

**ADDRESSING RAPID URBANIZATION
CHALLENGES IN THE GREATER ACCRA REGION:**
An action oriented approach

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Executive Summary

Currently 51.9% of Ghana's population lives in urban areas, and it is estimated that it will reach 72.3% by 2050, calling for fast and sustainable strategies for facilitating the main problems deriving from rapid urbanization. The challenges in the Greater Accra Region deserve special attention taking into account the rapid expansion of the urban area since the 1990 with a serious backlog of services and infrastructure. To prevent further uncontrolled urban growth and to harness the agglomeration advantages of urbanization a clear strategy is needed.

This proposal provides a clear strategy for sustainable urban development and effective implementation structured on the basis of a three-legged approach, a development method uniting legal, economic and spatial frameworks.

The Urban Strategy for the Greater Accra Region contains three complementary strategies:

- 1) Development of Planned City Extensions:
 - Legal framework
 - Economic and financial analysis
 - Adequate Housing for PCE
- 2) Renewal of Urban City-Centres
 - Strategic projects inside the city-center of Accra
 - Informal settlements upgrading
 - Housing and city infill
- 3) Comprehensive Flooding Management Strategy

Planned City Extensions (PCEs) provide an accurate response for rapid urbanization utilizing UN-Habitat's principles for Sustainable Urban Development contiguous to existing urban cores, as it is the case in the proposals of Accra, Tema and Ningo-Prampram.

The three suggested Planned City Extension areas can accommodate a total estimated population of 1.8 million, providing access to services and infrastructure. These new areas would be sufficient to respond to the prospective growth of the coming two decades. In essence, city extensions are physically connected to the existing cities, adapting its shape and location to create a continuous urban pattern, merging the existing city with the new planned area through a continuous street pattern.

The renewal of the existing urban area focuses primarily on the regeneration of the Accra city-centre. Seven key strategic projects are proposed to serve as catalyzers for the regeneration of the capital. Given the institutional complexity of the administrative structures of the city, the implementation of complex plans has already failed in the past. Therefore, a more strategic project oriented approach could initiate the transformation and create the momentum for a shift towards sustainable development in Accra. Specific attention is given to environmental areas, public space projects and strategic prospective developments inside the city, such as Jamestown, Korle Lagoon, Independence Square and Marine Drive, the Airport Area, the Military Training School and the Center for National Culture area. Furthermore, an upgrade strategy for selected slum areas such as Aishaiman, Ga Mashie, Nima, Agboghloshie and Old Fadama, will aim to improve the basic living conditions of the most vulnerable and very poor dwellers. Finally, a city infill strategy for densification is proposed, setting housing as the central element of urban development.

Planned City Extension and city renewal strategies are complementary. Both can be implemented in parallel, each of them at a different development speed; PCE is a fast and large scale intervention to address rapid growth and prevent unplanned sprawl and Urban Renewal is a slower tool that is usually implemented at a smaller scale.

The renewal strategy specific action points are to improve access to finance, the creation of a housing fund, the long term finance improvement through the current Pension Act 770, a government guarantee to secure loans, incentives, such as tax rebates, and housing micro-finance as the most appropriate vehicle for facilitating access to housing.

As concrete actions for the slum-upgrading component, actions have been defined in the city-wide slum upgrading strategy and operationalized through a City-Wide Slum Upgrading Programme. This will be anchored in the current review of the national slum upgrading and prevention strategy for Ghana as well as the basic review and enactment of relevant policies and regulatory frameworks.

In addition to these two strategies a comprehensive flood management strategy should prevent and mitigate urban flooding, one of the main risks in the Greater Accra Region. Concrete solutions include desilting of Odaw Channel and its tributaries, establishing an early warning system for floods, reducing the number of people at flood risk, conducting a contingency plan for waste management and deciding on a properly designed landfill for Greater Accra Metropolitan Area.

Effective implementation will only be possible when spatial planning matches legal and financial preconditions. Land and tax issues are a challenge that should be addressed in the proposed Urban Strategy. Especially the three Planned City Extensions offer opportunities. By defining these three PCE's as special or national projects new planning mechanisms can be tested and implemented. As such these PCE's will be Ghana's model for sustainable urban development.

To bolster the strategy and effective implementation of the strategy this report indicates what institutional rearrangement and capacity building is required at different government levels.

The Leading Role of Ghana in West Africa

The rapidly spreading sprawl development, the continuous formation and densification of slum areas and the damages already suffered from flooding all call for urgent action in the Greater Accra Region.

If action is postponed, the Greater Accra Region will likely see the last vacant land in the region sprawled, a growing amount of disconnected slums at the ever growing periphery, and more urban disasters, particularly flooding, as environmentally protected areas and flood prone areas are claimed by urbanization. Moreover, this pattern of unsustainable urbanization will not lead to prosperity, but rather to economic and productive decline.

The proposed Urban Strategy draws a path of priority actions that both prevent the continuation of harmful urbanization patterns, and maximizes the existing urban and natural resources enabling an economic growth of the region along with its urban growth.

The Urban Strategy presents a unique opportunity to confirm the leading role of Ghana in the region by showcasing sustainable urban development in action and creating cities that attract tourism, business and foreign direct investment. In order to effectuate sustainable urban planning, a clear strategy is needed, requiring prioritization of key projects in the Greater Accra Region in combination with legal, financial and managerial rearrangements.

These issues can be solved, but demand political will and leadership to change business as usual. The proposed Urban Strategy document sets out clear, precise directions for addressing this challenge. The Urban Strategy proposes specific projects to implement and test a 'new urban agenda' for Ghana. In order to change business as usual these project could be defined as 'special' projects in which new planning paradigms can be implemented.

The Urban Strategy presents an opportunity for a big leap forward towards affirming Ghana as the regional champion of sustainable development, bringing together national and local governments, private sector and communities for an alternative and sustainable urban development.



CURRENT URBANIZATION TRENDS & PATTERNS IN THE GREATER ACCRA REGION

Current Urbanization Trends and Patterns in the Greater Accra Region

1.1 Introduction

As Ghana's population has drastically increased from 24,658,823 in 2010 to 27,043,093 in 2014, urbanization is moving much faster than planning, leaving many communities in the urban centers with poor or no residences, and with woefully inadequate infrastructural and service facilities. As the capital city Accra, that is also the administrative capital, is located in the southern part of the country, it is no surprise that the southern part of the country is urbanizing faster than the northern part.

1.2 Overview of Ghana's Urbanization Process

Ghana developed a National Urban Policy and Action Plan in 2010 set to guide the urban development; however, the action plan only lays out general areas recommended for improvement, without specific targets addressing the rapid urbanization process. It is therefore important that Ghana focuses in the implementation of the National Urban Policy and Action Plan on the scheduled intervention programs that will target the specific negative consequences of urbanization according to the various paces and stages of urbanization in different parts of the country.

This poses the question - how can the current urbanization challenges that Ghana is facing be turned into opportunities for a future sustainable urban growth that takes full advantage of the country's resources?

The Urban Strategy presented in this document seeks to give an answer to this question.

Urbanization in Ghana is the result of rural-urban migration, natural increase of the population in towns and cities, as well as the reclassification of villages with over 5,000 inhabitants into towns, according to the census definition of an urban center in Ghana. While Ghana has defined the urban areas according to population, this definition needs to be reviewed as increasingly available adequate facilities are becoming more relevant for a city's urbanization.

Harnessing the economic gains of urbanization should be one of the top priorities of Ghana. While the population increase has slowed down in recent years, the urbanization of the country has been steady ever since 1921. Greater Accra remains to be the country's most urbanized region, while the nation's capital is the most urbanized city.

The primacy of Accra has however been moderated by the growth of its neighboring city, Tema, that has been growing since the late 1950s. Although economically, Accra and Tema combined dominated Ghana, no single city dominates the distribution of Ghana's population. In this respect, it seems that the region's urban primacy is not causing serious national problems.

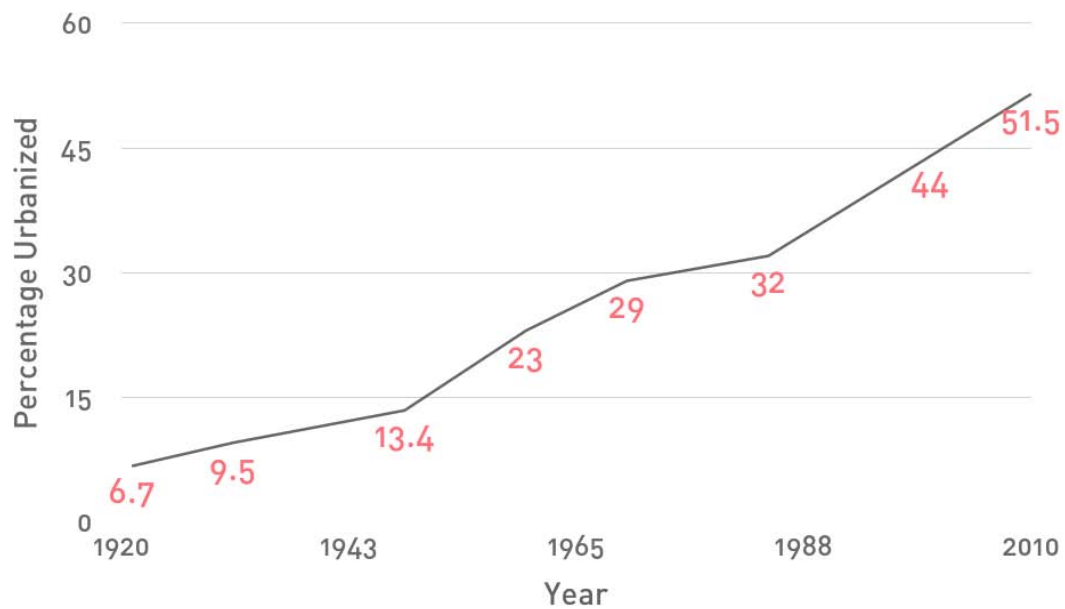
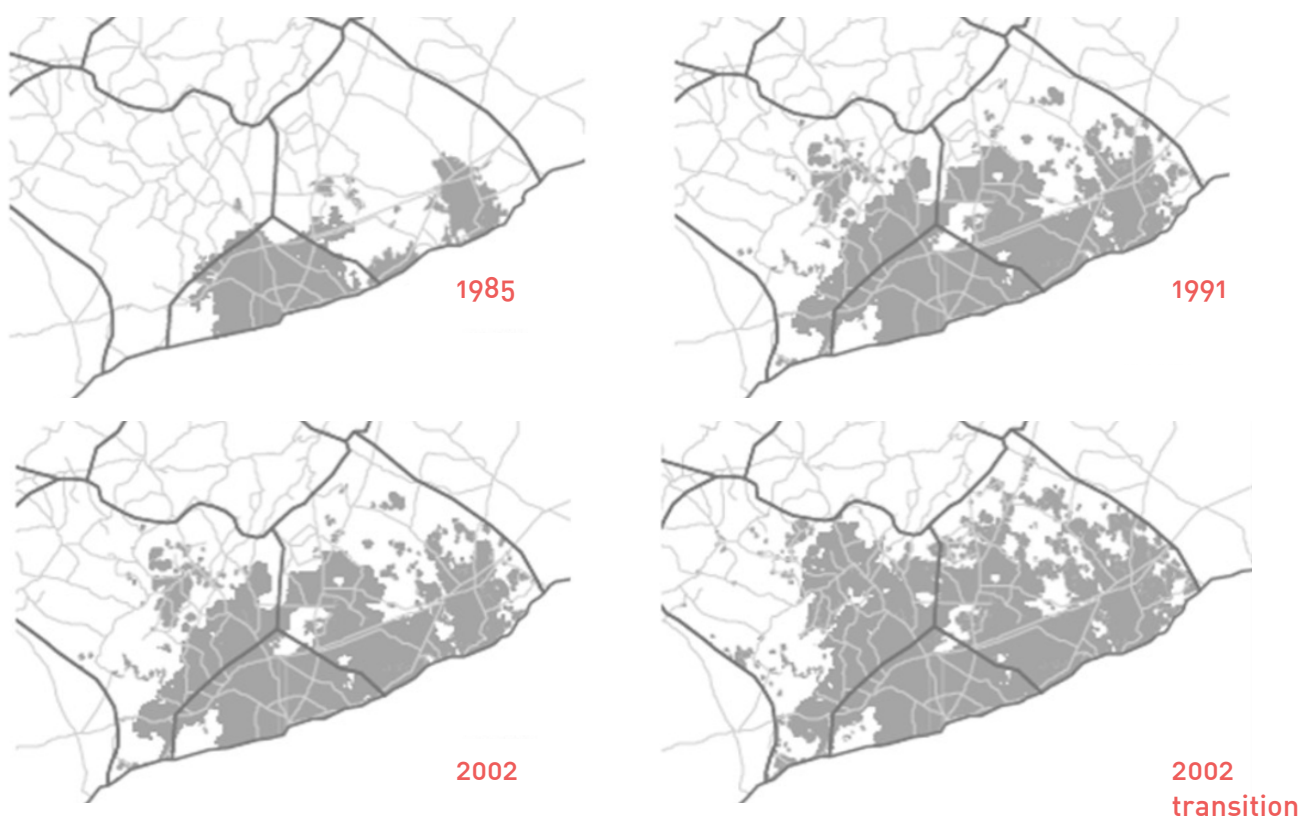


Chart 1 - Urbanization Trends in Ghana 1921-2010

year	1921	1931	1948	1960	1970	1984	2000	2010
urban population %	6.7	9.5	13.4	23.0	29.0	32.0	44.0	51.5

Table 1 - Urbanization Trends in Ghana 1921 - 2010

Current Urbanization Trends and Patterns in the Greater Accra Region



Urban Growth of the Greater Accra Region from 1985-2002

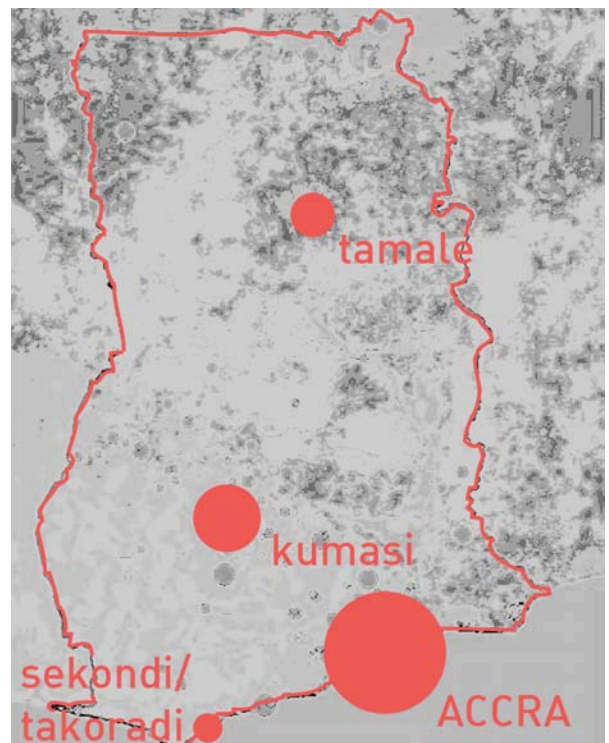
1.3 Urbanization & Sprawl

From the colonial days of the triangular trade route of Accra, Kumasi and Sekondi-Takoradi, Ghana has urbanized along this corridor with the Accra-Kumasi corridor being the most active area of urbanization. It can therefore be inferred that Ghana's urbanization is in direct correlation with the location of its trade areas. With commerce being a major determinant of Ghana's economy, the majority of the population constantly moves to the commercial and trade centers in search of seemingly greener pastures; thus contributing to the constant population growth in the trade areas. This needs to be strategically addressed in order to ensure fair distribution of urban and economic growth.

The concentration of urbanization in few cities has effects on the socio-economic development of the nation, especially in the Northern parts of the country, where only few urbanized cities and towns can be found.

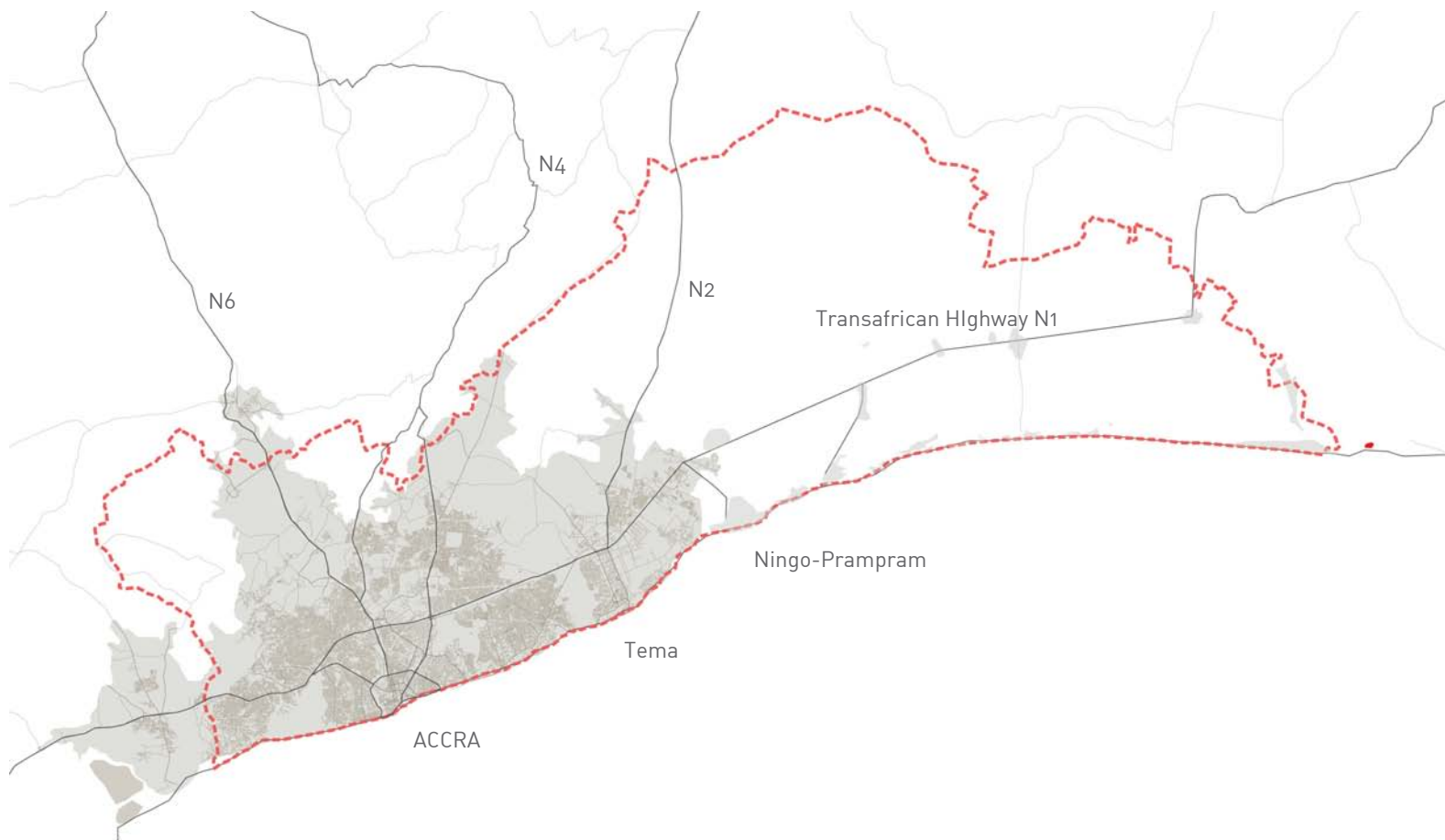
It should be noted that the concentration of trade, and the availability of infrastructure and services in the urbanized areas, result in high housing costs. This, coupled with the fact that over 90% of residences in Ghana are individual houses, results with vast sprawl areas consisting of single or double story residential houses, forcing low income earners to live on the city fringes, and commute to city centers for work. The World Bank recorded Accra to have sprawled over 100% in the 17 years from 1985 to 2002.

The sprawl, along with the rise of slums in the inner cities, leads to high costs of infrastructural development. Due to sprawl, the capital city Accra has now merged with surrounding cities such as Adentang, La Dadekotopong, Ga West and Ga Central, among others. Boundary disputes in Ghana have therefore become commonplace as cities frequently dispute over boundaries where infrastructural facilities that generate revenue are located. One such case is the dispute between the Accra Metropolitan Assembly and La Dadekotopong Municipal Assembly over the Accra Mall area. This points to the fact that infrastructural and service facilities are key to harnessing the economic benefits of urbanization.

