

Problem Based Learning: Teaching engineers to tackle the SDGs

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Understanding the Significance of SDG 11



- The United Nations describes the general objective of SDG 11 as making cities "INCLUSIVE, SAFE, RESILIENT and SUSTAINABLE"
- More than half of the world's population now live in cities and the figure is expected to rise to 70% of the global population by 2050.
- With the population of the world expected to be near 10 billion by then, this means nearly 7 billion people will be living in urban environments
- This fact alone should be enough to explain the urgency of SDG 11:
 Sustainable Cities and Communities and achieving the SDG indicators

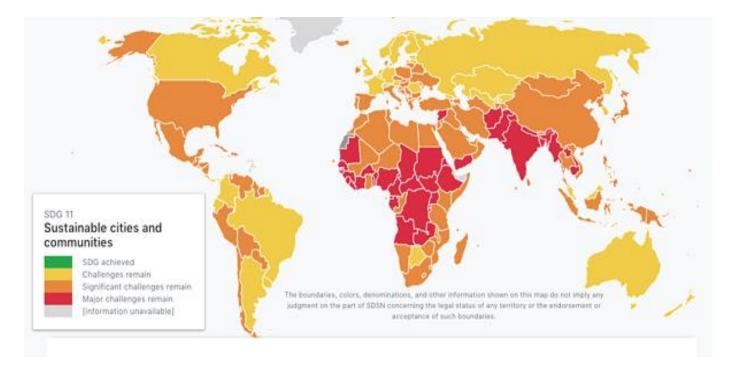




PROGRESS ON SDG 11



 No country in the world has completely achieved the targets set forth in SDG 11







"Leapfrogging" - Sustainable Urban Transport and Mobility in Freetown - A T- SUM Pilot Project



 The T-SUM - Transitions to Sustainable Urban Mobility in Sub - Saharan Africa

 aims to identify the conditions under which sustainable and inclusive transport and land use development can be accelerated in growing cities in Sub – Saharan Africa.

The Pilot Project focuses on Maputo in Mozambique and Freetown in

Sierra Leone.









T - SUM

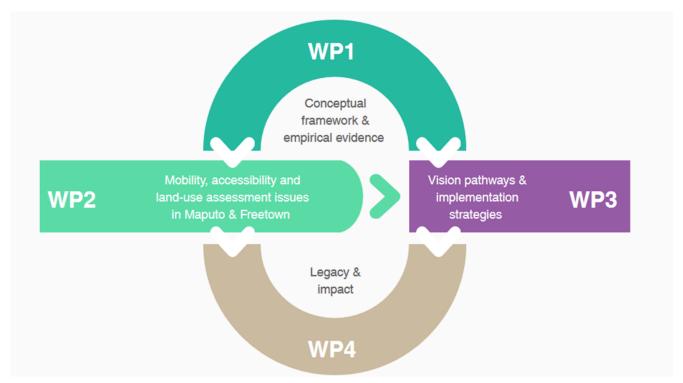


- Looking at the feasibility & consultative stage
 - Assemble and co-produce evidence by interrogating urban transport and land use data in two rapidly developing cities in the region – Maputo and Freetown
- Why Maputo and Freetown?
 - They are examples of typical urban development trajectories that are concurrently facing the twin challenges of integrating the built and social fabric alongside attaining lasting and inclusive economic growth.
- "Leapfrog" -
 - Cities in developing countries are faced with a choice of avoiding the mistakes of cities in developed countries by "leapfrogging" car oriented mobility to directly develop more sustainable and liveable cities.



