

Report on

# PRAKRUTEE

ARCHITECTURE ENVIRONMENT



An initiative of  
Environmental  
Management Centre



emc

and

Rachana Sansad's Institute  
of Environmental  
Architecture



Prepared by  
Environmental Management  
Centre

February 2009

## Acknowledgement

At the outset, we would like to acknowledge the generous support provided by the **Maharashtra Pollution Control Board (MPCB)** towards the conduct of PRAKRUTEE.

We would like to thank Mr. Alan Tweedie of Mumbai Festival Forum for providing a platform for conducting PRAKRUTEE.

We would like to extend our heartfelt gratitude towards Ad. Ashok Rawat, Mr. Sunil Godse and Ad. Mrs. Sadhana Mahashabde who facilitated conduct of the event.

We would like to extend sincere thanks to Hon. Mayor Mrs. Shubha Raul, Ward officer Mr. Pai and Incharge of Scout Hall Pavilion Garden Mr Khan for extending their support.

We would also like to thank Ar. Girish Doshi, Dr. S.R. Kashyap, Ar. Pallavi Latkar Mr. Himanshu, Mr. Dilip Bera and Ms. Sharlene Chichgar who acted as resource persons for training of the participants.

We would like to thank Prof. Roshni Udyavar, Head of Department Rachana Sansad for supporting the event and making Rachana Sansad College facilities available.

Last but not the least; we record contributions Ms. Pratima Raykar, Ms. Anvita Bisaria and Ms. Amruta Pradhan of the EMC Team in the planning and execution of PRAKRUTEE.



**Dr Prasad Modak**  
**Executive President**  
**Environment management Centre**

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“Environment” is a buzz word today!

With population, urbanization and consumerism increasing, pressure on environment is mounting high. People are now realising that we need to take some drastic steps if at all we want to survive on this planet. Sectors like real estate & construction, manufacturing are talking of going “Green”. From global level to local level, there are various efforts and a lot of sharing of ideas happening. In this scenario ‘a common man’ as well is looking for a platform to contribute his bit in taking care of environment.

Mumbai Festival provided such a platform. This year Mumbai Festival came up with the strong theme on Environment, Arts and Culture. The Mumbai Festival, launched in 2005, was the first attempt to develop a community based festival for the city of Mumbai. It is a unique model of public private partnership under which NGO’s, Private parties, Government and related Authorities work cohesively. The Mumbai Festival provides an annual opportunity to convey a positive message about Mumbai to a wider world, raising its profile and image to attract tourists and potential investors in the city. One of the foremost international festivals in India, 2009 Festival took place from January 15, 2009 to January 31 2009. The main focus of the 2009 Festival was on ‘youth involvement’ and ‘environmental responsibility’.

Mumbai Festival Forum in collaboration with Rachana Sansad Institute of Environmental Architecture and the Environmental Management Centre (EMC) organized **PRAAKRUTEE**, an innovative inter-collegiate art & architecture **Design Contest** to create an **Environmental-Hub**. PRAAKRUTEE stands for blend of *Prakruti* (Nature) and *Akruti* (Form).

## 1. The PRAAKRUTEE Concept

The concept of PRAAKRUTEE was developed by Dr. Prasad Modak, ex-IIT professor as an event to sensitize youth and citizens to environment. PRAAKRUTEE was first introduced in Pune which was a joint effort of EMC and Dr. B.N. College of Architecture Pune and supported by Pune Municipal Corporation (PMC) and the concerned Corporator. After the success of PRAAKRUTEE in Pune, the event was organized in Mumbai. **Figure 1** explains the PRAAKRUTEE process.

Rachana Sansad Institute of Environmental Architecture contacted various Architecture Colleges of Mumbai. All the colleges supported the idea of conducting PRAAKRUTEE in Mumbai and showed willingness to participate.

After discussion ‘Shivaji Park’ was finalised as site with a consensus from all the colleges.