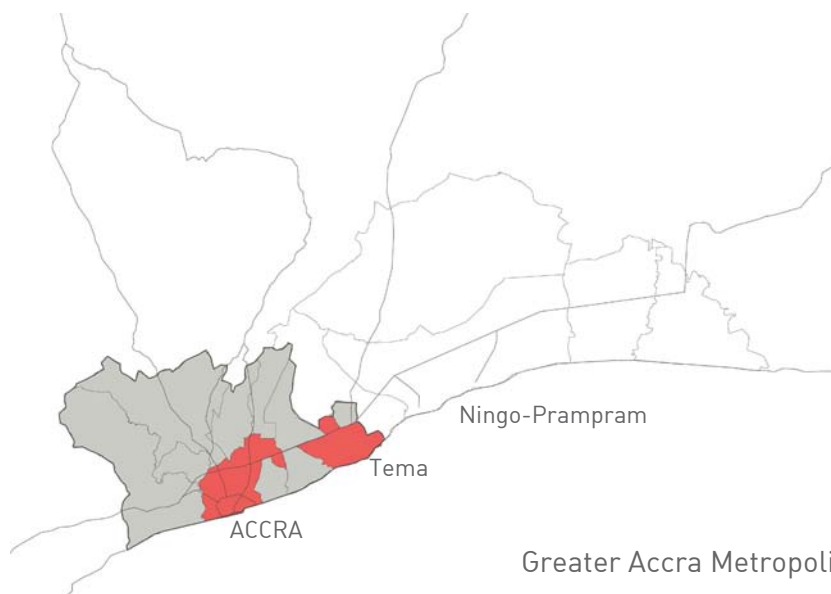


Major Urban Centers in Ghana

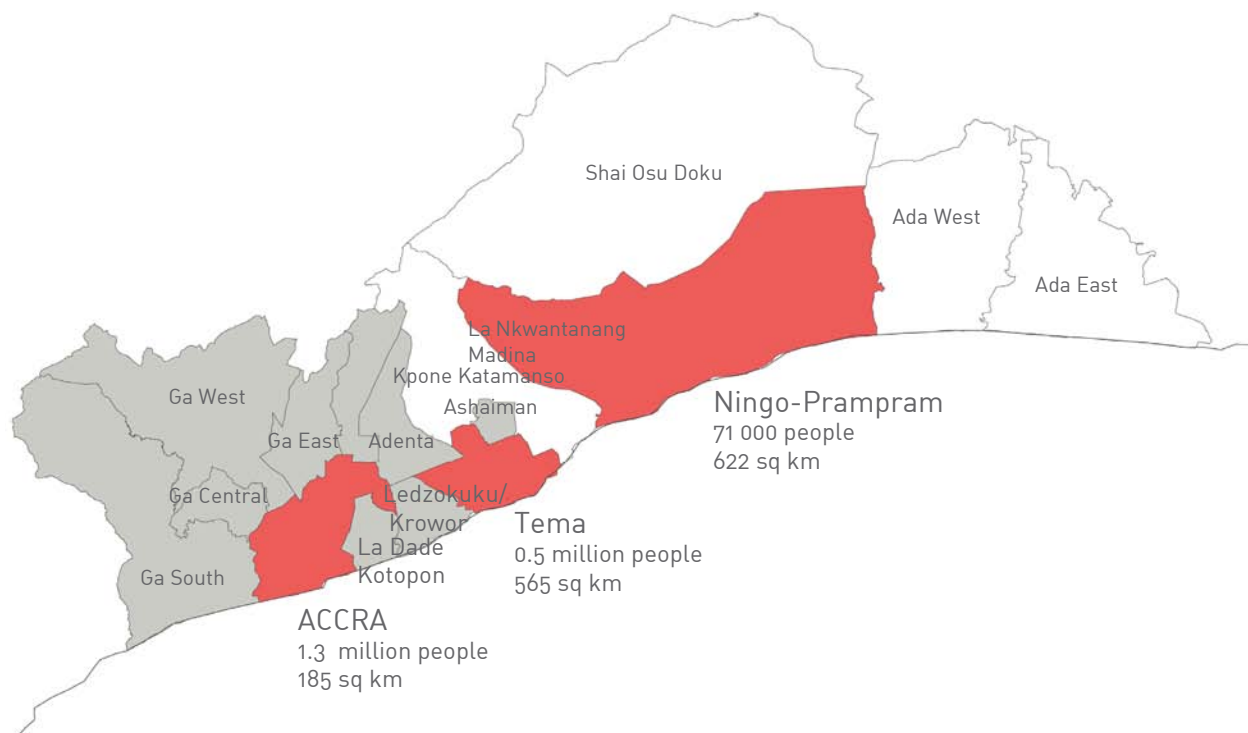
Current Urbanization Trends and Patterns in the Greater Accra Region



Greater Accra Region - GAR
Key Infrastructure



Greater Accra Metropolitan Area - GAMA



Accra Metropolitan Area, Tema Metropolitan Area
& Ningo-Prampam District



2

CHALLENGES, FAILED RESPONSES
& PROPOSED SOLUTIONS

Challenges, Failed Responses & Proposed Solutions

Progress in urbanization has faced numerous challenges especially in the area of land acquisition, legislation, institutional arrangement, capacity building, governance and finance.

Land Challenges

Acquiring land in urban Accra can be challenging. The documentation needed for the land acquisition process is very cumbersome and requires people with specialized skills. This results in a corrupt acquisition system. There is also no transparency in the system as citizens do not know exactly what goes into the charges of the land documentation process.

Over 80% of the land in Ghana, especially in Accra, belongs to stools, families and individuals; however, local governments are authorized by law to undertake land planning. The law therefore requires that landowners liaise with local governments in order to develop land use schemes approved by the local governments. Local governments, however, do not enforce this law, leading to vast urban sprawl in Accra, mostly as a result of low-density residential schemes implemented by landowners without government supervision. The 20% of land owned by the government within redevelopment zones is commonly used for upper income facilities.

Proposed Solution

Simplify the land acquisition process and establish a one stop electronic office (at the GAR, GAMA, metropolitan or district level) which would result in increased transparency and reduced corruption, as it has been the case in cities such as Kigali in Rwanda, where this one stop office has been implemented.

Institutional Arrangement

The supervision of urbanization is undertaken by the Urban Development Unit of the Ministry of Local Government and Rural Development; however, housing and

environment, both major components of urban development, fall under two different ministries. Coordination and responsibility sharing has thus become a major challenge in the urban sector, with the lack of coordination contributing to urban sprawl and slum formation. Though the Urban Development Unit has established the Urban Sector Stakeholders and the Habitat Committee, they both work on an ad-hoc and voluntary basis. It is therefore essential to ensure the existence of a well-resourced coordination point for effective implementation at all levels of government. Furthermore, the highly politicized governance structure of the local government slows down the comprehensive and inclusive implementation of urban development in the country. Whereas parliamentarians are elected, local government Chief Executives are nominated by the government and confirmed by Assembly members. This gives allegiance of the Chief Executives to the President and his political party rather than to the people, regardless of the fact that Ghana as a country is a democracy with a decentralized government.

Proposed solution

Given the complexity of transforming the established political dynamics, long-term action should be taken in this regard. It would therefore be of essence for Metropolitan, Municipal and District Chief Executives to be elected rather than appointed, to make them accountable to the people and not the President or his affiliating party.

As a medium-term solution, project-based statutory bodies for short-term and large scale developments and redevelopment of specific areas should be set into place. Through a project-based approach, coordinated teams - committees, can be created and results achieved within limited timeframes. The teams would be formed by staff from the involved Ministries (local government and rural development, environment, finance...).

Through these project-specific committees, districts and municipal areas can cooperate, developing specific tasks related to planned city extensions, urban regeneration and renewal, affordable housing and flooding prevention.

Capacity building

The capacity of technocrats in charge of urban development at the national, local and community levels is inadequate. The Urban Development Unit has a 6 member staff with only 2 senior technical staff, 2 junior technical staff and 2 administrative support staff. There is an obvious need for more senior technical staff with analytical and coordinating skills, as well as urban development specialists to assist them to comprehensively and inclusively implement existing urban development and housing policies.

Proposed Solution

Implemented a capacity development programme and a recruitment process with provision of financial means from the specific project committees.

Urban Planning & Infrastructure

The 1958 master plan provided a sound physical framework for the development of Accra until 1980, although many proposals that were back then contained in the plan have so far not been implemented. At the same time, urban development has sprawled well beyond the boundaries of this plan creating unplanned areas without adequate service provision. Nowadays urban growth is taking place without consultation among local government, private developers and utility companies, in an environment of almost non-existent long term urban planning. The 1958 master plan did not

achieve its objectives because the necessary resources and the political will for implementation were absent. The plan was neither affordable nor flexible, and it was primarily oriented towards physical development.

The 1992 Strategic Plan for the Greater Accra Metropolitan Area presented by the Ministry of Local Government and prepared by the Accra Planning and Development Programme in association with UNDP and UN-Habitat presented five alternative structure plan concepts for GAMA, a) urban consolidation, b) multi-city structure, c) satellite towns, d) twin city structure and e) laissez faire. Due to the lack of modification in the existing development policies and to the absence of control over planning the fifth scenario materialized.

“The cities of Accra and Tema continued to expand unrestricted along the regional routes [...] resulting in a continued haphazard land-use pattern [...] and development along all regional road corridors as well as infringement upon major wetlands. [...] Such development has created erosion leading to downstream floods and siltation of drainage channels”.

The complexity and comprehensive approach of the previous plans together with insufficient allocation of human and financial resources and the lack of long-term political and community engagement resulted in no implementation. They were nevertheless very thoughtful and technically sound plans, leading to conclude that a more simplified, strategic, precise and project oriented approach will facilitate implementation.

Very much linked with planning, transportation, water, energy and telecommunications infrastructure has been assessed and planned with a low-degree of subsequent implementation.

Challenges, Failed Responses & Proposed Solutions

Transportation and traffic congestion is a main issue in the GAR, where urban sprawl and an urbanization model completely dependant on private car has resulted into the daily saturation of routes with commuters spending hours in traffic jams, decreasing urban productivity and producing severe environmental impacts.

The Ghana Urban Transport Project was designed to respond to the emerging mobility challenges in Accra and the growing cities of Ghana. Discussions were held with various development partners to design a response to this need within the broader framework of Governments policy. The project commenced in 2007 and is financed in partnership with Agence Francaise de Developpement and the International Development Agency (World Bank). The project also enjoyed the support of the Global Environment Facility. In terms of results, implementation turned out to be again the weaker part of the project, as the project evolved from a comprehensive 4 BRT lines initiative into an one upgraded bus line running between Accra and Amasama.

Proposed Solution

The already outlined project-based approach and the formation of dedicated statutory bodies, combined with allocation of national budget lines and support from international funding programmes, offer a direct solution for the implementation problems of urban and infrastructure projects in Ghana.

A planning methodology based on political and community engagements ensures a long-term commitment to the project and ownership of the final interventions proposed.

Flooding & Environmental Challenges

The main environmental challenge that the Greater Accra Region has to confront is frequent flooding and subsequent damages. Past flooding episodes caused physical and economic damage, leading to loss of built

structures and agriculture lands. Flooding has been particularly prevalent during the rainy season in Accra along the Odaw and Densu rivers due to inadequate drainage channels and the flat nature of the terrain. In the past, major flooding episodes such as the crisis of October 2011, caused by unforeseen heavy rainfalls, revealed Accra's defenseless built environment. In response, the Government of Ghana with the support of the UN developed an emergency five-year National Plan of Action.

The five-year plan supported DRR with immediate and short-term recovery efforts and long-term resiliency considerations. However, memory is short and little was solved. The future contingency plan for the Greater Accra Region should include stronger planning strategies for the Waste Management Department, planning of a resilient waste collection system and routes in informal settlements, and environmentally regulated landfills placed at strategic locations.

Proposed solution

Desilt the Odaw Channel and its tributaries, establish an early warning system for floods, and reduce the number of people at flood risk, conduct a contingency plan for waste management and decide on a properly designed landfill for Greater Accra Metropolitan Area.



3

BENEFITS OF SUSTAINABLE
URBAN DEVELOPMENT

Benefits of Urban Sustainable Development

Major efforts to enhance the quality of life, prosperity and equity have been made in a number of cities. Such transformations require a proactive approach to succeed. Thriving cities have a vision and follow it through with a framework and an action plan to develop it. A framework is not about centralized command and control, it is rather a tool to anticipate needs, coordinate efforts and find a path to a goal that everyone can follow. A collectively held framework gives local leaders a roadmap to reach out to citizens, to energize departments, to mobilize partners so that they engage in realizing the vision, and to leverage synergies between stakeholders.

Anticipating the future means being better prepared today. By staying ahead of challenges, cities and city leaders are ready to see opportunities and manage risks from a particular vantage point, linking long-term vision and short-term actions.

Successful cities build a momentum by tackling priority projects that are aligned with an overall vision. Planning identifies pressing issues and available resources, and ensures that initiatives are not redundant or going in different directions. On the other hand, cities that do not actively plan for their future are likely to be left behind.

Cities are connected to a surrounding region with which they share resources and opportunities. Rather than just looking within municipal boundaries, city leaders who plan together can create a competitive advantage out of cross-municipal coordination. In addition to spatial efficiencies, this allows them to draw on economies of scale to boost their negotiation power.

Housing, employment, accessibility and safety are key concerns for urban dwellers and are strongly correlated to urban form. The correct policies on density, land use, public space and the layout of infrastructure

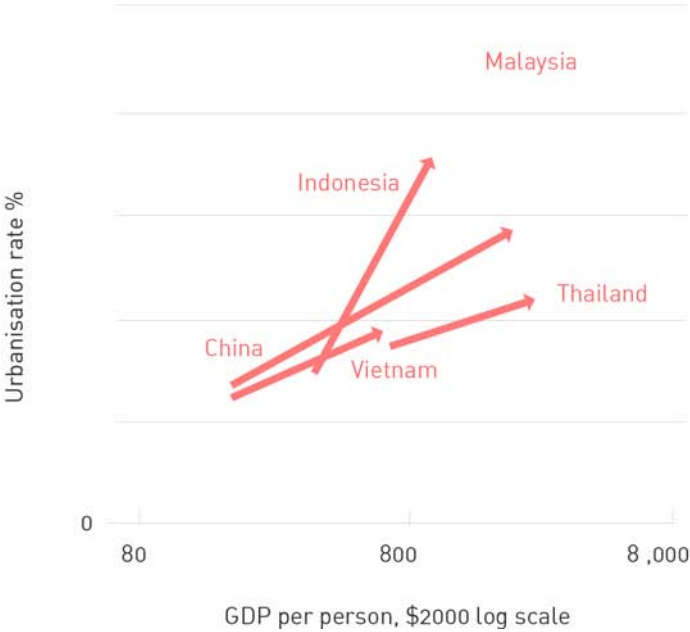
and services make a difference to the delivery of good quality of life at the right price. Designing a spatial pattern that addresses citizens' concerns is a means for delivering a better city. Making sure there are plenty of jobs in the city is a primary concern for local leaders. Cities compete to attract investment to generate economic activity. Planning coordinates the spatial location and distribution of economic activity, and facilitates value capture from public investments and the transformation of rural to urban land.

Local leaders can drive constructive change if they are active rather than passive leaders; leaders who anticipate rather than react get to the root of problems. Unplanned spatial patterns are inefficient and require more resources to maintain, and the high cost of bad or no decisions is likely to be irreversible.

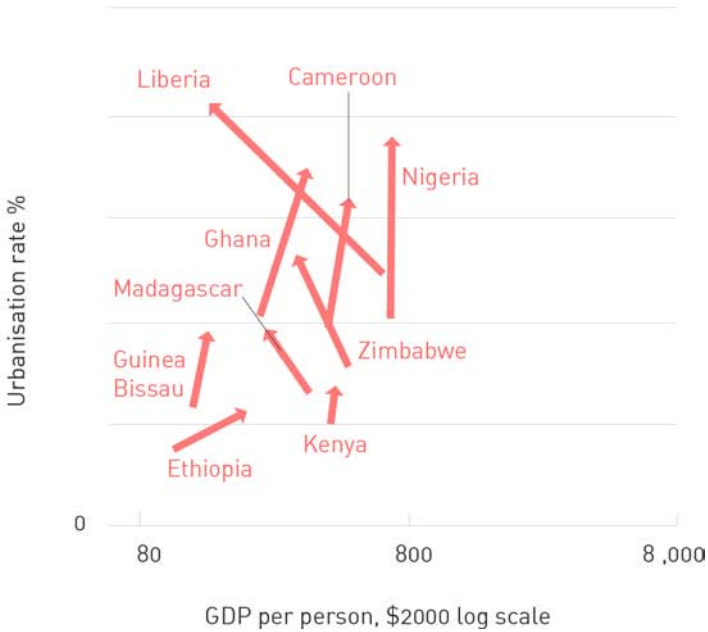
On the long run, unplanned urbanization comes at a great cost for municipalities, both financially and through the loss of natural resources and potential revenue sources. Successful cities globally have demonstrated that GDP can grow in tandem with urbanization, but this can only be guaranteed when the urbanization is planned and socially, financially and environmentally sustainable. As exemplified by the growing number of quickly developing Asian cities, planning can help establish economically strong urban centres.

Communication is a key asset for cities, but the opportunity to connect and convey a city's advantages can be undermined by empty or contradictory messages. Momentum and support are increased when local leaders demonstrate substantive, even if incremental, progress that is consistent with the collective vision and framework.

East Asia & Pacific



Sub-Saharan Africa

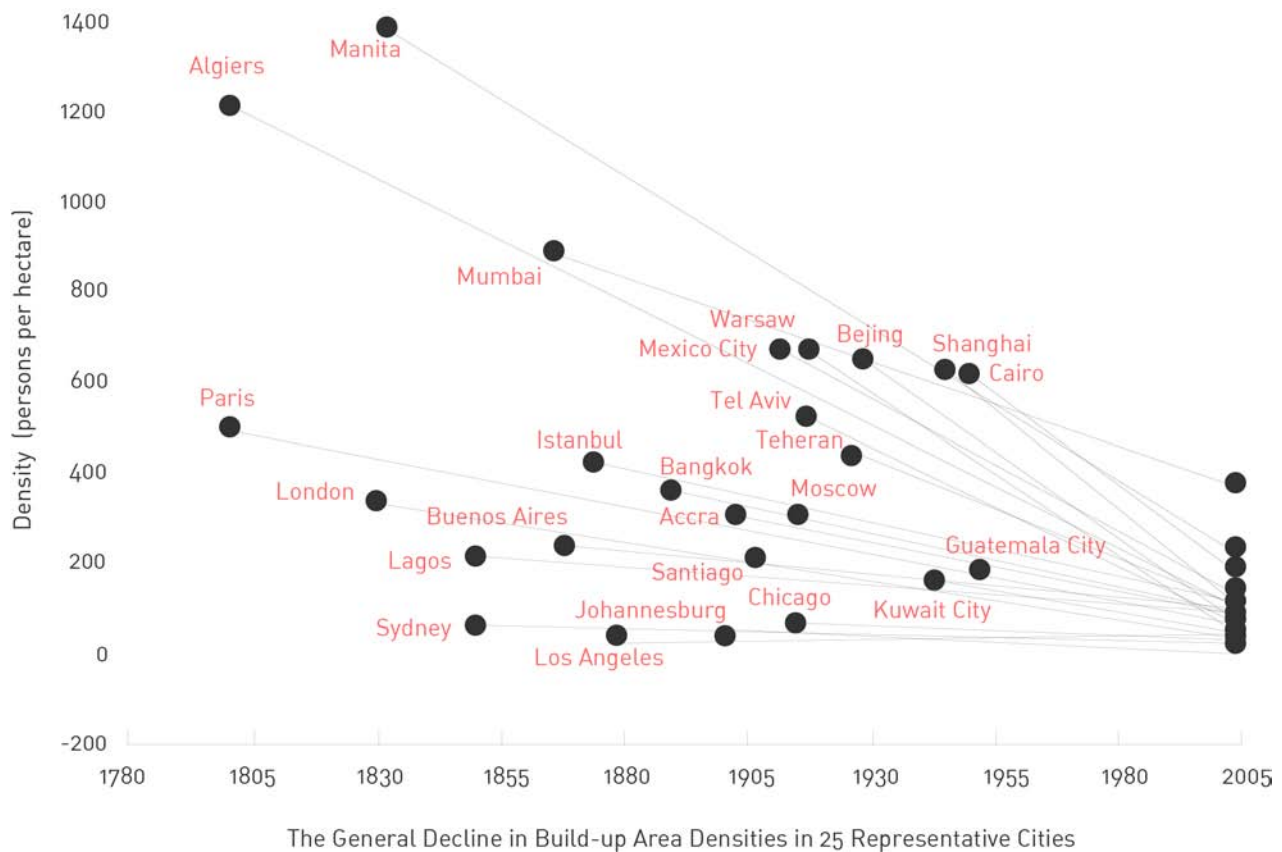




4

UN-HABITAT'S VISION & PRINCIPLES
FOR SUSTAINABLE URBAN DEVELOPMENT

UN-Habitat's Vision & Principles for Sustainable Urban Developments



Urban sprawl due to rapid urban growth results in many serious problems including inefficient land use, high car dependency, low density and high segregation of uses. Coupled with land speculation, current models of city growth result in fragmented and inefficient urban space where urban advantage and city concept are lost.

Cities of the future should build a different type of urban structure and space, where city life thrives and the most common problems of current urbanization are addressed.

To mitigate the consequences of sprawl UN-Habitat has developed an approach that summarizes and refines existing sustainable urban planning theories to help build a new and sustainable relationship between urban dwellers and urban space, and to increase the value of urban land.

This approach is based on 5 principles that support the 3 key features of sustainable neighbourhoods and cities: **compact, integrated, connected.**

UN-Habitat's 5 Principles

1 - Adequate space for streets and an efficient street network

The street network should occupy at least 30 per cent of the land at at least 18 km of street length per km². This ensures that every place is easily reachable by car, bike, foot or public transport and it helps avoid congestion.

2 - High density

At least 15,000 people per km², that is 150 people/ha or 61 people/ha. This principle helps make basic services more cost-effective and with it, it contributes to the development of better services, infrastructure and public spaces. It also aims to prevent sprawl, car dependency and pollution.

3 - Mixed land-use

At least 40 per cent of floor space should be allocated for economic use in any neighborhood. This principle helps develop active and lively neighbourhoods, that are safe day and night.

4 - Social Mix

The availability of houses in different price ranges and tenures in any given neighborhood to accommodate different incomes; 20 to 50 per cent of the residential floor area should be for low cost housing; and each tenure type should be not more than 50 per cent of the total. This principle helps fight poverty, segregation and discrimination and the creation of ghettos or gated communities.

