

Sustainability in Developing Cities of Africa - A Study of Ibadan

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Abstract

This article explores the concept of sustainability in the context of developing cities in Africa, with a focus on Ibadan, Nigeria. As a rapidly growing city facing a range of environmental, social, and economic challenges, Ibadan provides a valuable case study for understanding the complex dynamics of sustainable urban development in Africa. The article begins by providing an overview of the concept of sustainability, highlighting its importance in addressing the pressing global challenges of climate change, resource depletion, and inequality. It then examines the specific challenges facing developing cities in Africa, including urbanization, poverty, and environmental degradation. The article goes on to explore the case of Ibadan, examining its history, current development patterns, and potential for sustainable growth. Through a review of existing literature and empirical data, the article highlights the ways in which Ibadan is grappling with issues such as slum development, inadequate infrastructure, and poor waste management. Finally, the article considers potential strategies for promoting sustainable development in Ibadan and other developing cities in Africa. These include measures such as promoting sustainable transportation, improving access to basic services, and engaging local communities in the planning and implementation of development projects. Overall, the article argues that while the challenges facing developing cities in Africa are significant, there is also significant potential for sustainable development through creative and innovative approaches to urban planning and management.

Keywords: Sustainability, Developing Cities, Urbanisation, Ibadan, Nigeria

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I. INTRODUCTION

Sustainability is a crucial issue for developing cities in Africa, and Ibadan, as one of the largest cities in Nigeria, is no exception. To better understand sustainability in Ibadan, researchers need to examine various aspects of development in the city, including economic, social, and environmental factors.



Figure 1. Ibadan City Map

1.1 Economic Sustainability

Ibadan is an important economic centre in Nigeria, with a diverse range of industries including agriculture, manufacturing, and services. However, the city's economic growth has been hampered by a lack of infrastructure, poor governance, and corruption (Naher, et al., 2020). To improve economic sustainability, it is important to invest in infrastructure such as roads, water supply, and electricity. Small and medium-sized businesses (SMEs) can be supported by the government by giving them access to funding, education, alongside other resources. Figure 1 shows the map of Ibadan. The city is a victim of unreliable data. This makes it very difficult for any government to make accurate predictions of strategic development.

1.2 Social Sustainability

Ibadan has a rich cultural heritage and a diverse population, but the city is also facing social challenges such as poverty, unemployment, and crime (AKANJI, 2022). To improve social sustainability, it is important to promote inclusive growth, which involves creating jobs and economic opportunities for all members of society. The government can also invest in social infrastructure such as schools, hospitals, and public housing to improve access to basic services for the poor and vulnerable. Figure 2 shows Tenure Types in Ibadan and the unreliable nature of land tenure in the city.

1. Provide security of tenure
indicator 1 - tenure types
city and country levels

Type of tenure:	1993	1998	1993	1998
	% of all households	% of all households	% of women-headed households	% of women-headed households
1. Formal Ownership:				
Owned	26.6%	22.5%	20.8%	15.0%
Purchasing (mortgage)	14.4%	14.3%	14.6%	25.6%
sub-total	41.0%	44.0%	35.4%	40.6%
2. Tenancy:				
Private rental	23.5%	22.5%	19.8%	20.7%
Social Housing	21.8%	25.0%	27.7%	27.4%
Sub-tenant	5.2%	1.5%	9.5%	6.3%
sub-total	50.5%	49.0%	57.0%	54.4%
3. Squatter:				
without rent	3.5%	2.7%	2.9%	2.4%
with rent	2.5%	2.3%	2.2%	2.2%
sub-total	6.0%	5.0%	5.1%	4.6%
4. Other				
homeless	1.8%	1.5%	1.9%	0.0%
other	0.7%	0.5%	0.6%	0.0%
sub-total	2.5%	2.0%	2.5%	0.4%
TOTAL (should be equal to 100%)	100.0%	100.0%	100.0%	100.0%

please provide sub-totals if information is not available for the requested level of detail.

Figure 2. Tenure Types in Ibadan, Nigeria

Ibadan is facing a range of environmental challenges including air pollution, water pollution, and deforestation. To improve environmental sustainability, it is important to promote sustainable land use practices, such as afforestation and sustainable agriculture (Olowoyeye, 2021). To minimize emissions of greenhouse gases and lessen the effects of climate change, the government may additionally invest in sources of clean energy and encourage efficient use of energy.

Indicator 17: solid waste disposal
city level

	1993	1998
	% of solid wastes	% of solid wastes
Sanitary landfill	NAV	NAV
Incinerated (in incineration plants)	NAV	NAV
Open dump	NAV	NAV
Recycled	NAV	NAV
Burned (openly)	NAV	NAV
other	NAV	NAV
TOTAL	NAV	NAV

What measures have been undertaken to reduce the impact of solid wastes on the environment?

A shocking revelation of data situation reveals little or no attention at updating statistical data on the situation of solid waste disposal. The only hope is in the promise of updating the record by the relevant agencies.

Waste management and recycling is a sure source of environmental conservation. The new democratic dispensation in the country now opens up a lot of hopes for addressing issues of importance to habitable life.

Although we have a Federal Environmental Protection Agency, whose mandates includes waste and pollution monitoring, a Ministry has now been created also.

Figure 3. Solid Waste Disposal in Ibadan

In summary, resolving financial, environmental, and social problems is key to encouraging equitable growth. Sustainability is a critical concern for developing cities like Ibadan. To encourage environmentally friendly growth in Ibadan and other African cities that are still in the emerging stage, the government, corporate sector, and civil society must collaborate.

1.4 Goals and Implications

Aim:

In order to advance environmental growth and raise the standard of living for its citizens, this study aims to analyse the ecological problems that Ibadan, an African emerging city, is facing.

Objectives:

1. To identify the economic sustainability challenges facing Ibadan, including unemployment, poverty, and limited economic opportunities.
2. To explore strategies to promote economic sustainability in Ibadan, including promoting the creation of jobs, supporting medium-sized and small enterprises, as well as attracting investment.
3. To examine the social sustainability challenges facing Ibadan, including limited access to education, healthcare, and other basic services, and social exclusion.
4. To identify strategies to promote social sustainability in Ibadan, including investing in social infrastructure, supporting education and healthcare, and promoting inclusive growth.
5. To explore the environmental sustainability challenges facing Ibadan, including air pollution, waste management, water pollution, and deforestation.
6. To identify strategies to promote environmental sustainability in Ibadan, including encouraging green transportation, promoting waste management and recycling, protecting water bodies, supporting reforestation efforts, and educating the public on environmental issues.
7. To examine the role of the private sector, civil society, and the government in promoting sustainability in Ibadan.
8. To provide recommendations for policymakers, civil society organizations, and other stakeholders on strategies to promote sustainability in Ibadan and other developing cities in Africa.

II. LITERATURE REVIEW

2.1 Economic Sustainability of Ibadan City

Ibadan is an important economic centre in Nigeria, with a diverse range of industries including agriculture, manufacturing, and services. However, the city faces several challenges that hinder its economic sustainability, including:

2.1.1 Infrastructure Situation in Ibadan: Ibadan suffers from a lack of basic infrastructure, such as good road networks, reliable electricity supply, and clean water supply. This makes it difficult for businesses to operate efficiently and for the city to attract new investments.

The Southwestern Nigerian state of Oyo has Ibadan as its capital city. With a population of more than three million, it is the third-largest metropolis in Nigeria and one of the most populous cities in Africa.

