



WORKSHOP REPORT

TWO-DAY WORKSHOP

ON

**'HOW TO CONDUCT COURSES ON ENVIRONMENTAL
MANAGEMENT AND SUSTAINABILITY'**

AT

NATIONAL INSTITUTE OF TECHNOLOGY, KARNATAKA



THE BACKGROUND

With Sustainability gaining increasing prominence in the national and international regulatory and policy environments, businesses are paying increasing attention to their environmental performance, creating a need for well-trained environmental managers. Academic institutions such as the IITs, NITs and even B-Schools have responded by initiating courses and full-fledged programs in Environmental Management. However most of these courses and programs are inadequately geared to meet the requirements of the job market – they often lack the inter-disciplinary, multi-stakeholder, multi-scale and practical orientation that is imperative for employability.

One of the main objectives of Ekonnnect Knowledge Foundation (Ekonnnect) is to support educational institutions in developing curricula that can prepare students for successful careers in Environmental Management. In keeping with this objective, Ekonnnect plans to conduct workshops for faculty of academic institutions, training them in the nuances of developing and conducting courses on Environmental Management and Sustainability.

THE WORKSHOP AND THE PARTNERSHIP

On 20th and 21st September 2013, Ekonnnect Knowledge Foundation conducted a two-day workshop at the National Institute of Technology Karnataka, Surathkal to train professors, PhD scholars and students of Environmental Management and Engineering on the topic ‘How to conduct courses on Environmental Management and Sustainability’.

Conducted in partnership with the Civil Engineering Department at NITK, the workshop was a resounding success, with 30 professors, 10 PhD scholars and 30 Master’s students from institutes across Mangalore region benefitting from the interactive lectures and group activities.

WORKSHOP OBJECTIVES

The objectives of the workshop were:

1. To expose faculty and students to the evolution of the discipline of Environmental Management
2. To expose the faculty to courses on Environmental Management offered around the world
3. To give faculty hands-on training on Environmental Management curriculum development and supporting tools
4. To give students guidance on conducting research and making careers in Environmental Management

DAY 1: SEPTEMBER 20, 2013

SESSION 1 (10:00 AM to 11:00 AM): Presentation by Dr. Modak on ‘Introduction to Environmental Management & Sustainability’

SESSION 2 (11:30 AM to 01:00 PM): Presentation by Dr. Modak on ‘Educational Programs in Environmental Management & Sustainability’

SESSION 3 (02:00 PM to 04:00 PM): Work Session – 1: Designing courses on Environmental Management & Sustainability

(Participants were divided into groups. Each group was tasked with developing a course module on Environmental Management & Sustainability. Appropriate worksheets and guidance material were provided. Group A developed the outline of a 36-lecture full course for students. Group B developed an 8-week Saturdays-only executive training course for business with course details. Group C developed a 2-day course for policy makers, planners and regulators and a 2-day course for environmental NGOs. Each group was provided with internet access.)

Parallel presentation on 'Making Careers in Environment and Sustainability' for students and PhD scholars

SESSION 4 (05:00 PM to 05:30 PM): Presentations by the groups followed by discussion

DAY 2: SEPTEMBER 21, 2013

SESSION 1 (09:00 AM to 9:30 AM): Developing Course Materials – PowerPoints

SESSION 2 (09:30 AM to 11:30 AM): Work Session – 2 Preparation of PowerPoints
(Participants were divided into groups. Each group was tasked with developing a PowerPoint presentation related to topics on Environmental Management & Sustainability. Presentation I followed Pecha Kucha technique. Appropriate worksheets and guidance material were provided. Presentations were made at the end.)