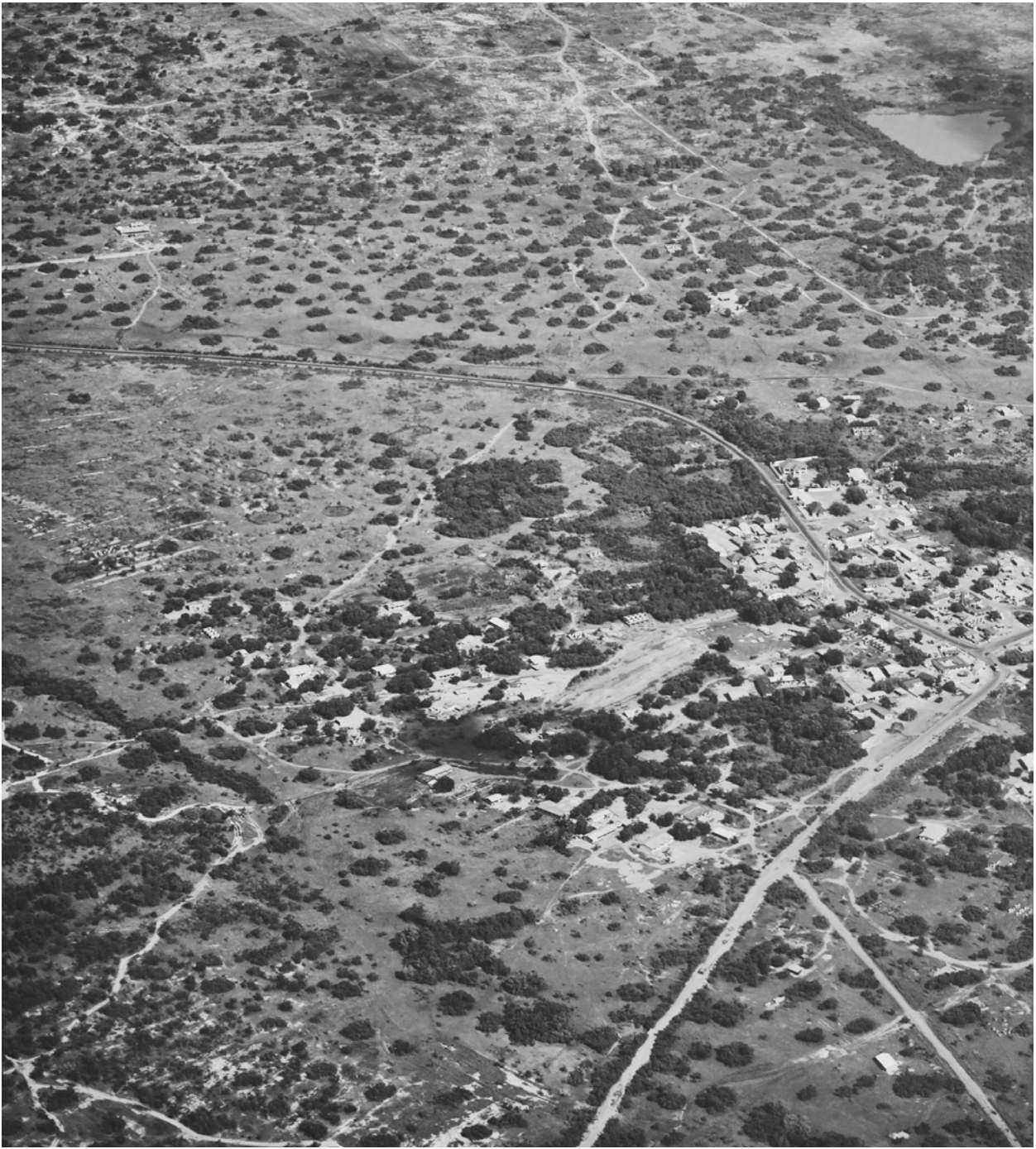
5 - Limited land-Use Specialization

This is to limit single function blocks or neighborhoods; single function blocks should cover less than 10 per cent of any neighborhood. This helps reduce car dependency and pollution.

The five principles are highly interrelated and supported each other. Implemented together they seek to promote dense urban growth, alleviate urban sprawl and maximize land efficiency; to promote sustainable, diversified, equal and thriving communities; to encourage walkable neighborhoods and reduce car dependency; to optimize use of land and provide a street network which facilitates safe, efficient and pleasant walking, cycling and driving; to foster local employment, local production and local consumption; to cater for the diverse housing needs of the community, at densities which can ultimately support the provision of local services.

At the same time, UN-Habitat has developed the Housing at Centre approach, through which it actively pursues the right to adequate housing through promoting inclusive and human rights-based policies and measures that seek to improve access to affordable housing for all and especially the most poor and vulnerable, improve the lives of slum dwellers and prevent the development of new slums. The new approach seeks to reposition housing at the centre of national urbanization, integrated to the fundamental sustainable principles, and at the centre of cities, reinforcing the spatial and people-centred dimensions of housing as well as the linkages with urban planning practice.

By planning future growth areas applying the sustainable development principles and the housing-centred approach, planned city extensions present remarkable opportunities to pave the path towards country-wide comprehensive sustainable urbanization,



LEGAL & ECONOMIC PROFILE
OF THE GREATER ACCRA REGION

5.1. Opportunities of the Planning Law

A - Physical Development Law in Ghana

Physical development law in Ghana exists at three levels: national, regional and district or municipal development planning. Projects should be compatible with national and regional plans but the main consideration is whether they are incorporated within district or municipal plans. For Accra and Tema, this means the plans developed and adopted by the respective metropolitan assemblies. For Ningo-Prampram, this is the District Assembly. In Accra and Ningo-Prampram, the Metropolitan and District authorities, respectively, have responsibility for formulating and implementing projects. In Tema, the Tema Development Corporation, a statutory body, has responsibility for the formulation and implementation of plans and projects. The difference in approach is primarily that the standard planning system, as it exists in Accra and Ningo-Prampram, facilitates the evolutionary development of an area over time with only occasional larger infrastructure interventions. The variation in Tema, through what is known as a special purpose territory, is to support a shorter-term large-scale development or redevelopment of an area.

As the above suggests, local administrative are very important in planning law in Ghana. Changing administrative boundaries is a Constitutional issue that involves potentially time consuming and complex procedures that are highly subject to political contestation. However, if needed, the Local Government Act does provide for cooperation between districts, or municipal areas, through the establishment of project specific committees that rely on the delegation of their parents' authority, although they are still dependent on the parent authorities for approval and the adoption of financial tools. This includes the establishment of 'joint development planning areas' managed by joint development planning boards. These may be initiated at the local level or centrally

by the President. These have implementation authority but remain dependent on their parent district assemblies for the approval of rules and the adoption of financial measures.

Planning instruments are highly flexible, with limited direction and control of standards from the national or regional levels. This allows for the promulgation of locally relevant standards and, to a large degree, of financial rules, although the latter are generally subject to central government review. This structure can be useful in facilitating individual projects, although it requires much stronger coordination to achieve coherence at a regional or national level. The Ministry responsible for local government is the principal national actor in the planning process, although the system envisages a strong role for the President, as well as relying on the Minister responsible for land in many areas. The National and regional development planning commissions have considerable potential for soft power through their advisory roles.

Finally, it is important to note that the Ghanaian legal system does not have significant explicit provisions for diverse financial tools, particularly land based financing, or for alternative land assembly mechanisms, such as land readjustment. This means that these may be possible in voluntary circumstances, and with limitations, but that there will be significant restrictions in what can be done to manage minority objections and maximise endogenous revenue.

B - Implications of the Land Use and Spatial Planning Bill 2011

A new Land Use and Spatial Planning Bill has been under development and pending before Parliament for several years. Should this Bill become law, it will require a review of strategies. However, the most important changes appear to be a change in central responsibility for planning from the Ministry responsible for local government to that for

environment and the explicit introduction of structure and local plans under the umbrella of district development plans. These introduce new processes and policy priorities, but do not fundamentally change the structure of the planning system.

5.2. Economic Trends in Ghana

A - General Economic Trends in Ghana

Ghana's urban transformation over the past three decades has coincided with rapid GDP growth. The average GDP growth was 5.7 per cent between 1984 and 2013. More recently between 2005 and 2013 the growth rate has picked up, averaging 7.8 per cent. Cities are the major engines of this rapid growth. In 2004, 75 per cent of Ghana's GDP was generated by industrial and service sectors within Accra. Between 1984 and 2013 Ghana's urban population increased from 31 per cent to 51 per cent; from 4 million to over 14 million people. It is estimated that by 2015 some 19.5 million people will live in cities. Ghana's urban population is expected to double by 2045.

Urbanization in Ghana has both positive and negative aspects.[1] Urbanization has contributed to poverty reduction, to more accessible and higher quality education and to greater access to urban services. Rapid economic growth has led to a marked decline of poverty in both rural and urban areas. Accra's poverty incidence decreased by 20 per centage points between 1991 and 2012. Urban areas have witnessed poverty reduction as a consequence of job creation and economic growth. Urbanization has also enabled higher quality education to reach larger segments of society and provided greater access to solid and liquid waste disposal, toilet facilities and piped water for urban areas. Despite the positive gains, Ghana's urban economy still has a number of vulnerabilities:

- Ghana lacks a Vibrant Industrial Sector

Although urbanization has brought about a 21 per centage point decrease in the agricultural employment share between 1992–2010, the level of industrialization is still low in urban areas. Most urban jobs are concentrated in informal services.

- Uncoordinated Spatial Expansion with Limited Connectivity

Ghana's rapid urbanization has been accompanied by unplanned spatial expansion of metropolitan areas. Connectivity is lacking in terms of services and especially transportation links. Congestion is severe, and worst affects the mobility of those living in urban peripheries.

- Limited & Unequal Access to Basic Services

Urban population growth has led to demand for urban services outpacing supply. As a result, only a reduced proportion of the urban population has access to piped water, sanitation and toilet facilities.

- Wide & Growing Urban Housing Deficit

Housing supply lags behind demand, particularly in Ghana's largest urban centres, Accra and Kumasi. Access to land has also declined, as affordability has become a critical issue. Urbanization, real estate development and speculation have fuelled increases in urban land values, making affordability a key determinant that pushes urban residents to the expanding urban periphery.

- Financial Gap

Although Ghana is to a large extent politically decentralized, fiscal decentralization is still lagging behind. Much of the country depends on donor support, and MMDAs also depend heavily on government transfers under the District Assembly Common Fund (DACF). This is inadequate for the provision of the needed basic services and infrastructure. However, Section 88 of the Local Government Act of 1993, Act 462, restricts the possible

loans of local governments within Ghana to GHS 2,000.00 (USD 465.00), without Central Government guarantee. Rates by MMDA are also often outdated and need to be updated in order for them to be valid. Property revaluation is also lagging behind, causing local governments to lose necessary funding for development. In addition, the means of collection for property rates causes the Assemblies to lose money, as the easy to collect rates are rather given out to contractors at very high commissions. This needs to be amended for Assembly collectors to rather deal with large institutions that are easy to collect from and contract collectors to collect domestic rates, to ensure that that percentage of commission given on collection is commensurable to the work done.

B - Economic Profile & Jobs in Greater Accra Region

Challenges in Accra Metropolitan Area, including Accra City Centre, Mena and Ningo-Prampram districts

The Accra Metropolitan Area is experiencing a rapid and unplanned urbanization process due to an influx of people combined with the impact of land speculation. It is projected that Accra will grow from approximately 2.5 million inhabitants to 4.2 million in the next ten years, and a large share of this growth is expected to be located in the Ningo-Prampram District (UN Habitat 2014).

Greater Accra recorded a population of 4,010,054 in 2010 (Ghana Statistical Service). The region's annual population growth rate was 3.1 per cent between 2000 and 2010. The population density of Greater Accra was 1,236 persons per square kilometre, up from 895.5 in 2000. Greater Accra's population has a youthful structure. The highest proportion of the population in 2010 was in the 0-4 year segment group. The average household size is 3.8 in Greater Accra, lower than the national average of 4.4.

Annual population growth is higher in Greater Accra (3.1 per cent) than nationally (2.5 per cent), but the region's total fertility rate is 2.56, which is lower than the national figure of 3.28. Based on these figures, it can be argued that immigration to the region may be a major factor accounting for the region's rising population. Consequently, there is a need to create new city extension plans as well as provide infrastructure.

The Greater Accra Region continues to be the major destination for foreign direct investment (FDI) in the country. At the end of 2005, some 1,545 (79.64 per cent) of the 1,940 cumulative registered projects were located in the region (Ghana Investment Promotion Council, 2005). A significant share of investment in urban areas, especially in the Greater Accra Region goes into the manufacturing, services, general trade and tourism sectors.

The region has over 200 manufacturing establishments employing some 22,060 persons (KPMG 2012). Fishing plays a major part in the region's economy; there are some 30,000 fishermen in the region a third of the total number of fishermen in the country.

A high proportion of the workforce has a low level of education, while a low proportion of employed persons aged 15 years and above has commercial, technical and vocational qualifications. A small number of people with formal educational skills engage in the middle-level sector of the economy as artisans, carpenters, drivers, masons and plumbers. This calls for a new outlook towards the education of the workforce.

Tema Metropolitan Area

Tema's population is 506,000 with an annual population growth of 2.2 per cent. Tema is a major industrial hub and port of Ghana, with over 500 factories including chemicals, clothing, electronics, electrical, furniture, machinery, petroleum products, steel and tools. The port serves as an entry point for import and export of goods nationally and internationally. The biggest employers are the industrial and the service sectors, with fishing and agriculture as well contributing to the local economy substantially. The dominant trend of urban growth is densification in the already dense informal areas and sprawl in the peripheries. This current trend of urbanization is unsustainable. Aishaiman is Tema's largest informal settlement. It is constantly growing as it offers extremely low-cost accommodation.

Ningo-Prampram District

The population of Ningo-Prampram District, according to the 2010 Population and Housing Census, is 70,923.

The population is young, with 38.2 per cent aged below 15 years. The district has a household population of 68,521 with a total of 14,627 households. The average household size in the district is 4.8 persons per household. Children constitute the largest proportion of the household members accounting for 37.9 per cent.

Some 66.8 per cent of the population aged 15 years and older are economically active of whom, 94.1 per cent are employed while 5.9 per cent are unemployed. For those who are not economically active, the largest share are students (48.8 per cent) while 25.1 per cent perform unpaid household duties. The private informal sector is the largest employer in the district, employing 85 per cent of the employed population. Some 28.5 per cent of workers are engaged as skilled agricultural forestry and fishery workers, 24 per cent service and sales workers, 21.8 per cent in

craft and related trade and 6.8 per cent in elementary occupations.

The average number of persons per house is 7.7. Majority of households (55.1 per cent) do not have toilet facilities and therefore resort to fields, bush and beaches. Other households (27.1 per cent) in the District use public toilets. Many households (32.3 per cent) burn their solid waste and 30.5 per cent dump in a public dump (container), while another 4.4 per cent have their solid waste collected. For liquid waste disposal, 58.5 per cent throw their waste onto the compound and 26.9 per cent onto the street.



6

AN URBAN STRATEGY
FOR THE GREATER ACCRA REGION

An Urban Strategy for the Greater Accra Region

A comprehensive urban strategy for the Greater Accra Region should encompass several complementary strategies that would target the main challenges, tackle the most pressing issues and trigger sustainable urban growth, as well as sustainable urban planning practices. These suggested priority strategies are:

Development of Planned City Extensions

The Planned City Extensions aim to prevent the formation of future slums and set a model for the entire region.

Renewal of urban city-centres and upgrade of informal settlements

The renewal of the existing urban areas is twofold and it involves:

- A transformation of the centre of Accra with key strategic projects that would serve as instigators of city-wide urban and economic development and improve the overall living conditions in the city, particularly targeting the public spaces

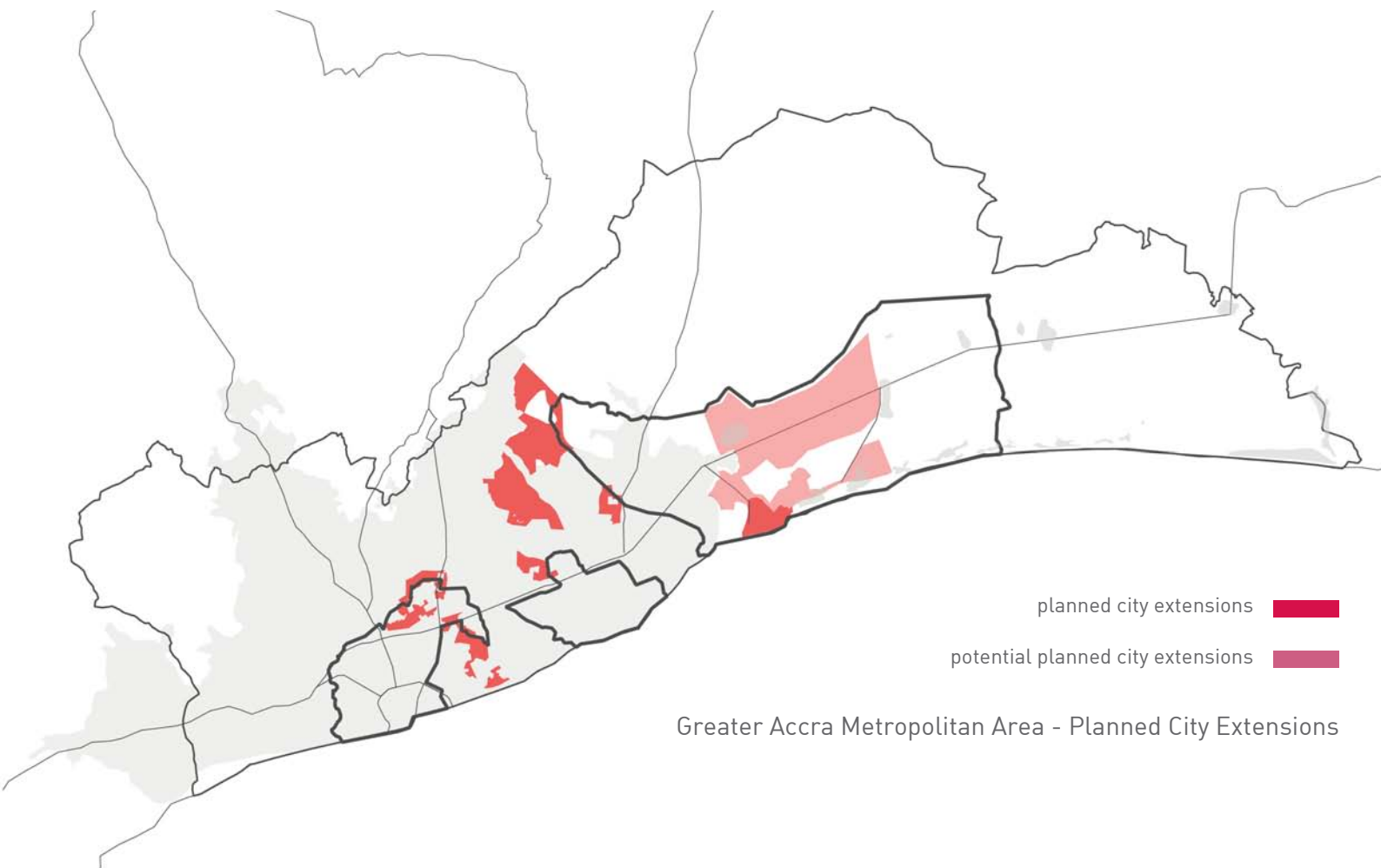
- An upgrade strategy for selected slum areas aiming to improve the basic living conditions of the most vulnerable, very poor dwellers; and thirdly an infill housing densification strategy.