Like many cities in Nigeria, Ibadan faces significant challenges with its infrastructure. The city's road network is inadequate, with many of its roads in a state of disrepair. Traffic congestion is a significant problem, and the transportation system in Ibadan is often unreliable.

The water supply in Ibadan is also a concern. Water shortages are frequent, and many locals lack access to potable, safe water to consume. The city's electricity supply is also unreliable, with frequent power outages.

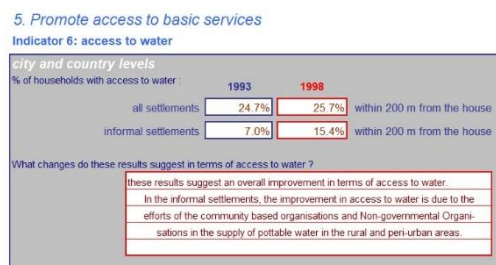


Figure 4. Access to Potable, Safe, Drinking Water

In recent years, the private sector and government have made efforts to develop the infrastructure in Ibadan. Several road construction and rehabilitation projects have been undertaken, and plans are in place to improve the transportation system in the city.

The government has also initiated efforts to improve the water supply and electricity infrastructure in the city. However, these efforts are still in progress, and the infrastructure situation in Ibadan remains a significant challenge. Figure 4 shows Data about safe, drinking water in Ibadan indicating very low population of users.

2.2 Unemployment Situation in Ibadan

Ibadan has a high unemployment rate, especially among young people. This creates social and economic challenges, such as poverty and crime, and reduces the city's potential for economic growth.

Unemployment is a significant problem in Ibadan, Nigeria. The city has a large population of young people, many of whom are unemployed or underemployed. (NATIONAL BUREAU OF STATISTICS, 2020).

The informal sector provides employment opportunities for many people in Ibadan, but these jobs are often low-paying and unstable. The formal sector, including government jobs and jobs in the private sector, is limited and highly competitive.

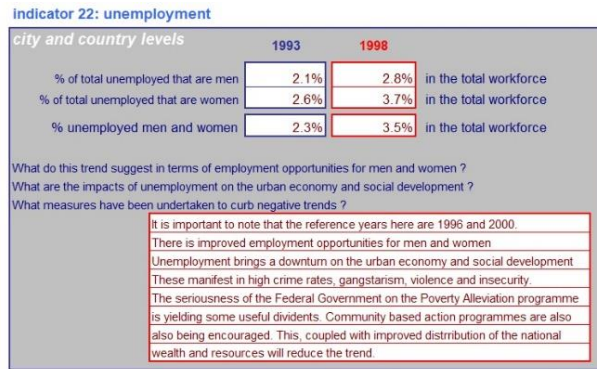


Figure 5. Unemployment Situation in Ibadan, Nigeria

There have been some efforts to address the unemployment situation in Ibadan. The government of Oyo State has implemented various programs aimed at creating job opportunities for young people, such as skills acquisition and entrepreneurship training programs. However, these programs have had limited success, and the unemployment situation in Ibadan remains a significant challenge.

Additionally, the COVID-19 pandemic has worsened the unemployment situation in Nigeria, including Ibadan, with many businesses struggling to survive and laying off workers (Statista, 2021). However, with the gradual opening of the economy and vaccine rollout, there are hopes for improved employment opportunities in the future.

2.3 Informal Economy in Ibadan: A significant portion of Ibadan's economy is informal, which means that many businesses operate outside the formal regulatory framework. This limits the potential for taxation and revenue generation and makes it difficult to accurately track the city's economic activities.

The informal economy refers to economic activities that are not regulated or recognized by the government and are not captured in official statistics.

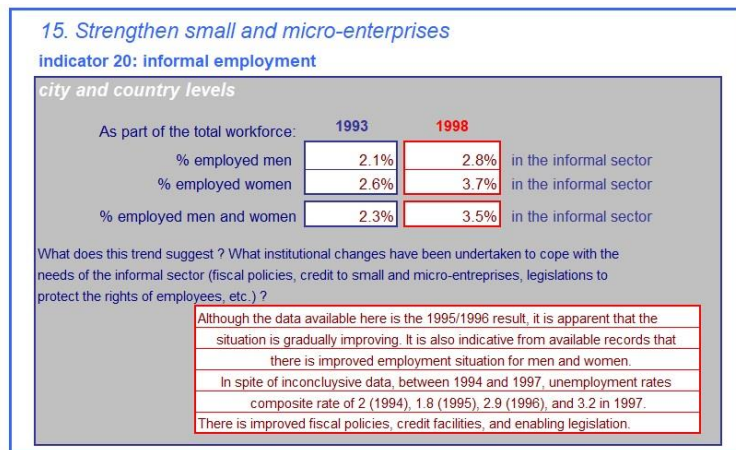


Figure 6. Informal Employment in Ibadan, Nigeria

In Ibadan, the informal economy includes activities such as street vending, small-scale trading, and artisanal work (Etim & Daramola, 2020). Many people who work in the informal economy have limited education and skills, and they may lack access to formal employment opportunities.

Despite being unofficial, the business community is very important to the municipality's prosperity. It provides employment opportunities for many people who would otherwise be unemployed, and it contributes to the local economy by providing goods and services that are in demand.

However, the informal economy in Ibadan also faces significant challenges. Figure 6 shows the miserable number of employed persons in various categories. Workers in the informal economy often lack legal protection and are vulnerable to exploitation. They may also face harassment from government officials or other groups. Additionally, because the informal economy is not regulated, it can be difficult for workers to access credit or other financial services, which can limit their ability to grow their businesses.

Efforts have been made by the government and NGOs to support and regulate the informal economy in Ibadan, including through skills training programs, microfinance initiatives, and efforts to formalize informal businesses (Olubiyi, 2022). However, the informal economy remains a significant and complex part of the city's economy.

2.4 Poor Governance and Corruption in Ibadan: Corruption and poor governance in Ibadan can discourage foreign investment and harm the city's reputation as a reliable and transparent business destination. Ibadan, Nigeria, faces serious issues with poor administration and mismanagement, which have an adverse effect on the growth of the metropolis and the well-being of its citizens. Corruption is pervasive in Nigeria, and Ibadan is no exception.

Bribery, misappropriation of funds from the government, and the abuse of authority by public servants are just a few of the ways corrupt behaviour emerges. It weakens the rule of law, impedes the growth of the economy, and erodes confidence among citizens in governmental entities by inhibiting investments.

Poor governance is also a significant challenge in Ibadan. Government institutions, including the judiciary and law enforcement agencies, are often ineffective and inefficient (Ogunkan, 2022). This can lead to a lack of accountability and transparency, which can exacerbate corruption and limit public access to services.

The impact of poor governance and corruption in Ibadan is evident in various areas. For example, the city's infrastructure is inadequate, with poor road networks, unreliable water supply, and electricity, and inadequate health and education systems (PAGE & WANDO, 2022). These problems are often compounded by corruption and poor governance, as resources that should be allocated for public infrastructure and services are mismanaged or embezzled.

Efforts have been made to address the problem of poor governance and corruption in Ibadan, among other ways, by creating organisations to combat corruption and making an attempt to enhance transparency and executive authority. However, progress has been slow, and corruption remains a significant challenge in the city.

