LARGE SCALE INFRASTRUCTURE PROJECTS: EMERGING PLANNING CONCERNS

- **TITLE: UNOCCUPLIED PLANNING MANSIONS**

- ANNUAL NATINAL PLANNERS CONVENTION BY KIP FROM 4th to 8th November 2019,
  - HELD AT DIANI REEF BEACH RESOURT
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Organization of the Presentation

- Definition of Infrastructure
- Sustainability
- Characteristics
- Planning Conceptual View
- Institutional Arrangements of Delivery
- Examples: Nairobi Roads
- Standard Gauge Railway line
- Emerging Concerns

Definition: Compound world: **INFRA** and **STRUERE**, with Latin roots

- **Infra,** means below, under or beneath
- Struere, referring to built

- United States President's Commission on Infrastructure 2007

- Translates into the underlying man made structure upon which human civilization is built upon
- Artefacts and processes of inter related systems that enable movement of resources in order to provide the services that mediate security, health, economic growth and quality of life over a range of scales.

- A network of man made systems and of processes that function collaboratively and synergetically to produce and distribute a continuous flow of goods and services.
- In planning we view it as "A network of spatial arteries and veins; (roads, ports, dams, railways, power generation/lines, airports, water supply systems, drainage systems, irrigation systems, oil and gas pipes, and cables) that enable people, commodities, water, energy, waste water, variety of vehicles, and information efficiently and effectively for sustainable social economic development" We therefore put emphasis on **SUSTAINABLE INFRASTRUCTURE**

SUSTAINABLE INFRASTRUCTURE FOR SUSTAINABLE SOCIAL ECONOMIC TRANSFORMATION

Socially

- Inclusive and responsive to human rights
- Access and benefits to everyone without discrimination
- Supports widespread poverty reduction
- Fair distribution of facilities & services
- Welfare change in society of a greater majority than for a few
- Reforms governance from hierarchical departmentalization based on sectors to integrative (horizontal, bottom-up, synergetic, and cross sectoral)

Environmental

- Minimizes resource use (land, water, energy, raw materials) and where possible recycling
- Minimizes pollution and degradation of the natural environment
- Encourages regeneration of natural resources- Continuous flow and increase in volume
- Uses more of the renewable resources especially energy
- Sensitivity to cross sectoral linkages

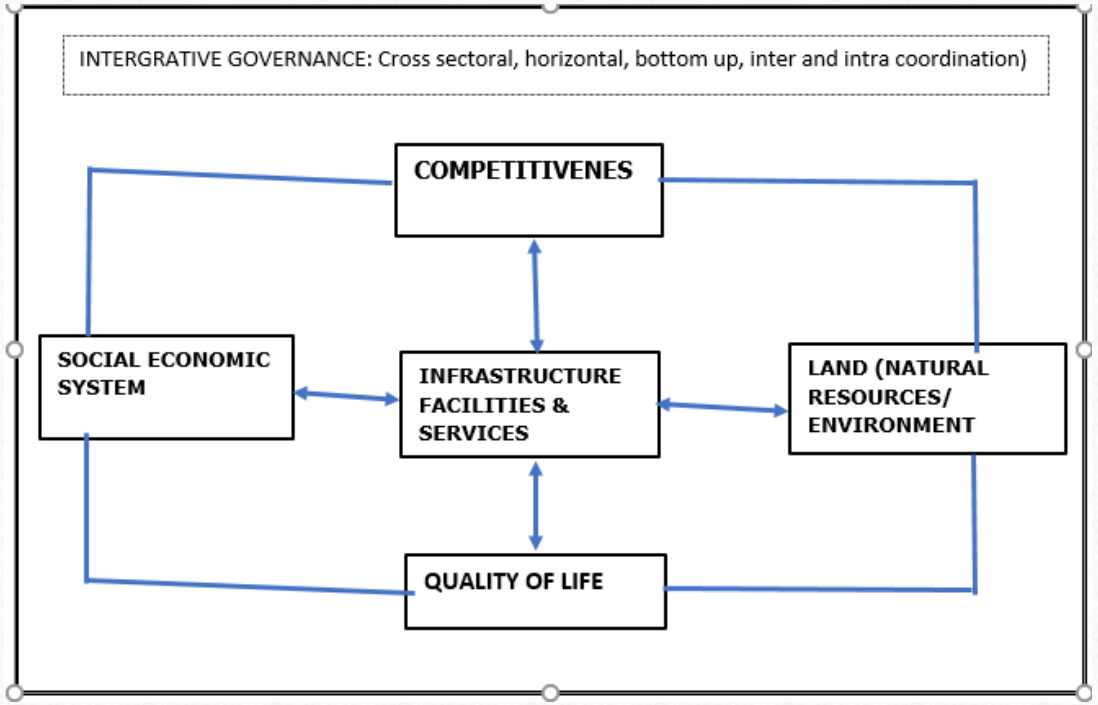
Cont'd

- Economic
- Stimulates widespread economic growth through linkages to nodes and large frontiers of spheres of influence
- End users are not subject to tariffs that they cannot afford to pay
- Is resource efficient (time used, energy consumed, costs, convenient access)
- Gives choices to communities
- Does not burden governments and communities with debts they have a burden to pay
- Gives real public value for the use of scarce resources
- Enhances connectivity and seamless flow of services

Characteristics of the Projects:

- Large scale with tangible and non tangible benefits
- Large scale users of space and best supplied on public land or where there is up to date land information system and valuation of resources
- Are provided by public sector due to the scale of the projects and spatial jurisdiction they pass through or cut across
- Non rival in utilization, the use by one person does not reduce the same for the other
- Not easy to exclude others from use
- Its full benefits are usually in the long term
- Have complementary relationships with others
- Form a basic foundation upon which modern civilization are built upon in form of structure and function.
- Facilitate the integration of space and sectoral function in the built environment
- In development thinking from both classical and neoclassical development intercourse

