

EXECUTIVE DEVELOPMENT PROGRAM
ON
PROJECT MANAGEMENT TECHNIQUES
IN URBAN PLANNING

16-18th January 2025

Dr. Arpan Paul Singh
Principal Instructor

Ar. Vijesh Kumar
Co - Principal Instructor

Patrons

Prof. Dr. Ayon K Tarafdar
Head, A-CUPCB-SPAV

Prof. Dr. Ramesh Srikonda
Director, SPAV

Training Outcome Report



AMRUT Centre of Urban Planning
for Capacity Building
A-CUPCB-SPAV



Executive Development Program Team

Principal Instructor: Dr. Arpan Paul Singh, Assistant Professor, SPA Vijayawada
Co-Principal Instructor: Ar. Vijesh Kumar, Assistant Professor, SPA Vijayawada
Industry Expert: Mr. Prasanna V, Senior Associate, Hill International, India

Patrons

Prof. Dr. Ayon K Tarafdar, Head, A-CUPCB, SPA Vijayawada
Prof. Dr. Ramesh Srikonda, Director, SPA Vijayawada

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About the Executive Development Program

The complexity of urban projects often involving diverse stakeholders, stringent regulatory requirements, and the integration of multiple functions necessitates strategic coordination and comprehensive oversight. Mastering project management equips professionals with essential tools to navigate these challenges, enabling systematic planning, execution, monitoring, and closure of projects.

Urban Local Bodies (ULBs) can significantly boost their efficiency through the adoption of project management techniques. By implementing standardized project management frameworks, ULBs can streamline their processes, reduce bureaucratic delays, and enhance service delivery to citizens. Improved project management leads to better planning and execution of urban infrastructure projects, ensuring timely completion and optimal use of public funds.

The Executive Development Program on Project Management Techniques in Urban Planning, designed as a three-day, six-session program, is tailored to empower urban planners, engineers, and policymakers with advanced strategies for managing urban development projects. The program emphasizes practical, hands-on learning through continuous engagement with one or two live urban infrastructure projects in coastal cities, focusing on climate resilience. Participants will work on these projects using MS Project software in SPAV's state-of-the-art laboratories, gaining actionable insights into resource optimization, risk management, and delivering impactful urban solutions that address the pressing demands of contemporary cities.

This program aspires to nurture leadership and foster innovation, equipping professionals to adeptly navigate the complexities of urban transformation while championing sustainable and resilient development practices.

Day Wise Program

Day 1 (16/01/2025) – Introduction to Project Management and Planning	
Inaugural: 9:30 – 10:00 AM	
Forenoon Session (10:00 AM - 12:30 PM):	
<ul style="list-style-type: none"> • Lecture: Introduction Project Planning • Hands on Exercise <ul style="list-style-type: none"> ○ Overview and Interface Navigation: Introduction to project management software or tools. ○ Creating and Setting Up a Project: Cover the initial setup, including project parameters, timelines, and stakeholders. ○ Managing Calendars and Working Time: Demonstrate how to create and manage project calendars, working hours, and special dates. 	Dr. Arpan Paul Singh Ar. Vijesh Kumar
Afternoon Session (2:00 PM – 5:00 PM):	
<ul style="list-style-type: none"> • Lecture: Scope Management and Work Breakdown Schedule • Hands on Exercise <ul style="list-style-type: none"> ○ Creating a Work Breakdown Structure (WBS): Break down tasks to create a manageable structure. ○ Task Dependencies and Constraints: Introduction to dependency types and their effects on task sequencing. ○ Introduction to Resource Assignment: Resource assignment principles 	Dr. Arpan Paul Singh Ar. Vijesh Kumar
Day 2 (17/01/2025) – Project Scheduling and Resource Management	
Forenoon Session (9:30 AM - 12:30 PM)	
<ul style="list-style-type: none"> • Lecture: Project Scheduling • Hands on Exercise <ul style="list-style-type: none"> ○ Estimating Task Duration and Effort: Techniques for accurate time estimation. ○ Task Constraints and Deadlines: Understand and apply constraints to tasks to better control scheduling. ○ Critical Path Analysis and Dependencies: Identify and analyze the critical path to ensure timely project completion. 	Dr. Arpan Paul Singh Ar. Vijesh Kumar
Afternoon Session (2:00 PM – 5:00 PM)	

