

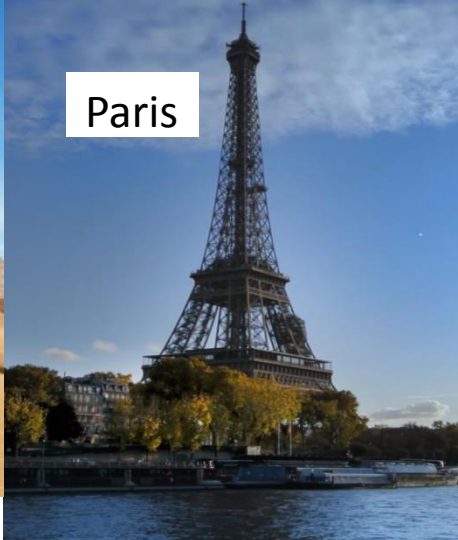
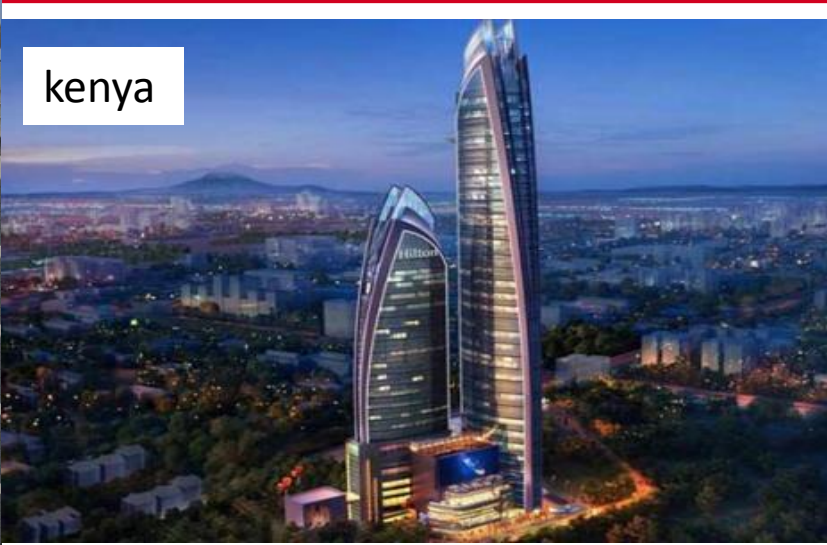


Chaired by:

Global and local challenges and/or potentials in construction

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Guideline:

- Expectations
- Global and local challenges
- Global and local potentials
- Possible solutions
- Implementation into “real work”



radical change always starts with changing ideas and believing in them

Global and local challenges and/or potentials in construction



Problems and challenges that faces construction everywhere :

1. A general situation of socio-economic stress,
 2. A chronic resource shortages,
 3. Institutional weaknesses
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Global and local challenges

Economic Challenges

- There is corruption in construction industry
 - Exclusion of key Engineers during feasibility studies and issuing of contracts
 - Unequal distribution of resources
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Social Challenges

- Rural buildings are seen as poor buildings
 - People don't want to live in Low cost housing
 - Poor quality of low cost housing
 - Lack of awareness on corruption at all levels
 - Poverty or unemployment
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Environmental Challenges

- Importing of materials resulting in inefficient application
 - The curriculum is misaligned with the application on the ground
 - The skills of builders are poor
 - Insufficient internships and exchange programs
 - Lack of interdisciplinary connection for project
 - Locals left out on feasibility studies
 - Allocation of financial resources
 - Lack of usage of locally available materials
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Global and local potentials

Potentials in construction

- Construction sector is changing: adapt to future needs, growing sector due to urbanization
 - Blend of local and conventional building materials: to develop green structure
 - Pressure to reduce carbon footprint of buildings through recycled materials (urban waste, agro waste, domestic waste...)
 - Abundance supply of local materials
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Possible solutions and implementation for impact

Solution: Spread information about construction to general public

Implementation: Exhibitions, social media, app

- Teaching basic knowledge
- Teaching technical background
- Informal education

- General public: Pilot projects showing the public (has a teaching effect as well – how do pilot projects work)

Make information more accessible: Information kept together only build elites

Possible solutions and implementation for impact

Solution: New learning tools and methods

- Teach the basics
 - Teach about new tools: Low cost materials, wastes
 - Online courses
 - Teaching entrepreneurship
 - Teaching to work interdisciplinary, interdisciplinary engagement
 - Teaching not only engineering, teach them economics and politics as well
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Possible solutions and implementation for impact

Solution: Think about the standards

- Teach basics, not standards
 - Next generation should know what is needed, implement it in local context (considering climate conditions and more)
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Possible solutions and implementation for impact

Solution: Undercover impact

- Tell the clients, not the politicians directly
- Civil engineers as lobby for politicians
- Building interdisciplinary base for politicians

Impact from the bottom and at the top!