To address these challenges, the government can take several steps to promote economic sustainability in Ibadan. These include:

2.4.1 Investing in Infrastructure

The government can invest in critical infrastructure such as roads, water supply, and electricity to improve the city's business environment (CFI Team, 2022). Infrastructure spending is crucial to the growth of Ibadan, Nigeria. Facilities in the city is insufficient, which limits economic growth and hinders the welfare of its residents.

16. Encourage public-private sector partnership and stimulate productive employment opportunities

qualitative data 5: public-private partnerships

city and country levels

1. Have some major public enterprises involving the delivery of services in cities established partnerships with private firms during the last five years at the city level? yes

How many ? > 10

2. Have some major public enterprises involving the delivery of services in cities established partnerships with private firms during the last five years at the country level? yes

How many ? >10

Have public-private partnership become a more common practice in the last five years ?

Have they been effective ? Have they offered a greater flexibility in the management and higher degree of transparency, efficiency and accountability in their operation ?

Is the cost-recovery of services higher ?

Public-private partnership has improved considerably in the last five years. They have been effective. They offer a greater flexibility in the management and higher degree of transparency, efficiency and accountability - especially in the new democratic dispensation. There is improved respect for rules and regulations. Obviously, the cost-recovery of services is higher under the new dispensation.

Figure 7.Public-Private Partnerships in Ibadan, Nigeria

Investments in infrastructure can include road construction and rehabilitation, the expansion of the transportation system, the improvement of the water supply, and the provision of reliable electricity. These investments can create employment opportunities and stimulate economic growth, as well as improve the quality of life for residents.

To attract investment, Ibadan needs to create a conducive environment for businesses to thrive. This may involve performing steps to make it easier to start and incorporate an enterprise, making funding available, as well as ensuring that the legal and regulatory framework is predictable and stable.

PPPs, which stand for public-private partnerships, are another effective strategy for luring capital to the physical environment sector. Governments can use private businesses' effectiveness, finance, and knowledge to create and manage construction initiatives by collaborating with them (THE INVESTOPEDIA TEAM, 2022).

However, investments in infrastructure in Ibadan must be made with a focus on sustainability and inclusivity. It is essential to ensure that infrastructure investments benefit all residents, including those in underserved communities. Additionally, investments must consider the potential impact on the environment and address climate change challenges.

In conclusion, investing in infrastructure in Ibadan is crucial for the city's development, and efforts must be made to create an enabling environment for businesses to invest. The government should explore PPPs and prioritize sustainability and inclusivity in infrastructure investments.

2.4.2 Promoting SMEs in Ibadan: Government agencies may help businesses that are small or medium-sized by fostering a framework that makes it easier for them to take advantage of resources including funding, education, and training.

With regard to Ibadan's economy growing, the growth of SMEs must be encouraged. SMEs are the underpinning of many global economies across worldwide and play a vital part in creating employment, boosting the economy, and eliminating of impoverished communities (WORLD ECONOMIC FORUM, 2022). To promote SMEs in Ibadan, the government and other stakeholders can implement various initiatives, including:

- a) **Providing Access to Finance:** SMEs often face challenges accessing financing, which can limit their growth potential. The government can partner with financial institutions to provide affordable and accessible loans to SMEs.
- b) **Making the Starting and Registration Process for a Business Simpler:** Reducing bureaucratic barriers and minimising the complexity involved in establishing and incorporating an enterprise can encourage more people to start SMEs.
- c) **Providing Training and Capacity Building:** Many SMEs lack the skills and knowledge needed to operate and grow their businesses. Providing training and capacity-building programs can help SME owners acquire the skills and knowledge they need to succeed.
- d) **Promoting Market Access:** SMEs often struggle to find markets for their products and services. The government can facilitate access to markets, both domestically and internationally, by providing information on market opportunities and supporting SMEs to participate in trade fairs and exhibitions.
- e) **Supporting Innovation:** Innovation is essential for the growth and competitiveness of SMEs. The government can provide support for research and development activities and facilitate collaborations between SMEs and research institutions.
- f) **Encouraging Partnerships:** Partnerships between SMEs and larger companies can provide SMEs with access to resources, technology, and expertise, which can help them to grow and become more competitive.

In conclusion, promoting SMEs in Ibadan is crucial for the city's economic development. By providing access to finance, streamlining the procedure for establishing and incorporating a company, providing training and capacity building, promoting market access, supporting innovation, and encouraging partnerships, the government, and other stakeholders can create a more conducive environment for SMEs to thrive.

19. Ensure transparent, accountable and efficient governance of towns, cities and metropolitan areas

Qualitative data 8: transparency and accountability

city level		
At the local government level, are there:		
	1996	2000
a) regular independent auditing of municipal accounts ?	no	yes
b) published contracts and tenders for municipal services ?	no	yes
c) sanctions against faults of civil servants ?	yes	yes
d) laws on disclosure of potential conflicts of interest ?	yes	yes
Has there been any progress in improving governance ?		
What measures have been undertaken in this area ?		
There has been a remarkable progress in improving governance;		
Measures undertaken in this area include greater openness, transparency,		
accountability, and recently the passing of the Anti-Corruption Bill by the		
National Assembly.		
Another important factor to note is the improved participation in 'self-rule' which		
is offered in the democratic system of governance.		

Figure 8. Transparency and Accountability Levels in Ibadan

2.5 Encouraging Formalisation of the Economy in Ibadan

The government can create incentives for informal businesses to formalise their operations, such as tax breaks or access to government contracts. Encouraging formalisation of the economy in Ibadan is essential for promoting economic growth, creating employment opportunities, and reducing poverty (Adedapo & Demokun, 2021). A significant portion of the city's economy is informal, which can limit the government's ability to collect taxes and provide essential services to its citizens. To encourage the formalisation of the economy in Ibadan, the government and other stakeholders can implement various initiatives, including:

- i. **Simplifying the Regulatory Framework:** Complex regulations and bureaucratic barriers can discourage businesses from formalising their operations (International Labour Organisation, 2021). The government can simplify the regulatory framework and reduce the costs associated with formalisation.
- ii. **Providing Incentives:** Providing incentives such as tax breaks or access to credit can encourage informal businesses to formalize their operations.
- iii. **Increasing Access to Information:** Many informal businesses may not be aware of the benefits of formalization. Providing information and education on the advantages of formalization can encourage businesses to formalize.
- iv. **Improving Access to Finance:** Informal businesses may struggle to access finance, which can limit their ability to formalize. The government can work with financial institutions to provide affordable and accessible loans to informal businesses.
- v. **Strengthening Institutions:** Strong institutions, such as the judiciary and law enforcement agencies, can help to promote formalization by enforcing regulations and protecting the rights of businesses.
- vi. **Promoting Entrepreneurship:** Encouraging entrepreneurship can help to create a culture of formalization. The government can provide training and support for aspiring entrepreneurs and help to create an environment that supports the growth of formal businesses.

In conclusion, encouraging the formalisation of the economy in Ibadan is crucial for promoting economic growth and reducing poverty. By simplifying the regulatory framework, providing incentives, increasing access to information, improving access to finance, strengthening institutions, and promoting entrepreneurship, the government and other stakeholders can create a more conducive environment for businesses to formalize their operations.

