide short term loans for the improvement of the income generation capacities of participants and long-term loans for shelter. Such cooperative societies would provide for expansion of the domestic thrift potential for low-income finance. This would give low-income families increased access to home-ownership finance,
A fundamental re-structuring and simplification of both the content and presentation of the Building Code to be undertaken to make it more relevant to the needs of the self-help house designer/constructor;

The setting up of a standard technical committee to monitor the implementation of the Code and to recommend necessary revisions; and

Introduction of measures into barrier free design in public housing and residential areas.

3.4.7 Institutional Framework

The demands that will be required of the administrative system during the post 1991 period will be of a radically different character from what was required of the system in the pre 1991 period. There will be the need for the MOWH and related organizations in the shelter sector to perform broader coordination and outreach functions emanating from the new programmes. Housing agencies and regional coordinating councils and district assemblies will, therefore, be reoriented to act more as promoters and facilitators of housing activity rather than builders of housing units. They will play an increasing role in:

- development and supply of serviced land;
- distribution of building materials and components at reasonable rates;
- provision of technical and advisory services;
- development and extension of appropriate construction technology; and
- maintenance of professional and technical standards in housing development

To enable these agencies and authorities to perform their new role effectively and efficiently, they should be suitably restructured. Their planning approaches, personnel policies and management systems should be modified to improve their work ethos and make them more responsive to the needs of the people as follows:

- coordination of policy and programmes through the establishment of a Housing Policy Authority at the Cabinet level; which will comprise Ministers and Chairmen of principal agencies involved in the housing supply process, with the Minister for Works and Housing as Chairman, and with support from the Policy, Planning and Evaluation Unit of the MOWH.

housing, a clear definition of institutional roles is required to ensure an efficient and integrated approach to housing development, given the large number of governmental agencies directly involved in the provision of

Non-governmental organizations, which have flexibility in their operation and greater sensitivity to the needs of the people at local levels, can provide effective linkages between public sector agencies and the people. They can also participate in and/or promote housing and related activities. Such NGO's will be encouraged and supported wherever necessary to play an increasing role in:
• designing programmes tailored to meet the specific requirements of the local people;
• facilitating interaction with the people to provide feed-back for modification of programme;
• promoting and mobilizing household savings and community resources;
• providing necessary support for the formation of cooperatives and local associations for
taking up programmes on a self-help basis;
• strengthening the participatory capacity of the community to enter into constructive dialogue
with public authorities and agencies;
• disseminating information at the grass-roots level in regard to, and promoting the use of, low-
cost building materials and technologies;
• organizing training programmes at grass-roots levels;
• providing support services at the community level; and
• establishing linkages amongst local level programmes.

Measures will be taken to institutionalize and promote interaction between NGO's and Government
at all levels and to strengthen the managerial capability of NGOs participating in the activities of the
housing sector.

3.4.8 Implementation, Monitoring and Evaluation

Figure 1 summarizes the broad objectives of the National Shelter Strategy, identifies the main
priorities, and points out both the various directions in which action needs to be pursued and the time
frame within which these should be accomplished. In order to achieve the strategies outlined above,
programme and project efforts will be directed at the target groups with income levels below the
median. With the exception of settlement upgrading schemes, most previous solutions offered to date
have been too costly. The new programme strategy takes into account the issue of affordability and
the need for upgrading housing units, as well as sites and services. The shelter strategy will also
significantly change the direction of public sector housing investment. Basically, it recognizes that
housing investment must be geared towards the provision of infrastructure and, in order to facilitate
investment by households, must take into account the requirements of land, finance, skills, training
and technical advice. In this manner, the new programme strategy hopes to activate a broad process
of community participation and self-help, with particular attention to the role of women.

Programmes to be undertaken will address not only the existing backlog but also the housing needs
of new households. This would need a substantial step-up in the maintenance, upgrading and
improvement of the existing housing stock as well as construction of new dwelling units at a rate
much higher than the present rate. For this purpose the investment in housing will have to be
substantially increased over the present level and the required complementary investments in
infrastructure, services and amenities also will have to be ensured.

A pilot programme of action to promote non-conventional shelter delivery systems as an improved
mechanism for the provision of low-income housing will be developed as part of the action
programme.
encourage them to use existing institutions to enhance their savings capacity and limited financial resources, and encourage the banks and insurance companies to allocate part of their investment portfolio to housing development. Such an intermediary can leverage seed capital from other sources, such as conventional financial institutions, and bilateral and multilateral aid agencies and lend this to the informal sector. The objectives of the non-conventional financing system would be:

(a) to create more opportunities for savings by the establishment of appropriate financial institutions;

(b) to harness resources where they are available and direct them to low-cost shelter solutions;

(c) to improve the financial stability of low-income families by providing them with the opportunity to build up savings;

(d) to enable low-income families to contribute to the solution of their own shelter problems by providing them with sufficient credit for that purpose;

(e) to provide long-term loans to local agencies to enable them to undertake sustained programmes of infrastructural development for low-income housing areas; and

(f) to provide a tax holiday and incentives for housing developers.

3.4.4.8 Joint venture arrangements between financial institutions and public and private sector developers offer another avenue for mobilizing resources and development costs reductions. In this new approach financial institutions should assume a more active role in the provision of shelter for low and moderate income groups. They should collaborate with government institutions in the provision of construction and mortgage finance for low-income solutions. Finance institutions will make loans to private developers for the provision of shelter projects such as serviced sites and core houses. The Ministry of Works and Housing (MOWH) will make government land available to private sector developers, while the Technical Services Centre of the Ministry will be responsible for project management of sites being developed by private developers. The mortgage "take out" funds will be recycled to the MOWH for the continued financing of low-income shelter.

3.4.5 Building Materials and Construction Technologies

Several constraints have been identified in the building materials sector, mainly relating to limited supply, high costs, low quality and inappropriate use of building materials. In order to provide options for improvements in building materials and construction technologies the following measures will be employed.
- development of local raw materials and an energy base;

- development of local production of building materials;

- research technology transfer and popularization; for example, through the Centre for Material Science and Technology and Building Centres.

- introduction of modular coordination in some building components;

- development of local capacity for equipment design and manufacture; and inventory of what is produced and the producers.

- establishment of incentives for building materials production;

- preparation of appropriate regulatory instruments and the Promotion of the Building Materials Industry;

- manpower Development; and

- improvement in Institutional arrangements.