Flooding Prevention and Management Strategy

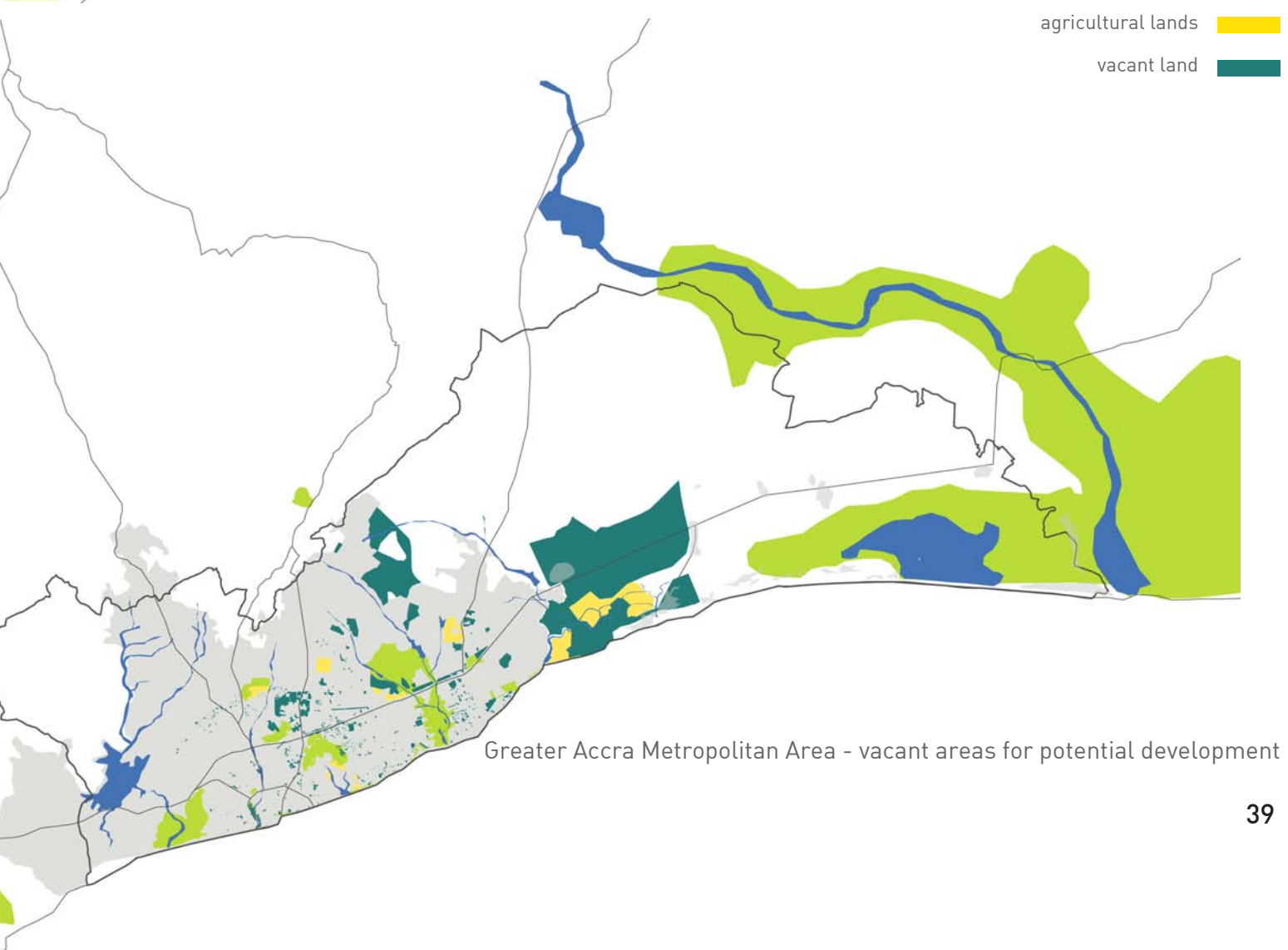
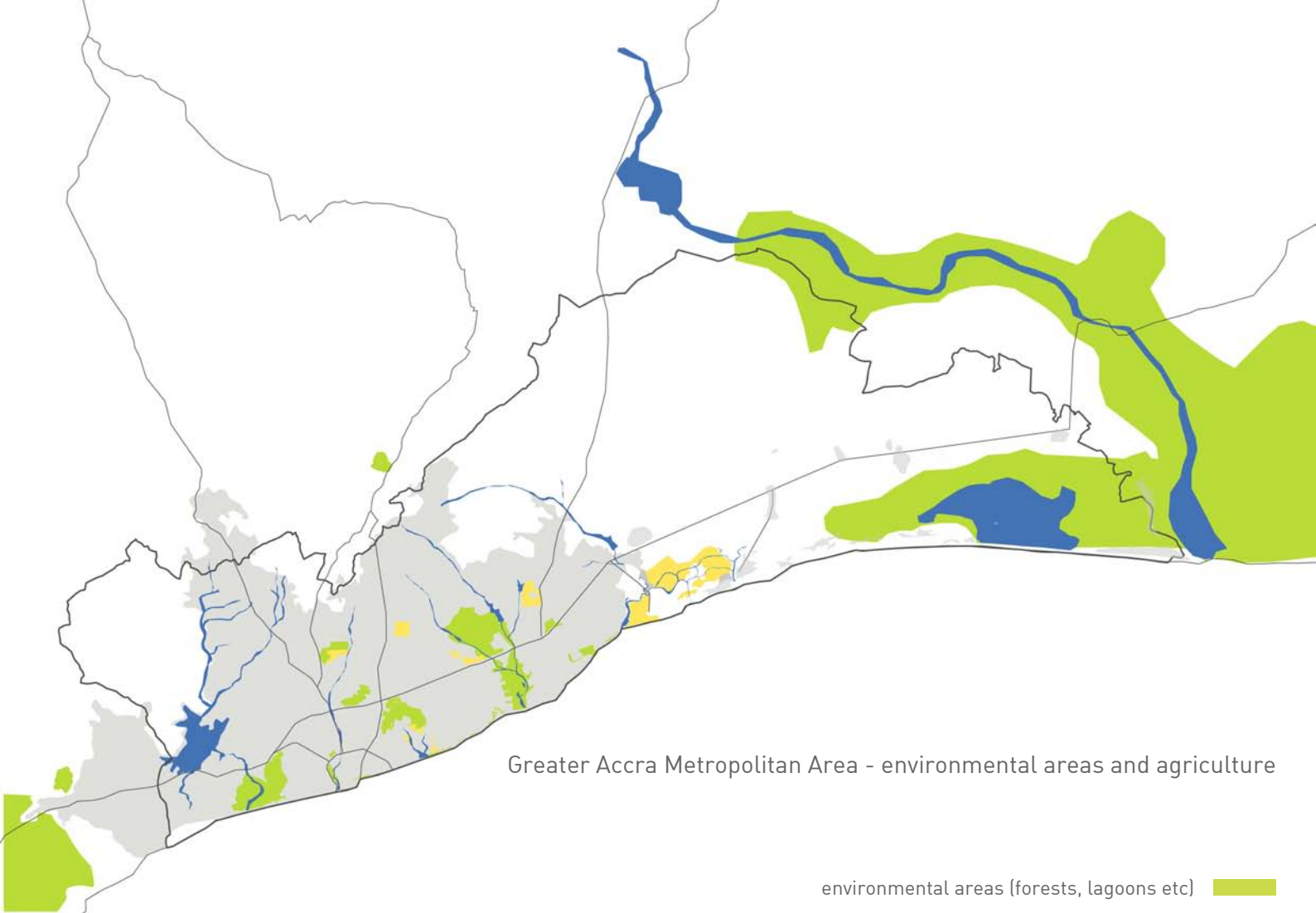
Tackles the most pressing environmental issue that is increasingly advancing with climate change. Floods have already caused significant economic damage in the area, being also responsible for the severe urban fires of 2015.

This strategy will prevent future losses as well as mitigate the growing risks in future plans and extensions, which have been identified as one of the main priorities of the urban strategy of the region.

A. Quick Responses to Fast Urbanization: Development of Planned City Extensions



Greater Accra Metropolitan Area - Planned City Extensions



An Urban Strategy for the Greater Accra Region

A.1 - Planned City Extension of Accra

Accra was the most prominent European trading centre of the region, and subsequently became the capital of the British Gold Coast. British settlers shaped the city neighborhoods according to racial segregative patterns. In the second half of the 20th century, European neighborhoods were planned as low-density, the CBD expanded, while neglected landscapes of informal settlements massively formed at the borders of the former city boundaries and alongside river banks and shorelines.

Occupying a total surface area of 173 km², the overall structure of the city still maintains a highly segregative pattern with marginalized informal settlements growing at unprecedented rate. Old Fadama (Sodom and Gomorrah) remains to be the largest informal area located at the heart of the capital. It is constantly growing as it offers very low-cost housing.

The city of Accra has grown from a city with a radius of 10 km into a continuous, urban agglomeration that stretches over 60 km along the coastline. Within this agglomeration Accra is still the main service center.

Accra serves today as the centre of the international economic corridor connecting Côte d'Ivoire, Ghana, Togo, Benin and Nigeria, and locally as the Greater Accra region's economic and administrative hub contributing to approximately US\$3 billion of Ghana's total gross domestic product (GDP 1.836\$). According to the World Bank, the economically active population of AMA is estimated to be 823,327. It is worthwhile to state that the estimated figure of all the economically active population who dwell within the Metropolis excludes the workers of both formal and informal sectors who commute daily to engage in various economic activities. The sectors of AMA economy consist of Primary Sector (farming, mining,

quarrying and fishing which constitutes alone 77% of the primary), Secondary Sector (manufacturing, electricity, gas, water, construction) and Tertiary Sector (wholesale, retail trade, hotel, restaurant, transportation, storage, communication, financial intermediation, real estate, public administration, education, health). As an urban economy the service sector is the largest (26%), employing about 531,670 people. The second largest, secondary sector, employs 22.34% of the labour force (that is 183,934 people). Accra has 114,198 of its labour unemployed, making an unemployment rate of 12.2%.

The city of Accra is fully built with no open spaces, either owned by families and individuals or the government. The only extension left for Accra to physically develop is infill building through rezoning and this is catching up fast with the many single family low density areas being redeveloped into multi family medium density units. These are found especially in the upper income areas of Ridge and Airport Residential Area.

The bulk of Accra's urbanizing population is not within the upper income, but rather the low-income. This has presented Accra with a miss match development, especially for housing provision, with the resulting negative effect of the proliferation of slums. It is therefore critical for any city extension project in Accra to seriously consider the provision of housing and supporting facilities for the low to middle income earners, who form the bulk of the urbanizing population of Accra.

Transportation and other services should also be provided to suit the majority of the population within the low to middle income groups, rather than mostly the upper income groups. In the same manner, policies and bye-laws should also make provision especially for the low to middle income classes to afford them a decent and adequate accommodation, employment, social services and a good quality of life in general.

The first potential city extension is situated 4km north from the Accra Airport, inside the Districts of Ga Central and Ga West and represents a total of 1,220 hectares of vacant space. This area could house around 184,000 people in a high density urbanization scenario of 150 p/ha, and 98 160 people in a low density urbanization scenario of 80 p/ha.

While it is mostly vacant, existing dispersed small development clusters are dispersed in the green areas as well as a partially developed street network. This opens possibilities for developing a planned city extension based on the already existing infrastructure of the University of Ghana, which can be upgraded and complemented to become high-density mixed-used development. The adjacent intersection of the Tema-Accra Motorway and Liberation Road situates the potential site at proximity of an excellent North/South and East/West transportation connection. A major obstacle to developing this city extension is the environmental value of the area, which comprehends small agricultural parcels.

The second potential city extension is situated south from the first one, inside the Accra Metropolitan Area. Located 1.5 km from the Accra Airport, the area takes a total of 4,200 hectares, and could house around 630,000 people in a high density urbanization scenario of 150 p/ha, and 340,000 people in a low density urbanization scenario of 80 p/ha.

Proximity to major roads, to the Accra airport and its airport transportation network and infrastructure, offers great potential for it to be upgraded and connected to site. To the north of the site, an existing commercial strip and a partially developed street network has the potential to be developed to foster a vibrant local economic center. Possible obstacles to developing this city extension are the proximity of the site to the Accra Airport, which may affect the site with airport and aircraft noise pollution, and the presence of small agricultural valuable land parcels

throughout the designated area.

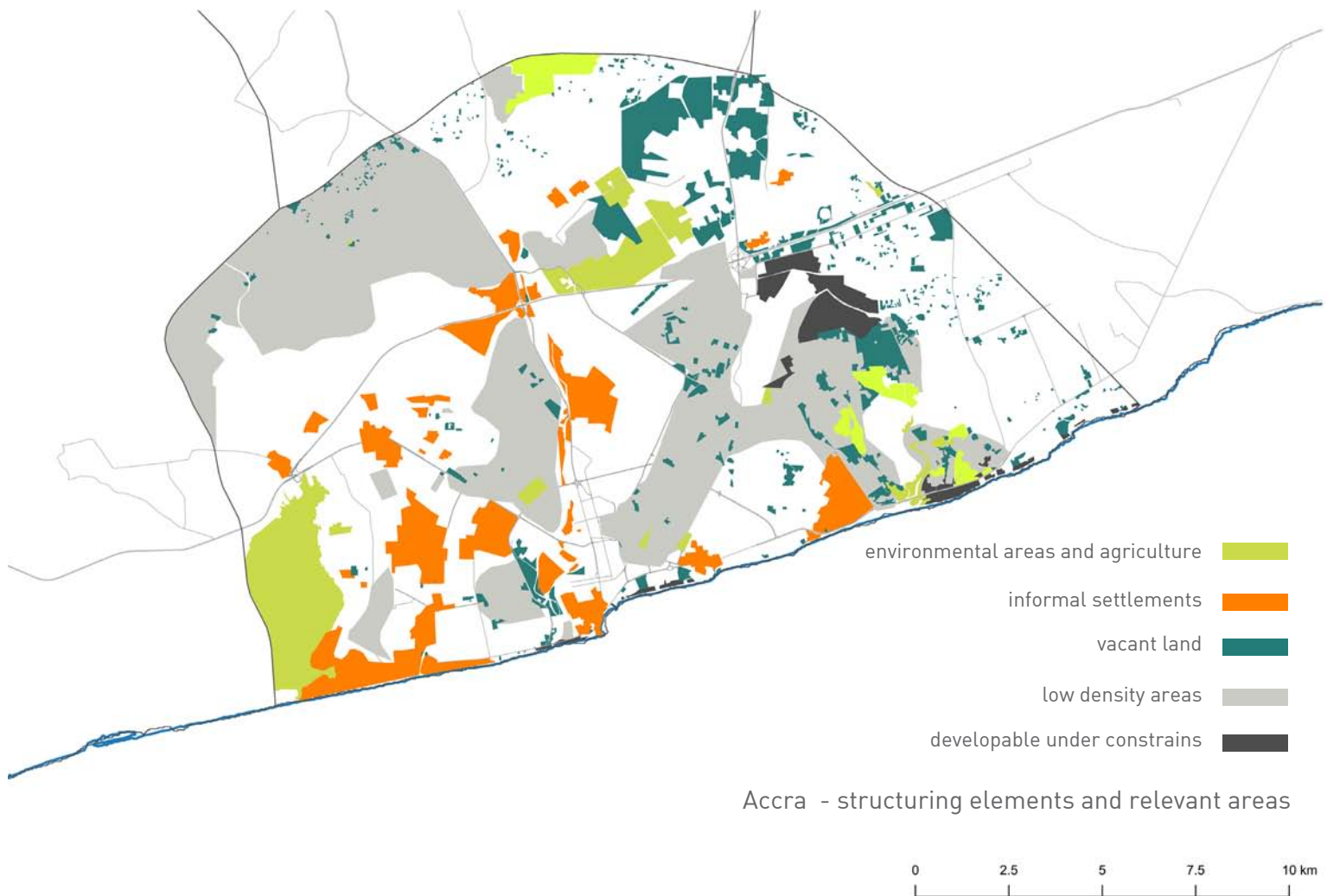
On the long term, the relocation of the airport to the east of Accra would transform this area into one of the most strategic redevelopment areas of the Metropolitan Area, providing vacant land for an structured and connected Accra Planned City Extension.

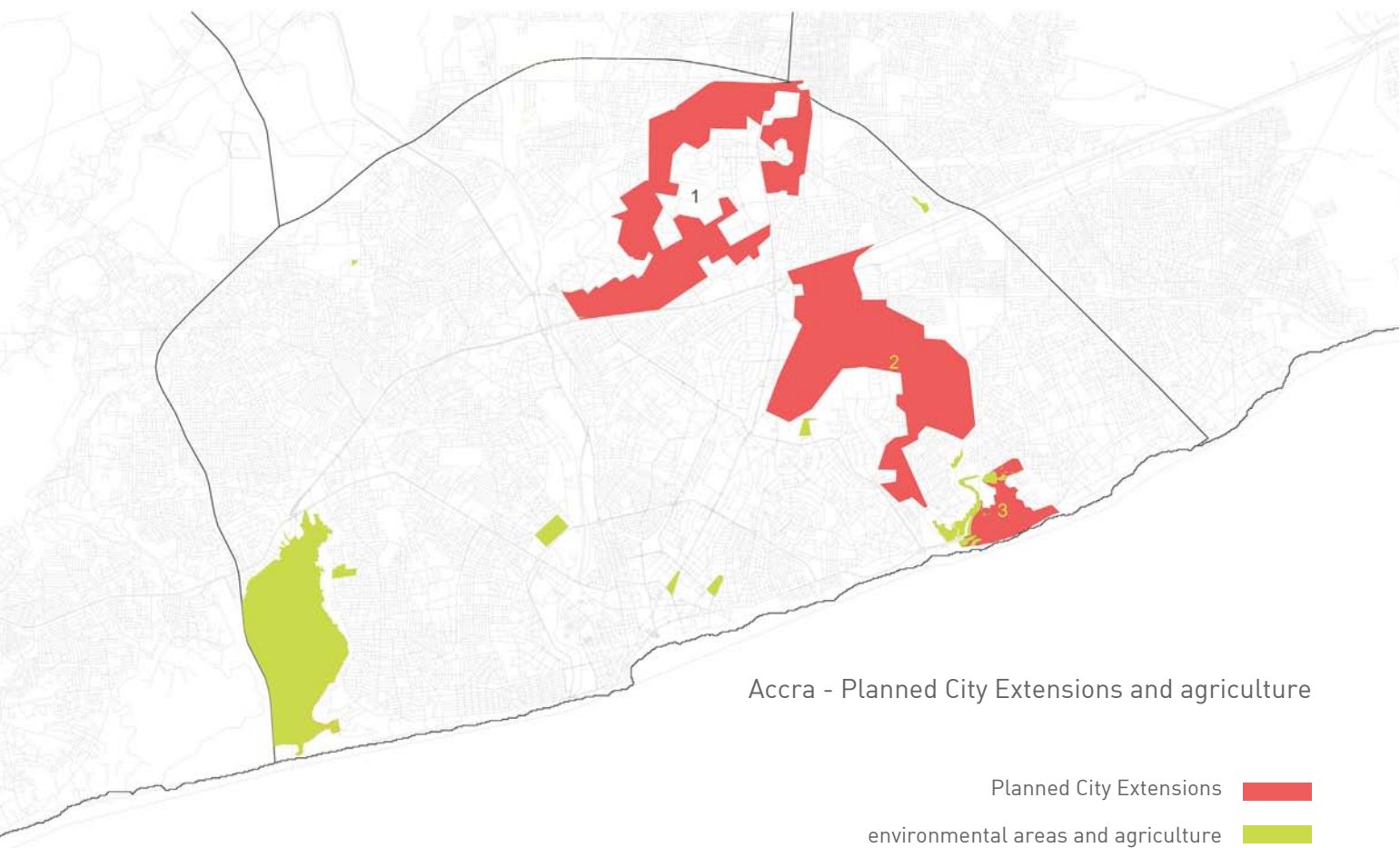
An Urban Strategy for the Greater Accra Region

The third potential city extension is situated south from the first and second alongside the coast, between the districts of La Dade Kotopon and Ledzokuku/Krowor. Located 6 km from the Accra Airport, the area takes a total of 210 hectares, and could house around 31,800 people in a high density urbanization scenario of 150 p/ha, and 17,000 people in a low density urbanization scenario of 80 p/ha.

The site offers an existing street network of major roads, which has the potential to be upgraded and complemented. Strong resilient strategies must be adopted to improve the resilience of the city's waterfront and tackle the projected sea-level rise to ensure the site's viability.

Considering that every waterfront edge is an integral part of an interconnected regional watershed, and the dynamics of that watershed provide the context for any individual waterfront plan or design. Within this ecological context, and with appropriate planning and design, there is a wide array of opportunities to integrate diverse land-uses including natural habitats, public access, parks, housing, commercial districts, and working waterfronts at appropriate locations. Possible obstacles include the relocation of the Military Academy.





City Extension 1

City Extension 2

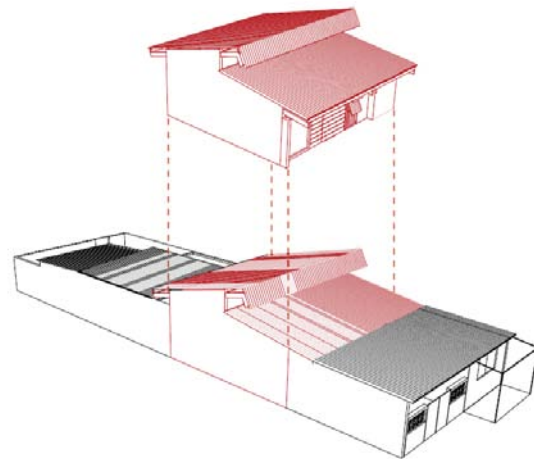
City Extension 3

A.2 - Planned City Extension of Tema

The Tema Metropolitan Area lies on the Ghana coast, east of the capital city of Accra. Tema city, the capital of the metropolitan area, was constructed on the site of a fishing village and expanded rapidly when its port and harbor were developed in the 1960s. The city grew into the biggest industrial hub and port of Ghana, with over 500 industries situated in Tema including chemicals, clothing, electronics, electrical, furniture, machinery, petroleum products, steel and tools. The port serves as an entry point for import and export of goods nationally and internationally. The biggest employers are thus the industrial and the service sector, with fishing and agriculture as well contributing to the local economy substantially.

Tema City was planned as a new town in the 1960s, by planners such as Alcock, Fry & Drew and Doxiadis leaving their trail on different areas of the city. The largest part of the planned city was developed as a master plan for the extension of Tema in 1962 by Constantinos Doxiadis, based on the development of 19 communities of 1,500 to 2,000 inhabitants. The city extension is situated parallel to the vast industrial area, spreading towards north from the port. These communities were linked through avenues and streets, generating a connected urban pattern. In the areas in which the Doxiadis plan was successfully implemented, a livable, structured and accessible network of neighborhoods was implemented. This structure still exists today, and despite the state of decay of most buildings, has promoted economic activities with street shops, pedestrian mobility and adequate amount of spaces dedicated to streets and public spaces. The surrounding areas, in which the plan was not implemented and space for streets was not secured, have sprawled into poorly connected neighborhoods which lack infrastructure, services and adequate public space. Many of the unfinished neighborhoods have been

informally densified, eventually forming slums within some of the communities. Communities have also experienced a backyard densification process, which has resulted into a more dense urban pattern adequately served by existing properly dimensioned streets between the communities. Located adjacent to the communities, Ashaiman, which started out as a quarters for the industrial workers in Tema, remains to be the biggest slum area, and a popular entry point for poor migrants contributing to its constant growth and densification. Presently, the Tema area has 506,000 inhabitants and a population growth of 2.2% annually. The increasing urban growth of the area is not sustainably facilitated; the dominant trend of urbanization is densification in the already dense informal areas, and low density sprawl in the peripheral zones.



Doxiadis masterplan - experimental neighborhood in Community 4

Therefore, any planning strategies should facilitate the urban growth and address the problem of unsustainable urbanization. Though the percentage of slum dwellers and the number of slum neighborhoods and pockets in Tema is not as high as in Accra, housing, transportation and social services for the low to middle income should be areas of priority in the development of any city extension program or project.