Conceptual View: Integrative Sustainable Infrastructure Planning)



Current Government Systems and Relation to Infrastructure and Selected Agencies

1. Finance: Ministry of Treasury & Planning

   Independent Commissions and Offices (CRA, CoB, Auditor

2. Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works
3. Ministry of Water and Irrigation
4. Ministry of Environment and Natural Resources
5. Ministry of Energy and Petroleum
6. Ministry of Information Communication and Technology
7. Ministry of Lands and Physical Planning

   National Land Commission

Selected Cases

Nairobi Initiatives

- Thika Highway Costs
- Eastern & Northern by Pass Kshs 8.5B
- Southern by Pass Kshs 18B
- Outer Ring Road 8.64B
- Western By Pass 17.3B
- Intended Express way Kshs 65B
- Railway plans to extend Commuter services even to JKIA and most parts of the Metropolitan area (Syokimau, Imara, Makadara, Athi River, etc)
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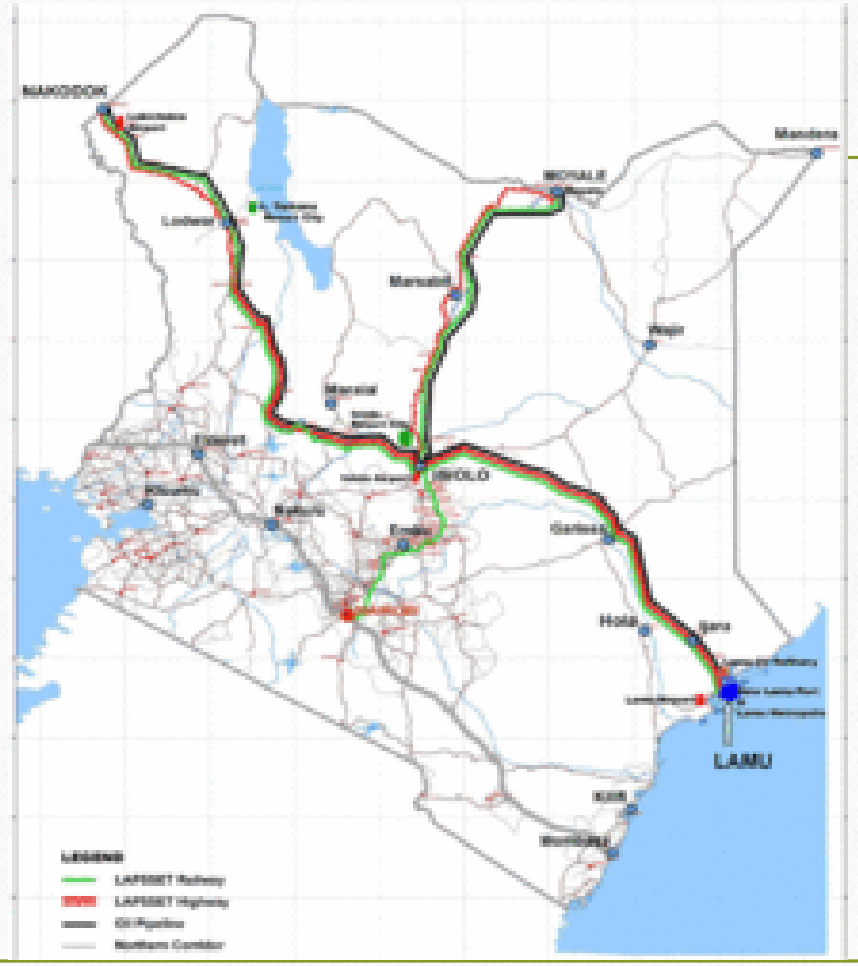
Railway Infrastructure Development Mombasa to Malaba SGR

- Mombasa Nairobi 609Km cost $ 3.6B
- Nairobi Naivasha 120Km $ 1.5B
- Naivasha Kisumu 267Km $3.8B
- Kisumu Malaba 130 Km $ 1.69B

Case of LAPSSET Development Corridor



- Second Development Corridor in the Unoccupied Mansion Spaces Since Independence
- Components of LAPSSET well thought out
- These are:
- Port at Manda Bay 32 Berths
- Standard Gauge Railway Juba, Addis
- High as above
- Crude Oil pipeline
- 3 Airports
- Resort Cities 3 No
- Oil refinery at Isiolo
- Related complementary services (water, power, fibre optic, Malindi Garsen)
- SECURITY ISSUE remains a challenge in the region

PANERY SESSION-EMERGING CONCERNS

- Several Billions spent but supporting unsustainable transport system (The More you built the more they come)
- Non comprehensive approach to provision of infrastructure (water, transport, ICT, irrigation) without complementary linkages-there is need for a policy mix
- Large sums of money spent without participation of the citizens
- Feasibility reports of the projects not easily accessible for scrutiny and transparent debates
- Planting, adding more fertilizer to inequality in the provision of infrastructure (Lack of choices)
- Isolated non coordinated response to infrastructure problems

Cont'd

- Growing demand for land needed for infrastructure provision and high costs of compensation
- Corresponding enabling policy to facilitate investments that make infrastructure investments to pay is lacking (Excess Capacity)-Not properly linked to nodes, and resource hinterlands
- Encroachment on key infrastructural spaces (water and Sanitation, Energy, Transport, Catchment and wetlands)
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