After finalising the site city administration was approached regarding the actual implementation of the designs generated. Hon. Mayor Mrs. Shubha Raul and Ward Officer Mr. Pai facilitated all

6 Teams were registered from 4 colleges. These teams were introduced to concept of PRAKRUTEE and the site. After introduction students had one month to carry out the reconnaissance. Participants were also to conduct a survey to understand people’s expectations from hub and problems faced by them at present.

The event was of seven days. From January 22, 2009 to January 24, 2009 training sessions were organised for capacity building of the participants. Lectures on subjects like Use of urban open spaces, Life Cycle Assessment, Form Landscape & Culture etc. were organised. After these lectures participants worked on their designs. The technical jury was held on January 27, 2009.

After the technical jury the designs were put in exhibition on January 27 & 28, 2009.

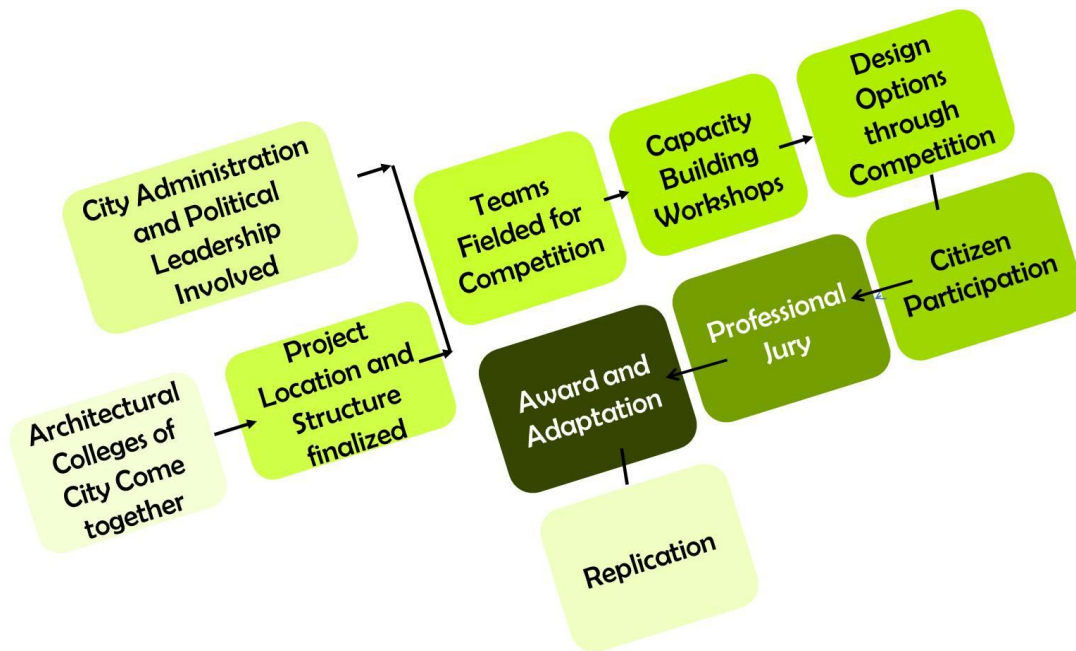


Figure 1 : The PRAKRUTEE Process

## 2. Concept of Environmental Hub

For PRAKRUTEE Mumbai an Environmental Hub was conceived as a need to promote interaction between citizens, experts, administrators and policy makers. **See Box 1.**

### Box 1: Concept of An Environmental Hub

- + A pathfinder to generate ideas & options for environmental action
- + A showcase for emerging environmental technologies and solutions
- + A promoter of environmental research and studies
- + A monitor of urban environmental status
- + An educator to provide instruction, information and education
- + A facilitator for positive community based environmental actions and initiatives
- + A communicator of environmental information
- + A supporter of all environmental actions
- + A network for outreach
- + A zero footprint design which portrays an ecological philosophy
- + A multi-task space which invites people to share their concerns and views
- + A voice which speaks to the city administrations

Presently there is no Environmental Hub existing in the city of Mumbai. The idea was to attempt conceiving such a hub and make it replicable in other areas of Mumbai as well as other cities.

