

WORKSHOP ON RAINWATER HARVESTING SYSTEMS

Aim:

To sensitize young professionals with need and potential of rainwater harvesting systems (RWHs) and impart knowledge, skills and attitude required for planning and designing of RWH at an individual, neighbourhood and institutional/ individual scale.

Learning Objectives:

1. To understand the key issues and challenges faced in urban water management sector in Indian cities
2. To enhance knowledge and acquire holistic perspectives towards Rainwater Harvesting concepts.
3. To learn components of RWHs and to understand the enabling framework for setting up the RWHs at individual, neighbourhood and institutional scale.
4. Exposure to community driven practices, case studies in the field of Rainwater Harvesting and provide guidance on how to engage with relevant stakeholder aimed at building water prudent sustainable communities.
5. To interact and learn from implementers and beneficiaries of successfully implemented RWHs during the field visit.

Methodology:

The 3-day workshop will be conducted through presentations, brainstorming/ interactive sessions, lectures, case studies, campus tour, quizzes and Do It Yourself (DIY) exercises.

Target group:

1. Architecture and planning students
2. Researchers and academics interested in curriculum development in planning, architecture and civil engineering

SESSION PLAN

| 22.06.2022 – Day 1 – Urban water challenges, issues and way forward | | | | |
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| Session Name | Time Slot | Discussion Points | Resource Person | Methodology |
| CSE, catch water where it falls - Documentary | 11:00 – 11:02 | <ul style="list-style-type: none"> Video Documentary | Pooja | Audio visual |
| Workshop Introduction | 11:00 – 11:15 | <ul style="list-style-type: none"> Aim objectives and key takeaways/ outcomes of the workshop Context setting - Global and local water and sanitation scenario | Pooja | Presentation/ Slides |
| Guwahati Scenario | 11:15 – 11:30 | <ul style="list-style-type: none"> Regional and local context – Water scarcity, drainage and urban flooding in Guwahati | Shweta Das | Presentation/ Slides/ Lecture |
| Exercise 1 – Memory Mapping | 11:30 – 12:00 | <ul style="list-style-type: none"> To understand and sensitize students about the significance of rainwater | Students | Softboard, pins and thread |
| Exercise 1.2 – Issues and challenges | 12:00 – 12:20 | <ul style="list-style-type: none"> Concerns and Possible solutions in urban water management in their region | Students | Whiteboard and sticky notes Discussion and Interaction |
| Introduction to Traditional Rainwater Harvesting Systems | 12:20 – 13:00 | Ancient Wisdom - Introduction to Traditional Rainwater Harvesting Systems from different parts of India | Shivani | Presentation/ Slides |
| Lunch (1 Hour) | | | | |
| Exercise 2 – Quiz and Doodle: Traditional RWHs | 14:00 – 14:45 | <ul style="list-style-type: none"> Ancient Wisdom - Introduction to Traditional Rainwater Harvesting Systems from different parts of India | Students | Quiz on Slides, Flipchart |
| About CSE and Urban water challenges | 14:45 – 15:30 | <ul style="list-style-type: none"> About CSE Current water scenario Key issues and challenges in urban water management Need of rainwater harvesting | Shivani | Presentation/ Slides/ Lecture |

| 23.06.2022 – Day 2 – Knowledge, skills and attitude required for planning and designing of RWH | | | | |
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| Introduction to Day 2 | 11:00 – 11:05 | Briefing of Session Plan for Day 2 | Pooja | Slides |
| Reflection Session | 11:05 – 11:20 | Group presentation on Traditional RWH in different regions of India | Students | Open discussion on sheets and interaction |
| Concept planning and basics of RWH and SUDS | 11:20 – 13:00 | <ul style="list-style-type: none"> • Concept and components of Rainwater Harvesting – Data Requirement, Case Examples • Basic concept of SUDS (Sustainable Urban Drainage Systems) and stormwater Harvesting in Open Spaces | Shivani | Presentation/ Slides/ Lecture |
| Lunch (1 Hour) | | | | |
| Institutional framework, regulations and governance in rainwater harvesting systems | 14:00 – 14:15 | <ul style="list-style-type: none"> • Understanding Institutional framework and their provisions in promoting rainwater harvesting • Rainwater harvesting government guidelines | Pooja/ Shweta | Presentation/ Slides/ Lecture |
| Campus Tour | 14:15 – 15:00 | <ul style="list-style-type: none"> • Issue Mapping in the Campus • Reflection on Campus Tour | Students | On site |
| Basics of post implementation of RWH System: Operation & Maintenance | 15:00 – 15:30 | <ul style="list-style-type: none"> • Operation and Maintenance in rainwater harvesting • Why Operation and Maintenance of Rainwater Harvesting structures is required? • What kind of and where O & M is required for RWH structures? | Shivani | Presentation/ Slides/ Lecture Audio Visual Data |
| Introduction to DIY | 15:30 – 15:45 | <ul style="list-style-type: none"> • Introduction to DIY Exercise | Students | Group Exercise/ Sheets |

| 23.06.2022 – Day 3 – Learn from implementers and beneficiaries of successfully implemented RWHs and DIY Exercise | | | | |
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| Introduction and Guwahati Scenario | 11:00 – 11:30 | <ul style="list-style-type: none"> Briefing of Session Plan for Day 3 Regional and local context – Water scarcity, drainage and urban flooding in Guwahati | Shweta Das | Presentation/ Slides/ Lecture |
| Current practices and implemented projects in the field of RWH – A case of Guwahati | 11:30 – 11:50 | <ul style="list-style-type: none"> Success story of being a Water Warrior - Implemented RWH projects in Guwahati | Akshay Agrawal | Presentation/ Slides/ Lecture |
| DIY Exercise & Presentation | 11:50 – 13:00 | <ul style="list-style-type: none"> Prepare a concept plan for the given plan and discuss what the utilities are and favourable site conditions for various interventions presented in the workshop before, with details on stakeholders involved and key benefits. Participants would work in four groups; each group will be allocated with supporting data. Each group will present their conclusion after the exercise (5 + 2 (Q&A & Discussion) mins for each team). | Students | Group Exercise/ Sheets Open Discussion |
| Workshop Conclusion, Feedback on key learnings and Certificate Distribution | | | | |