3.4.6 Legislation

Various existing laws and regulations create problems and inhibit housing activity. A number of Acts will be re-examined with a view to amending them. In additional new legislation will be introduced wherever necessary. The strategy will include the following:

- Local governments to ensure that basic infrastructure and services are provided in housing schemes as much as possible before development commences;

- Modifications in the rent control laws;

- Rationalization and simplification of the existing legislative provisions and procedures relating to acquisition of land and the development of a unified land law;

- Institution of suitable innovative legal and administrative mechanisms, such as negotiated settlements and land pooling and readjustment;

- Introduction of Estate Agency legislation in order to protect the consumer and reduce the incidence of protracted land disputes and expensive litigation;

- The revamping of all related professional standards in order to facilitate the operations of the real estate market;

- Amendment and modification of the Town and Country Planning procedures;
C4. URBAN POVERTY REDUCTION AND EMPLOYMENT GENERATION

4.1 Introduction

While Ghana - Vision 2020 deals with macro-economic concerns relating to economic growth, human development, population, poverty and employment, this Plan of Action focuses on poverty and employment (see Box 3). The recommendations set out below are broadly consistent with the principles outlined in Ghana-Vision 2020.

With reference to the framework provided by Ghana-Vision 2020, the Ministry of Employment and Social Welfare has been preparing a national employment policy, and has (April 1995) produced a draft National Employment Policy Framework for internal review and finalization for a medium-term plan (1996-2000) and short-term (annual) programmes. A National Network on Employment Capacity Building was inaugurated, under which a number of (about eleven) in-depth studies were conducted to prepare the medium and short term objectives and actions referred to. WFP is said to have pledged $2.5 million to support institutional building and implementation arrangements.

Box C4.1 Long-term Objectives and Medium-term Programmes

A major concern will continue to be the equitable distribution of the benefits of development, closer integration of women and rural dwellers into the national economy and the elimination of hard-core poverty through the promotion of efficient rural farm and non-farm production activities and the encouragement of the innovative spirit of micro and small enterprises.

The medium term programme objective is to halt further deterioration in living standards in both rural and urban areas and to initiate poverty reduction measures that will contribute to the achievement of broad-based improvements in the quality of life for the poor.

The policy expresses concern about the high level of unemployment and underemployment, especially among the youth and other vulnerable groups and proposes to institute measures for the creation of job opportunities and to prevent further job losses in the medium-term. Accordingly, employment promotion is to be built into all macro-economic and production policies for the five year plan period, 1996-2000. Additionally, the legal and regulatory framework is to be reviewed in the interests of promoting employment creation, especially in the informal sectors. Training, including apprenticeship schemes, will be an important aspect of the employment strategy.

The long-term objectives of human development are to reduce poverty, raise average incomes and reduce disparities in incomes and economic opportunities. It is proposed to achieve these goals by reducing the rate of population to 2% by 2020 (by managing the demographic variables, improving access to social services, and raising labour productivity through improved training schemes).

The medium-term objectives, directed to improve the quality of life and expansion of opportunities for all, include: poverty reduction; employment creation; human resource enhancement; increasing employment opportunities; and improving social infrastructure and services. In addition, women's access to productive resources will be enhanced.

Source: Ghana-Vision 2020
4.2 Strategies and Policies

The elements of the strategy for poverty reduction and employment generation will include the following:

- an enabling environment for private investment (including stable macro-economic policies, equitable legal framework, adequate infrastructure and incentives);

- education and skills training to enable the poor to participate effectively in the economy;

- training linked with jobs or self-employment (with appropriate assistance, start-up capital, etc.)

- improved access to assets: improved distribution and availability of relevant inputs and services (e.g. technology, information) are essential for effective employment in rural areas as well as the urban informal sector;

- labour-intensive technologies to encourage the use of local resources and appropriate technologies;

- public works programmes for job creation and more income for the poor and disadvantaged;

- assistance to disadvantaged groups (e.g. women, the disabled) who experience discrimination (credit, technology, etc.);

- improved implementation of population policy;

- provision of, or improved access to, basic social and welfare services by disadvantaged and vulnerable groups;

- measures to increase agricultural productivity, improve the incentive system in agriculture (e.g. by restoring subsidies), and improve opportunities for off-farm employment;

- macro-economic production and labour policies that are consistent with poverty reduction and employment promotion;

- institutionalization of measures for achieving widespread grass-roots decision-making and participation in local affairs and development;

- respect for basic human and civil rights;

- promotion and support of the informal sector and co-operatives, before improving the information base; reviewing regulatory framework; and improving/providing technical assistance,
- review of urban bye-laws and other policies that have a negative impact on informal sector activities;

- safeguarding of the rights of women to equal access to credit and business loans.

- strengthening of the labour market information system, particularly at district level; and

- a population policy to achieve in the long run a population size that is compatible with the provision of an adequate standard of living for all and sustainable development.

The Platform for Action adopted at the Fourth World Conference on Women (4-15 September 1995) included strategies and activities to enable women to overcome poverty. This National Report, Ghana's National Plan of Action, Habitat II, endorses and incorporates the following Strategic Objectives adopted at the above-mentioned conference:

- reviewing, adopting and maintaining macro-economic policies and development strategies that address the needs and efforts of women to overcome poverty within the framework of sustainable development;

- providing women with access to savings mechanisms and institutions and to credit; and

- conducting research in order to enable women to overcome poverty.

The related recommended actions are presented in Annex I to this Report and should be read as part of the actions below:

4.3 **Activities**

The following programme activities are recommended for achieving the objectives stated in this Report and those adopted at the Beijing Conference:

- Develop, expand or review the effectiveness of vocational and technical skills training for disadvantaged vulnerable groups, eg. unemployed women, unskilled and unemployed youth, and small-scale operators in the informal sector;

- Provide standardization and quality improvement services for informal and small-scale sector operators;

- Undertake a study of technologies including indigenous technologies, appropriate for small-scale operators;

- Establish information, marketing and extension services for informal and small-scale enterprise operators in both urban and rural areas,
Develop links between informal and non-conventional financing services (e.g. susu) with formal financial institutions to serve women and micro-enterprises in the informal sector;

Incorporate entrepreneurship management and marketing skills in vocational training and encourage trainees to go into self-employment;

Organize functional literacy and management skills training for informal sector micro enterprises;

Establish start-up capital savings, re-investment and revolving fund schemes for small operators to ensure sustainability of enterprises;

Undertake a survey of the nature and characteristics of the informal sector and their constraints to provide a data base for assistance, including technical assistance and the establishment of safety nets, especially for the disabled women and men and other vulnerable groups;

Strengthen existing youth skills training and institute self-employment and other placement services for the youth;

Establish industrial estates for cottage, micro and small-scale enterprises;

Establish retraining schemes to facilitate job switches;

Promote the use of a public works programme as a means for employment;

Upgrade urban slums and improve environmental sanitation;

Strengthen the institutional base of communities for self-reliance and participation in the development process;

Strengthen population management programmes in both rural and urban areas;

Undertake a survey of services and facilities in relation to the spatial distribution of population in order to provide an analytical basis for measures to increase access to basic social services -- water, education and health -- and minimize disparities;