Tema is developed in communities under by the Tema Development Corporation (TDC), in collaboration with the Tema Metropolitan Assembly (TMA). All physical development issues in Tema therefore are referred to the TDC and the TMA. A satellite image urban morphology analysis of the wider Tema area sought to identify vacant or semi-vacant areas potentially suitable for development and/or densification. Several types of spaces that could be considered were revealed, and were categorized as following:

1. Low Density Areas

these are vast patches of sprawled urbanized land, where the estimated density is less than 1000 inhabitants per square km. They could eventually be suitable for densification, infill development or complete redevelopment and city extension planning.

2. Complicated Spaces

These are vacant areas that could potentially be bigger infill developments, but are not very likely to be suitable for development, or are unlikely to be a cost-effective investment. The ones that have been identified are either located adjacent to industrial areas, detached from the residential zones and situated in possibly polluted and unattractive areas, or they are adjacent to the Sakumo Lagoon, in what could be an environmentally protected area, wetlands, or an area prone to flooding.

3. Vacant Spaces

a) small vacant spaces – there are vacant spaces dispersed throughout the built tissue of the city; however, most of these are

presumably not suitable for development, as they could be public spaces, parks, schools, hospitals and similar public use spaces that are recommended to be maintained, particularly in the more densely built areas. b) Big peripheral vacant spaces – located on the northern edge of the urban growth border, these are the focus of the suggested city extensions.

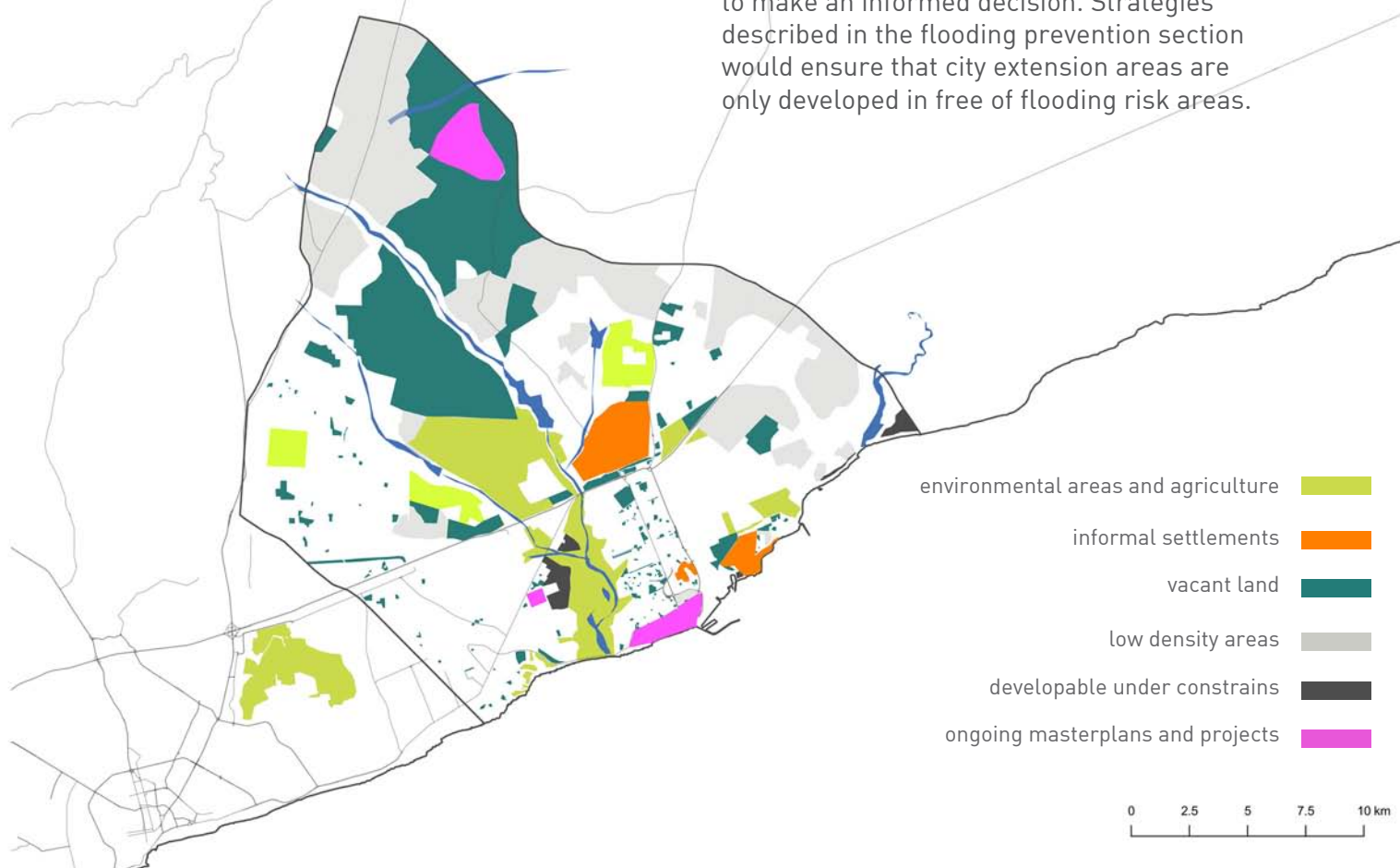
Four potential locations for planned city extensions were identified along the northern edges of the urban growth boundaries of the city. Here the focus is placed on the possibilities for planning city extensions on the two larger vacant spaces. However, we leave open the possibility to develop as well the smaller vacant spaces, which are better positioned as they are closer to the central city, but they are also more environmentally challenging as they are largely covered in agricultural land.

The first potential city extension is situated 15km north from the Tema Port and extends on a total of just under 4,000 hectares of vacant space. This area could potentially house around 520,000 people in a high density urbanization scenario of 150 p/ha, and 280,000 people in a low density urbanization scenario of 80 p/ha. While it is mostly vacant, the area seems to be already in a process of development, as several small residential clusters are dispersed throughout the green areas, attached onto a partially developed orthogonal street network. This opens possibilities for developing a planned city extension based on an already commenced infrastructure. At the same time the existing small residential clusters are presently sprawled and not well connected to the rest of the urbanized environment, which makes their accessibility to basic services expensive or difficult. A planned extension that would envelop and include these developments into a denser, compact urban area could address these problems and enable possibilities for affordable housing. Possible obstacles to developing this city extension are the

An Urban Strategy for the Greater Accra Region

Possible obstacles to developing this city extension are the environmental value of the area which is adjacent to the already polluted and endangered Ashaiman Irrigation Dam area. Moreover, a percentage the area might be prone to flooding and its development would depend on detailed flooding reports, ensuring that built up areas would be protected and at a safe distance of water bodies. The second potential city extension is situated north from the first one, along the opposite side of the Ashaiman Dam Basin. Located 20 km from the Tema Port, the area spreads across a total of 4,200 hectares, and could house around 630,000 people in a high density urbanization scenario of 150 p/ha, and 340,000 people in a low density urbanization scenario of 80 p/ha.

The location is well situated near two major intercity roads offering good transport links, furthermore a major arterial road connecting the nearby Oyibi and Afienya that is currently being constructed is passing right through the potential extension site. Along this road, located amidst the designated extension site, a 940 hectare masterplan (Apolonia City of Light) is already underway, meaning that infrastructure and basic social services are already being brought in the area, making the conditions for additional adjacent planned extensions better and more cost effective. Similarly to the first potential planned extension, the area might be on land with a significant environmental value and valuable natural resources, and a percentage of its area might be prone to flooding, so detailed flooding reports should be produced in order to make an informed decision. Strategies described in the flooding prevention section would ensure that city extension areas are only developed in free of flooding risk areas.





Tema - structuring elements and relevant areas

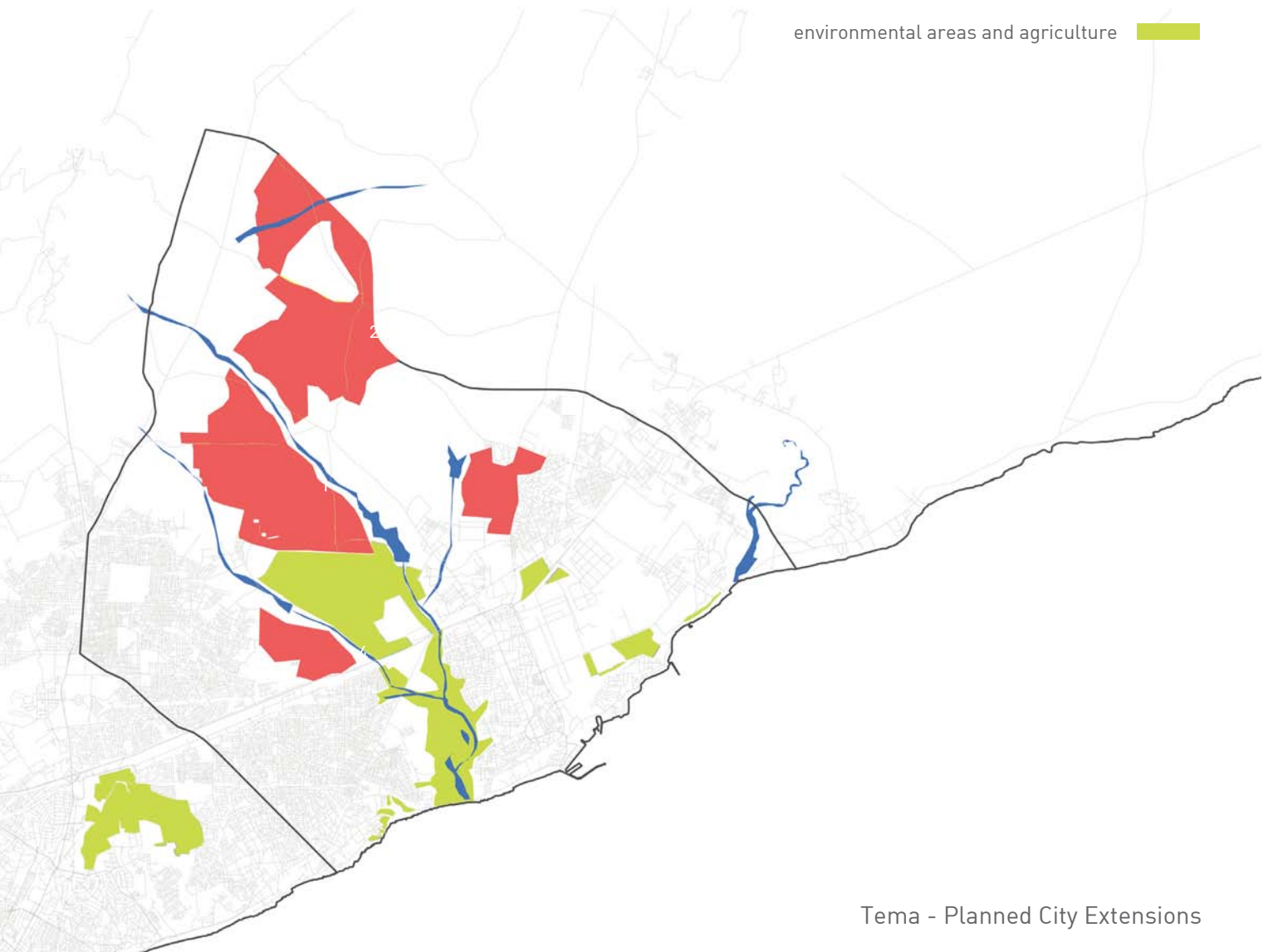
City Extension 1



City Extension 2



Planned City Extensions 
environmental areas and agriculture 



Tema - Planned City Extensions

A.3 - Planned City Extension of Ningo-Prampram

Ningo-Prampram District covers a total land area of about 622.2 square kilometers. The district is located about 15 km to the east of Tema and about 40 km from Accra. The district's proximity to Tema and Accra makes it easy for community members to have access to many social facilities and infrastructure, such as good roads, water, hospitals and electricity.

In 2012, the Ningo-Prampram District was carved out of the previous Dangme West District into Shai Osudoku and Ningo-Prampram Districts by the LI 2132 and the Local Government Act of 1993(Act 462). Upon its formation, the District Assembly is the Planning Authority with the mandate to plan, initiate and implement development programmes at the local level.

Ningo-Prampram is experiencing a drastic population growth coming both from inside and outside the administrative boundaries of the district. Lower land prices in the district are generating a population pressure coming from the west, mostly from the fast growing cities of Accra and Tema. The lack of a concrete spatial development plan for the district is causing the lag of planning behind the current land provision demands. As a result, the area is sprawling into a disconnected continuum of low rise buildings, impeding the provision of affordable water and sanitation services, streets, lightning, public open spaces and facilities.

Ningo-Prampram District represents an unmatched opportunity to respond to the unplanned urban sprawl of the capital and of the whole region. Availability of land and international connectivity along the trans-national corridor from Abidjan to Yaoundé, the prospective international airport and the access to the coastline make Ningo-Prampram a superb location for a priority planned city extension to provide adequate

access to land, housing, economic activities and services for the growing population. This planned city extension, which through the adequate density has the potential to accommodate 300,000 inhabitants during a first stage and over 1.5 million inhabitants in subsequent phases, is a sustainable urban development strategy to address the pressures of urbanization and urban sprawl within the Greater Accra Region (GAR). The fast sprawl that the area is experiencing requires an urgent combined engagement and action from the National and District Government. There is a very limited timeframe to avoid unplanned sprawl and transform Ningo-Prampram into a thriving and prosperous compact, connected, socially inclusive and resilient city, which would be a sustainable development example for the country of Ghana and for the region as a whole.

The proposed planned city extension builds up on the territorial and topographic assets of the district, including the fisheries, the agricultural land and the protected natural areas. It then takes into consideration the future growth direction of the municipalities of Tema, Afiencya, Dawhenya, Prampram, New Ningo and Ningo, with an estimated endogenous population increase of 35,000 inhabitants for 2020, to designate the most suitable areas for extension. Apart from this internal growth, migration is also generating a rapid exogenous increase of population, making it crucial to designate urban areas to fit both internal and external growth. Accra will grow from approximately 2.5 million inhabitants to 4.2 million in the coming two decades, and a large share of this growth is expected to be accommodated in the Ningo-Prampram District.

The selected urban extension area account for 25 sq km with the potential to accommodate 300,000 inhabitants. Nevertheless, there is a larger area of suitable and available land of around 136 sq km that could accommodate up to

1.5 million of new urban residents. The proposal establishes two main city axes; a west-east corridor that runs parallel to the N1 Trans-African highway between the N-1 and the Atlantic Ocean and a north-south corridor, which connects the coastal zone to the prospective location of the international airport.

The proposal is articulated around a central open space of current agricultural land that could evolve in a green space area for the city. The existing structure of Prampram is incorporated and connected with the planned extension. New growth areas are developed around the central park in which prevalent functions begin to appear. In the southwest corner, the fishermen's town of Prampram expands from the existing settlement, providing a new small port and a fish market, activating the economic potential of the area. Also the administrative center is located here, providing access to government services. The southeast corner contains mixed used development where tourism and hotels have become a primary activity, taking advantage of the natural beauty of the Ghanaian coast and offering accommodation and services for national and international businessman and tourists. The University City is located in the northeast angle of the city center, offering residential areas and services for students, professors and researchers, developing innovative agriculture and forestry processes that are tested in the fertile central park and the northern irrigation lands, improving crop production and fostering food security. In the northwest corner, the central station connects the main corridors of the city, creating a new transit-oriented centrality.

The fishermen town and the tourism area are connected by the beachfront boulevard, a high value open public space that provide access to beaches, restaurants and commercial areas, with intertwined housing, office and commercial uses. The Ghana Avenue (main street), which connects the

prospective airport with the coastline, ends up in a high-end business facilities with conference centers overlooking the sea.

At the city scale, the concept proposes a street network layout, with different widths and qualities depending on their location and function. It includes a street hierarchy with arterial routes and local streets based on traffic speed differences and provision of public transportation corridors along the main avenues and streets. This street pattern is not only for vehicles transit, but also for pedestrians and cyclists, promoting the proliferation of street businesses and mitigating GHG emissions, reducing traffic congestion and laying the foundation for safer streets and neighborhoods. The street is the structural element that shapes the urban structure and sets the pattern of the development of blocks, plots, buildings, open spaces and green corridors, structures that support local economy, connectivity, culture, creativity and future developments.

The PCE entails 50% of the land used for public space. Numerous international studies have proved that this percentage of land allocated for public spaces fosters the development of economically thriving cities. From these 50% allocated to public space, 30% is devoted to streets and 20% to squares, parks and open space, with at least 18 km of street length per square kilometer. In order to build an adequately connected grid, at least 80 street crossings per km² are ensured in the planned city extension.

Land ownership is also taken into consideration in the design of the proposal, adapting the extension areas to the different ownership models. There is a vast availability of state land that could be ensured for the project by its designation as a national priority intervention.

An Urban Strategy for the Greater Accra Region

The proposal avoids zoning, and allocates floor space to economic uses inside any neighborhood. It also promotes mixed use and qualifies the different areas of the city according to the various expected densities. Low, medium and high densities are established in accordance with the location of the main axes of the city, topographic features and natural preservation areas. Commercial, residential, administrative and non-polluting light industries are intertwined inside the city, creating functional neighborhoods that can autonomously provide jobs, housing and services to residents. The proposal avoids dividing neighborhoods by highways or hard infrastructures and no more than 10% of the blocks inside a neighborhood have single uses.

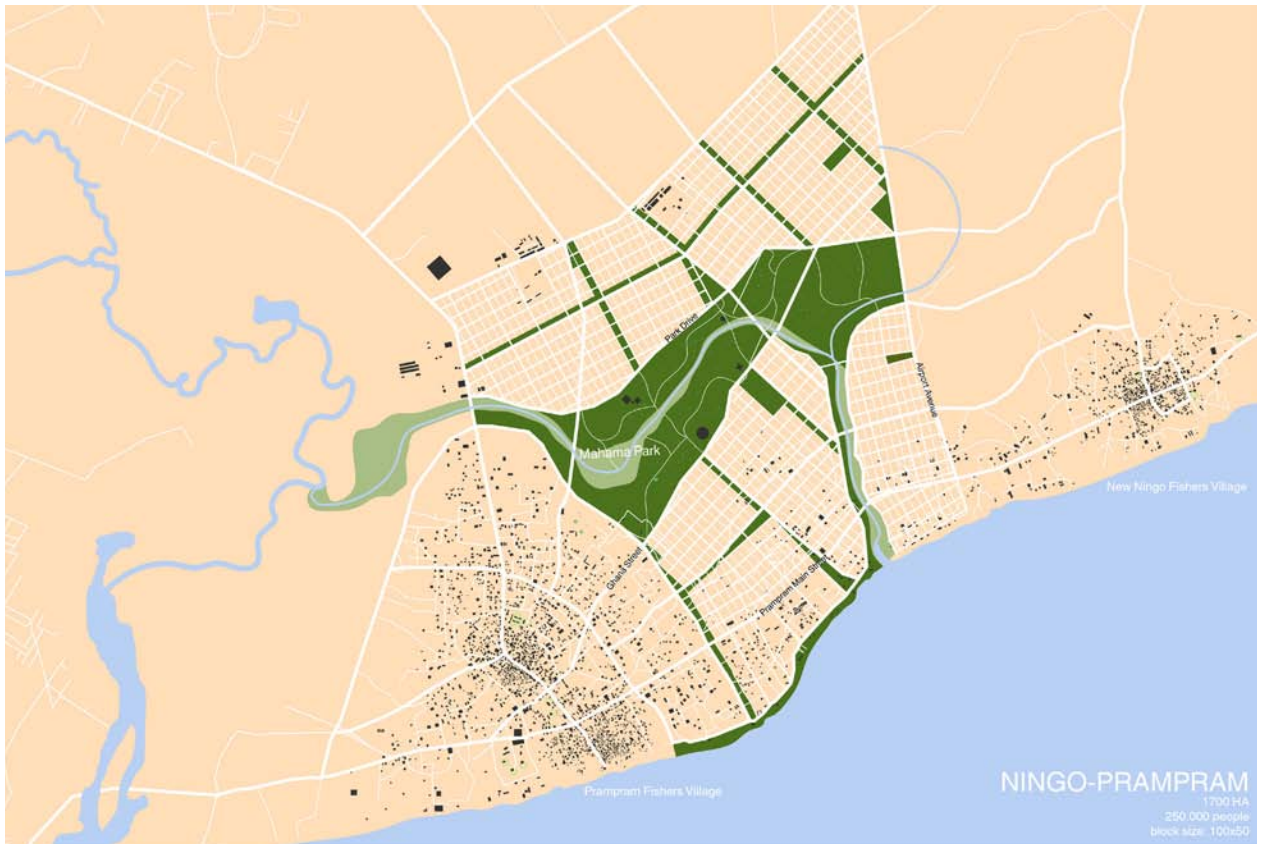
The proposal would integrate a strategy for access to adequate housing, that would ensure that adequate housing is provided for all future city dwellers by conducting a housing rights assessment, a housing needs assessment, a housing market analysis and an affordability gap analysis on the scale of the wider region, in order to determine specific measures to improve affordability levels, productivity, access to finance for supply and demand, and integration with land and infrastructure provision systems.

The proposal would integrate a strategy for access to adequate housing, that would ensure that adequate housing is provided for all future city dwellers by conducting a housing rights assessment, a housing needs assessment, a housing market analysis and an affordability gap analysis on the scale of the wider region, in order to determine specific measures to improve affordability levels, productivity, access to finance for supply and demand, and integration with land and infrastructure provision systems. From the social perspective, the proposal aims at providing equal access to jobs, housing and services, spatially combining rental and ownership housing property

models. Each neighborhood provides a range of different rent levels to achieve integration, reserving a 20 to 50% of residential space for low-affordable income residents.

The PCE also aims at integrating public safety in urban development, promoting social inclusive urbanism that encourages mixed uses and social integration. Institutions and residents would be at the center of an urban policy that promotes social inclusion through education and entrepreneurship, favouring the harmonious living between various social and cultural groups.