<ul style="list-style-type: none"> • Lecture: Project Crashing • Hands on Exercise: <ul style="list-style-type: none"> ○ Project Schedule Optimization: Strategies for refining schedules (e.g., fast-tracking and crashing). 	<p>Dr. Arpan Paul Singh Ar. Vijesh Kumar</p>
<p>Day 3 (18/01/2025) – Resource Management, Monitoring, and Project Control</p>	
<p>Forenoon Session (9:30 AM - 12:30 PM):</p>	
<ul style="list-style-type: none"> • Lecture: Resource Scheduling and Resource • Hands on Exercise: <ul style="list-style-type: none"> ○ Resource Assignment and Availability: Allocate resources effectively based on skills and availability. ○ Introduction to Resource Conflicts and Leveling ○ Defining and Creating Resource Pools: Set up and manage shared resources across projects. ○ Resource Utilization and Optimization: Techniques for tracking and optimizing resource usage. 	<p>Dr. Arpan Paul Singh Ar. Vijesh Kumar</p>
<p>Afternoon Session (2:00 PM – 5:00 PM)</p>	
<ul style="list-style-type: none"> • Hands on Exercise <ul style="list-style-type: none"> • Tracking Project Progress and Analyzing Variances: Methods to track milestones and analyze deviations from the plan. • Updating Schedules and Baselines: Adjust project schedules and baselines in response to real-time changes. 	<p>Dr. Arpan Paul Singh Ar. Vijesh Kumar</p>
<ul style="list-style-type: none"> • Lecture: Project Monitoring and Earned Value Management 	<p>Mr. Prasanna V, Senior Associate, Hill International</p>
<p>Valedictory (5:30 PM – 6:00 PM)</p>	

Session Wise Proceedings

Inaugural Session

The Executive Development Program (EDP) on Project Management Techniques in Urban Planning' was inaugurated on January 16, 2025. The event was graced by Prof. Dr. Vijayalakshmi Iyer, Director (I/c), Dr. Ayon K. Tarafdar, Head of A-CUPCB, and the program's Principal Instructors, Dr. Arpan Paul Singh and Ar. Vijesh Kumar. Faculty members from the Departments of Architecture and Planning also attended the occasion.

Dr. Ayon K. Tarafdar provided an introduction to the centre's functioning and its key activities, emphasizing that this centre is the first among five such centres in the country to proactively commence its planned initiatives. He highlighted that this EDP marks the beginning of these activities.



Figure 1: Dr. Ayon K Tarafdar, Head- ACUCPCB-SPAV speaking at the inaugural



Figure 2 Dr. Vijayalakshmi Iyer, Director I/C speaking at the inaugural

Prof. Dr. Vijayalakshmi Iyer conveyed the greetings of Prof. Dr. Ramesh Srikonda, Director, SPAV, and underscored the significance of project management techniques in addressing contemporary urban challenges.

Following this, Dr. Arpan Paul Singh presented an overview of the program, which spanned three days and comprised six sessions. The program aimed to equip urban planning professionals with advanced project management strategies, focusing on both theoretical and practical aspects. Participants were trained in systematic planning, execution, monitoring, and control of urban development projects using MS Project software.



Figure 3: Delegates and Faculty at the Inaugural Session

The inaugural session concluded with High Tea.

Session 1: Introduction to Project Management in Planning

The first session of the program featured two lectures. The first lecture, delivered by Dr. Arpan Paul Singh, provided an introduction to the fundamentals of project management in urban planning. Key topics covered included essential concepts, the stages of project management, and the critical role of urban planners in managing development projects. Real-world case studies were presented to offer practical insights and applications.



Figure 4: Participants interacting with the instructor



Figure 5: Ar. Vijesh Kumar delivering the lecture in Session 1

The second lecture was conducted by Ar. Vijesh Kumar, who focused on the selection of projects using Multi-Criteria Decision-Making (MCDM) techniques. The session covered methods such as Analytical Hierarchy Process (AHP), Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS), and Simple Additive Weighting (SAW). Additionally, he elaborated on the methods of normalization to support effective decision-making.

Session 2: Introduction to MS Project:

The session commenced with Dr. Arpan Paul Singh delivering a lecture on Scope Management and the fundamentals of Work Breakdown Structure (WBS). The participants began with a straightforward exercise to grasp the basics, gradually progressing to tackle more complex, real-life scenarios. Following this, Ar. Vijesh Kumar introduced the participants to MS Project software, facilitating hands-on exercises in a guided environment. This approach allowed participants to actively practice and enhance their skills.