Parallel presentation on 'Using Google Effectively for Research' for students and PhD scholars

SESSION 3 (02:00 PM to 03:30 PM): Presentation on Preparation of Case studies

SESSION 4 (04:00 PM to 05:00 PM): Demonstration of E-learning Course on Environmental Management & Sustainability

WORKSHOP PROCEEDINGS

DAY 1

The workshop began with an inaugural function graced by Prof. Swapan Bhattacharya, Director NITK, who, after a lamp-lighting ceremony extended his warm welcome to Dr. Prasad Modak, Director, Ekonnnect and the chief resource-person for the workshop. Dr. Bhattacharya, Dr. Babunarayan and other department professors who addressed the 80-member gathering lauded the workshop topic for its significance, relevance and timeliness.



Photo: Inauguration Ceremony



Photo: Director, NITK addressing the gathering

Dr. Modak kicked off the workshop with a session that took the audience through the journey of evolution of Environmental Management as a discipline and set the stage for the discussion and deliberations that took place over the next two days.

Next was the group activity - the participating professors were organized into 4 groups, each entrusted with the task of preparing Environmental Management curricula of different durations and different types of audience, as follows:

- Group A
Duration: 34 lectures; Audience: Students
- Group B
Duration: 8 weeks (only Saturdays); Audience: Business Executives
- Group C
Duration: 2 days; Audience: Policy Makers, Planners and Executives
- Group D
Duration: 2 days; Audience: Environmental NGO professionals

The groups were given a list of Environmental Management courses being offered as a part of Master's programmes by Universities across the world.

While the professors were completing their group work, Dr. Modak made a presentation on 'Making Careers in Environment and Sustainability' to the students and PhD scholars. During the ensuing discussion, the students and PhD scholars freely talked about their hopes and apprehensions regarding career options in the field and benefitted from personalized career guidance from Dr. Modak who answered their questions on job opportunities and research areas.

Post lunch, the various groups made presentations on the curricula they had prepared during the group work and received feedback from Dr. Modak.



Photo: Lectures Being Delivered By Dr. Modak

DAY 2

The second day began with Dr. Modak delivering a lecture on how to make presentations for teaching. The participants found the various tools and applications he mentioned very interesting and useful, especially the Pecha Kucha technique of presentation. Pecha Kucha is a presentation style in which 20 slides are shown for 20 seconds each (six minutes and 40 seconds in total). The format, which keeps presentations concise and fast-paced, powers multiple-speaker events called Pecha Kucha Nights (PKNs)

The group work for the day involved preparing teaching presentations, using pointers from Dr. Modak's lecture, on one of the topics the professors had selected as a part of the curricula they had prepared the previous day. Again, while the professors were engaged in group work, Dr. Modak made a presentation to the student participants on 'Using Google Effectively for Research'.

Post lunch, the groups made presentations on their teaching topics and received comments from Dr. Modak. Annexure II has the curricula that were developed. Thereafter, the second resource person Divya Narain made a presentation on how to prepare teaching case studies. For the students, she demonstrated Ekonnnect's Job portal and e-learning platform, Ekolearning (<http://ekolearning.ekonnnect.net/>). She also demonstrated Ekolearning's upcoming e-learning course 'Foundation Course on Environmental Management and Sustainability'.

The final session was the feedback session, during which all participants, professors and students alike, expressed their extreme satisfaction at the learning they had received over the two days of the workshops. They said that the workshop had left them enlightened, clear in their perspectives and more hopeful about their careers. Annexure I shows the results of the feedback.

The workshop ended with a certificate distribution by Dr. Modak and a vote of thanks by Dr. Babunarayan.

The PowerPoint presentations of the workshop have been uploaded on Ekonnnect's slideshare account and can be accessed at:

<http://www.slideshare.net/EkonnnectKnowledgeFoundation/newsfeed>



Photos: Certificate Distribution

Ekolearning's Foundation Course on Environmental Management and Sustainability

The course employs a unique 'case study' based approach for teaching the principles of environmental management. The inter-disciplinary case studies have been chosen to highlight the multi-stakeholder, multi-scale and multi-faceted nature of environmental issues. The course will be taught by Dr. Prasad Modak

The course has four modules:

Module 1: Air Quality Management

Module 2: Ecological Risk Assessment

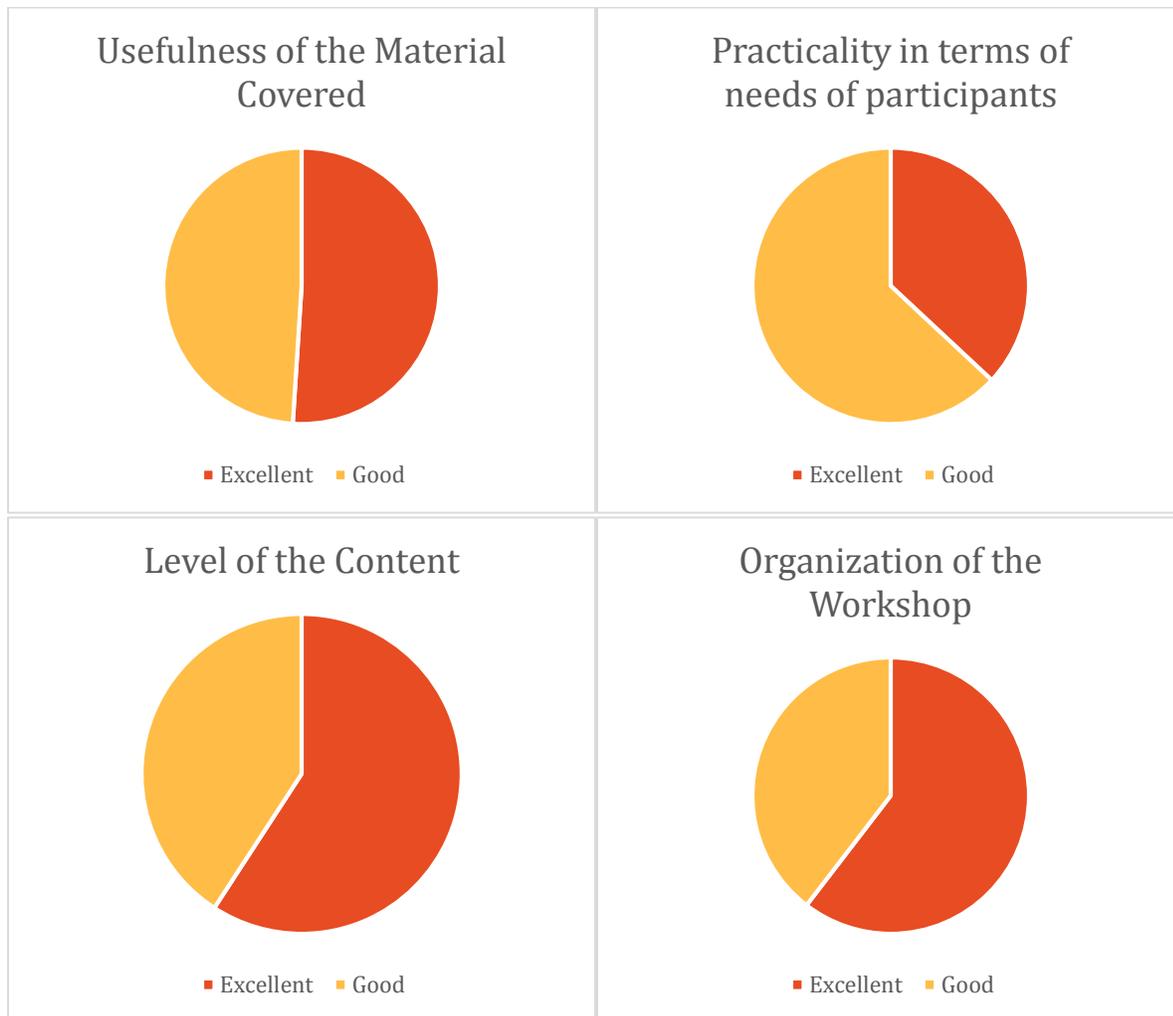
Module 3: Business and Sustainability

Module 4: Water Conflict Management

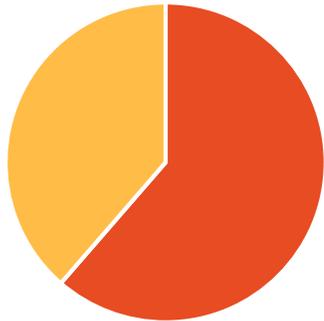
The first module has been opened for preview and can be accessed free of cost at <http://ekolearning.ekonnnect.net/>. Feedback from students is being solicited and will be used for improving the course. Once the preview period is over, students can complete the rest of the course by paying the fee and earn a certificate.

ANNEXURE I – FEEDBACK ANALYSIS

Following pie-charts reflect an analysis of the feedback provided by 49 participants

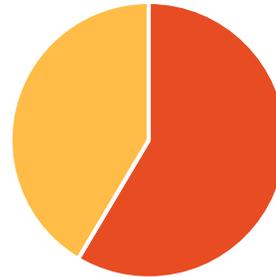


Usefulness of Handouts



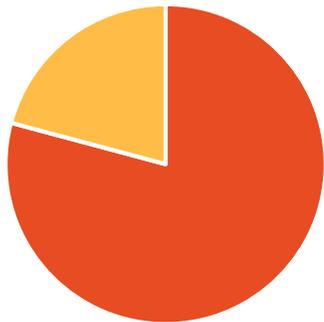
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Effectiveness of the Activities



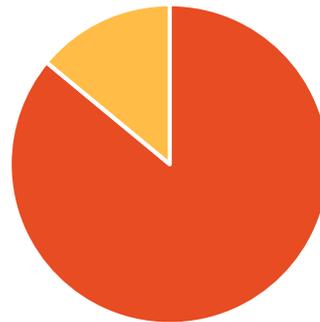
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Presentation Style



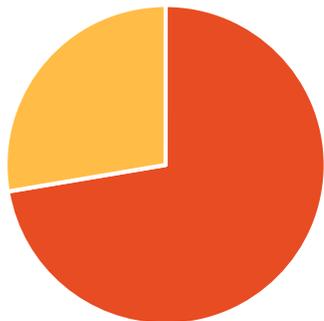
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Instructor's Knowledge



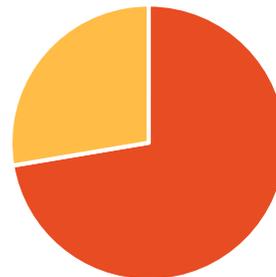