Ningo-Prampram - concept visions for a Planned City Extension



vision 1



vision 2

A.4. Affordable Housing for PCE

Urbanization often results in densification in already dense, informal areas. The process of densification leads to sprawl and overcrowding which in-turn reduces the economic viability of the area and expands urban poverty. To prevent informal densification in the PCE, Ghanaian authorities can implement smart growth housing strategies to ensure the areas are sustainably developed. At their core, these smart growth housing strategies will help promote urban renewal in the Greater Accra Region by helping diversify the Accra housing market with affordable housing options that include rental and social housing.

Affordable housing can be an engine for urban renewal through inclusive economic growth. The less income that households spend on high-cost housing will result in additional means to save and spend outside of housing. This will enable greater financial independence and help grow the economy.

Through careful review of zoning rules and building regulations, multifamily housing can accommodate residents of moderate and low-incomes. The provision of such rental and social housing—with connection to utilities and services—will prevent informal settlements in the PCE by offering affordable, formal settlements as viable alternatives. Diversifying housing options in the PCE areas will ensure optimized densification trends and reverse the expansion of urban poverty and sprawl with economic and social regeneration. The smart growth housing strategies will foster inclusive neighborhood participation in everyday social and economic affairs. As a result, this will not only improve economic productivity but also give each household a stake in the success of the community.

Tema is an ideal area to promote affordable housing given the low-density areas with vast patches of vacant and semi-vacant areas.

In addition to the aforementioned study of local zoning and building codes to facilitate multifamily housing, innovative housing finance mechanisms are an additional key component that Tema would be ideal in implementing. Strategic housing finance partnerships between local, municipal actors (Tema Development Corporation and Tema Metropolitan Assembly), the national government (Ministries of Finance and Public Works and Housing) and the financial sector (housing banks, including Ghana Home Loans) can incentivize affordable housing through a variety of fiscal and financial options. Finally, Tema is also ideal in terms of urban design purposes given the area's proximity to community resources, including employment, schools, healthcare, etc. compared to Ningo-Prampram. In summary, there are a wide variety of options that smart growth housing strategies can bring to urban renewal efforts in the PCE areas. UN-Habitat stands ready to provide technical support to facilitate urban renewal efforts through affordable housing.

Housing is one of the most expensive assets any Ghanaian is likely to possess. Formal housing units in Accra are beyond the affordability level of most, including the middle class and especially low-income households. Only 3% of households in the capital city can afford monthly mortgage payments. As a result, housing is a prominent constraint to economic growth and sustainable urban development in the Greater Accra Region. In order to accomplish successful urban renewal in the Planned City Extension, smart growth housing strategies are needed to ensure inclusive economic and the development of strong communities. Through the following steps, the Greater Accra Region can become the housing model in West Africa for an economically prosperous and sustainable urban center.

Smart Growth Housing Strategies

1. Promote diverse mix of housing, including rental and social housing, with connection to utilities and services.
2. Pursue densification strategies for optimal spatial layouts for housing so that residents can coevolve with transportation, employment locations, schooling, green spaces, etc.
3. Expand development rights to protect open spaces and prevent residential overcrowding
4. Encourage civic participation for residents to be community stakeholders and have input on developments in their neighborhood.
5. Prevent informal settlements with formal, affordable settlements

To successfully accomplish urban renewal in the PCE through these smart growth housing strategies, it is critical to examine and act upon several key principles that may expand the provision of adequate and affordable housing.

1. Use rules and regulation - Understanding the impact rules and regulations have upon tenure, cost and livability of housing can help foster changes in institutional and legal arrangements that expand access to affordable housing. For instance, zoning codes can be used to ensure people of all incomes reside in the PCE. Through mixed-use housing, communities will be more economically productive and socially cohesive.
2. Use urban design - The spatial layout of housing is one aspect of urban design that can optimize affordable housing and its location in relation to community resources, such as work, schools, hospital, parks etc. Urban design with a focus on housing can lead to urban regeneration in the PCE by

minimizing barriers to education, healthcare and employment.

3. Use financing mechanisms - Finally, to finance affordable housing in the PCE, it is essential to understand the importance of a diversified mix of rental and social housing in promoting urban renewal. Strategic public and private partnerships can promote affordable housing development investments that benefit the region as a whole.

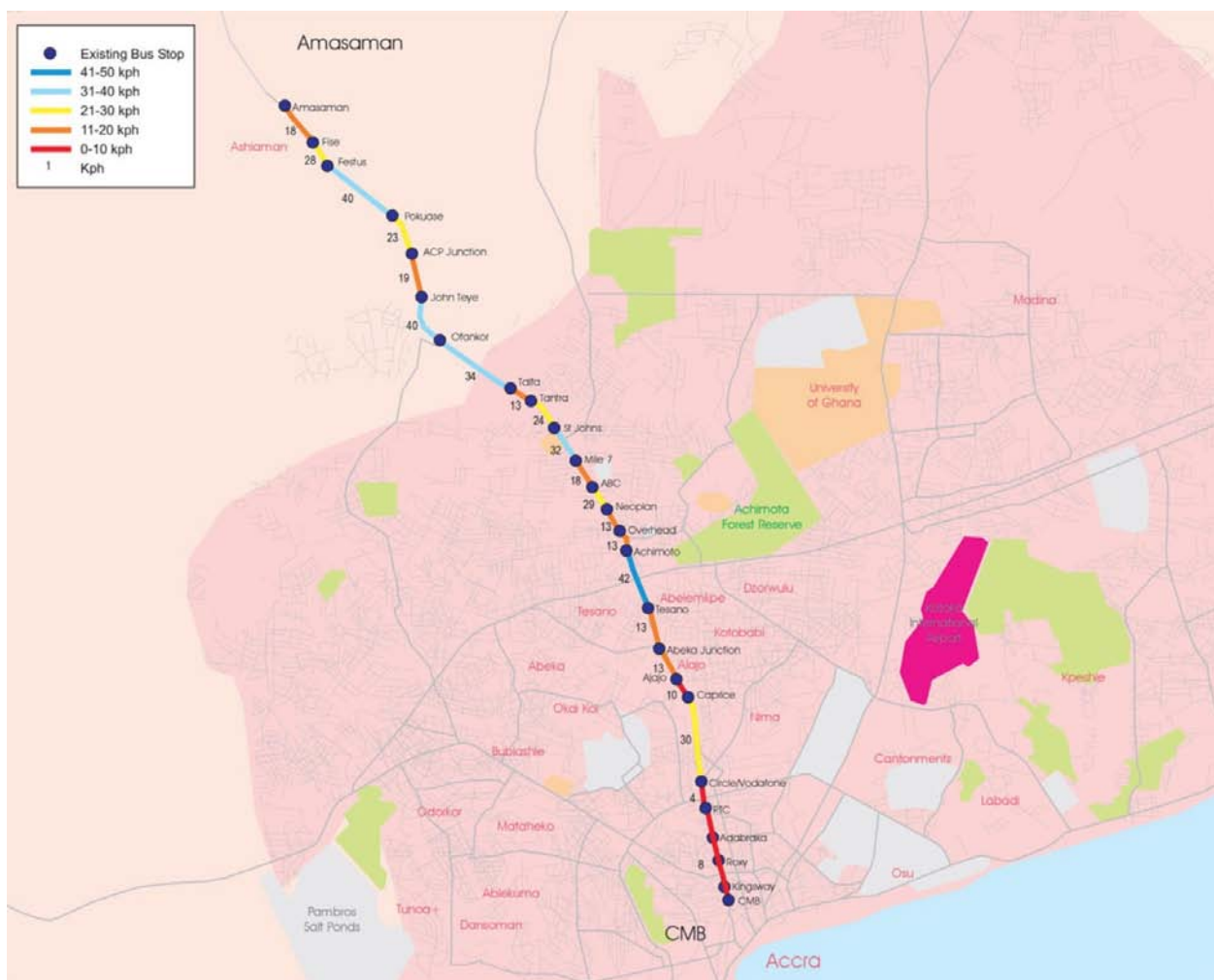
By adhering closely to these three principals for planned urbanization, these smart growth strategies will help the Greater Accra Region will undergo strong urban renewal through the provision of affordable housing for all.

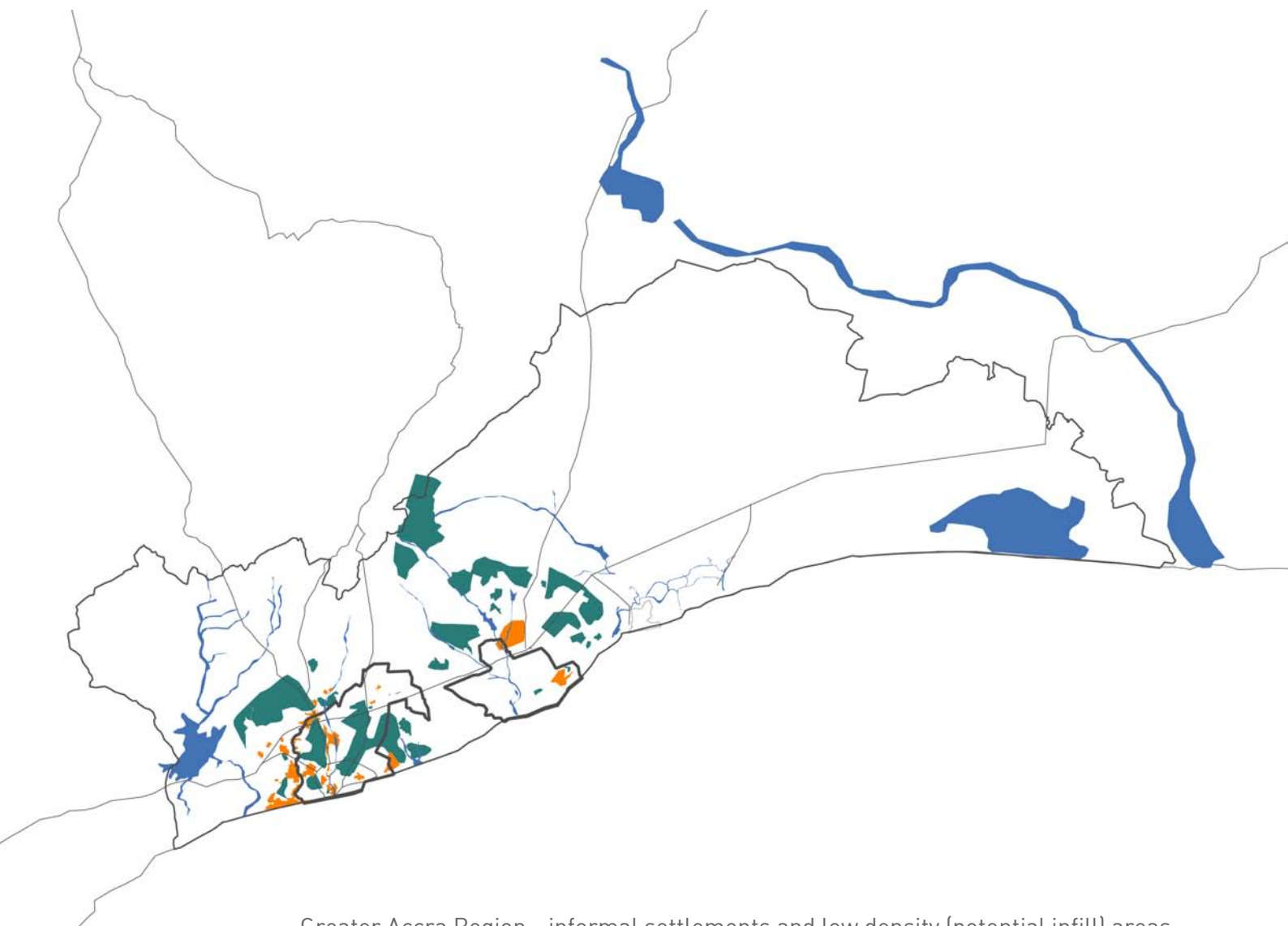
An Urban Strategy for the Greater Accra Region

Transportation



The densification strategy for the Greater Accra Metropolitan Region (GAMA) would take advantage of the BRT bus lines implemented as part of the Ghana Urban Transport Project which commenced in 2007. The project is financed in partnership with Agence Francaise de Developpement, the International Development Agency (World Bank) and the Global Environmental Facility.

The project's objective is to enhance mobility and affordability of bus transport services through the implementation of a major transportation corridor, which would promote a shift to environmentally sustainable urban transport modes and encourage lower transport-related GHG emissions in Accra.





Greater Accra Region - informal settlements and low density (potential infill) areas

low density areas 
informal settlements 

A5. Legal framework of PCE Planned City Extension of Accra

The Accra Metropolitan Assembly has responsibility for planning and development control of all infrastructure. This involves the adoption of a plan covering the metropolitan area that should be produced by the Authority and considered by the Metropolitan Planning Board. The Assembly also has the power to adopt rules or by-laws for the planning area, subject to approval by the Minister for Local Government.

Proposed project areas 1 and 3 both involve land held by the State or by State corporations. This may be politically challenging if a project is initiated at the Metropolitan level, but may be easier to manage if either area were declared a special purpose territory. That would allow for central government management of the land acquisition process and for the establishment of a statutory development corporation as the project delivery vehicle. The necessary planning decisions could be made without the special purpose territory, through adjustments to the Metropolitan Development Plan, but this would not provide an obvious delivery mechanism and could lead to less coherent development. A third option, of negotiating the purchase of the land in sites 1 and 3 with the relevant state institutions is not considered, as this would be both expensive and might still require central government intervention to change the conditions under which the land is held. Proposed project area 2 is already occupied to some extent and would require an effective mapping of the land tenure rights that exist in the area.

This is particularly important because of the historical correlation between informality and traditional land tenure in many parts of the city. It could be developed as a voluntary project under the Metropolitan Development Plan, and, therefore, avoid major expropriation and allow for some alternative land and development based financing tools. However, this could be time consuming and highly unpredictable due to the need for consensus. Depending upon the exact nature of the existing settlement, Ghana's recognition of 'slum upgrading schemes' for the reconstruction of built up areas may become relevant. These are complex inter-ministerial structures developed under plans approved by the Minister responsible for planning. Where there is a particular economic imperative, the National Development Commission has the power to request the President, through the Minister, to establish a 'special development area', which allows for the establishment of a dedicated planning authority. This has the advantage of central government engagement and resources but, in the case of a regeneration within the boundaries of Accra, may be too dislocated from the Metropolitan Assembly. As in most cases of specific large scale development projects, the establishment of a statutory corporation is probably the most effective project delivery vehicle and this is most easily achieved when linked with the recognition of a special purpose territory.

Legal Framework for Planned City Extension of Tema

Tema is governed by the Tema Development Corporation under the Tema Development Corporation Instrument, as amended to 1989. The Corporation has a 125 year lease (expiring 2077) on the 'Tema Acquisition Area', in which it has, in partnership with the Tema Metropolitan Assembly, responsibility

for planning, housing, infrastructure and related matters. The housing and site and service projects of the Tema Development Corporation both appear to focus on low density middle to upper class, with even 'affordable housing' options having limited relevance for the poor. There also appears to be a significant history of informality bordering the formally planned residential and industrial areas of Tema.

Tema site B appears to be the subject of the latest site and service scheme undertaken by the Tema Development Corporation, known as Community 24, which is the seventh such project in the area. It is assumed that Tema site A also lies within the boundaries of the Tema Acquisition Area, although this is subject to confirmation.

Legally, the Government has two options if it decides to change the urban development strategy of Tema significantly. Option 1 is statutory change by amending the Tema Development Corporation Instrument and then either negotiating with the Municipal Assembly or imposing a central government driven planning instrument. This approach would be time consuming, expensive and probably highly contested. Option 2 is to negotiate with the Tema Development Corporation and the Municipal Assembly to adopt a higher density approach to the remaining land available within the Tema Acquisition Area. There does not appear to be any legal bar to such a negotiation, although further research would be required to identify the scope of financial authority available to the Development Corporation in its projects.

Legal Framework for Planned City Extension of Ningo-Prampram

Ningo-Prampram presents the simplest legal scenario of the three potential project sites. This is because it is a contiguous single administrative unit governed by a District Assembly. To approve a planning instrument,

the District Assembly would need to adopt a district development plan to accommodate the specific project and, possibly, to adopt any subsidiary plans that might be required.

In law, these plans are envisaged as being developed by the District Planning Board and the Development Planning Sub-committee before being proposed for adoption. However, this does not appear to be a requirement. Subject to approval by the Minister for Local Government, the District Assembly also has powers to issue rules or by-laws, and these would be adequate to provide for the regulation of plans.

There are three important issues that would need to be addressed to assess the feasibility of a Ningo-Prampram based project. The first issue affecting feasibility is the financial model for the project. If this includes significant public funds, there is a risk of a District based planning and regulatory approach not being sufficiently coordinated with national financial planning. This is most easily addressed by establishing a Ningo-Prampram project as a 'special purpose territory', in the same manner as the Tema Acquisition Area, which would allow for the establishment of a development corporation and, therefore, some direct central government responsibility. This approach might also be useful if significant private investment, without direct development control, was projected. If the financial model is more independent at the District level, this will not be necessary.

The second issue affecting feasibility is the question of the significant areas of Stool Land in Ningo-Prampram, including in the proposed project site. Options for the alienation of plots will be limited if the Stool Land status is maintained, and the use of land based financing instruments will also be curtailed. Land can be 'de-stooled' by the national government but, in practice, this will be subject to the level of support for the project among traditional authorities.

This may also be a further reason for the establishment of a special purpose territory, as it makes the public justification for de-stooling clear, while also emphasising the national priority attached to the project. If the project has widespread local support, de-stooling may not be a concern, and might be driven locally. This could be supported by the active use of land tools for enumeration and the mapping of household use rights and interests in the area.

The third issue affecting feasibility is the presence of land belonging to state corporations. If this land has been allocated by statute, the process for changing its use may be cumbersome and subject to political pressure. If the land has been acquired as a private asset in the course of the state corporations' activities, it is technically straightforward to make it available, if subject to the necessary political will to make the transfer actually happen. Further considerations may be explored as the financial model and project implementation mechanism for any project are developed.

A6. Economic Analysis for Planned City Extensions

a. Infrastructure costs and scenarios

Current levels of infrastructure are highly underdeveloped, water supply, water collection, sewage and waste require considerable investment. The estimated growth of 1 million people, equivalent to 200,000 households (assuming 5 person per household), will require at least 1.8 billion GHC (at \$3,000 per household), equivalent to US\$ 500 million, almost five times the annual municipal budget.

In order to estimate cost scenarios for the three areas, we have applied the following basic parameters suggested by the Planned City Extension design.

Applying the same variables, but calibrating for population growth, basic estimations were obtained. Costs of roads are based upon US\$300,000 for one lane paved road per km or US\$3million for roads in one squared kilometre (sq km) of constructed area at 15,000 people per constructed sq km (not against total area of land which is only 112 people per sq km). Road costs in Ghana were estimated at US\$1,600 per five-person household. In a low density scenario a 20 per cent higher cost was estimated, but there are several options for road quality and size (quality will have to be accounted for in a more complex study). Altogether the cost is set a US\$5,300 per five person household which provides a general indication.

Cost estimations for the PCEs

Low density and high density cost are obtained by $(\text{projected population}/5) \times (\text{cost per household})$. These estimations assume that for low density paved road costs increases in 20 per cent.

ACCRA	sqkm	%	
Total Planned City Extensions Area	27.4		
Density	15,000		
Population	411,150		
Street Area	8.2	0.3	
Public Space	5.5	0.2	
Average block area	9,375	125x75 sqm	
Average plot size	175	17.5x10 sqm	
Economic Floor Area	11.0	0.4	
Commercial Units	219,280	50	
Residential Floor Area	13.7	0.5	
Number of Dwelling Units	102,788	4	
Affordable Housing Units	25,697	0.25	
Open market housing Units	77,091	0.75	

The analysis of planned city extensions (PCE) in the three regions in the tables below indicates that since revenues will be insufficient to cover the costs of PCE in the three areas, there needs to be a source of development fees or taxes beyond the annual budget.

The following issues need to be considered:

- What is the added cost of the infrastructure compared to overall construction costs?
Infrastructure costs decrease with density. From this perspective starting the PCE with Accra and then for Tema and Ningo-Prampram in three phases may be economically efficient rather than building three areas at once. The quality of construction or specific types of infrastructure requirements must also be taken into account; a theatre, a monument, or logistic facilities may change the costs and financing.
- Based on the assumptions provided by PCE, the cost of 100 square metre plot of land is equivalent to US\$30,000 plus construction, this would yield an average three room apartment value of \$50,000. The cost of infrastructure would be one-time ten per cent costs of total value.
- Statistics from Accra shows that families live with less than US\$200 per month. So houses cannot be paid for by families but will need a grant component. This must be part of the investment model to be designed for residential buildings.

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Item	cost/househod USD	Accra 1		Accra 2		Accra 3	
	Average size 5 people	Low Density	High Density	Low Density	High Density	Low Density	High Density
		98,160	184,050	72,160	135,300	16,960	31,800
Piped Water	2,000	39,264,000	73,620,000	28,864,000	54,120,000	6,784,000	12,720,000
Sewage	1,500	29,448,000	55,215,000	21,648,000	40,590,000	5,088,000	9,540,000
Drainage	200	3,926,400	7,362,000	2,886,400	5,412,000	678,400	1,272,000
Primary Roads Paved	1,600	37,693,440	58,896,000	27,709,440	43,296,000	6,512,640	10,176,000
	5,300	110,331,840	195,093,000	81,107,840	143,418,000	19,063,040	33,708,000

A. Accra

Item	cost/househod USD	Tema 1			Tema 2	
	Average size 5 people	Low Density	High Density		Low Density	High Density
		279,491	524,046		337,266	632,378
Piped Water	2,000	111,796,400	209,618,400		134,906,400	252,951,200
Sewage	1,500	83,847,300	157,213,800		101,179,800	189,713,400
Drainage	200	11,179,640	20,961,840		13,490,640	25,295,120
Primary Roads Paved	1,600	107,324,544	167,694,720		129,510,144	202,360,960
	5,300	314,147,884	555,488,760		379,086,984	670,320,680

B. Tema

Item	cost/househod USD	Ningo-Prampram	
	Average size 5 people		
		300,000	
Piped Water	2,000	120,000,000	
Sewage	1,500	90,000,000	
Drainage	200	12,000,000	
Primary Roads Paved	1,600	96,000,000	
	5,300	318,000,000	

C. Ningo-Prampram

b. Revenue Estimations for Strategy

Municipal Finance

Accra municipality revenues come mainly from “Other revenues”: i) sales of goods and services, ii) property income, iii) fines, and iv) miscellaneous. Revenues also come from taxes, where property taxes and taxes on sales of goods and services are the main sources (see “Revenue generation”). The municipalities also receive grants provided by The District Development Fund (DDF) which is a donor by the government of Ghana to provide funding to municipalities (see next table on revenue generation performance).