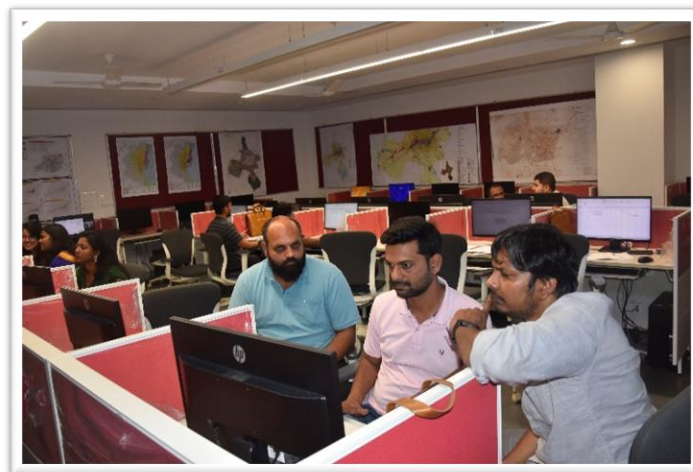


Figure 6: Ar. Vijesh Kumar instructing the hands-on exercise on Microsoft Project

Day 2: January 17, 2025**Session 3: Theoretical Concepts of Project Scheduling**

The session began with Dr. Arpan Paul Singh delivering a lecture on the theoretical concepts of project scheduling, starting with manual scheduling techniques using Critical Path Methods. It further delved into advanced scheduling approaches, including Gantt charts and dependency mapping. The theoretical framework was supplemented through discussions on optimizing timelines for urban projects.



Figure 7: Participants solving the scheduling problems manually under the supervision of instructors

Session 4: Hands-on Exercise on Project Scheduling and Optimization

The second session started with Ar. Vijesh Kumar introducing the probability-based scheduling using PERT methods which was followed by Participants applied the scheduling concepts from the morning session using MS Project. Also, the theory of resource allocation was taught post which the participants used MS Project to create resource pools and explored strategies to optimize the resource allocation. They learned to identify project bottlenecks and explored optimization strategies for effective resource allocation.