Strengthen the National Rural Water Supply and Sanitation Programme;

Formulate spatial strategies to strengthen spatial and functional linkages including rural-urban linkages;
Integrate rural road network, land use and district development planning for more effective commodity flows, and transportation generally -- urban-rural and intra district/regional;

Widen the statistical base of employment records to cover the informal sector as well;

Develop the capacity of the population to effectively exercise options to control its fertility;

Strengthen and enhance services which promote and support improved fertility management by the population;

Intensify the provision of information, communication and education services on population issues and family planning, especially in rural areas;

Strengthen coordination and collaboration between sectoral ministries, districts, NGOs and other agencies that are involved in population management programmes;

Establish district level capacity for the management and implementation of population programmes;

Integrate population counselling with clinic-based health services;

Intensify the provision of targeted, male-oriented programmes for the promotion and acceptance of improved fertility management; and

Provide more distribution outlets for non-prescription contraceptives, including traditional methods.

4.4 Monitoring Progress

A monitoring system will be set up to help improve targeting of activities, improve their efficiency, and assess the impact on beneficiaries. The system will consist of the following:

(a) physical monitoring of implementation in the field;

(b) financial monitoring of disbursements and transfers of funds; and

(c) impact monitoring, reviewing the impact of programmes on beneficiaries, as a continuous process to feed back into management.

Steps will be taken to improve targeting and monitoring of the following: (a) beneficiary assessment, (b) rapid assessment, and (c) surveys of households and beneficiaries. Indicators will be devised from objectives and actions undertaken, as listed in the last section. The sequencing of monitoring activities will also depend on the activities and resources.
4.6 Commitments

The Government of Ghana is committed to poverty eradication and provision of employment. The Directive Principles of State Policy of the Constitution, for example, enjoin the President, among other things,

(a) to take steps to ensure, the realization of basic human rights, a healthy economy, the right to work, the right to good health and the right to education; and

(b) to promote just and reasonable access by all citizens to public facilities and services in accordance with the law. In addition, the state is to take all necessary action to ensure that the national economy is managed in such a manner as to maximize the welfare, freedom and happiness of every person in Ghana and to provide adequate means of livelihood, suitable employment and public assistance to the needy.

Vision 2020, as noted above, puts these into operation, with specific reference to employment creation and poverty reduction within the context of development planning.
5. **ENVIRONMENTAL MANAGEMENT**

5.1 **Introduction**

In recent years much progress has been made to limit environmental damage in the country through stimulating public awareness, notably by the Green Forum for Development (Environmental Journalists and Communicators); the radio, especially "Good Morning Accra"; television cartoons which target children, and newspaper publications. A 10-year Environmental Action Plan (EAP), a watershed in environmental management in the country, covering management in the country, covering the period 1991-2000 has also been formulated by the Environmental Protection Agency. The Plan identifies strategies to address the key issues for sustainable utilization and management of renewable resources and the protection of the environment. The EAP covers land management, forestry and wildlife, water management, coastal ecosystems, industrial pollution, mining, hazardous chemicals and human settlements. The integration of environmental considerations with all facets of developmental activities has also been advocated by the Plan. Also Government’s vision for the environment in the long term as spelt out in the Presidential report to parliament (6 January, 1995) and compiled into the Report Ghana—Vision 2020, lays a solid foundation for the protection of the environment of the country.

The institution of Environmental Impact Assessment (EIA), a component of the EAP, which has been made mandatory for all sectoral and socio-economic planning and development, is directed towards the control of environmental pollution in the country. Appropriate incentives and sanctions backed by legislative instruments are being adopted to ensure compliance.

5.2 **Strategies and Policies**

Ghana’s principal development challenge today is to chart a course of development that is sustainable and environmentally sound over the long term. The Government’s current environmental policy as articulated in the Environmental Action Plan (EAP) aims at ensuring a sound management of resources and the environment, and the exploitation and use of these resources in a sustainable manner. Specifically, the policy seeks to:

- maintain ecosystems and ecological processes essential for the functioning of the biosphere;
- ensure sound management of natural resources and the environment;
- provide adequate protection for humans, animals and plants, their biological communities and habitats against harmful impacts and destructive practices, and preserve biological diversity;
- guide development in accordance with quality requirements to prevent, reduce, and as far as possible eliminate pollution and nuisances;
- integrate environmental considerations in sectoral, structural and socio-economic planning at the national, regional, district and grassroots levels; and
in co-operation with other governments and organizations, seek common solutions to environmental problems in West Africa, Africa and the world at large.

The implementation of the policy has been decentralized to the various ministries and district assemblies concerned, with the Ministry of Environment, Science and Technology playing a coordinating role and ensuring the active involvement of the essential science and technology inputs. In particular, the policy focuses on the following subsectors:

- Land resources management;
- Forestry and Wildlife management;
- Water management;
- Marine and Coastal Ecosystems;
- Industrial Pollution;
- Mining
- Hazardous Chemicals; and
- Planning and Management of Human Settlements;

The Government has also instituted an Environmental Resource Management System which is reflected in the Ghana Environmental Resource Management Project (GERMP). The Environmental Resource Management System is the mechanism for implementing Ghana's Environmental Action Plan. Most environmental concerns are inter-sectoral and decisions involve choices between alternative, and possibly conflicting, actions which carry costs and benefits. The management system developed through the GERMP ensures that all possible options are considered, and that their technical, economic, financial, social or political implications are examined by the various sectoral agencies involved in the light of national, district or community development priorities.

The priority areas outlined in the introduction fall under six policy areas of the EAP. These are:

- Human Settlements
- Industrial Pollution
- Mining
- Water Management
- Hazardous Chemicals and
- Environmental Education

The more recent policy thrust of MEST incorporates the following broad issues:

- Human settlements including land reclamation and re-use;
- Sanitation and waste management;
- Environmental standards, education and enforcement;
- Technology development, promotion, education and acculturation;
- Commercialization of science and technology research outputs for increased productivity and accelerated growth; and
- Institutional arrangements for enhanced collaboration with other organizations for the management of environment, science and technology policies (on account of the cross-
While 1, 2, 3 relate to the environmental management realm and are of direct relevance to Habitat II, 4 and 5 specifically address the science and technology support for sustainable development.

These are also consistent with some other national development goals set by Government such as: Health for all by the year 2000; Water for all by the year 2000; and National Shelter Strategy.

Some other related responses include the National Strategy for Sustainable Human Settlements. More specifically, with regards to the large metropolitan areas and urban centres, the Urban 1, 2, and 3 Programmes are already tackling some of the critical sustainable development problems in urban areas. In the special case of the Greater Accra Metropolitan Area (GAMA), a Strategic Plan has been developed by the Ministry of Local Government and Rural Development for managing the growth of the metropolis. Accra Metropolitan Area (AMA) is also part of a network of cities engaged in the Healthy Cities and Sustainable Cities Projects.

