

Planning for Climate Change and Rapid Urbanisation

Continuing Professional Development, Lecture Series for Professionals

lecture notes

- Lecture title : A Manifesto for Climate Responsive Design
- Presenter : Peter Clegg; Isabel Sandeman
- Presenter firm : Feilden Clegg Bradley Studios
- WWW : fcbstudios.com

summary

A Manifesto for Climate Responsive Design identifies 9 key themes of Climate Responsive Design, which are explained through a series of real-life built exemplar projects from Uganda, Rwanda, the DRC and Malawi. These exemplar projects represent a new generation of architecture, which illustrates a developing understanding of how the built environment can adapt to and help mitigate the impact of climate change and biodiversity loss.

learning outcomes

By the end of this lecture, students will:

- Understand the theory of Climate Responsive Design through 9 key themes
- See how these themes can be applied through several exemplar projects from across East Africa

key concepts

1. Participatory Process
2. Local Materials
3. Solar Shading
4. Passive Ventilation
5. Natural Daylighting
6. Sustainable Landscape
7. Energy Generation
8. Water Management
9. Waste Management

relevant SDGs

SDG6, SDG7, SDG8, SDG9, SDG11, SDG12, SDG13

links to further information

<https://fcbstudios.com/>

<https://www.shatotto.com.bd/>

<https://www.agakhanacademies.org/>

speaker notes

Part 1 – Introduction

- Slide 1-2 : Introductions
- Slide 3-12 : Presentation overview and introduction to 9 themes of Climate Responsive Design
- Slide 13-15 : Introduction and history of the Feilden Foundation
- Slide 16-17 : Manifesto background, introduction and aims

Part 2: 9 themes of Climate Responsive Design told through 9 exemplar projects

- Slide 18-20 : 9 themes of Climate Responsive Design and how they relate to the SDG's
- Slide 21 : Map showing the locations of 9 exemplar projects from across East Africa
- Slide 22-26 : Participatory Process / Rwamagana Leaders' School Dormitory
- Slide 27-31 : Local Materials / African Wildlife Foundation Conservations Primary Schools
- Slide 32-36 : Solar Shading / Mzuzu University Health Clinic
- Slide 37-39 : Passive Ventilation / Ilima Primary School
- Slide 40-41 : Natural Daylighting / Ruhehe Primary School
- Slide 42-45 : Sustainable Landscape / Lake Bunyonyi Vocational Secondary School
- Slide 46-47 : Energy Generation / Cotton-On Foundations Primary Schools
- Slide 48-49 : Water Management / National Teachers' Training College, Kaliro
- Slide 50-53 : Waste Management / Early Childhood Development & Family Centres

Part 3, The Manifesto 10-points:

- Slide 54-64
 1. Involve project stakeholders in every stage of the design and construction process for low-carbon, long-lasting buildings.
 2. Leverage the construction process to build local capacity and provide training and work opportunities for the local community.
 3. Use local materials with low embodied carbon, which are preferably grown or recycled such as responsibly sourced timber from managed plantations.
 4. Utilise passive ventilation strategies, natural daylighting and energy from the sun, but protect from solar overheating and glare.
 5. Strategic masterplanning of biodiverse landscapes can promote health and wellbeing, provide climatic cooling and mitigate the effects of extreme weather events.
 6. On-site renewable energy generation can cover or supplement energy requirements and help to offset embodied carbon in the building fabric.
 7. Recycle grey water and harvest and store rainwater for reuse, and to help prevent flooding and erosion.
 8. Ensure healthy disposal and recycling of human waste, as well as adequate hand washing facilities and clean filtered water for human consumption.
 9. Designers, builders and building users should work together to combat climate change and learn from successes and failures.
 10. Rapidly urbanising nations should aim to leapfrog already industrialised countries through constructing passive buildings and investing into clean energy and smart low-carbon technologies.

Part 4 – Next Steps

- Slide 65 :A Manifesto for Climate Responsive Design – the book
- Slide 66 : Climate Responsive Design Exhibition coming up in FCBStudios London office
- Slide 67 : The Online Forum and CRD Module in collaboration with Martyrs / Kigali University
- Slide 68 END

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