2.6 Tackling Corruption in Ibadan

By enacting laws that encourage openness and accountability in governmental organisations, the authorities may enhance oversight and combat graft. Tackling corruption in Ibadan is essential for the city's development and the well-being of its citizens (Feyisipo, 2022). Corruption undermines economic growth, erodes public trust in government institutions, and perpetuates poverty and inequality. To tackle corruption in Ibadan, the government and other stakeholders can implement various initiatives, including:

1. **Strengthening Anti-Corruption Institutions:** The Independent Corrupt Practices and Other Related Offences Commission (ICPC) and the Economic and Financial Crimes Commission (EFCC) are two agencies the government can enhance to combat unethical behaviour by providing adequate funding and resources and ensuring their independence.
2. **Increasing Transparency and Accountability:** Transparency and accountability are critical for preventing corruption (United Nations Office on Drugs and Crime (UNODC), 2020). The government can

promote transparency and accountability by publishing information on government activities and expenditures and ensuring that public servants become responsible for the actions they take.

3. **Public Education:** Public awareness campaigns about the risks of illicit activity as well as the value of openness and accountability can help to create a culture that does not tolerate corruption.

4. **Simplifying Bureaucratic Processes:** Complex and cumbersome bureaucratic processes can create opportunities for corruption. The government can simplify bureaucratic processes and reduce red tape to minimize the opportunities for corruption.

5. **Encouraging Citizen Participation:** Citizen participation can help to hold public officials accountable and reduce the opportunities for corruption. The government can encourage citizen participation by providing opportunities for feedback and engagement and promoting citizen-led monitoring of government activities.

6. **Punishing Corrupt Officials:** Punishing corrupt officials sends a strong message that corruption will not be tolerated. The government can ensure that corrupt officials are prosecuted and punished in accordance with the law.

In conclusion, the elimination of corrupt behaviour in Ibadan is essential for fostering growth in the economy and lowering income disparity, as well as ensuring public trust in government institutions. By strengthening anti-corruption institutions, increasing transparency and accountability, educating the public, simplifying bureaucratic processes, encouraging citizen participation, and punishing corrupt officials, the government and other stakeholders can create a more transparent and accountable environment that discourages corruption.

In summary, promoting economic sustainability in Ibadan will need to be addressed together by the public, business, and non-profit sectors to address the city's economic challenges and build a more inclusive and prosperous economy.

III. DISCUSSION: SOCIAL SUSTAINABILITY IN IBADAN CITY

Social sustainability is an important aspect of urban development that focuses on improving the quality of life and well-being of people in the city. In Ibadan, there are several social challenges that need to be addressed to promote social sustainability. Some of these challenges include:

3.1 **Poverty in Ibadan:** Ibadan has a high poverty rate, with many residents living in informal settlements lacking permission to utilize necessities like health care, schooling, and sanitary facilities. Poverty is a significant challenge facing Ibadan. Despite being one of Nigeria's largest cities and a hub for economic activities, a considerable portion of the population in Ibadan lives below the poverty line. Poverty in Ibadan is mainly caused by factors such as underemployment, low educational attainment, lack of ability to obtain basic amenities like water that is safe and health care, and poor infrastructure. To address poverty in Ibadan, the government and other stakeholders can implement various initiatives, including:

a) **Creating Employment Opportunities:** Creating employment opportunities is critical to reducing poverty in Ibadan. Government subsidies to small and medium-sized enterprises (SMEs) can help create jobs, investing in infrastructure, and implementing policies that encourage private sector investment.

b) **Investing in Education:** Education is key to breaking the cycle of poverty. The government can invest in education by improving access to quality education and implementing policies that encourage school attendance and retention.

c) **Improving Access to Basic Services:** One of the main factors contributing to poverty in Ibadan is the lack of access to essential amenities like water that is safe and the health care system. The government can improve access to these services by investing in infrastructure and implementing policies that ensure equitable access for all citizens.

d) **Providing Social Protection:** Social protection programs such as cash transfers and food assistance can help to alleviate poverty and reduce inequality. The government can implement social protection programs that target the most vulnerable populations.

8. Promote gender equality in human settlements development
indicator 11: female-male gaps

city and country levels			
1993 data	female	male	1993 female-male gap
Primary school enrolment ratio	43.7%	56.3%	12.6%
Secondary school enrolment ratio	45.9%	54.1%	8.2%
Tertiary school enrolment ratio	34.5%	65.5%	31.0%
Adult literacy rate	12.4%	15.3%	2.9%
Life expectancy at birth	55.0	51.5	3.5
Under-five mortality	52.50%	47.50%	5.00%
Unemployment	46.60%	53.40%	6.80%
number of elected or nominated councillor at the local level per 10,000	1	46	45

e) **Empowering Women and Girls:** Empowering women and girls is essential for reducing poverty in Ibadan. The government can implement policies that promote gender equality, such as providing access to education and healthcare and promoting women's participation in the workforce.

f) **Strengthening Institutions:** Strengthening institutions such as the judiciary and law enforcement agencies can help to reduce corruption and ensure that public resources are used effectively to address poverty. In conclusion, poverty is a significant challenge facing Ibadan. To address poverty, the government and other stakeholders can implement initiatives that create employment opportunities, invest in education, improve access to basic services, provide social protection, empower women and girls, and strengthen institutions. By addressing the root causes of poverty and promoting inclusive economic growth, Ibadan can reduce poverty and improve the well-being of its citizens.

3.2 Unemployment in Ibadan: There is a high rate of unemployment in Ibadan, particularly among young people. This creates social and economic challenges such as poverty, crime, and social exclusion. Unemployment is a significant challenge in Ibadan, with a considerable proportion of the population lacking access to decent employment opportunities. The high level of unemployment in Ibadan is mainly due to several factors, including the inadequate state of infrastructure, insufficient investment in the economy, and a lack of skills among the workforce. To address unemployment in Ibadan, the government and other stakeholders can implement various initiatives, including:

i. **Encouraging Private Sector Investment:** In Ibadan, promoting venture capital from the private sector can help to provide job possibilities. By enacting laws that lower the overall cost of doing company operations, government agencies may foster an atmosphere where companies can prosper and provide incentives for companies to invest in Ibadan.

ii. **Investing in Infrastructure:** Investing in infrastructure such as roads, bridges, and public transportation can help to create employment opportunities and stimulate economic growth in Ibadan.

iii. **Improving Access to Credit:** Medium-sized and small companies can grow and generate jobs by having better chances of obtaining finance. The government can provide financial support for SMEs and implement policies that reduce the cost of borrowing.

iv. **Promoting Skills Development:** Investing in skills development can help to improve the employability of the workforce in Ibadan. The government can collaborate with private sector employers to develop training programs that provide relevant skills for the job market.

v. **Promoting Entrepreneurship:** Promoting entrepreneurship can help to create employment opportunities in Ibadan. The government can provide support for entrepreneurs, including access to financing and business development services.

vi. **Diversifying the Economy:** Economic activity can become more diversified by opening up career possibilities in other economic areas. The government can promote the development of new industries and support existing ones to expand.

In conclusion, unemployment is a significant challenge in Ibadan. To address unemployment, the government and other stakeholders can implement initiatives that encourage private sector investment, invest in infrastructure, improve access to credit, promote skills development, promote entrepreneurship, and diversify the economy. By creating employment opportunities, Ibadan can improve the well-being of its citizens and stimulate economic growth.

3.3 Schooling in Ibadan: Ibadan City has restricted opportunities for excellent public schools, especially for kids from families with limited resources. This limits their potential for social mobility and economic prosperity.