5.3 Objectives

The medium-term objectives being adopted to improve the status of the environment include the following:

- Developing and managing infrastructure systems needed to provide basic hygienic conditions in human settlements;

- Managing human settlements activities in order to minimise the long term adverse impact on the environment and human life;

- Showing great sensitivity to the articulation of the relationship between gender and the environment and how this affects the health of women and other vulnerable groups.

- Providing adequate and safe water supplies for all communities and households;

- Eradicating water-borne diseases;

- Safely disposing of solid and liquid waste in all communities and households by strengthening the framework for solid and liquid waste management;

- Providing facilities for the safe disposal of sanitary waste and sullage;

- Providing facilities for the safe disposal of industrial effluents;

- Strenthening the institutional capacity to improve water supply both quantitatively and qualitatively;
- Promoting private sector participation in the provision of equipment and services for water supply; and

- Generating environmental awareness by increasing public education programmes on sanitation in schools in the mass media.

5.4 Activities

5.4.1 Water

- Give priority to the satisfaction of basic water supply needs.

- Enhance the utilization of the capacity of existing facilities for water supply through maintenance, upgrading and rehabilitation programmes to be followed by expansion of supply to serve unserved areas.

- Implement programmes to conserve water resources, reduce service costs and manage water demand in human settlements, through protection of water sources, use of economical water treatment technologies, use of water saving plumbing fixtures, appropriate pricing policies that discourage wasteful uses and public education.

- Enforce water quality standards through, for example, the use of financial instruments based on the "polluter pays" principle, to prevent water quality degradation.

5.4.2 Sanitation and Wastewater management

- Undertake a detailed evaluation of the sources of sanitary wastes and their impact on the environment, especially the human living environment, and prepare a comprehensive, time-structured and affordable national plan to abate, if not eliminate, urgent problems associated with sanitary waste management.

- Prepare an inventory of national industries and of the quantity and nature of wastewater they produce, and develop and enforce standards of wastewater discharges; develop financial and legal instruments for enforcement, based on the "polluter pays" principle.

- Provide incentives for the development and use of innovative technologies in sanitary waste and wastewater management, including low-cost sanitation.

- Increase the awareness of the ecological and health hazards in inadequate sanitation management.

- Give priority to the provision of basic sanitary waste disposal facilities for low income populations.
Develop a national programme for the provision of sanitary-waste-disposal facilities, based on the wide use of upgradable low-cost technologies, on the use of innovative forms of revenue generation, on community and, particularly, women's participation; and on non-governmental organization and private sector involvement.

5.4.3 Solid Waste Management

- Undertake a detailed evaluation of sources of domestic waste, commercial and industrial solid wastes and of their impact on the environment, especially the human living environment in rapidly growing settlements, and prepare a comprehensive time-structured and affordable national plan to abate if not eliminate the urgent problems caused by the inadequate solid waste management.

- Increase awareness of the ecological and health hazards of inadequate solid waste disposal and of the role that physical planning of human settlements can play in dealing with the environmental impact of waste production.

- Give priority to serving unserviced areas before services are improved in areas already served, which entails the development of appropriate approaches for managing solid wastes generated in hard-to-service low-income informal settlements through applied research.

- Integrate the planning and implementation of solid waste management programmes with other infrastructure programmes, such as the provision of water supply, sanitation and drainage services.

5.4.4 Protecting women and other vulnerable groups

- Develop and strengthen primary health care systems (including maternal and child care) that are practical, community-based, scientifically sound, socially acceptable and appropriate to their needs, and that meet basic health needs for clean water, safe food, sanitation and hygiene.

- Involve women's groups in decision-making at the national and community levels to identify health risks and incorporate health issues in national action programmes on women and development.

- Develop and implement health campaigns to reduce the health impact of domestic use of biomass energy.

5.4.5 Monitoring Progress

This will be achieved through the set of settlements and shelter indicators that include environmental health indicators. These should, where possible, be disaggregated by gender.
5.4.6 Commitments

The evidence of national ownership stems from the fact that the Government of Ghana has already shown its commitment to sustainable development by undertaking the following:

- the establishment of the Environmental Protection Council (EPC) in 1973;

- the transformation of the EPC into an Environmental Protection Agency (EPA) in 1994;

- the formulation and adoption of the Ghana Environmental Action Plan (EAP) Volumes 1 (1991) and 2 (1994);

- the Ghana Environmental Resource Management Project (GERMP) for institutional strengthening (1992);

- the establishment of the Ministry of Environment in 1993;

- the establishment of the Ministry of Environment, Science and Technology (MEST) in 1994; and

- a workshop on the Implementation of Agenda 21 for Anglophone West Africa in 1993 leading to Ghana's being selected as the focal point for the implementation of Agenda 21 in the sub-region.

- the development of Urban I, II and III Projects and the preparation of a National Strategy for Sustainable Human Settlements as well as Urban IV and V; and

- the establishment of a Decentralised Planning System.
6. DISASTER PREPAREDNESS AND MITIGATION

6.1 National Oil Spill Contingency Plan

A contingency plan has been prepared by the Ministry of Environment, Science and Technology (MEST). The Plan covers oil spills of all categories. The Plan provides the framework to deal with oil spillage in the marine environment and inland waterways as well as spillages from off-shore and in-shore pipelines in an integrated manner. The executive body as proposed by the Plan is the Environmental Protection Agency, which is responsible for the development and maintenance of a national capability to respond to accidents at sea, on inland waterways or in connection with oil pipeline leakages or failures which have caused or are likely to cause any kind of pollution. The EPA is required to set up:

1. A National Reporting Centre to coordinate communication flow in case of an emergency.

2. A National Responsible Authority with the responsibility of initiating an operational response in case of accidents.

An Oil Pollution Advisory Board is to be set up to promote technical, scientific, administrative, logistic support and manpower to the Oil Pollution Executive Body (EPA). The Board will have a Chairman to be appointed by MEST. The responsibilities of MEST, EPA, the National Reporting Centre and the National Responsible Authority have been laid down in the Plan.

6.2 Implementation of the National Disaster Preparedness Plan

The following actions are required in order to implement the existing National Disaster Preparedness Plan and support its operations:

- Provide the legal framework for disaster management and mitigation.

- Complete national and local studies on the nature and occurrence of natural disasters, their impact on people and economic activities, the effects of inadequate construction and landuse in hazard-prone areas and the social and economic advantages of adequate pre-disaster planning.

- Implement nationwide and local awareness campaigns through all available media, translating the above knowledge into information easily comprehensible to the general public and to populations directly exposed to hazards.