Revenue Scenarios in Accra, Tema and Ningo-Prampram

For Accra Metropolitan region three sites for transformative interventions could be identified, accounting for an area of 27.4 square kilometers in total, which – when developed - can accommodate a population of 411,150 people. The development plan provides for the construction of 102,785 dwellings.

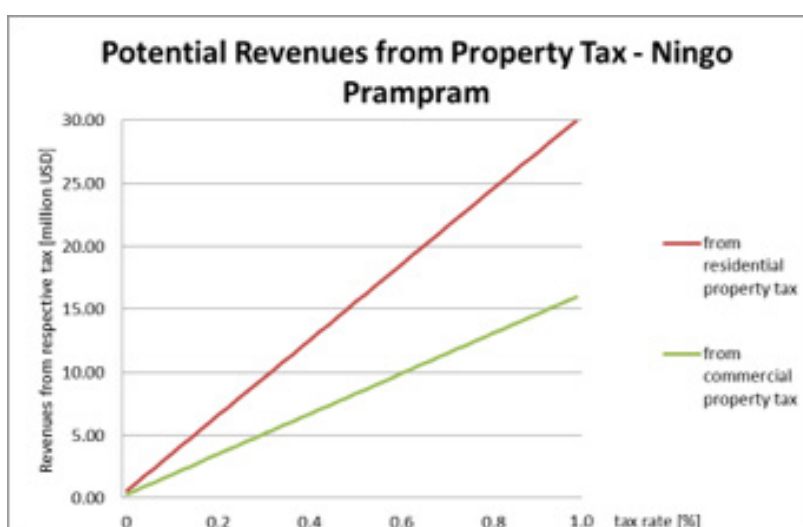
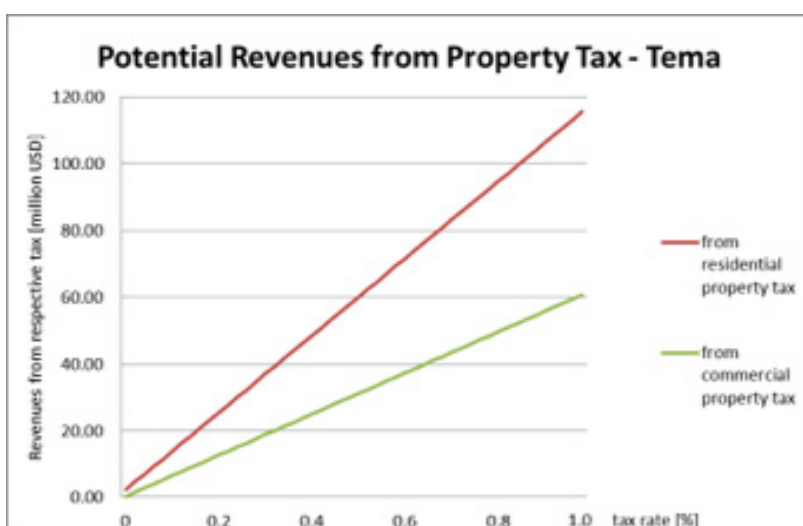
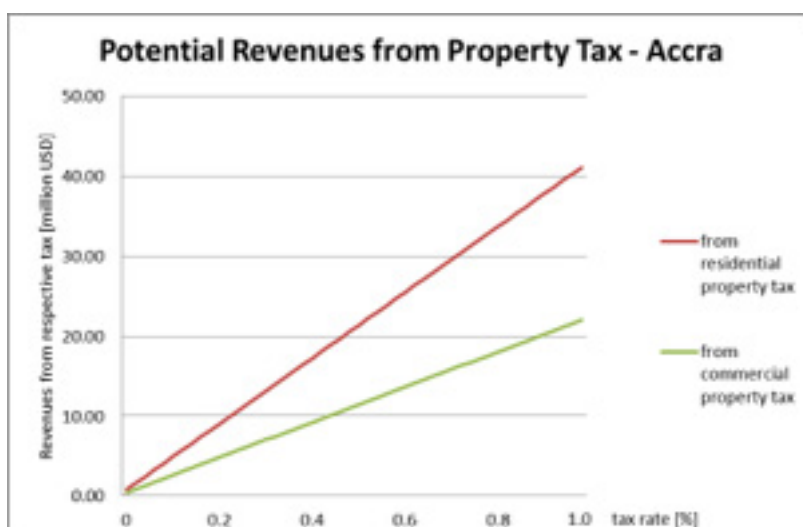
The following chart shows the potential revenues from taxing the projected properties in the Accra Metropolitan region depending on the tax rate. The estimations of revenues are based on the assumption that the average property values in this area will be similar to the average values in the Greater Accra region, as the development plan provides for both affordable and open market properties. The estimation of a per square meter value for residential properties of US\$ 300 is based on UN Habitat assessment on housing prices in both informal settlements as well as middle and high class neighbourhoods.

Additionally to the revenues from taxing residential properties, the chart also shows revenues that can be generated by taxing properties for commercial use. The development plan for the Accra metropolitan

region provides for the construction of more than one commercial unit per two residents, each of which accounts for some 50 square meters. For the tax revenue simulation the average per square meter value of commercial units is estimated at US\$ 200.

The tax rate used in this simulation is the effective tax rate on the average per square meter value of property. Depending on how the property value per square meter differs between property types, the average tax rates can be generated through a strategic setting of a differentiated tax rate. Assuming a per square meter value of US\$ 200 for the affordable housing units and US\$ 340 for open market houses, the more expensive property type could be taxed with a tax rate of 0.7per cent and the affordable type on 0.2per cent. On average one square meter residential property would be taxed on 0.575per cent but the tax rate on the average per square meter value would be 0.618per cent. Beside its distributive effects, this strategic tax rate setting can be an incremental tax and lead to the higher revenues the more the housing values and housing sizes differ between income groups.

The planned city extension for Tema provides for a population of 1,156,200 with similar requirements for residential and commercial units like in the development plan for metropolitan Accra. The potential revenues from residential as well as commercial tax are shown in the following chart. Again the calculations are based on the assumption of an average residential property value of US\$ 300/sqm and a commercial property value of US\$200/sqm.



The potential revenues demonstrated in the tax revenue simulations for each development site are the total revenues that can be generated when the planned dwellings are already constructed and occupied or at least possessed individuals. The revenues are smaller during the implementation of the development plan, but will increase every year until they finally reach their potential.

Under the assumption that the number of completed buildings, residents and workers grows continually during the implementation period, the average annual revenues from property tax would be only half of the revenues after completion shown in the charts. Considering these non-constant revenues during the phase of implementation is especially important under the aspect of debt financing and scheduling expenditures.

The development of sites for transformative interventions in Ningo Prampram is projected to create room for accommodating 300,000 people. In the following the results of the tax revenue simulation are demonstrated (again under the assumption of residential property values of US\$300/sqm and commercial property values of US\$200/sqm).

However, the importance of a precise and continually updated registration and valuation of property has to be emphasized. After assessing a newly developed property at the stage of its completion and sale, regular follow-up valuation is necessary to tap revenues in the long term. The assessment of an annual property value increase of 3 per cent for both residential and commercial properties in Ningo-Prampram would result in additional revenues of US\$ 33.7 million in total over ten years compared to the revenues in case of not continually updated property valuation (with an average tax rate of 0.5 per cent on both kinds of property and with otherwise the same assumptions as above). Instead of generating on average US\$ 23 million each year from

property taxation, the assessment of this realistic figure for increase in property value would result in average annual revenues of US\$ 26.4 million for this period of ten years.

c. On Urban Strategy

To achieve the urban strategy for the Accra Metropolitan Assembly (AMA) follows seven strategic directions, namely: 1) ensuring and sustaining macroeconomic stability; 2) enhancing competitiveness in Ghana's private sector 3) fostering accelerated agriculture modernization and sustainable natural resource management 4) enhancing oil and gas development; 5) infrastructure, energy and human settlements, 6) and human development, productivity and employment and 7) promoting transparent and accountable governance.

The strategic directions are completed with further priority areas to ensure the successful realization of the vision of New Accra. These priorities needs further development, include areas such housing, agriculture, water, education, health and waste management.

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<i>2-year Summary Revenue Generation Performance 2012 / 2013</i>							<i>In GHc</i>
<i>Revenue Item</i>	<i>2012 Actual Collection</i>	<i>Approved Budget 2013</i>	<i>Revised Budget 2013</i>	<i>Actual Collection 2013</i>	<i>Variance</i>	<i>% Perf</i>	<i>Projected 2014</i>
Administration, Administration (Assembly Office), Head Office							Accra Metropolis - Accra
	0.00	0.00	0.00	0.00	0.00	#Num!	0.00
	0.00	0.00	0.00	0.00	0.00	#Num!	0.00
Taxes	3,033,562.19	0.00	0.00	0.00	0.00	#Num!	11,553,696.00
111 Taxes on income, property and capital gains	0.00	0.00	0.00	0.00	0.00	#Num!	8,000.00
113 Taxes on property	2,643,499.53	0.00	0.00	0.00	0.00	#Num!	6,305,000.00
114 Taxes on goods and services	390,062.66	0.00	0.00	0.00	0.00	#Num!	5,165,696.00
115 Taxes on international trade and transactions	0.00	0.00	0.00	0.00	0.00	#Num!	55,000.00
Grants	0.00	0.00	0.00	0.00	0.00	#Num!	69,608,006.00
131 From foreign governments	0.00	0.00	0.00	0.00	0.00	#Num!	
132 Non Governmental Agencies	0.00	0.00	0.00	0.00	0.00	#Num!	128,072.00
133 From other general government units	0.00	0.00	0.00	0.00	0.00	#Num!	69,479,934.00
Other revenue	7,497,653.97	0.00	0.00	0.00	0.00	#Num!	15,538,640.00
141 Property income (GFS)	993,056.33	0.00	0.00	0.00	0.00	#Num!	3,230,000.00
142 Sales of goods and services	5,532,509.06	0.00	0.00	0.00	0.00	#Num!	10,968,490.00
143 Fines, penalties, and forfeits	652,273.58	0.00	0.00	0.00	0.00	#Num!	710,500.00
145 Miscellaneous and unidentified revenue	319,815.00	0.00	0.00	0.00	0.00	#Num!	629,650.00
Grand Total	10,531,216.16	0.00	0.00	0.00	0.00	#Num!	96,700,342.00

Although Accra is not an agro-based economy due to scarcity of fertile farmland, there are pockets of small scale agricultural activities within the Metropolis. To support these activities, emphasis are put on promoting market gardening (vegetable cultivation) and comprehensive environmental greening projects.

It is estimated that only 21.4 per cent of the estimated annual need of housing units (25,000 units) is produced in the Metropolis. There is, therefore, an accumulated backlog of 300,000 units, which are needed to reduce congestion in existing housing facilities in the metropolis. This situation has created strains in the existing housing stock and infrastructure. The housing needs of Accra's urban inhabitants are often restricted

to sub-standard structures, unsanitary environments and squatter and slum communities. Currently, there are about 29 squatters and slum communities in the City. The implementation of slum-upgrading projects will be continued to alleviate the hardships faced by slum-dwellers.

d. Conclusions and Policy Issues On Urban Economy

The feasibility of the three expansion areas will depend on the industries and services the central government and municipalities are able to promote. A combination of tourisms, logistic hubs and services may have success depending on an appropriate productive assessment and market analysis which is not part of this analysis and must be

done in order to assess potential sectors.

On Revenues and Taxes

The PCE in any of the three expansion areas cannot be funded by future residents with a monthly income of US\$ 200 per month. So an integrated policy at municipal level with proper investment strategy and land value capture is necessary.

External funding can be obtained from development banks or public private partnerships, though the latter must be assessed for conditions, legal framework and projects. For endogenous funding, land value capture must be part of the strategy from the outset by designing Development tax and Infrastructure levies, as well as “capital gains tax” for improved land coming from increase in land value.

On Land Registration

A proper system of zoning or property valuation is necessary to increase revenues. Currently property valuation is outdated with large differences in same cities. Current collections from a population of 1.7 million people are just under US\$2 million or US\$1 per person while annual expenditure is US\$19 per person. Funding this gap is part of the investment strategy.

A tax coverage of one third of the expenditure from local income, the revenues would be about US\$12 million which is close to the project income from land tax from residential areas. Effective tax collection is critical to provide better services. At the same time, the business community is likely an untapped property tax resource.

On Economic Analysis of Planned City Extension

Infrastructure costs decrease with density. From this perspective starting the PCE with Accra and then moving on to Tema and Ningo-Prampram in three phases may be more economically efficient than building three areas at once. However the quality of construction or specific infrastructure

requirements should be taken into account: a theatre, a monument, or logistic facilities may change the costs and financing.

Tax estimations indicated in this paper also are static, and don't take into account future population increases resulting from the economic strategy. This in turn will expand collections from residents, commercial establishments and industries. So, the different tax level must consider that dynamic effect into account. Finally, the task ahead for a complete economic study is pending once the city layout with facilities is decided. Several exercises are pending on the cost side such as net present value and residual land value, discount factor and cost of capital, internal rate of return (IRR) and discounted payback, with this analysis a more advanced feasibility analysis must be accomplish. On the revenue side, land registration and property valuation system is necessary with a transparent and permanent update system, then taxes on properties must be adjusted and continuously updated. On the productive side, costs and revenues, must be aligned not just for population growth, but also for economic expansion and sector potential.

This paper provides a first approach to economic potential and feasibility as a base for initial strategies on urban expansion in Accra, Tema and Ningo-Prampram.

e. Potential Revenues from Sale of Public Land

The estimations are based on medium land prices in the three areas of development (the basic prices and shares of land owned by the local government were provided unofficially by the counterparts). The underlying assumption is that privately owned land can be bought by the government to develop it and after development be sold at a price that the sale results in a break-even result (there are several models for land acquisition, leasing and others, we assume that land is just sold).

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Financial costs and potential value changes are thereby not directly considered. Following this simplification, for the government neither expenditures nor revenues result from purchase and sale of currently private land. Land that is only during the period of development in public hands can thereby be neglected when calculating the surplus created in the government's land sale.

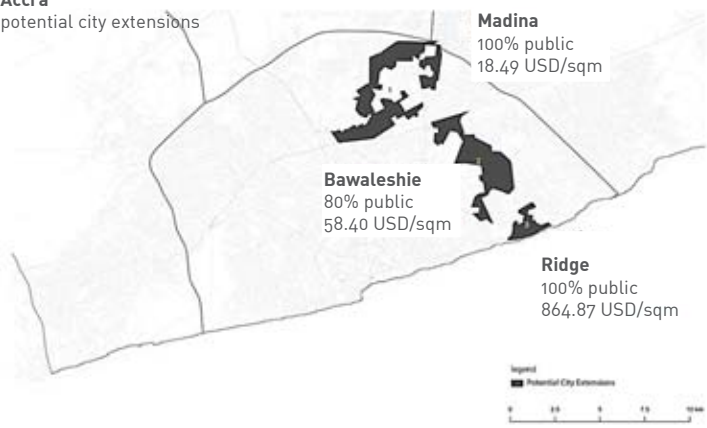
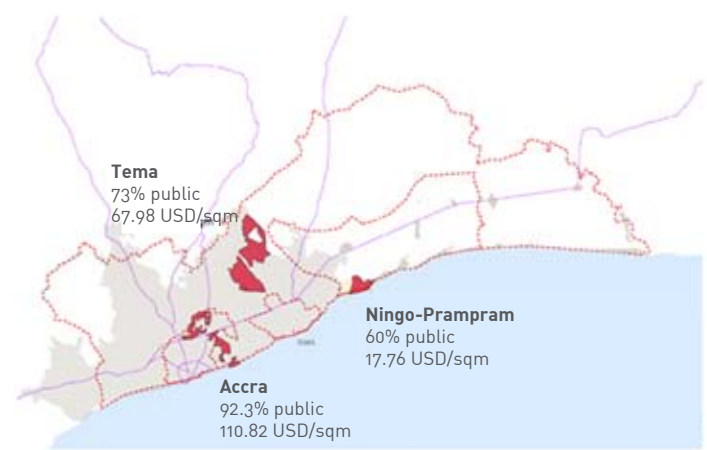
This is only the fact, as long as the share of land which is currently in private hands does not extend the projected share of residentially and economically used space. If the amount of currently private land, however, extended the amount of projected private land, land would have to be bought by public hand to be converted to public land, resulting in expenditures. Land prices vary widely between the different sites of development. In the sites in Accra metropolitan region the medium per square meter price is 110.82 USD while a square meter land on the site in Tema costs 67.98 USD and in Ningo-Prampam even only 17.76 USD.

At present 92.3% of the land for development in Accra are in public hands (75% in Tema and 60% in Ningo Prampam). Therefore, in all three areas public land currently accounts for a larger share than the share of land






projected to be publicly owned after the site development. The development strategy for the three areas provides for private owners to hold a share of 45% of the total developed land for residential and economic use.

Therefore in Accra revenues can be generated through the sale of 37.3% of the total land from government to private owners (20% in Tema and 5% in Ningo Prampam). As the land prices in the three development sites in Accra differ strongly and the proportion of public and private land varies between the three sites, for Accra revenues should be calculated for the three sites separately before totaling them up. This results in total revenues of 1,058'901,245 USD (US\$1.05 billion) for the sale of public land in development plots in Accra. In Ghana the total revenue of the central government in 2011 was US\$ 8.8 billion. The land prices within the sites of development in Tema and Ningo Prampam are more uniform, so that the revenues can be calculated with the average land price for the respective site. For Tema this results in revenues of 1,047'979,680 USD and in Ningo-Prampam in revenues of 15'096,000 USD.

Potential Revenues from Sale of Public Land

<p>Accra</p> <p>Madina: sale 45% of 1227ha land from public to private (at 18.49 USD/sqm) Revenues: Bawaleshie: sale of 25% of 902ha land from public to private (at 58.40 USD/sqm) Revenues: Ridge: sale of 45% of 212ha land from public to private (at 864.87 USD/sqm) Revenues: Total revenues: 1,058,901,245 USD</p>	<p>Accra potential city extensions</p>  <p>Madina 100% public 18.49 USD/sqm</p> <p>Bawaleshie 80% public 58.40 USD/sqm</p> <p>Ridge 100% public 864.87 USD/sqm</p> <p>Legend Potential City Extensions</p> <p>0 10 20 30 40 50 60 70 80 90 100 km</p>
<p>Tema</p> <p>sale 20% of 7708ha land from public to private (at 67.98 USD/sqm) Revenues: 1,047,979,680 USD</p> <p>Ningo-Prampram</p> <p>sale of 5% of 1700ha land from public to private (at 17.76 USD/sqm) Revenues: 15,096,000 USD</p>	<p>Areas for Potential Planned City Extensions</p>  <p>Tema 73% public 67.98 USD/sqm</p> <p>Ningo-Prampram 60% public 17.76 USD/sqm</p> <p>Accra 92.3% public 110.82 USD/sqm</p>

An Urban Strategy for the Greater Accra Region

					
	connectivity	land ownership	land availability	administrative issues	natural constraints
accra	<ul style="list-style-type: none"> _Kotoka Airport _Transafrican Highway N1 _N4 road _doastline 	<ul style="list-style-type: none"> _most of land owned by state (the university of ghana, accra airport, military academy, forest reserve) 	<ul style="list-style-type: none"> _30 sq km vacant land available 	<ul style="list-style-type: none"> _all of the extensions are mostly outiside of Accra municipal border, would take involvement and collaboration between districts 	<ul style="list-style-type: none"> _high-risk flooding areas _natural reserves _wetlands _parks _forrest
tema	<ul style="list-style-type: none"> _Tema port _R40 road _no direct connection with national roads _far from the port and the industrial area _far from CBD 	<ul style="list-style-type: none"> _land managed by TDC that developes high end housing _Property combines private and public ownership 	<ul style="list-style-type: none"> _80 sq km vacant land available 	<ul style="list-style-type: none"> _none of the PCEs are within the Tema municipal border, would take involvement and collaboration between districts 	<ul style="list-style-type: none"> _potentially flood prone areas _wetlands _agricultural lands _livestock lands
ningo-prampram	<ul style="list-style-type: none"> _Transafrican Highway N1 _coastline _prospective future airport in the district _proximity of the Central University 	<ul style="list-style-type: none"> _state ownership of land along the transafrican highway _around 50% of land belongs to Stools of Prampram and Ningo 	<ul style="list-style-type: none"> _95 sq km vacant land available 	<ul style="list-style-type: none"> _land is inside the Ningo-Prampram District Assembly _existing political initiative and engagement _Presidential Decree would facilitate the process through National Priority Project _best legal scenario 	<ul style="list-style-type: none"> _high value agricultural land is part of the proposed city extension _availability of land to plan flood prevention infrastructure _fisheries _wetlands

B1. Transformation of the city centre with key projects

The main transformative projects could reshape special interest areas, that can be selected based on their strategic location, problematic character, transformative potential, infrastructural, social, political or cultural meaning. Some examples of locations for the transformative projects include:

- Jamestown
- Korle Lagoon
- Independence Square and Marine Drive
- Airport Area
- Aishaiman, Ga Mashie, Nima, Agbogbloshie and Old Fadama.
- Military Training School
- Center for National Culture area



B2. Informal Settlement Upgrading

Informal settlements are a major challenge in the GAR. Rapid urbanization, inadequate public policies and unequal distribution of wealth, as well as lacking planning in advance and provision of affordable housing and basic urban services have led to the formation of informal settlements. The informal settlements are growing rapidly. In 2011, 1.6m million out of 4.3 million people in Accra were living in informal settlements occupying 15.7 percent of the land. The population density of informal settlements in Accra is on average 607.8 people per hectare, which is considerably higher than the population density for the city as a whole (250.7 persons per hectare).