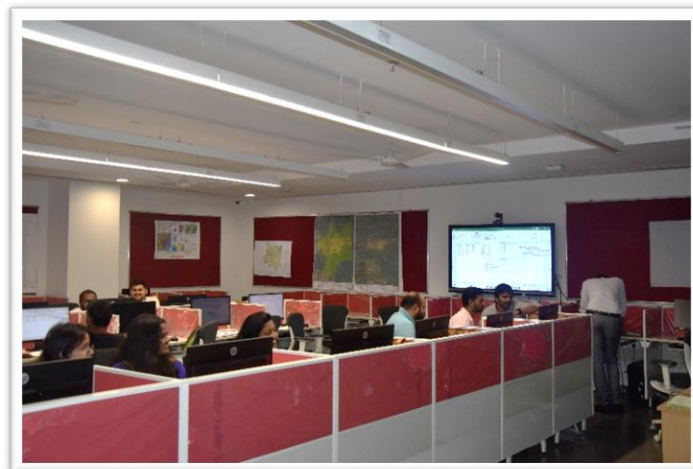


Figure 8: Delegates carrying out hands-on exercise on project scheduling

Day 3: January 18, 2025

Session 5: Theoretical Concepts of Resource Management and Project Monitoring

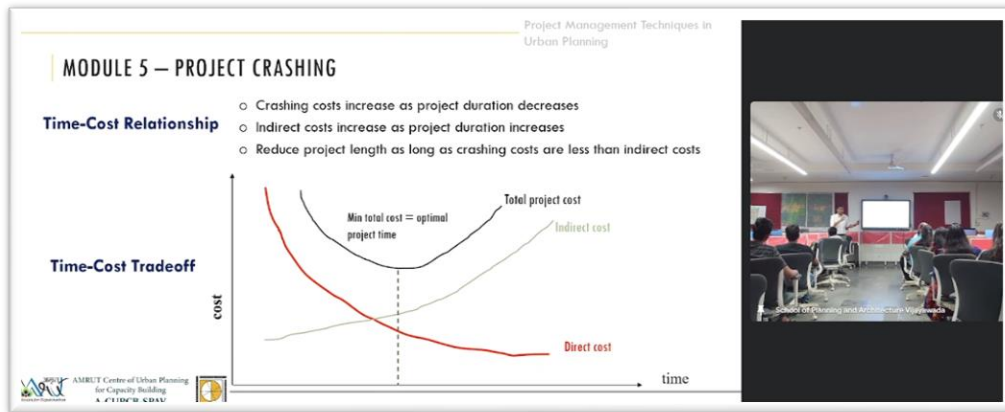


Figure 9: Dr. Arpan Delivering a lecture on Project Crashing

The session commenced with Dr. Arpan delivering a lecture on Project Crashing and manual problem-solving techniques for time-cost management. This was followed by a hands-on exercise in MS Project, focusing on adjusting timelines to mitigate or accommodate risks. Ar. Vijesh then conducted a lecture on Resource Levelling and Smoothing, complemented by a practical session using MS Project. The session comprehensively covered resource allocation, cost management, and risk assessment in urban projects. Additionally, monitoring and control techniques were discussed to ensure adherence to project milestones and budgets. Participants used MS Project to simulate real-world scenarios, focusing on resource optimization and project tracking. They analysed case studies to gain actionable insights into effective project management.

Session 6: Tracking Project Progress

The second session featured a lecture by Mr. Prasanna Venkatesan R, Senior Associate at Hill International, Chennai, on the practical aspects and applications of Earned Value Management (EVM) as a powerful tool for project monitoring and progress tracking.



Figure 10: Mr. Prasanna Venkatesan R delivering the lecture online

The session included in-depth discussions on real-world case studies from India, highlighting the implementation of EVM in diverse project scenarios.

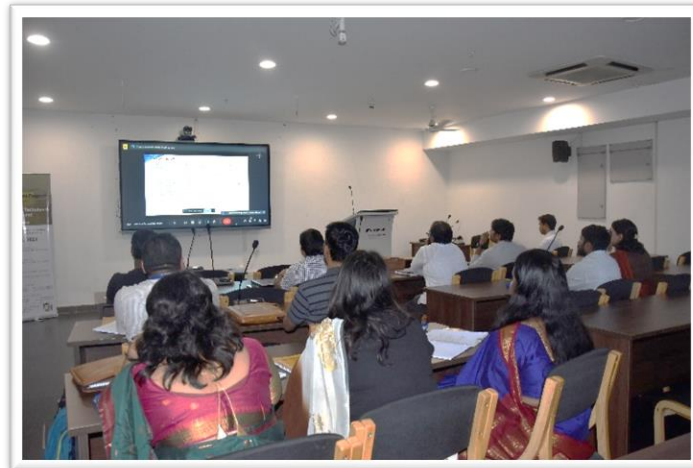


Figure 11: Participants keenly listening to Mr. Prasanna Venkatesan R's lecture

Following this, Dr. Arpan introduced a problem-solving exercise on EVM, guiding participants through manual calculations to build a solid conceptual understanding. The session then transitioned to applying these concepts using MS Project software, providing participants with hands-on experience in integrating EVM into project workflows.

Valedictory Session

The valedictory session was presided over by Dr. Ayon K Tarafdar, Head, A-CUPCB. The feedbacks from the participants both oral and survey form based were taken followed by which the organizers distributed certificates and mementos to the 17 participants, who included professionals from planning and architecture firms, APCRDA, and young planners. Dr. Tarafdar commended the participants for their active engagement and encouraged them to apply the techniques learned in their professional practices and also participate in such programs further. The valedictory session ended with a group photo.



Figure 12: Dr Ayon K Tarafdar and the organizing team giving away the certificate of completion and mementos to the participants

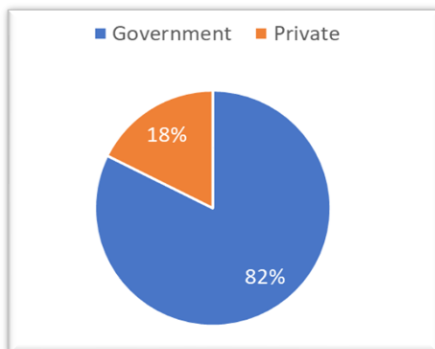


Figure 13: Group Photo of the participants with Dr. Ayon K Tarafdar, Head, ACUPCB