Education in Ibadan is a critical issue that requires urgent attention. Although there are several educational institutions in Ibadan, the quality of education remains a significant challenge. Because of insufficient facilities, a lack of funding as well as and a dearth of appropriately trained teachers, numerous pupils in Ibadan are unable to receive a high-quality education.

Government officials and other interested parties can pursue a number of efforts to enhance the standard of public schools in Ibadan, including:

a) **Investing in Infrastructure:** Investing in infrastructure such as Libraries, labs, and instructional facilities can all contribute to raising educational standards in Ibadan. The building and remodelling of public schools and other institutions of learning may be funded by the authorities.

b) **Improving Teacher Training:** Improving teacher training can help to ensure that students in Ibadan have access to quality education. The government can provide training programs for teachers to improve their teaching skills and knowledge.

c) **Increased Educational Access:** The level of literacy in Ibadan can be raised through expanding opportunities for learning. The government can implement policies that encourage school attendance and retention, such as providing free textbooks and school meals.

d) **Promoting STEM Education:** Fostering STEM (science, technology, engineering, and mathematics) educational opportunities can aid in preparing learners for the employment market of the twenty-first century. The

government can collaborate with educational institutions and the private sector to develop STEM programs and provide funding for STEM research and development.

e) **Improving the Standard of Higher Education:** Raising the standard of postsecondary education can aid in producing graduates with the abilities required to succeed in the international labor market. The government can collaborate with universities and other tertiary institutions to develop curricula that are relevant to the needs of the job market.

f) **Strengthening Vocational Education:** Strengthening vocational education can help to provide students with skills that are in demand in the job market. The government can collaborate with vocational institutions to develop training programs that provide relevant skills for the job market.

In conclusion, education in Ibadan requires urgent attention. Government officials and other interested parties can establish programs that make investments in infrastructure improvements to raise the standard of educational institutions in Ibadan, improve teacher training, increase access to education, promote STEM education, enhance the quality of tertiary education, and strengthen vocational education. By providing access to quality education, Ibadan can prepare its citizens for the challenges of the 21st century and contribute to the development of the country.

3.4 Health in Ibadan: The healthcare system in Ibadan is under-resourced and overburdened, with many people unable to access quality healthcare services.

Health is an essential aspect of human development, and Ibadan is no exception. The city is home to several health facilities, including hospitals, clinics, and health centres. However, despite the presence of these facilities, the health status of the population in Ibadan remains a significant concern. Some of the health challenges in Ibadan include poor sanitation, inadequate healthcare infrastructure, and inadequate healthcare funding. Government officials and other interested parties can put into action a number of efforts to enhance the overall wellness of the people in Ibadan, including:

a) **Improving healthcare infrastructure:** Improving healthcare infrastructure such as hospitals, clinics, and health centres can help to improve access to quality healthcare services in Ibadan. The government can provide funding for the construction and renovation of healthcare facilities.

b) **Increasing Healthcare Funding:** Increasing healthcare funding can help to improve the quality of healthcare services in Ibadan. The government can increase the allocation of funds to the healthcare sector and provide incentives for private sector investment in healthcare.

c) **Education for Public Health Promotion:** In Ibadan, encouraging education about public health may help to increase consciousness about the value of healthy lifestyle choices. The government can collaborate with community organizations to promote public health education programs.

d) **Improving Sanitation:** Improving sanitation can help to prevent the spread of diseases in Ibadan. The government can invest in sanitation infrastructure such as waste management systems and provide funding for public sanitation campaigns.

e) **Strengthening Disease Surveillance:** Strengthening disease surveillance can help to identify and respond to outbreaks of diseases in Ibadan. The government can invest in disease surveillance infrastructure and collaborate with international organizations to strengthen disease surveillance and response systems.

f) **Giving Patients Choice to Needed Drugs:** The physical well-being of the people of Ibadan can be improved by giving them access to necessary medications. To ensure that everyone has access to cheap necessary medications, government officials can work with drugs companies.

In general, the health status of the population in Ibadan requires urgent attention. To better Ibadan inhabitants' state of physical well-being, government officials and other stakeholders can implement initiatives that improve healthcare infrastructure, increase healthcare funding, promote public health education, improve sanitation, strengthen disease surveillance, and give people the ability to obtain necessary medications. By enhancing the general public's state of physical well-being, Ibadan can contribute to the development of the country and improve the well-being of its citizens.

3.5 Investing in Social Infrastructure in Ibadan: The government can invest in social infrastructure such as schools, hospitals, and public housing to improve access to basic services for the poor and vulnerable. Investing in social infrastructure in Ibadan, Nigeria has the potential to significantly improve the metropolis and its inhabitants. The term "social infrastructure" means to the set of societal institutions and frameworks that facilitate social contact, enable individuals to achieve their fundamental needs, and help them achieve their objectives. Educational institutions, medical facilities, civic centres, recreational areas, and transportation systems are scenarios that constitute social infrastructure. Here are some potential benefits of investing in social infrastructure in Ibadan:

i. **Improved Quality of Life:** By investing in social infrastructure, residents of Ibadan can enjoy better access to essential services like healthcare, education, and public transportation. This can improve their quality of life and contribute to their overall well-being.

- ii. **Economic Growth:** Investing in social infrastructure can stimulate economic growth by creating jobs and increasing productivity. For example, building new schools and hospitals can create construction jobs, while improving public transportation can make it easier for people to get to work and do business.
- iii. **Social Cohesion:** Investing in social infrastructure can also promote social cohesion and a sense of community. Community centers and public spaces can provide opportunities for people to come together and build relationships, while schools and libraries can promote lifelong learning and intellectual development.
- iv. **Increased Resilience:** Investing in social infrastructure can help communities to become more resilient in the face of challenges like natural disasters, economic downturns, and public health crises. For example, a well-equipped hospital can help to prevent and manage disease outbreaks, while a reliable public transportation system can help people to evacuate in the event of a natural disaster.

Overall, investing in social infrastructure in Ibadan can have a positive impact on the city and its residents by improving quality of life, promoting economic growth, fostering social cohesion, and increasing resilience.

3.6 Promoting Inclusive Growth in Ibadan: The government can promote inclusive growth by creating jobs and economic opportunities for all members of society, particularly those from marginalized communities. Promoting inclusive growth in Ibadan, Nigeria can help to create a more equitable and sustainable city. Inclusive growth refers to economic growth that is accompanied by reduced poverty and inequality, and that benefits all members of society. Here are some strategies that can be used to promote inclusive growth in Ibadan:

- a) **Help SMEs (Small and Medium-Sized Businesses):** SMEs are an important source of job creation and economic growth. The authorities may assist Businesses by facilitating the availability of financing, and education, and by assisting with capacity development, and entrepreneurial development services.
- b) **Invest in Human Capital:** Knowledge acquisition and skill-building investments can be beneficial to build a skilled workforce that is able to compete in the global economy. This can be done by improving access to quality education and vocational training, and by promoting lifelong learning.
- c) **Develop Infrastructure:** Developing infrastructure such as roads, bridges, and public transportation can facilitate economic growth by improving access to markets and reducing transaction costs. By ensuring that locals have the opportunity to access basic amenities like medical care and educational opportunities, it may additionally improve the general level of life for citizens.
- d) **Promote Social Protection:** Social protection programs such as cash transfers, food subsidies, and Insurance for Healthcare can aid in lowering impoverishment and raising the quality of life of the most vulnerable members of society.
- e) **Encourage Private Sector Investment:** Increasing investment from the private sector can boost the economy while generating employment opportunities. This can be done by creating a favourable business environment, reducing bureaucracy, and providing incentives for investment.