- Establish an operational system and mobilize resources to save lives and property and reduce the effects of a disaster/emergency.

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Establish properly the National Disaster Management Board with a permanent secretariat responsible for day to day activities regarding disaster prevention, mitigation and preparedness.

To protect infrastructure on the coastline, perhaps decree a set back line of 100 metres and over for infrastructure construction. The ban on sand winning which affects environmentally sensitive coastal areas should also be rigorously enforced.

Construct adequate floodwater channels and introduce constant maintenance of the channels.

Introduce regular environmental education activities to create an awareness of the harmful and dangerous effects of dumping of solid waste in drains.

Broaden and/or intensify anti-bushfire campaigns which have been initiated in various parts of the country, including the institution of awards for communities who have found innovative ways of solving the problem.

Monitor extreme storms and provision of early warning systems.

Establish a separate, independent and collaborating organization for research, documentation, education, and coordination. It should not be occupied with intervention and other operational activities. This research and information centre shall serve as a back up and supporting organization. This centre shall be the combined responsibility of the National Disaster Management Board, the Universities, the CSIR, etc.
PART D

INTERNATIONAL COOPERATION AND ASSISTANCE

1. Some Guiding Principles
2. Priorities for International Funding
3. Capacity Building
4. Cost Projections
INTERNATIONAL COOPERATION AND ASSISTANCE

1. Introduction: Some Guiding Principles

International cooperation and assistance in human settlements should consider the principles outlined below:

a. Holistic Approach

A holistic approach must be employed in dealing with the problems of human settlements. For example, solutions to rural development problems must be seen within the context of rural-urban linkages and the broader context of integrated district development.

b. Self-Reliance

Maximum self-reliance and participation should be part of any programmes or project's logic since Ghana is totally committed to its new programme of decentralization and governance. Self-reliance is also required in terms of the use of local personnel and other resources, and defining needs and priorities.

c. Rural-Urban Development Strategy

In Ghana and in the majority of African countries where the population is largely rural, development cooperation should not focus on cities alone, notwithstanding the global emphasis on cities during Habitat II. What is required is a rural-urban development strategy which, inter alia, will address rural-urban disparities and strengthen rural-urban linkages.

d. Sharing

The commonality of human settlements problems requires improved programme for sharing ideas and for technical cooperation among developing countries and between LDC's and in MDC's.

2. Priorities for International Funding

Concessional external assistance will continue to play significant role in Ghana's economic development even under fairly optimistic assumptions about exports and national savings. The projected inflow of total external concessional financing for all sectors of the economy is around $800 million per year for the medium term period starting from 1996. The breakdown of this projection consists of $600 million of project aid (including technical assistance), and $200 million in balance of payment support (including food aid).

The National Action Plan on Human Settlements will be sufficiently developed in programme detail and integrated with appropriate pipeline projects in the social sector for which donor commitments have been obtained in the medium term.
Priority national sector programmes relevant to the agenda of Habitat II have been formulated in the form of a National Policy Framework Document presented to the last donor Consultative Group meeting with Ghana. The key areas of priority concern for which additional donor inflows are required in the National Plan of Action are provided in the following summary:

2.1  **Water and Sanitation**

Priority programmes in the sector involve planned investments aimed at acceleration of the provision of potable water and reliable water delivery to urban centres through the rehabilitation of existing systems.

2.1.1 improve the capacity of existing facilities for urban water supply through maintenance, upgrading and rehabilitation programmes to be followed by expansion of supply to unserved areas

2.1.2 provide and rehabilitate rural water supplies nationwide.

2.1.3 Develop a national programme for the provision of basic sanitary waste-disposal facilities based on (a) the wide use of upgradable low-cost technologies; (b) the use of innovative forms of revenue generation; (c) community participation (men and women); and (d) NGO and private sector participation.

2.2  **Transport and Telecommunication**

Priority in the investment programme for the sector is designed to mobilise direct foreign direct investment for the following:

2.2.1 building local private sector capacity through technical assistance for sustainable road maintenance in the various ecological zones in Ghana.

2.2.2 funding urban road programmes

2.2.3 developing urban and intercity mass transport

2.2.4 improving urban telecommunication services to reduce the need for excessive intra urban transport.

2.2.5 providing technical assistance for the development of criteria for rationalising the selection and location of feeder roads in less productive areas and in scattered settlements.

2.2.6 improving inter-modal linkages between road, rail and water transport.

2.2.7 rehabilitating the Western, Eastern and Central parts of the rail lines to reinforce rural access and linkages to the urban network of Southern network.
2.2.8 upgrading existing telecommunication facilities on the railways as part of the rural radio telecommunication infrastructure.

2.3 Poverty Reduction

2.3.1 improve access to basic social services and productive assets; credit; job-oriented skills training and/or retraining; and participation in decision-making.

2.3.2 assist the informal sector (training, appropriate technology, credit, information and market development)

2.4 Environment

2.4.1 develop a national programme for the provision of a detailed evaluation of sources and impact of domestic, industrial and commercial solid waste.

2.4.2 develop sufficient low-cost energy systems for development on a sustainable basis.

2.5 Land

Provide base maps for human settlements planning and development.

2.6 Shelter

2.6.1 support commercialisation of research output in the development of local building materials.

2.6.2 provide technical assistance to reliable home finance schemes and institutions.

2.6.3 upgrade urban slums and improve environmental sanitation.

2.7 Decentralization and Governance

2.7.1 strengthen the district assemblies to administer and mobilize financial resources, and to undertake planning and programme/project operations.

3.0. Capacity Building

3.1 National capacity building relevant to the implementation of the Action Plan is a high priority area for technical assistance. The strategy will be to focus the external resources for training of skilled personnel, equipment and logistics at the local community levels and to support the community-driven approach to human settlement planning.

3.2 Capacity building for the implementation of the National Action Plan will be implemented within the framework of the following principal policy guidelines adopted in the National Technical Assistance Cooperation Programme (NaTCAP).
3.2.1 to ensure the rationalisation and integration of external technical assistance inflows to the social sector.

3.2.2 to provide a framework of reference material to donors in their planning of development assistance to Ghana.

3.2.3 to direct the transfer of technical knowledge for the development of human resources and institutions on concessionary terms from donors.

3.3 Priority areas identified for external capacity-building assistance in human settlement development are:

3.3.1 support to a needs assessment study on the level quality and adequacy of local level skilled staff in the area of human settlement planning and development;

3.3.2 support to strengthening local consultancy capacity in integrated human settlement planning;

3.3.3 support to the national statistical service in its capacity to collect, analyse and integrate environmental data with economic data for decentralised human settlement planning;

3.3.4 a training programme to develop and institutionalise project management skills in the District Assemblies;

3.3.5 training of information systems analysts especially in the development of geographical information systems including the use of micro-filming and computerised record maintenance;

3.3.6 support for the conversion of a national training institution into a centre for human settlement planning and assistance to build its institutional capacity to coordinate and disseminate research and study outputs on human settlement planning data; and

3.3.7 support to the cost of south-south technical personnel exchange programmes.