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Clarity of Material



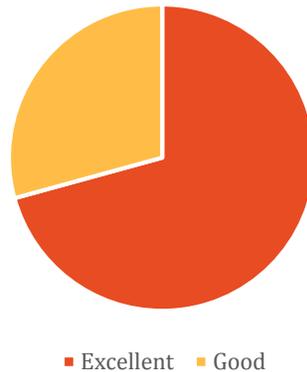
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Instructor's Response to Questions



■ Excellent ■ Good

Overall Feedback



COMMENTS AND SUGGESTIONS FROM PARTICIPANTS

HOW COULD THIS WORKSHOP BE IMPROVED?

1. More Case Studies can be introduced
2. A few more experts could be invited
3. Involvement of students could be increased
4. More participants could have been included (e.g. M. Tech. Industrial Pollution Control students)
5. Workshop duration can be increased from 2 days to 5 days.

ANY OTHER COMMENTS AND SUGGESTIONS

1. Lecture time on powerpoint can be reduced
2. One outbound activity can be introduced
3. Let's have this workshop every year
4. Can be extended to a week. This will benefit all groups. A week can be divided between different audience i.e. UG, PG, Researcher and Faculty
5. Recent trends in Environmental Engineering research can be covered
6. It was very informative and helpful to improve communication and interaction skills and soft skills related to presentation
7. It was planned and executed in the best possible manner.