## 3. The Site

The site for the competition was chosen as **Shivaji Park in Dadar (W)**. Shivaji Park has been one of the most active open spaces. Number of people visit Shivaji Park for various purposes. The challenge in designing environmental hub at Shivaji Park was that at Shivaji Park diverse activities take place simultaneously. They are not necessarily a single entity. Thus to design a hub which will gel well with the present activities without disturbing and which will sensitize citizens about environment them was important.

Citizens will be the ultimate users of the Environmental Hub. This competition aimed to provide the citizens, a platform to voice their opinions about this hub.

## 4. Design Process

Participants were to select a specific location in and around Shivaji Park area as design site. They consulted various stake holders to find out their perception of Environmental Hub. All this formed a part of the design concept.

The participants defined their own scope of design.

The design included permanent, temporary and landscape components or a combination of these.

PRAAKRUTEE was a seven days' event starting from 22<sup>nd</sup> January to 29<sup>th</sup> January 2009.

## 5. Participating Teams

Total six teams from four colleges from Mumbai participated in the competition. **Table 1** shows the participating teams

<i>Sr. No.</i>	<i>Name of college</i>	<i>No of teams</i>
1	Pillai's College, Panvel	1
2	Bharti Vidyapeeth College of Architecture	2
3	Sir JJ College of Architecture	1
4	Rachana Sansad's Institute of Environmental Architecture	1
5.	Rachana Sansad's College of Applied Arts and Crafts	1

## 6. Participants' introduction to PRAAKRUTEE

On Wednesday, December 22, 2008; participating teams were briefed about the competition and the concept of Environmental Hub. Active members of Shivaji Park Dakshata Samiti like Ad. Sadhana Mahashabde. Mr. Girish Raut, Mr Sunil Godse interacted with the participants at Shivaji Park. Various



subjects like historical importance of Shivaji Park, need & role of open spaces in maintaining the social health, background of Shivaji Park Dakshata Samiti, and role of open spaces were touched upon in the meeting.

After this students were supposed to carry out their own study for the Shivaji Park area and build their design concept.



Mr. Girish Raut addressed group of participants 'About Shivaji Park'



Dr. Prasad Modak explained the concept of 'PRAAKRUTEE'



Group of Participants



Group of Participants



## 7. Training sessions for capacity building

Interactive sessions for participating students on subjects like arts, use of urban spaces, energy, environment friendly materials etc were organized during the first three days – 22<sup>nd</sup> to 24<sup>th</sup> January. These were to provide inputs in the design (See Table 1). Each day commenced with these sessions. After attending them participants would proceed with their designing. Rachana Sansad college facilities were made available for the students for the design studio. Detailed programme of the sessions is given in **Annex-I**.

## 8. Designs options through competition

Students had absorbed the problems of Shivaji Park quite well. They tried to propose Environmental Hub in such a way that the present activities at Shivaji Park will be disturbed to minimum extent. Also many innovative ideas were presented to showcase eco-friendly technologies. The design problem was approached in two ways. By some teams the hub was designed as one entity and by some teams it was defined by small activities and scattered across entire Shivaji Park. Many issues specific to Shivaji Park like problem of dust, jogging track, litter were addressed by students. Looking at the time constraints the efforts were appreciable. **Annex-II** consists of photographs of the designs of students.

## 9. Technical jury

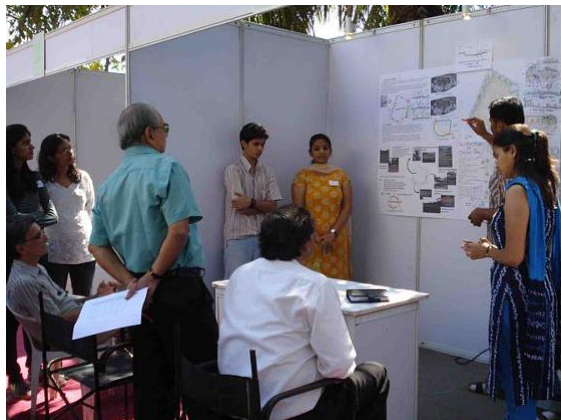
The participating teams presented their designs to eminent professionals and experts from Mumbai as Technical Jury on Monday, January 27, 2009 at Scout Hall Pavilion Garden. Member of the Jury Panel were Ar. Mundgekar, Ar. Fadnis and Dr. Prasad Modak. Participants were judged for their concept, details and presentation skills.



