2nd Online Impact Workshop Cum Master Class on Capacity Building Initiative for Citywide Water and Sanitation Management

Date: August 11 - 13, 2021
Venue: Zoom
CSE-GNDU Academia Partnership: Pedagogy, Action Research and Model Projects for Building Sustainable Habitat (Journey of 4 Years)

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March 25, 2017

Agreement

BETWEEN

FACULTY OF PHYSICAL PLANNING AND ARCHITECTURE,
GURU NANAK DEV UNIVERSITY AMRITSAR

AND

CENTRE FOR SCIENCE AND ENVIRONMENT (CSE)

ON

Through
Sustainable Building & Habitat Programme,
Centre for Science and Environment, New Delhi

TECHNICAL, ADVISORY, KNOWLEDGE AND CAPACITY BUILDING
SUPPORT FOR REFORMS IN CURRICULUM
Capacity Building Programmes Organised at GNDU (2017-2019)

Training programme on “Green Sense: Sustainability and Reformative practices”
16th – 18th January, 2018
Guru Nanak Dev University, Amritsar

NORTH REGIONAL CONCLAVE
on
Green Sense: Educational Campus Inventory
15th – 16th November 2018

Training programme on “Green Sense: Framework for Sustainable Development”
10th August – 11th August, 2017
Auditorium, Guru Granth Sahib Bhawan
Guru Nanak Dev University, Amritsar

“Enabling Low-impact Approach to Built Environment”
4th September – 6th September, 2018
Guru Nanak Dev University, Amritsar

Training programme on Sustainability and Circularity (Mass-Value-Carbon)
April 2nd – 3rd 2019
Guru Nanak Dev University, Amritsar

Regional Workshop on
MAINSTREAMING SUSTAINABILITY
IN CURRICULA OF THE BUILT ENVIRONMENT COURSES
October 30-31, 2019
2021  **Advanced Training on Decentralized Wastewater, Faecal Sludge and Septage Management:** March 9-12, 2021, School of Water and Waste, Centre for Science and Environment, New Delhi

2018. **International Training on Tools and Approaches for Citywide Water and Sanitation Management:** July 24 – August 03, School of Water and Waste, Centre for Science and Environment, New Delhi

2018  **Training on Nature Based Solutions for Water and Waste management:** July 10-13, School of Water and Waste, Centre for Science and Environment, New Delhi

Many training programmes attended through online mode.

Useful Reports on Water
Attended Face-to-Face Training Programmes at AAETI

Advanced Training on Decentralized Wastewater, Faecal Sludge and Septage Management: March 9-12, 2021
Org.: School of Water and Waste, Centre for Science and Environment, New Delhi

Org.: Sustainable Building & Habitat Programme, Centre for Science and Environment, New Delhi
Prelude

Second most cleanest Government University of India

- Establishment: Nov. 14, 1969
- Area: 202 Hectare
- Constructed Area: 13.14 hect.
- Student Strength: 12000 approx.
INITIATIVES IN WATER SECTOR
Establishment of Academic and Research Centres under RUSA 2.0

- Centre for Sustainable Habitat

- Incubation Centre – Golden Jubilee Centre for Entrepreneurship and Innovation

**Academia**

- Organized and attended CSE’s training programme at GNDU – 2017-2019
- Faculty and students of GNDU attended CSE’s training programmes at AAETI and Online
- Improvements in Course Curriculum – 2017 till date
Research in Water Sector

Guru Ramdas School of Planning
• UG/PG students undertaking dissertation/thesis on Water and Sanitation related problems.

Centre for Sustainable Habitat
• Out of 11 research projects, 4 concern water and wastewater
  • Pollution load of pond ecosystems
  • Rhizo-Remediation Based Waste Water Treatment
  • Prevalence of Uranium and Radium in Groundwater, etc.
  • Campus Sustainability - Water and Wastewater

Labs of the Centre
• Design and Transportation
• Air Quality and Noise Pollution
• Solid Waste Management
• Water and Wastewater Management
### Projects (On Ground)

<table>
<thead>
<tr>
<th>Water and Wastewater Management</th>
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<tbody>
<tr>
<td>• Augmentation of STP</td>
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<td>• Creation of wetland near STP</td>
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<td>• Rain water harvesting</td>
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<td>• Water recharge systems</td>
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<td>• Water collection pond</td>
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<td>• Water sensitive toilets and urinals</td>
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<td>• Adopting DWWAT system</td>
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Sewerage Treatment Plant

- Capacity - 2500 KL/day
- Cost: 38 lakh in year 2008
- Area: approx. 2 acres
- Reuse 2500 KL treated water for irrigating the botanical garden.

Rhizo-Remediation based Wastewater Treatment
Water Management and Reuse

Separate storm water and sewerage networks.

**Water Recharge**
- 188.86 hact. - organized lawns or agricultural lands natural recharge wells.

**Rainwater Harvesting**
- 87270 sq. mts. roof top area – storm water in the lawns or surface run off along the roads.
- Levels of roads lower than the lawns – increased run off due to overflow.
- 2 RWH tanks – in botanical garden and in its north-western direction.
- Surplus water of the tank is disposed of in the Nallah.

**Water Reuse after Treatment**
- Own sewerage treatment plant
- Treated water used within – 2500 KL/Day
Thank You