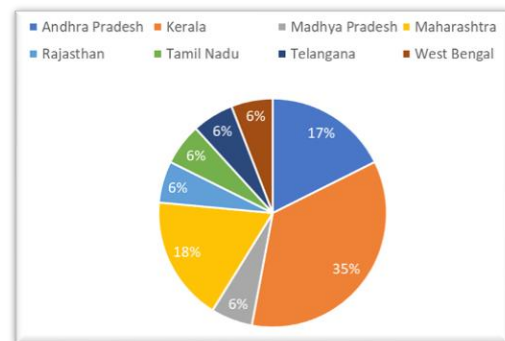
Feedback and Testimonials

Participant Profile

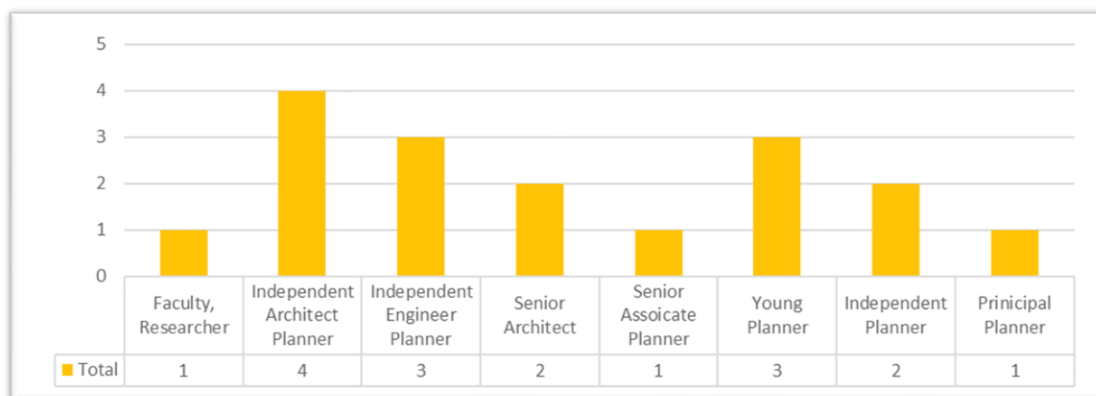
Reg.No.	Participant Name	Participant Type
EDP_24_01_01	Tiriveedhi Dileep Kumar	Private MNC
EDP_24_01_02	Adwait Inamdar	Private
EDP_24_01_03	Juned Shaikh	Private
EDP_24_01_04	Mohammed Abdul Wahab	Government
EDP_24_01_05	A Pushparang	Government
EDP_24_01_06	Chiranjeeb Dutta	Government
EDP_24_01_07	Nageswara Rao Rontala	Government
EDP_24_01_08	Amal Das	Government
EDP_24_01_09	Sareena Sirab	Government
EDP_24_01_10	Sandeep Peeke	Government
EDP_24_01_11	Gunjan Maheshwary	Government
EDP_24_01_12	Shweta Singh	Government
EDP_24_01_13	Sanskruti More	Government
EDP_24_01_14	Susan Mathew	Government
EDP_24_01_15	Nihal Kader P	Government
EDP_24_01_16	Sayfu Shayir A J	Government
EDP_24_01_17	Razal Kodappilly	Government



Participants by Affiliation



Participants by Location

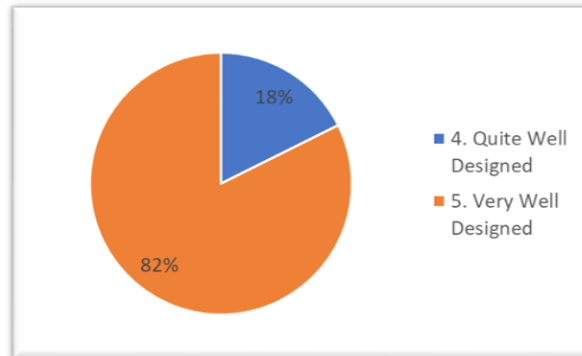


Participants by Profession

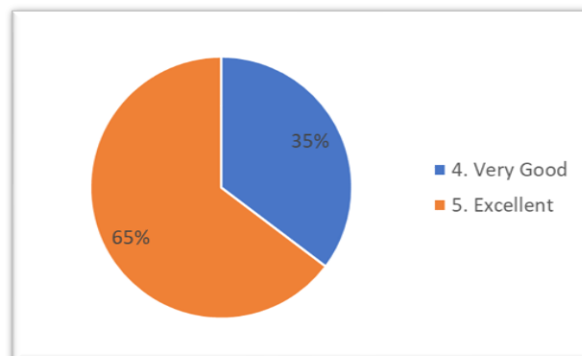
Summary of the Feedback

A google form was circulated among the participants for the feedback and the following responses were recorded.