Accra had more than 80 informal settlements and poverty pockets in 2011. This is expected to have increased in numbers until today. The settlements are mostly located on unused government land and sometimes on privately owned land. Some of the settlements are found in precarious locations such as along the sea, railway lines and others on open spaces as well as in deteriorated areas in the city centre. The map below shows the location of the informal settlements in the AMA region in 2011.

Informal Settlement Typologies

Informal settlements are often less likely to be prosperous and situated in precarious locations that are often subject to environmental, climate change and natural disaster impact and further spatially and physically segregated from the rest of the urban environment and thus excluded in terms of economic, social, health and educational opportunities. Informal settlements come in many forms. The quality of dwellings in such settlements varies from the simplest shack to permanent structures, while access to water, electricity, sanitation and other basic services and infrastructure is usually limited. In Accra and Tema, informal settlements are classified based on their tenure security.

In the city of Accra, it is estimated that 65 percent of the population has secure tenure status mostly on public land and 35 percent are in “infancy status” and on contested land. The informal settlements on public land present strategic entry-points for the suggested interventions below. Communities on secured land are more cohesive and organized for upgrading action.

Towards Informal Settlement Upgrading

There is political momentum to tackle informal settlements in Ghana. The Housing Policy was reviewed and launched this year. Informal settlement upgrading and the provision of affordable housing are a priority in the policy. It recommends the establishment of a National Housing Authority and a National Housing and Informal Settlement Upgrading Fund to operationalize the policy. Further, national and citywide informal settlement and prevention strategies are drafted and require road maps for implementation. It is important to endorse and equip the strategies with more adequate financing. A first city-wide participatory informal settlement upgrading strategy was formulated for Accra in partnership with UN-Habitat and the Participatory Slum Upgrading Programme (PSUP). This strategy prioritizes the informal settlements of Ga Mashie, Nima, Ashaiman and Old Fadama.

In James Town and Usher Town of Ga Mashie, participatory informal settlement upgrading is piloted by AMA with support from UN-Habitat.

Strategic Projects in Line with the Overall Informal Settlement Upgrading Framework

Concrete strategic projects embedded in a national or citywide informal settlement upgrading programme often pave the way for operationalizing policies and making policies more tangible for all stakeholders and potential investors. Inclusive participatory urban planning is a pre-condition for investment and the implementation of strategic projects.

This facilitates connectivity and integration of the informal settlements to the wider city fabric through street networks, an increase in public space to spur social-economic and recreational activities for the residents and improve basic urban services provision.

In line with the particular challenges of the settlements, three integrated approaches towards a citywide and national informal settlement upgrading programme are proposed:

- 1.** Redevelopment and upgrading considering land readjustment and participatory informal settlement upgrading,
- 2.** Re-zoning and re-blocking providing public space and access roads as well as tenure security,
- 3.** Resettlement into the suggested Planned City Extension (PCE) and Planned Infill on available land for residents living at risk of natural hazards and exposed to constant flooding.

When breaking down the approaches to strategic projects, the use of Community Development Funds can further enforce the local economic development through the creation of new businesses and the strengthening of community enterprises. This was successfully piloted as part of the PSUP in Accra.

For the resettlement and land readjustment of neighbourhoods, it is important to preserve and reinforce the density of informal settlements to benefit from the economies of scale, to keep the mix use of residential, economic and recreational activities in the same neighbourhood as well as the compactness where services can be reached by walking. It provides the opportunity to increase the social mix with affordable housing solutions of diverse income levels and create adequate space for streets and public space for socio-economic activities.

For more resource-efficient and well targeted interventions, a coordination mechanism like through the planned Housing Authority and a Housing and Informal Settlement Upgrading Fund are essential. UN-Habitat's experience of the Slum Upgrading Facility (SUF) Programme in Ghana showed the local potential of mobilizing the private sector when presenting "bankable" strategic projects. Retail banks, property developers, housing finance institutions, service providers, micro-finance institutions and utility companies came together and efforts resulted in a social housing initiative in Aishaiman settlement in Tema. Informal settlement dwellers also contributed through community saving and were empowered to access affordable credits with subsidized securities for the credits.

C - A Flooding Prevention and Management Strategy

It is crucial to consider past findings and environmental threats within the larger context of planning a sustainable and resilient future for the Accra Region. Recurring past disasters, as well as climate change predictions regarding the Ghana coast, both point to flooding as the most damaging occurrence. The region is not only increasingly susceptible to sea-level rise and flooding, with the entire coastal area being under heightened risk, but taken the distribution of many industries, economic hubs and agricultural lands that all fall under the flood-prone areas, the implications of flooding go far beyond the coast and often threaten economies. Moreover, along with property damage, the ability of flood waters to spread pollution from solid waste, industrial waste, and sewage is an important health and environmental issue particularly in poor areas.

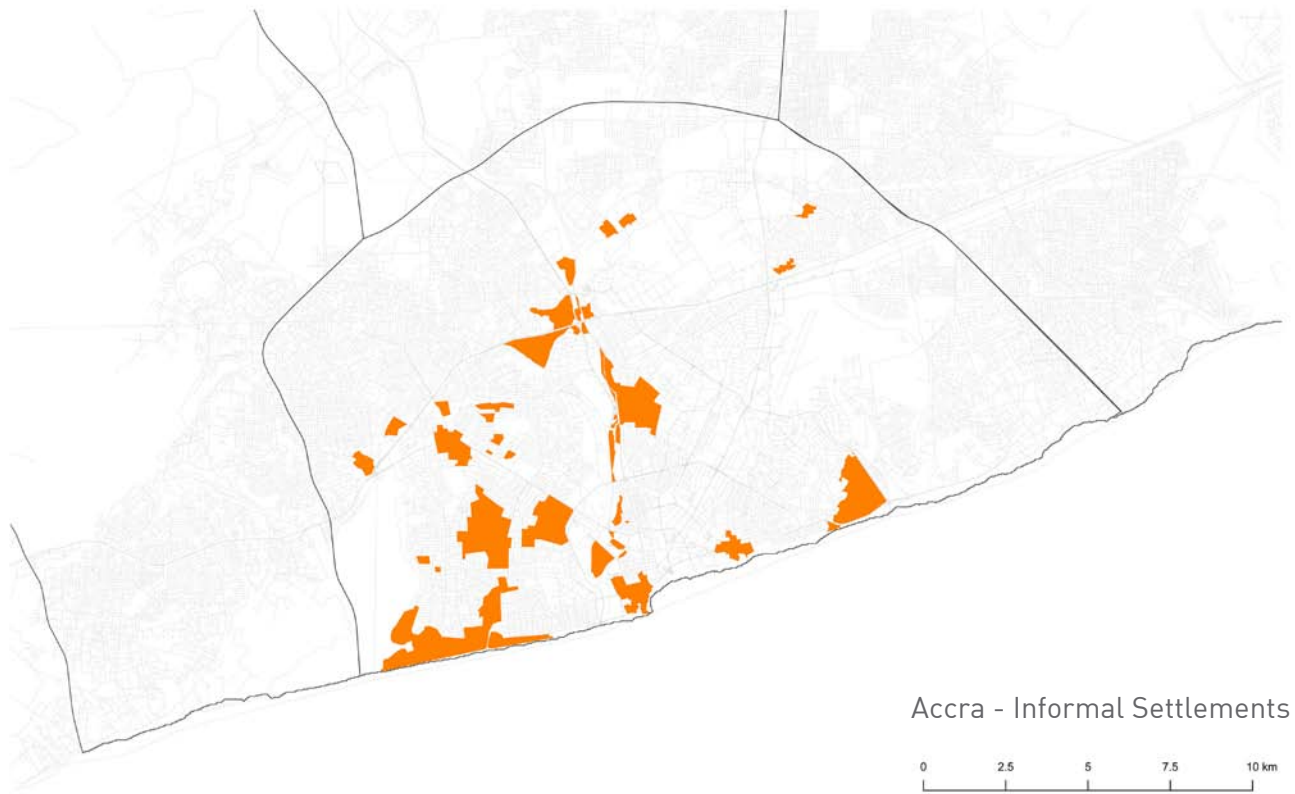
This is why a Flooding Management Strategy for the Greater Accra Region has been identified as one of the first priority actions to be taken as part of the Urban Strategy for the region.

Past local catastrophes and other cities and regions that have suffered similar weather events must be considered to begin to build a better and smarter Accra. Resilient measures of building and planning can secure Accra's regional future to become, in turn, a best practice that can be helpful to other areas at risk.

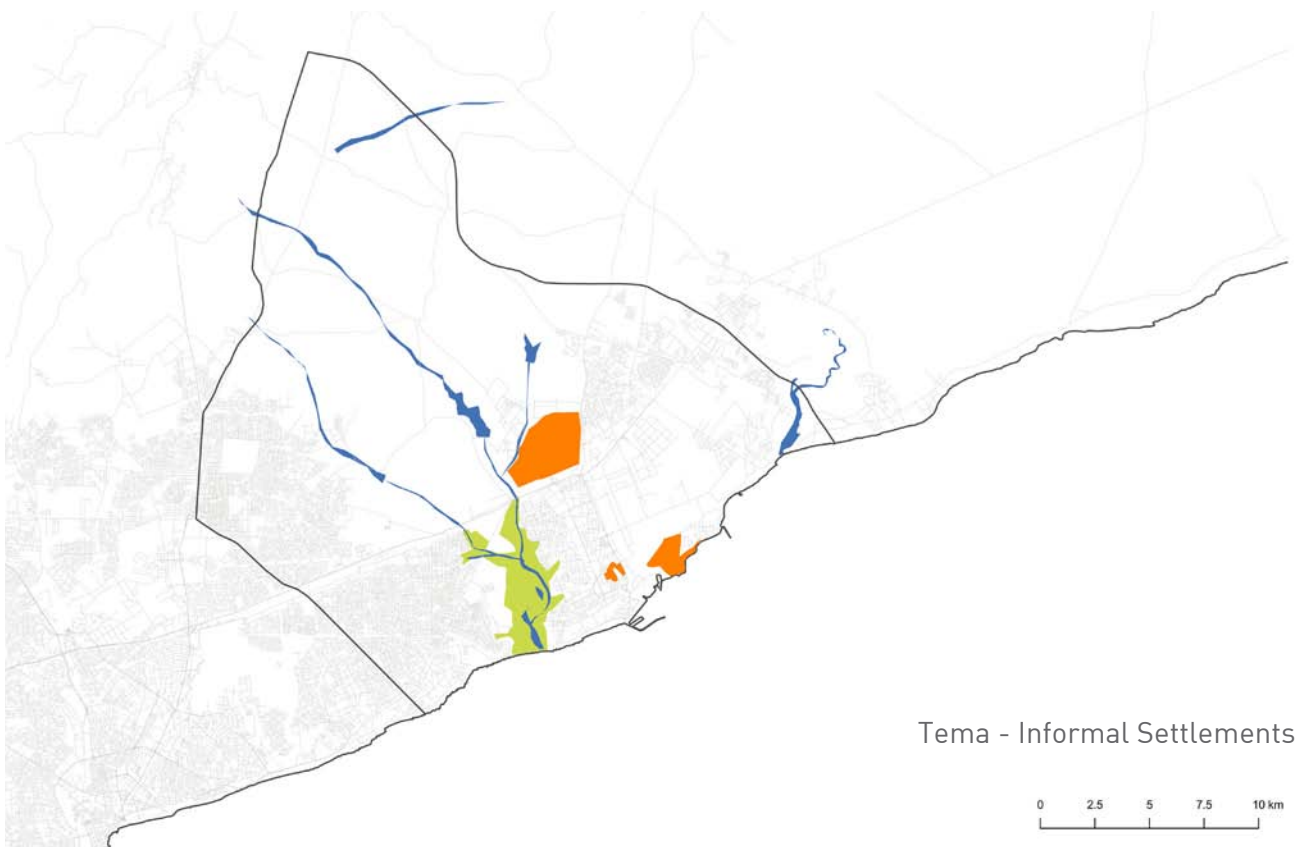
Frequent over-saturation of water reservoirs due to heavy rains and flooding of watercourses during the rainy seasons contribute to rapid surface runoff and channel erosion. In addition to poor existing infrastructure, informal waste dumping in Accra's waterways, due to a broken or partially absent waste-collection system, causes clogging and dramatically contributes to higher flood levels. Due to poor accessibility to waste collection points within densely built areas, informal settlements resolve to informal discharging sites (e.g. storm water channels and rivers) further polluting water, air and soil with toxic waste.

Accra's susceptibility to flooding has already been addressed in a report entitled "Rapid Disaster Waste Management Assessment 26 October Flash Flooding, Central Accra - Ghana", that collected findings and offered emergency response strategies as a reaction to the flooding catastrophe of October 2011.

Incompetence in addressing flooding prone areas, was highlighted again in the recent flooding crisis of June 2015 in Accra and several other parts of the country. Critics hold the Accra Metropolitan Assembly responsible in failing to desilt the Odaw river, which serves as a point of convergence for many drains in the capital and condemn the insensitive short-term emergency response and strategies proposed by the ministry and AMA: clearing the Old Fadama informal settlement to allow the desilting of waterways. The proposal expects 3-4,000 residents to be integrated into the neighboring community, which is situated on higher more stable grounds in a highly densely populated slum area.



slums



An Urban Strategy for the Greater Accra Region

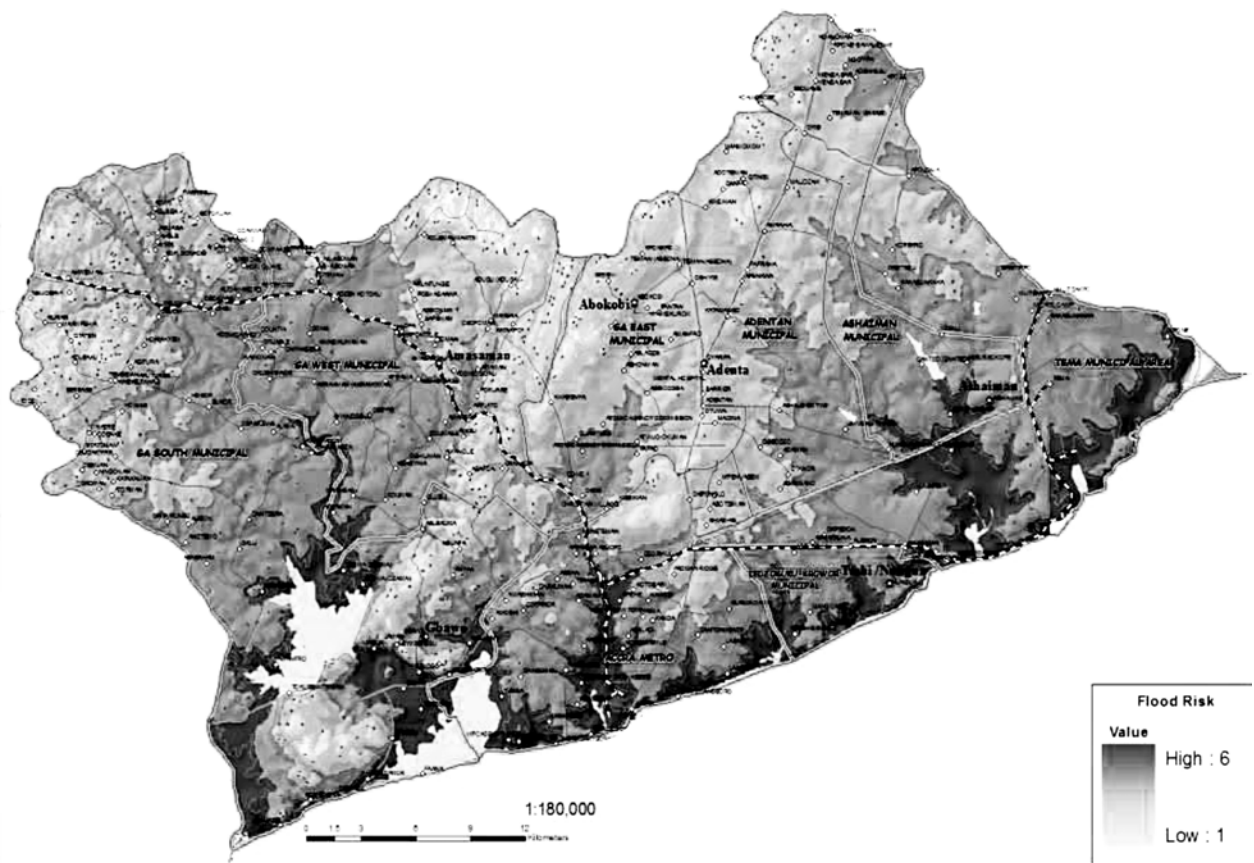
In response to the crisis, the immediate, short and long term five-year plan in the 2011 Assessment proposed the following initiatives:

- Desilting of Odaw Channel and its tributaries - to reduce the risk for poor runoff capacity in the system, and the risk for clogging when the waste is removed
- Establishing an early warning system for floods - in order to help the population in vulnerable areas cope with unexpected, off season rains
- Reducing the number of people at flood risk - this encompasses not only demolishing housing in flood prone areas, but also raising the ground, improving the drainage system etc.
- Conducting a contingency plan for waste management - the plan should focus on making the collections system resilient in order to facilitate collection of the regular waste in a hazard situation
- Deciding on a properly designed landfill for Greater Accra Metropolitan Area - ensuring preparedness for large volumes of waste generated after a hazard, when the collection capacity is commonly overloaded, while the volume for emergency at dumpsites is very small.

The initiatives from the 2010 report should be integrated into the suggested Flooding Management Strategy for Greater Accra, which should additionally encompass several initiatives regarding the wider Greater Accra Region, putting a particular focus on the capacity of sustainable urban planning to actively contribute towards flood prevention, namely:

- Land re-zoning and land re-adjustment, designating protected natural, wetland and flood-prone areas where construction should be forbidden.
- Planning intermediary buffer zones in lower risk flood-prone areas, where activities can still take place, but damage would be minimal in case of flooding

- Planning a flood prevention water infrastructure system, including water reservoirs and a canal network
- Disconnecting the rainwater pipes from sewage system
- Increasing the permeable surfaces percentage in Greater Accra



Flood prone areas in the Accra and Tema, 2012



7

CAPACITY BUILDING AS A TOOL
TO SUCCESSFUL IMPLEMENTATION

Capacity Building as a Tool to Successful Implementation

Assessment of the lack of capacity within the institutions

With the hiring freeze in the government sector of Ghana, increasing capacity at government level has become a challenge. Many ministries, departments and agencies have therefore resorted to the use of National Service personnel to fill their technical gap. This contributes to the lack of capacity of technical staff in the governmental agencies, including the Urban Development Unit of the MLGRD and other sector units at the local and regional government levels.

It is therefore necessary for mid-level and senior level technical capacity to be acquired at all levels of government in the sectors for urban development, with an accentuated need for staff specialized in planning and project implementation in low-income and slum areas.

Another area for consideration is the demand and supply of housing for the low to middle income dwellers. Finance institutions as well as consumers need capacity building in the area of housing finance in order to ensure the existence of sustainable financing options for housing.

The capacity of government, especially at the legislative level should be built for the facilitation of project and finance approval for sustainable urban development programs and initiatives.

Data for development is lacking especially on a community level. Capacity building for continuous data collection and updating is therefore required.

Recommended steps of improvement: Short term:

- a. Establishment of a well-resourced coordination point for sustainable urban development in the country
- b. Technical support to the Urban Development Unit, the Metropolitan and Municipal Planning Offices and the regional offices to assist with development and implementation of city, inter-city and regional plans especially in the development of low-income and slum communities
- c. Merging of Physical and Development Planning units at the MMDA levels to ensure comprehensive, realistic and sustainable spatial development
- d. Developing a platform for landowners and city authorities to plan their cities and implement them together since the cities do not own the lands but have the mandate to plan them according to Section 10, Subsection 3 of the Local Government Act 1993, Act 462
- e. Addressing the issue of coordination of government institutions with mandate for components of the urban development and coordination of urban sector stakeholders, to ensure inclusiveness and sustainability, especially with financing and continuity of programs and projects
- f. Data collection
- g. Regular Expert Group Meetings and Participatory Debates
- h. Collaboration with Universities in Ghana to improve planning and to address sustainable urban planning principles in the curricula of relevant fields of study.

Long term:

- a. Development of Long term plans at city level in accordance with the National Development Planning Commission plans and guidelines
- b. Development of sustainable inter-city and regional plans
- c. Review of policies that affect low-income housing negatively
- d. Development of strategies for implementation of plans, with financial plans and strategies

Capacity building around the proposed new urban strategy

- a. Capacity building for local government staff in the urban planning and rural housing departments, so that planning and implementation are comprehensively coordinated
- b. Establishment of a sustainable urban development coordinating body that will effectively and efficiently coordinate urban development activities until the national and/or local governments develop adequate capacity
- c. Capacity building for continuous data collection for NGOs who work in communities, according to the guidelines of the Ghana Statistical Services
- d. Build capacity of landowners, especially on how to work with MMDAs and also on the essence on planning land before sale
- e. Capacity for NGOs to advocate for and promote low-income housing and residential
- f. Capacity building for Regional governments to plan at regional level and monitor for implementation at MMDA level
- g. Build capacity of local governments to partner and work effectively and efficiently with donor agencies and the low-income earners, especially slum dwellers

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