Pillai's College of Architecture



Rachana Sansad's College of Applied Arts and Crafts



Bharti Vidyapeeth College of Architecture



Rachana Sansad's Institute of Environmental Architecture

## 10. Public Jury

After the technical jury the designs were put up for 'Public jury'. Exhibition of all the designs made by students was put up at Scout Hall Pavilion Garden, Shivaji Park on January 27 and 28, 2009. Exhibition was open from 11 AM in Morning to 8 PM in evening. Citizens from Shivaji Park were invited to vote for the best designs. Public Jury was inaugurated by Ward Officer Mr. Pai. Present along with were CEO Mumbai Festival Mr. Alan Tweedie; Ad. Sadhana Mahashabde; member of Shivaji Park Dakshata Samiti Mr. Girish Raut & Mr. Sunil Godse, Dr. Prasad Modak Executive President Environmental Management Centre; Roshni Udyavar Head of Department Rachana Sansad's Institute of Environmental Architecture. Corporator of Mumbai Mrs. Shraddha Jadav visited the exhibition. Ad. Ashok Rawat along with other members of G-North Ward citizens' forum visited the exhibition as well.

Students explained their designs to the citizens. After seeing all the designs citizens were supposed to cast their vote. Response of citizens was very positive. People showed keen interest in students' design. They were very receptive to various ideas presented by students and took their own time to understand each design well. The idea of providing a platform to common man for voice his concern for environment and open spaces appealed to them very much. A total of 164 citizens visited the exhibition.



**Voting counter**



**Visitors at the exhibition**



**Participants explaining their design to citizens during Public Jury**



## **11. Result**

The winning design was chosen separately for Technical Jury and Public Jury. Result was declared at Mumbai Festival Ceremony, Convocation Hall, and Mumbai University Campus.

### Technical Jury

Total three prizes were given for technical jury. **Table-2** lists the winning teams of Technical Jury.

<b>Table 2: Winning Teams of Technical Jury</b>		
<b>Rank</b>	<b>College</b>	<b>Marks</b>
First prize	Rachana Sansad’s Institute of Environmental Architecture	87.25/150
Second prize	Bharati Vidhyapeeth College of Architecture	73.3/150
Third prize	Bharati Vidhyapeeth College of Architecture	60/150

### Public Jury

One prize was given for public jury. Rachana Sansad’s College of Applied Arts and Crafts won by 59/164 votes

## 12. Feedback

Citizens have given a feedback that it was a very different and good effort. They emphasized that all the good ideas presented should get implemented. Their comments are encouraging. Highlights of citizens’ comments are given further in the report.

<b>Box 2: Highlights of Citizens Comments</b>
<p>“Nice work! Hard work put in by students. Ideally in the implementation, different ideas (the best ones) should be blended together in one final proposal. Great work!!”</p> <p>“It is really good attempt of making people aware of problems of other people. More than designing the project &amp; subject was necessary and that objective is accomplished.”</p> <p>‘It is something different and great. Full of information.’</p> <p>“An excellent effort. Needs collective follow-up with Municipal Authorities.”</p> <p>“Very informative. The authorities need to take notice and make the changes.”</p> <p>“Students appear to be aware of the problem and made effort for working solutions.”</p>

### **13. Next steps**

Best ideas from all the designs will be taken to the ward officer and effort will be made to implement them. Report on highlights of PRAAKRUTEE will be sent to Hon. Mayor Dr Shubha Raul, Municipal Commissioner Dr J M Phatak, Additional Municipal Commissioner Mr. R. A. Rajeev and Ward Officer Mr Pai.

In specific, EMC and Rachana Sansad will discuss with Ward Officer Mr Pai to find how the existing DP of Shivaji Park can be revised to incorporate the ideas presented by students. This revised plan will be publically disclosed for feedback.

The event can be replicated in Mumbai at different locations as well as in other cities.