Broadly, promoting inclusive growth in Ibadan requires a multifaceted approach that addresses the structural barriers that prevent some groups from benefiting from economic growth. By supporting SMEs, investing in human capital, developing infrastructure, promoting social protection, and encouraging private sector investment, Ibadan can become a more equitable and sustainable city for all its residents.

3.7 Supporting Education in Ibadan: The government can improve access to quality education by investing in schools and training programs and providing scholarships and financial aid for students from low-income families.

In order to grow Ibadan, Nigeria, and ensure the welfare of its citizens, funding for educational opportunities is essential. As a fundamental human right and a major factor in both the growth of society and the economy, educational institutions provide. Here are some strategies that can be used to support education in Ibadan:

- a) **Increasing Educational Access:** By constructing additional schools, improving transportation, and providing scholarships or financial aid to students in need, the authorities can enhance opportunities for learning. No matter how rich or poor they are, this can support ensuring that all kids have an opportunity for learning.
- b) **Increasing Educational Quality:** It is crucial to raise the standards of education in order to ensure that students receive a meaningful education. This can be done by training and supporting teachers, providing quality textbooks and teaching materials, and investing in educational technology.
- c) **Supporting Vocational and Technical Education:** Vocational and technical education can help to prepare students for the job market and promote economic growth. The government can support vocational and technical education by partnering with businesses to provide apprenticeships and internships, and by providing funding for vocational and technical schools.
- d) **Encouraging Community Involvement:** Community involvement can help to support education by providing resources and support to schools. This can include volunteering, donating books and materials, and providing mentorship and support to students.
- e) **Addressing Gender and Social Inequalities:** Gender and social inequalities can prevent some students from accessing education. The government can address these issues by promoting gender equality, providing support for marginalized groups, and implementing policies to address social inequalities.

In general, supporting education in Ibadan requires a comprehensive and coordinated approach that involves government, civil society, and the private sector. By expanding educational opportunities, enhancing educational standards, promoting occupational and technical schooling, encouraging community involvement, and addressing gender and social inequalities, Ibadan can build a more educated and prosperous future for its residents.

3.8 Improving Healthcare in Ibadan: The government can improve the healthcare system by investing in hospitals, clinics, and medical equipment and increasing the number of healthcare workers. Improving healthcare in Ibadan, Nigeria is essential for the well-being of its residents and the city's development. Being able to have access to excellent health care is important for the growth of society as well as the economy. Here are some strategies that can be used to improve healthcare in Ibadan:

- i. **Strengthening Healthcare Infrastructure:** The government can strengthen healthcare infrastructure by building new hospitals and clinics, improving the quality of existing facilities, and ensuring that healthcare providers have the necessary equipment and supplies to provide quality care.
- ii. **Investing in Healthcare Workforce:** The quality of healthcare is closely linked to the quality of the healthcare workforce. The government can invest in training and capacity building for healthcare professionals, and offer competitive salaries and benefits to attract and retain qualified staff.
- iii. **Increasing Access to Healthcare:** The government can increase access to healthcare by improving transportation, expanding the reach of healthcare services to rural and underserved areas, and providing financial support to low-income families to cover the cost of healthcare.
- iv. **Promoting Preventive Healthcare:** Preventive healthcare can help to reduce the incidence of preventable diseases and illnesses. The authorities can support preventative medicine by funding health promotion initiatives, dispensing vaccinations, and promoting periodic examinations and diagnostics.
- v. **Leveraging Technology:** Technology can play an important role in improving healthcare delivery, particularly in remote and underserved areas. The government can leverage technology to provide telemedicine services, mobile clinics, and health monitoring tools.

In summary, improving healthcare in Ibadan requires a comprehensive and coordinated approach that involves government, civil society, and the private sector. By strengthening healthcare infrastructure, investing in the healthcare workforce, increasing access to healthcare, promoting preventive healthcare, and leveraging technology, Ibadan can improve the health outcomes of its residents and promote its development.

3.9 Community Engagement in Ibadan: Civil society organizations and community groups can play a vital role in promoting social sustainability by engaging with communities, advocating for their rights and needs, and promoting social cohesion. Community engagement in Ibadan, Nigeria is essential for the city's development and the well-being of its residents. Community engagement refers to the process of involving community members in decision-making processes and giving them a voice in matters that affect their lives. Here are some strategies that can be used to promote community engagement in Ibadan:

- a) **Building Strong Community-Based Organizations:** Strong community-based organizations such as community associations, youth groups, and women's groups can serve as important platforms for community engagement. These organizations can help to mobilize community members, provide a forum for discussion, and encourage interactions with regional authorities.
- b) **Increasing Citizens' Engagement in Municipal Affairs:** Local government officials can promote community engagement by creating channels for citizen participation in decision-making processes. This can include town hall meetings, public hearings, and community-based planning processes.
- c) **Encouraging Community Involvement in Service Delivery:** It is possible to make the guarantee that vital services like education and healthcare are responsive to community needs by enabling neighbourhood residents to get involved in their implementation. This can include involving community members in the planning and management of local health clinics and schools.
- d) **Supporting Community-Led Development Initiatives:** Supporting community-led development initiatives can help to build community capacity and promote community ownership of development initiatives. This can include providing funding for community-led projects and supporting local entrepreneurship.
- e) **Contributing to Public Understanding and The process of Learning:** Putting money into neighbourhood awareness and education can help to build community capacity and promote citizen participation in decision-making processes. This can include providing training on leadership and civic engagement, and raising awareness about community rights and responsibilities.

Altogether, promoting community engagement in Ibadan requires a comprehensive and coordinated approach that involves government, civil society, and the private sector. By building strong community-based organizations, promoting citizen participation in local government, encouraging community involvement in service delivery, supporting community-led development initiatives, and investing in community education and awareness, Ibadan can build a more engaged and participatory community that is better equipped to address its development challenges.

Finally, promoting social sustainability in Ibadan will require a joint initiative by the administration, civil society, and the commercial sector to solve the humanitarian problems in the city and build a more inclusive and equitable city for all residents.

IV. ENVIRONMENTAL SUSTAINABILITY IN IBADAN CITY

Environmental sustainability is an important aspect of urban development that focuses on reducing negative impacts on the environment and promoting the conservation of natural resources. In Ibadan, there are several environmental challenges that need to be addressed to promote environmental sustainability. Some of these challenges include:

4.1 Air Pollution: Ibadan suffers from air pollution due to emissions from vehicles, industries, and waste burning. This contributes to respiratory problems and other health issues for residents.

Ibadan is a city located in southwestern Nigeria with a population of over 3 million people. Unfortunately, like many other urban centres in the developing world, Ibadan is facing significant air pollution challenges.

The main sources of air pollution in Ibadan include vehicular emissions, industrial activities, solid waste burning, and domestic cooking with biomass fuels. Such processes cause a variety of air contaminants, such as the gases carbon monoxide, nitrogen oxides, sulphur dioxide, particulates, and organic substances that are volatile, to be released into the atmosphere.