4 Cost Projections

Indicative assessment of the medium term requirement in external assistance support to capacity building is based on the following projections on the economic infrastructure and social sectors of the National Technical Assistance Cooperation Programme:
<table>
<thead>
<tr>
<th>SECTOR</th>
<th>EXTERNAL EXPERTS</th>
<th>LOCAL EXPERTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Short Term)</td>
<td>(Long Term)</td>
</tr>
<tr>
<td>ECONOMIC INFRASTRUC.*</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>SOCIAL SECTOR**</td>
<td>202</td>
<td>146</td>
</tr>
<tr>
<td>TOTAL</td>
<td>237</td>
<td>176</td>
</tr>
</tbody>
</table>

* Water, Roads, Telecommunications, Railway subsectors  
** Health, Education, Housing, Community Development

4.1 **Training**

On an annual average basis, the emphasis on national priority training needs is planned to shift from the economic infrastructure sector to the social development sector with a current assessed need for 1910 intrained personnel deficit. Training of social development planners and managers as a national priority in capacity building is planned to impact favourably on the implementation and monitoring of the National Plan of Action.

4.2 **Logistics and Equipment**

Planned expenditures on the logistics and equipment needs for capacity building in the social sector is estimated at $10.5 million in technical assistance costs over the medium term perspective. This projection is equivalent to 42 per cent of the total national, planned, external funding requirement on logistics and equipment for the capacity building programme.

4.3 **Financing Status**

Out of a total estimated technical assistance cost of $83.4 million projected for the social sector component of the National Technical Assistance Programme (NaTCAP), $60.4 million dollars has been secured by donor commitments and pledges. An estimated financing gap of $20.9 million needs to be supported in additional inflows from donors committed to the global Action Plan on Human Settlements.

4.4 **Recurrent Expenditure**

In the pace of policy-based planned reduction in the national budget, donor support will also be sought for the partial funding of the recurrent costs of technical assistance needed to implement the National Programme of Actions. The estimated recurrent cost of technical assistance to the Social Sector is about $1.3 million over the medium term.
ACKNOWLEDGEMENTS

The National Plan of Action (NPA) is based on a number of government documents (listed in Part A: Introduction of this Report) prepared by the Ministry of Works and Housing, the Environmental Protection Council, Ministry of Local Government and Rural Development, the National Development Planning Commission, and the Town and Country Planning Department.

The draft NPA was prepared by a team of consultants comprising Mr. Richard Acquaah-Harrison, Team Leader (broad setting, international cooperation and assistance, and technical editing); Dr. A.T. Amuzu (environmental management and disaster mitigation); Prof. John A. Dadson (poverty reduction); Prof. Jacob Songsore (environmental management). Mr. Kojo Twumasi (urbanization trends and indicators); and Prof. P.Y.K. Yankson (shelter trends and indicators). The team also included several government officials, who prepared sections of the NPA as follows: Dr. F. Agyapong, MOWH (access to land and shelter); Mr. J. Cofie-Agama, MOLG (decentralization and governance); and Mr. George Mensah TCDP (the past 20 years). Additional inputs were provided by Dr. Mansa Prah, Consultant (on gender issues) and Mrs. Levina Owusu, MOLG (on decentralization).

The following Chief Directors and Directors of Government Ministries/Departments reviewed the documents and provided additional inputs: Mr. S.Y.M. Zanu, MOLG (decentralization and poverty reduction); Mr. B. Egham, MEST (environment and disaster mitigation); Mr. C.N.K. Boateng, TCDP (urbanization and housing trends); Mr. Alhaji Dawuni, MOWH (access to land and shelter; and the past 20 years; Dr. Kweku Appiah, NDPC (broad setting) and Mr. George Cann, MOLG (international cooperation and assistance).

Mr. S.K. Ampah, Consultant, and Mr. A. Tamakloe, TCDP, assisted with project management and the organization of the workshop. Ms Molly Bruce-Micah of HSP Consult typed the Report.
## ANNEX 2

### Table 1. RANGE OF INFORMAL SECTOR ACTIVITIES

<table>
<thead>
<tr>
<th>I. Production Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. <strong>Food Processing</strong></td>
</tr>
<tr>
<td>1. Maize milling</td>
</tr>
<tr>
<td>2. Baking</td>
</tr>
<tr>
<td>3. Beer brewing</td>
</tr>
<tr>
<td>4. Other food processing and related works</td>
</tr>
<tr>
<td>02. <strong>Clothes/Shoes</strong></td>
</tr>
<tr>
<td>5. Tailoring and dressmaking</td>
</tr>
<tr>
<td>6. Knitting and crocheting</td>
</tr>
<tr>
<td>7. Making and repairing shoes</td>
</tr>
<tr>
<td>8. Other clothes/shoes and related works</td>
</tr>
<tr>
<td>03. <strong>Metal Fabrication and Repairs</strong></td>
</tr>
<tr>
<td>9. Blacksmithing</td>
</tr>
<tr>
<td>10. Nails and bolts</td>
</tr>
<tr>
<td>11. Welding and soldering</td>
</tr>
<tr>
<td>12. Making iron windows, doors and gates</td>
</tr>
<tr>
<td>13. Burglar proofing</td>
</tr>
<tr>
<td>14. Beds</td>
</tr>
<tr>
<td>15. Water tanks</td>
</tr>
<tr>
<td>16. Pans, containers and cooking pots</td>
</tr>
<tr>
<td>17. Stoves</td>
</tr>
<tr>
<td>18. Other metal products</td>
</tr>
<tr>
<td>04. <strong>Wood Processing</strong></td>
</tr>
<tr>
<td>19. Timber sawters</td>
</tr>
<tr>
<td>20. Carpentry/furniture making for homes and office</td>
</tr>
<tr>
<td>21. Other wooden products excluding handcraft (see the group below)</td>
</tr>
<tr>
<td>05. <strong>Handicraft</strong></td>
</tr>
<tr>
<td>22. Baskets and bags</td>
</tr>
<tr>
<td>23. Mats and rugs</td>
</tr>
<tr>
<td>24. Batiks</td>
</tr>
<tr>
<td>25. Pottery</td>
</tr>
<tr>
<td>26. Wooden carvings</td>
</tr>
<tr>
<td>27. Table clothes</td>
</tr>
<tr>
<td>28. Furniture from materials other than wood</td>
</tr>
<tr>
<td>29. Other practical and decorative items</td>
</tr>
<tr>
<td>06. <strong>Construction</strong></td>
</tr>
<tr>
<td>30. Brick and tile making</td>
</tr>
<tr>
<td>31. Quarrying</td>
</tr>
<tr>
<td>32. Building houses (foundations, walls, roofs, plastering, wiring, etc.)</td>
</tr>
<tr>
<td>33. Fencing</td>
</tr>
<tr>
<td>34. Building wells</td>
</tr>
<tr>
<td>35. Other construction and related fields</td>
</tr>
<tr>
<td>07. <strong>Garages</strong></td>
</tr>
<tr>
<td>36. Repair of vehicles and motor cycles, including bodies and engines</td>
</tr>
<tr>
<td>37. Other garages and related field</td>
</tr>
<tr>
<td>08. <strong>Services</strong></td>
</tr>
<tr>
<td>38. Hairdressing and related fields</td>
</tr>
<tr>
<td>39. Clothes washing</td>
</tr>
<tr>
<td>40. Car washing</td>
</tr>
<tr>
<td>41. Shoe shining</td>
</tr>
<tr>
<td>42. Health Services</td>
</tr>
<tr>
<td>43. Traditional medicine and treatment</td>
</tr>
<tr>
<td>44. Watch repair</td>
</tr>
<tr>
<td>45. Radio repair</td>
</tr>
<tr>
<td>46. Bicycle repair</td>
</tr>
<tr>
<td>47. Photo studio</td>
</tr>
<tr>
<td>48. Stamp makers</td>
</tr>
<tr>
<td>49. Other services and related fields</td>
</tr>
</tbody>
</table>