The training sessions conducted for capacity building of the candidates provided a useful input in building their skills. These sessions have a potential to develop as an independent three day training programme. This programme can be run as a continuing education activity by Rachana Sansad with support from EMC. It may well be a certificate course if structured with assignments/tests.

## Annexures

## **Annex I: Event Dates**

Introduction to the concept of PRAAKRUTEE and Shivaji Park	December 22, 2008
Training sessions for students	January 22, 2009 to January 24, 2009
Technical Jury	January 27, 2009
Public Jury	January 27 & 28, 2009
Prize Distribution	January 29 2009



## Annex II: Programme of Training Sessions

<i>Day</i>	<i>Time</i>	<i>Topic</i>	<i>Guest Speaker</i>
Thursday, 22nd January, 2009	09 30- 10 30	Interaction with Citizens Forum (G-North ward) –: “ Use and Misuse of Shivaji Park”	Mr. Ashok Rawat
	10 30 - 11 30	Life Cycle Assessment	Dr. Prasad Modak
	11 30 - 12 30	Urban Open Spaces and Eco-sensitive Art by	Mr. Himanshu
	12 30 - 13 30	Form, Landscape & Culture	Ar. Pallavi Latkar
	13 30 - 14 30	Lunch	
	1430 Onwards	Studio Hours	
	1800 to 2100	Interactive session with citizens of Shivaji Park at Scout Hall Pavilion Shivaji Park	
Friday, 23rd January, 2009	09 30 - 11 30	Minimizing Energy Requirements & Use of Environment Friendly Materials	Ms. Sharlene Chichgar
	13 30 - 14 30	Lunch	
	1430 Onwards	Studio Hours	
Saturday, 24 <sup>th</sup> January, 2009	09 30 - 10 30	Green Rating	Ar. Roshni Udyavar Yehuda
	10 30 - 11 30	Carbon Considerations	Mr. Dilip Bera
	11 30 - 13 30	Case studies by	Ar. Girish Doshi
	13.30 - 14 30	Water and Waste Water Management	Dr. S.R. Kashyap
	14 30 - 1500	Lunch	
	1430 Onwards	Studio Hours	

### Annex III: The Designs

#### Pillai's College of Architecture



Design was a blend of scattered structures and landscape. Issues like rain water harvesting, dust pollution, litter were dealt with. Use of jute bag nets to prevent from damage from cricket ball for the visitors was an innovative feature.

#### Rachana Sansad's College of Applied Arts and Crafts



The Hub was designed with honey comb pattern. Hub was a single entity with landscape around. People, like honey bees should come together and work for protecting environment was a main theme. All the elements were designed with honey comb pattern

**Bharti Vidyapeeth College of Architecture**



Main thrust was on reuse and recycling and reuse from conservation.

**Rachana Sansad's Institute of Environmental Architecture**



Many innovative technologies were showcased along the periphery of the park. Hub was designed to merge gently with all the present activities.

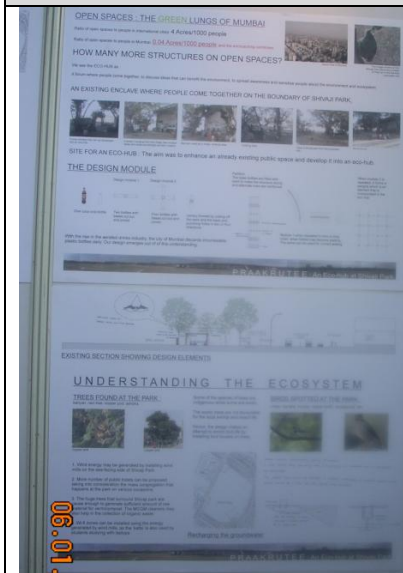
Model was made from eco-friendly material.

**Bharti Vidyapeeth College of Architecture**



Main feature was the redesign of jogging track for shock absorption for the joggers.

**Sir JJ College of Architecture**



Issues of birds was dealt with. Park consists not only of humans but also other components of eco-system. Thus bird eatery was provided. Elements of the hub like seating area etc. were proposed of used plastic bottles.