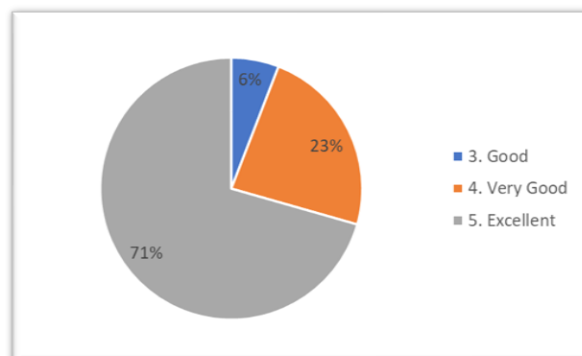
How useful do you think has been the design of the Curriculum with respect to the Subject Theme, for the given duration?



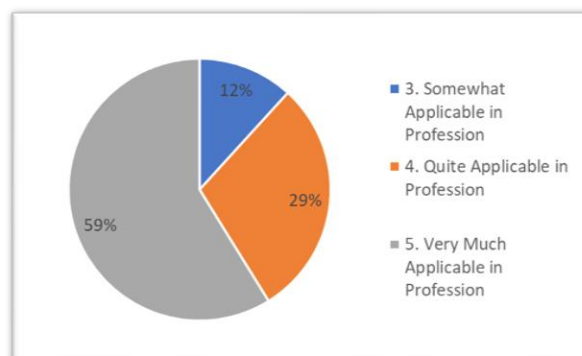
How did you find the quality of lectures?



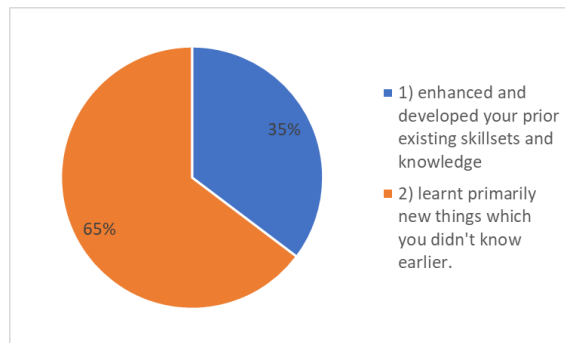
How did you find the quality of study materials distributed?



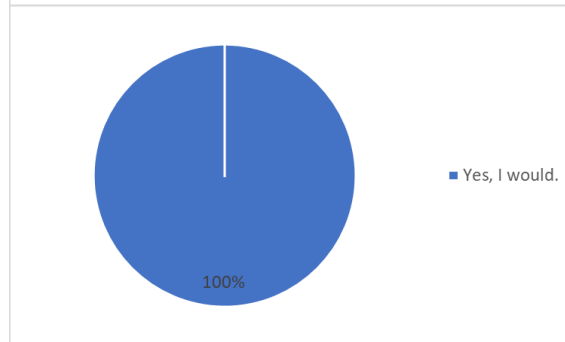
What do you think of the practical applicability of the training programme?



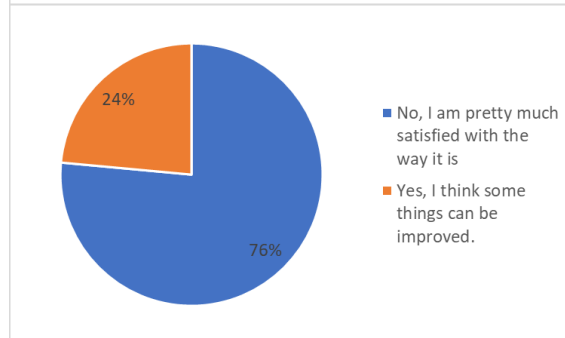
Through this programme you have



Do you think you would recommend someone to take this training, if offered in future?



Do you think there is anything that can be improved?



Some of the testimonials are as in below.

"The program provided me with valuable insights into Project Management in the field of Real Estate, significantly enhancing my skills and professional efficiency as an architect."
— Mr. Adwait Inamdar, Sr. Architect, Mudra Builders, Mumbai

"Complex concepts like Earned Value Management were simplified for better comprehension, making this program a valuable resource for improving project efficiency in the urban planning domain."
— Mr. Nageswar Rao Kontala, Principal Planner, APCRDA

"I have always aspired to start my own firm, and this program has greatly strengthened my planning and preparedness for achieving that goal."
— Ar. Shweta Singh, Architect and Young Planner

"Programs like these, with their emphasis on software-based learning, hold immense potential for integration into academic studio exercises, preparing students for industry demands."
— Ar. Triveedhi Dilip Kumar, Associate Planner, Price Waterhouse Coopers- PwC