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IV. Trade and Restaurants

50. Selling various items (food, charcoal and firewood, newspaper and books, household items, etc.) from fixed premises such as shops, kiosks, market stalls and verandas.

51. Hawking (on-street, mid-street, itinerant) selling chairs, side-walk road- days, everything, etc.

52. Preparing and serving food, drinks and meals in small restaurants, kiosks, markets and in open space

53. Roasting: corn/meat/banana

54. Beer selling

55. Other trade, restaurant and related fields

10. Transport

56. Taxi operators

57. Bicycle transporters

58. Wheel barrow pushers

59. Porters

60. Other transport and related fields

Source: ILO (1993)
Annex Fig 1: Southern Ghana Earthquake Risk Zoning
Source: Van Landewijk, 1989
ANNEX 4

NATIONAL WORKSHOP

Opening Address by
Hon. Dr. Christina Amoako-Nuama, Minister of Environment, Science and Technology

Closing Address by
Hon. A.B. Akuffo, Deputy Minister of Works and Housing

Chairmen: Discussion Groups

Group 1: Lt. Col. E. Okyere, Metropolitan Chief Executive, Kumasi Metropolitan Assembly
Group 2: Mr. K. Nyamekye-Marfo, District Chief Executive, Sunyani District Assembly
Group 3: Lt. Col. Kaku Korsah, Metropolitan Chief Executive, Shama, Ahanta East Metropolitan Assembly
Group 4: Mr. Albert Tenga, District Chief Executive, Bolga District Assembly

Chairmen of Plenary/Closing Sessions

- Hon. Dr. Alex Ababio, Chairman, Parliamentary Committee on Environment
- Mr. Ben C. Eghan, Chief Director, Ministry of Environment, Science & Technology
- Mr. William D. Opare, Executive Secretary, Ghana Real Estate Development Association
- Dr. K. Ofori-Tutu, Environmental Superintendent, Ashanti Goldfields Company
<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION</th>
<th>ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lt. Col. E. Okyere (Chairman)</td>
<td>Chief Executive</td>
<td>Kumasi Metropolitan Assembly</td>
</tr>
<tr>
<td>2. Mrs. Matilda Fiadzigbey (Rapporteur)</td>
<td>President</td>
<td>Ghana Institute of Surveyors</td>
</tr>
<tr>
<td>3. Ms Charity Acquah</td>
<td>Reporter</td>
<td>Ghana News Agency</td>
</tr>
<tr>
<td>4. Mr. Barichisu Adams</td>
<td>Reporter</td>
<td>New Times Corporation</td>
</tr>
<tr>
<td>5. Dr. Daniel Adom</td>
<td>Head of Planning Research</td>
<td>Ghana Water &amp; Sewerage Corp.</td>
</tr>
<tr>
<td>6. Dr. T.F. Agyapong</td>
<td>Deputy Director</td>
<td>Min. of Works and Housing</td>
</tr>
<tr>
<td>7. Mr. J.Y. Amankrah</td>
<td>Ag. Director</td>
<td>Min. of Employment &amp; Social Welfare</td>
</tr>
<tr>
<td>8. Mr, W.B.Y. Anim-Addo</td>
<td>D/Projects Manager</td>
<td>SSNIT</td>
</tr>
<tr>
<td>9. Mr. S.H. Biney</td>
<td>Snr. Asst. Secretary</td>
<td>CSIR</td>
</tr>
<tr>
<td>10. Mr. Alhaji Dawauni</td>
<td>Directory (Housing)</td>
<td>Min. of Works and Housing</td>
</tr>
<tr>
<td>11. Mr. J.C. Eshun</td>
<td>Investment Manager</td>
<td>SSNIT</td>
</tr>
<tr>
<td>13. Mr. A. Kwablah</td>
<td>Traffic Engineer</td>
<td>Dept. of Urban Roads</td>
</tr>
<tr>
<td>14. Mr. Justice Mingle</td>
<td>Asst. Editor</td>
<td>Ghana Broadcasting Corporation</td>
</tr>
<tr>
<td>15. Mr. E. Nutsugah</td>
<td>Head, HNI</td>
<td>Home Finance Co. Ltd</td>
</tr>
<tr>
<td>16. Mr. William D. Opare</td>
<td>Executive Secretary</td>
<td>Ghana Real Estate Dev. Assoc.</td>
</tr>
<tr>
<td>17. Mr. K.D. Osei</td>
<td>Snr. Planner</td>
<td>Ghana Institute of Planners</td>
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<tr>
<td>18. Ms Levina Owusu</td>
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<td>19. Mr. G. A. Tamakloe</td>
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<td>20. Dr. H.N.A. Wellington</td>
<td>Snr. Fellow</td>
<td>Ghana Institute of Architects</td>
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<td>21. Mr. J.B. Williams</td>
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<td>22. Prof. P.W.K. Yankson</td>
<td>Consultant</td>
<td>University of Ghana, Legon</td>
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<tr>
<td>NAME</td>
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<tr>
<td>1. Mr. K. Nyamekye-Marfo</td>
<td>District Chief Executive</td>
<td>Sunyani District Assembly</td>
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<tr>
<td>(Chairman)</td>
<td>Planning Officer</td>
<td>Town &amp; County Planning Dept.</td>
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<tr>
<td>2. Mr. Poku Asiedu</td>
<td>Planning Officer</td>
<td>Kumasi Metropolitan Assembly</td>
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<tr>
<td>(Rapporteur)</td>
<td>PR Coordinator</td>
<td>MEST</td>
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<tr>
<td>3. Mr. C.Y. Adu-Baah</td>
<td>Coordinating Director</td>
<td>New Juabeng Municipal Assembly</td>
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<tr>
<td>4. Mr. Kafui Ameh</td>
<td>Head of Spatial Planning</td>
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<tr>
<td>5. Mr. K. Darko Asante</td>
<td>Director</td>
<td>Min. of Local Government</td>
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<tr>
<td>6. Mr. K. Boakye-Boateng</td>
<td>Resource Person</td>
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<td>8. Mr. J. Cofie-Agama</td>
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<td>9. Ms Haana Gyamfi</td>
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<td>Bolgatanga District Assembly</td>
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<td>10. Mr. Frank GYamewodie</td>
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<td>12. Mr. A.Y.M.B Alhaji Ibrahima</td>
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<td>14. Mr. A.A. Kwarra</td>
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<td>15. Mr. George Mensah</td>
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<td>17. Mr. A.A. Tamakloe</td>
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<td>18. Ms Adwoa Van-Ess</td>
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<td>20. Mr. W.C. Winful</td>
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<tr>
<td>21. Mr. David Yaro</td>
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<tr>
<td>22. Mr. S.Y. Zanu</td>
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WORKSHOP GROUP 3: URBAN POVERTY REDUCTION AND EMPLOYMENT GENERATION