The health of people can suffer greatly from the effects of pollutants in the air, with breathing problems being an ongoing issue. Lung cancer, stroke, and cardiovascular disease can all be caused by pollutants in the air. People who already have medical conditions, young people, and seniors are especially susceptible to the adverse consequences of pollutants in the air.

To address the issue of air pollution in Ibadan, there needs to be a coordinated effort from the government, industry, and the general public. Some potential solutions include:

- i. Implementing stricter regulations on emissions from vehicles and industries
- ii. Encouraging the use of clean cooking technologies like LPG, electric cookers, or solar cookers.
- iii. Promoting public transportation and limiting the use of private vehicles.
- iv. Proper waste management to prevent waste burning
- v. Making people more aware of air environmental damage's negative impacts and the value of taking personal action on one's own to lessen it.

These measures can go a long way in reducing air pollution levels in Ibadan and improving the health and well-being of its citizens.

4.2 Waste Management in Ibadan: Ibadan generates a significant amount of waste, but the city lacks an effective waste management system. This leads to littering and the dumping of waste in open spaces, which can have negative impacts on the environment and public health.

Waste management is a significant challenge in Ibadan due to the city's rapid population growth and urbanization. Poor waste management practices can lead to environmental degradation, health hazards, and unsanitary living conditions. Here are some of the key issues and potential solutions:

1. **Waste Collection:** One of the major challenges in Ibadan is the inadequate waste collection infrastructure. There is a need to improve the collection system by providing more waste bins and hiring more waste collectors to ensure regular and efficient waste collection.

2. **Waste Segregation:** Another significant issue is the lack of proper waste segregation. Residents must be educated on how to separate their waste at the source, such as separating organic waste from inorganic waste. This will make it easier to recycle and reuse waste products.

3. **Recycling:** The recycling of waste is still not common in Ibadan. There is a need to establish a sustainable recycling industry that can convert waste into valuable products such as compost, plastic granules, and paper products.

4. **Landfill Management:** Ibadan's main landfill site, Awotan, is nearing its maximum capacity, and alternative sites must be found. Also, there needs to be effective monitoring and management of the existing landfill to prevent environmental pollution and health hazards.

5. **Public Awareness:** It is crucial to educate the general public on the importance of proper waste management practices. This can be done through public campaigns, community engagement, and outreach programs.

In conclusion, the average citizen, the commercial sector, and government agencies must work together in Ibadan to properly handle refuse. The standard of living of the population can be improved by using efficient waste handling techniques, prevent environmental pollution and health hazards, and create job opportunities in the recycling industry.

4.3 Water Pollution: Many of Ibadan's water bodies are polluted due to inadequate sanitation systems and waste disposal practices.

Water pollution is a significant problem in Ibadan due to urbanization, industrialization, and poor waste management practices. The major sources of water pollution in the city include untreated sewage, industrial effluents, and agricultural runoff. Here are some of the key issues and potential solutions:

- a. **Untreated Sewage:** A significant portion of Ibadan's sewage is discharged into water bodies without treatment. This practice contributes to the spread of waterborne diseases and contamination of water resources. There is a need to invest in adequate sewage treatment plants to treat and dispose of sewage properly.
- b. **Industrial Effluents:** Some industries discharge untreated effluents into water bodies, contaminating them with heavy metals and other toxic substances. There is a need to enforce regulations that mandate industries to treat their effluents before discharging them into water bodies.
- c. **Agricultural Runoff:** The excessive use of agrochemicals in farming activities leads to the accumulation of these chemicals in water bodies through agricultural runoff. There is a need to educate farmers on best practices for the use of agrochemicals and enforce regulations on their use.
- d. **Waste Management:** Poor waste management practices contribute to water pollution, as solid waste dumped into water bodies can lead to contamination. There is a need to improve waste management practices, including proper collection, segregation, and disposal of waste.
- e. **Public Awareness:** It is essential to educate the general public on the importance of protecting water resources from pollution. This can be done through public campaigns, community engagement, and outreach programs.

In conclusion, Users, the commercial sector, and the authorities must work together to combat the contamination of water in Ibadan. Proper sewage treatment, enforcement of regulations on industrial effluents and agricultural runoff, and improving waste management practices can improve the quality of water resources in the city. Also, raising public awareness of the importance of protecting water resources from pollution is crucial.

4.4 Deforestation: The city has lost a significant amount of its forest cover due to urbanization and agricultural practices. This has led to soil erosion, loss of biodiversity, and other environmental problems. Deforestation is a significant problem in Ibadan due to agricultural expansion, urbanization, and the demand for fuelwood. The loss of forests contributes to soil erosion, climate change, loss of biodiversity, and environmental degradation. Here are some of the key issues and potential solutions:

1. **Agricultural Expansion:** The expansion of agriculture is a significant driver of deforestation in Ibadan. There is a need to promote sustainable agriculture practices that do not require clearing large areas of forest for farming. Such practices include agroforestry, crop rotation, and conservation agriculture.
2. **Urbanization:** The expansion of urban areas in Ibadan has led to the conversion of forests into residential and commercial properties. There is a need for urban planning that incorporates green spaces and preserves forest areas within the city.
3. **Fuelwood Demand:** Many households in Ibadan depend on fuelwood for cooking and heating. This practice contributes to deforestation. There is a need to promote the use of clean energy alternatives like LPG and electricity for cooking and heating.
4. **Forest Conservation:** There is a need to conserve and protect existing forest areas in Ibadan. This can be done through forest management practices such as selective logging, forest restoration, and afforestation.
5. **Public Awareness:** Educating the general public on the importance of forests for the environment and their livelihoods can help raise awareness of the need to protect and conserve forests. This can be done through public campaigns, community engagement, and outreach programs.

In conclusion, deforestation in Ibadan requires a concerted effort from government, the private sector, and the general public. Sustainable agriculture practices, urban planning that incorporates green spaces, promoting clean energy alternatives, forest conservation, and public awareness can all help reduce deforestation rates in Ibadan.

To promote environmental sustainability in Ibadan, the government and other stakeholders can take several steps, including:

4.5 Encouraging Green Transportation: The government can encourage the use of public transportation, bicycles, and other green modes of transportation to reduce emissions from vehicles.

Encouraging green transportation in Ibadan is an essential step towards reducing air pollution, promoting sustainable mobility, and mitigating climate change. Here are some of the key strategies to promote green transportation in Ibadan:

- i. **Public Transportation:** The facilities for mass transportation in Ibadan need to be improved, including the deployment of commuter light rail and metropolitan systems, the development of the rapid transit bus system, and the promotion of the use of electricity-powered buses. As a result, there are going to be fewer automobiles on the roadways, which will lead to lower emissions of carbon dioxide.
- ii. **Cycling and Walking:** Encouraging the use of bicycles and walking is an effective way to reduce carbon emissions, promote exercise, and improve public health. The city can provide dedicated bike lanes, bike-sharing programs, and pedestrian walkways to encourage active transportation.