T-SUM











STAKEHOLDERS ACROSS SECTORS AND LEVELS OF GOVERNANCE

Supernational Level	National Level	Regional Level	Local Level
World Bank representatives responsible for relevant urban issues in Freetown	National Government Officials working on urban planning and urban transport in Sierra Leone	Transport and Planning Authorities in Freetown's Metropolitan Areas	Local Authority: Transport, Planning and other relevant departments including the Police representatives
Un-Habitat representatives responsible for urban issues in Freetown	NGO's working on urban issues in Freetown (eg Architects without borders)		Universities and research institutes
International Development Agencies focusing on urban issues in Freetown (ie DIFID)			Citizens associations, neighbourhood representatives, church & community associations
International Monetary Fund representatives responsible for urban issues in Freetown			Transport Operators – minibus associations, public buses





WHAT PEOPLE MOST LIKE ABOUT FREETOWN



LIKE

- The Landscape of the city
- The climate of the city
- Independence and freedom to express oneself

LIKE











WHAT PEOPLE DISLIKE ABOUT FREETOWN



- Water, sanitation and hygiene
- Poor planning
- Lack of public facilities
- Lack of enforcement of the law
- High level of congestion
- Lack of accessibility





















T-SUM & IRUMP INTEGRATED RESILIENT URBAN MOBILITY PROJECT



Proposed Site for Market and Transit Transport Terminal At Lumley, Freetown



Bus Improvement Pilot Corridor with supporting Infrastructure







T -SUM & "TRANSFORM FREETOWN" - URBAN MOBILITY PROJECT



TARGET 1

Reduce congestion by at least 50% in five locations by 2022

(Congo Cross, Eastern Police, Lumley/Juba, Wilberforce/Bottom Mango and Wellington/PMB Junction

TARGET 2

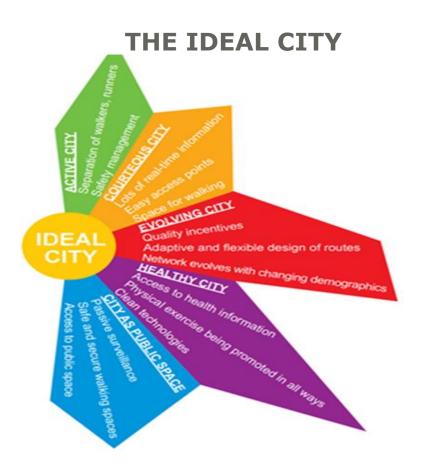
Increase public awareness and understanding of traffic and road safety by at least 50% by 2022





T-SUM VISION:





FUTURE OF FREETOWN

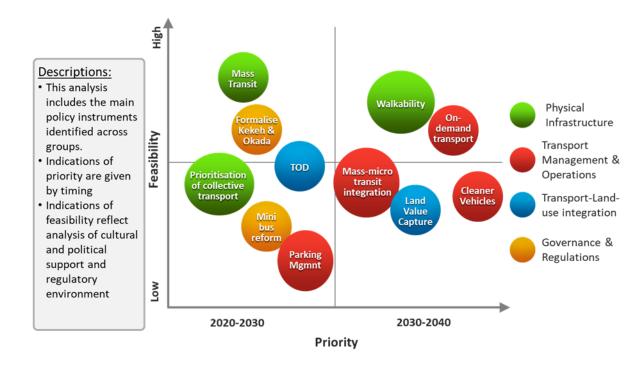
- Environmentally friendly & sustainable
- Well planned and organized
- Have Parks and Public Spaces
- Accessible and inclusive
- Safe and secure
- Healthy
- Prosperous





FREETOWN POLICY INSTRUMENTS IDENTIFIED









NEXT STEPS



- Review existing / committed projects, programmes and policies
- Further examine policy instruments
 - Agree timeline for each instrument
 - Include new policy instruments
 - Identify institutions/stakeholders who will initiate these policy instruments
 - Highlight cross-sectorial collaboration, path dependencies, synergies etc for each policy instruments
 - Identify practical implementation issues/barriers to achieving vision
 - Most pressing challenges enforcement, lack of resources
 - Why are they problematic
 - Categorize
 - Overcoming practical implementation issues





MY TAKE



To make cities sustainable for all, we can create good, affordable public housing. We can upgrade slum settlements. We can invest in public transport, create green spaces and get a broader range of people involved in urban planning decisions.

That way, we can keep the things we love about cities, and change the things we don't.





THANK YOU FROM T-SUM PROJECT FREETOWN