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<td>Lt. Col. Kaku Korsah (Chairman)</td>
<td>Metro Chief Executive</td>
<td>Shama Ahanta East Metro Assembly</td>
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<tr>
<td>Mr. Philip Tagoe (Rapporteur)</td>
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<td>Ms Victoria Abankwa</td>
<td>Snr. Planning Officer</td>
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<tr>
<td>Mr. K. Addo-Badu</td>
<td>Project Analyst</td>
<td>NBSSI</td>
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<tr>
<td>Mr. George Agbolo</td>
<td>Technician</td>
<td>P&amp;T Corporation</td>
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<td>Ms Millicent Amanor</td>
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<td>Mr. Seth Ashiawor</td>
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<td>Ms Gladys Asiam</td>
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<td>Min. of Local Government/RD</td>
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<td>Ms Adolfine Asimah</td>
<td>National Project Director</td>
<td>Habitat/Min. of LG&amp;RD</td>
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<td>Mr. Maxwell Bilson</td>
<td>Cameraman</td>
<td>New Times Corporation</td>
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<tr>
<td>Mr. E.K.A. Boateng</td>
<td>President</td>
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<tr>
<td>Mr. C.N.K. Boateng</td>
<td>Director</td>
<td>Town &amp; Country Planning Dept.</td>
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<tr>
<td>Mr. Nana Yaw Boateng</td>
<td>Development Officer</td>
<td>Shama-Ahanta East Dist. Assem.</td>
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<tr>
<td>Prof. J.A. Dadson</td>
<td>Consultant</td>
<td>University of Ghana, Legon</td>
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<tr>
<td>Mr. G.D.K. Fianu</td>
<td>Dist. Coord. Director</td>
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<tr>
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<tr>
<td>Dr. Mansah Prah</td>
<td>Lecturer</td>
<td>Univ. of Cape Coast</td>
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<td>Ms Vera Quaye</td>
<td>Snr. Research Officer</td>
<td>NCWD</td>
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<tr>
<td>Mr. K. Twumasi</td>
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<tr>
<td>Ms C. M. Wayoe</td>
<td>Ag. Dep. Director</td>
<td>Dept. of Social Welfare</td>
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<tr>
<td>Ms Pamela Wilson</td>
<td>Project Officer</td>
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**WORKSHOP GROUP 4: ENVIRONMENTAL MANAGEMENT, DISASTER MITIGATION AND RECONSTRUCTION**

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<td>1. Mr. Albert Tenga (Chairman)</td>
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<td>Bolga District Assembly</td>
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<tr>
<td>3. Mr. Okyeame Ampadu</td>
<td>Deputy Director</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>4. Dr. A.T. Amuzu</td>
<td>Ag. Director</td>
<td>WRRI, Accra</td>
</tr>
<tr>
<td>5. Ms Hannah Arthur</td>
<td>Journalist</td>
<td>Matberry Research, Accra</td>
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<tr>
<td>6. Mr. Samuel Asiedu</td>
<td>Development Planner</td>
<td>Sunyani District Assembly</td>
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<tr>
<td>7. Mr. Jubilant Atuwo</td>
<td>Chief Reporter</td>
<td>New Times Corporation</td>
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<td>10. Mr. D.O. Boateng</td>
<td>National Coordinator</td>
<td>O.H.S./TUC</td>
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<td>11. Mr. Nana Seidu B. Braimah</td>
<td>District Chief Executive</td>
<td>Wa District Assembly</td>
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<tr>
<td>12. Mr. B.C. Eghan</td>
<td>Chief Director</td>
<td>MEST</td>
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<td>13. Mr. E.P. Karbo</td>
<td>Dep. Director/Planning</td>
<td>Tamale Municipal Assembly</td>
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<td>14. Mr. A.O. Kwarteng</td>
<td>Dist. Envi. Health Officer</td>
<td>Sunyani District Assembly</td>
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<tr>
<td>15. Mr. Anthony Mensah</td>
<td>Executive Chairman</td>
<td>Landlife (GH) Ltd</td>
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<td>16. Mr. Emmanuel Mensah</td>
<td>Snr. Programme Officer</td>
<td>Min. of Mines &amp; Energy</td>
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<tr>
<td>17. Dr. K. Ofori-Tutu</td>
<td>Environmental Supt.</td>
<td>Ashanti Goldfields Company</td>
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<td>18. Mr. Stephen Owusu</td>
<td>Reporter</td>
<td>The Pioneer, Accra</td>
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<td>19. Ms Effie Sekyi-Aidoo</td>
<td>Snr. Programme Organiser</td>
<td>Ghana Broadcasting Corporation</td>
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<td>19. Prof. Jacob Songsore</td>
<td>Consultant</td>
<td>Univ. of Ghana, Legon</td>
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<tr>
<td>19. Mr. Kafui Ameh</td>
<td>PR Coordinator</td>
<td>MEST</td>
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ANNEX 5

REFERENCES

CHAPTER B1: BROADER SETTING


CHAPTER B.2: URBANIZATION AND SHELTER CONDITIONS BASED ON INDICATORS


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