- iii. **Carpooling:** The overall number of cars on the road and the amount of carbon dioxide released can be decreased by promoting sharing a vehicle. The city can incentivize carpooling by providing carpooling lanes, dedicated parking spaces for car-poolers, and other incentives.
 - iv. **Electric Vehicles:** Promoting the use of electric vehicles (EVs) is an effective way to reduce carbon emissions from transportation. The city can incentivize the use of EVs by providing tax breaks, subsidies, and charging stations.
 - v. **Public Awareness:** Educating the general public on the benefits of green transportation, such as reducing air pollution and promoting sustainable mobility, is crucial to encourage the adoption of green transportation practices. This can be done through public campaigns, community engagement, and outreach programs
- In conclusion, Ibadan needs an integrated effort from the general population, the business community, and the authorities to promote environmentally friendly transportation. Improving public transportation infrastructure, promoting active transportation, encouraging carpooling, incentivizing the use of electric vehicles, and public awareness campaigns can all contribute to reducing carbon emissions from transportation and promoting sustainable mobility in the city.

4.6 Promoting Waste Management: The government can invest in waste management infrastructure such as waste collection and recycling facilities to reduce littering and improve waste disposal practices.

Promoting proper waste management in Ibadan is crucial to address the problem of environmental pollution, promoting public health, and creating a clean and sustainable environment. Here are some strategies that can be employed to promote waste management in Ibadan:

- a. **Education and Awareness:** Raising public awareness about proper waste management practices and their importance is essential. The city can use various channels, such as media campaigns, educational programs, and community outreach programs, to educate the public.
- b. **Waste Collection and Segregation:** Improving waste collection and segregation systems is crucial. The city can invest in modern waste collection equipment, set up waste transfer stations, and encourage waste segregation at the household level.
- c. **Recycling and Composting:** To lessen the total quantity of solid waste that fills garbage dumps, composting and recycling must be promoted. The city can set up recycling and composting facilities, offer incentives for waste reduction, and promote the use of recycled materials.
- d. **Regulation and Enforcement:** Establishing regulations and enforcing them is crucial to ensure that waste management practices are followed. The city can establish laws on proper waste disposal, set up penalties for non-compliance, and create a regulatory agency to enforce the laws.
- e. **Public-Private Partnerships:** Effective methods for handling waste are capable of being promoted with the support of public-private professional cooperation. The city can work with waste management companies to set up waste management infrastructure, provide funding for waste management projects, and create job opportunities in the waste management sector.

In summary, promoting proper waste management in Ibadan demands cooperation amongst the general public, the business community, and government agencies. Educating the public, improving waste collection and segregation systems, encouraging recycling and composting, establishing regulations and enforcement, and creating public-private partnerships are some of the strategies that can be employed to promote proper waste management practices in the city.

4.7 Protecting Water Bodies: The government can promote the protection of water bodies by improving sanitation systems and regulating waste disposal practices.

Protecting water bodies in Ibadan is essential to promote public health, ensure a sustainable environment, and preserve the ecosystem. Here are some strategies that can be employed to protect water bodies in Ibadan:

- i. **Regulation and Enforcement:** The city can establish laws and regulations to protect water bodies and enforce them through a regulatory agency. This can include measures such as restrictions on wastewater discharge and penalties for non-compliance.
- ii. **Waste Management:** Proper waste management practices can help prevent water pollution. The city can improve waste collection and segregation systems, establish recycling and composting facilities, and promote the use of eco-friendly products.
- iii. **Watershed Protection:** The city can establish buffer zones around water bodies, protect wetlands, and promote reforestation to protect watersheds. This can help prevent soil erosion, reduce nutrient runoff, and maintain the water quality of the water bodies.
- iv. **Education and Awareness:** Raising public awareness about the importance of protecting water bodies is crucial. The city can use various channels such as media campaigns, educational programs, and community outreach programs to educate the public.
- v. **Public-Private Partnerships:** Collaboration between the public and private sector can help protect water bodies. The city can work with industries to reduce their environmental impact, provide funding for water protection projects, and create job opportunities in the water management sector.

In conclusion, protecting water bodies in Ibadan calls for an integrated approach by the general populace, the business community, and government agencies. Establishing regulations and enforcement, improving waste management practices, protecting watersheds, raising public awareness, and creating public-private partnerships are some of the strategies that can be employed to protect water bodies in the city. By protecting water bodies, Ibadan can ensure a sustainable environment and preserve the ecosystem for future generations.

4.8 Supporting Reforestation in Ibadan: The government can support reforestation efforts by planting trees in urban areas and promoting sustainable agriculture practices.

Reforestation is essential to address the issue of deforestation in Ibadan, promote environmental sustainability, and mitigate the effects of climate change. Here are some strategies that can be employed to support reforestation in Ibadan:

a. **Education and Awareness:** Raising public awareness about the importance of reforestation is crucial. The city can use various channels such as media campaigns, educational programs, and community outreach programs to educate the public.

b. **Community Participation:** Engaging local communities in reforestation projects can promote ownership and sustainability. Residents may be included in the preparation and implementation of forestry endeavours by the municipality, provide training and support, and create job opportunities in the forestry sector.

c. **Forest Management:** Proper forest management practices can help promote reforestation. The city can establish protected areas, promote sustainable forest management practices, and enforce laws and regulations to prevent illegal logging and land use change.

d. **Public-Private Partnerships:** Both the private and public sectors working together could help in efforts to regenerate forests. The city can work with businesses to promote sustainable practices, provide funding for reforestation projects, and create job opportunities in the forestry sector.

e. **Tree Planting Campaigns:** Organizing tree planting campaigns is an effective way to promote reforestation. The city can work with schools, local organizations, and businesses to organize tree-planting events, distribute seedlings, and promote the importance of planting trees.

In conclusion, supporting reforestation in Members of the public, the business community, and government agencies must work together to improve Ibadan. Raising public awareness, engaging local communities, promoting sustainable forest management practices, creating public-private partnerships, and organizing tree planting campaigns are some of the strategies that can be employed to support reforestation in the city. By supporting reforestation, Ibadan can promote environmental sustainability and mitigate the effects of climate change.

4.9 Educating the Public in Ibadan: The government can educate the public on environmental issues and promote sustainable practices such as reducing waste, conserving water, and reducing energy consumption.

Education is a crucial aspect of promoting sustainable development in Ibadan. Here are some strategies that can be employed to educate the public in Ibadan:

i. **School Curriculum:** The city can incorporate environmental education into the school curriculum. This can include teaching students about sustainability, climate change, waste management, water conservation, and other relevant topics.

ii. **Community Outreach:** Engaging local communities is essential to promote awareness and understanding of sustainable development. The city can organize community outreach programs to educate the public on relevant topics, such as energy conservation, waste management, and water conservation.

iii. **Media Campaigns:** The city can use various channels such as radio, television, and social media to promote sustainable development. This can include public service announcements, documentaries, and educational programs.

iv. **Workshops and Training Programs:** The city can organize workshops and training programs for various groups such as farmers, traders, and other professionals to promote sustainable practices in their respective fields.

v. **Public-Private Partnerships:** Development that is sustainable can be aided through public-private sectors cooperation. The city can work with businesses to promote sustainable practices, provide funding for sustainable development projects, and create job opportunities in the sustainable development sector.

V. CONCLUSION

In conclusion, educating the public in Ibadan requires a joint initiative of the general public, the business community, and the government at large. Incorporating environmental education into the school curriculum, engaging local communities, using media campaigns, organizing workshops and training programs, and creating public-private partnerships are some of the strategies that can be employed to educate the public on sustainable development in the city. By promoting education on sustainable development, Ibadan can ensure a sustainable future for generations to come.

In the final analysis, promoting environmental sustainability in Ibadan will require the authorities, social society as a whole, and the business community, to work together to address the city's problems with the environment, and build a more sustainable and resilient city for all residents.

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