



***DISHA: Making Careers in Environmental  
Management***

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*A counseling and networking event designed to  
guide students and young professionals*

**PUNE's DISHA REPORT**

**JULY 15, 2006**



**emc**

# **DISHA- MAKING CAREERS IN ENVIRONMENTAL MANAGEMENT**

## **PUNE, JULY 15, 2006**

*Venue: Bhanuben Nanavati College of Architecture (BNCA), Karve Nagar – Pune*

### **Introduction:**

DISHA, a novel venture by the Environmental Management Centre (EMC), is a series of career counseling and networking events proposed to be held in India's metros and other cities to help build careers in environmental management. The DISHA events will steer students and young professionals towards an understanding of the evolution and opportunities in the field of Environmental Management. DISHA is designed as a counseling and networking forum.

The first event in the DISHA series was held on 15<sup>th</sup> July 2006, at BNCA – Pune. This one-day event included presentations from Dr. Prasad Modak (EMC), guidance from resource persons (panel members) having expertise in various facets of the environmental domain, followed by panel discussions and distribution of a CD-ROM containing a vast array of environmental resource materials. The panel discussions, which proved to be the highlight of the event, had representation from industry, research organizations, academia, regulatory organizations, financial institutions, consultants and Non-Governmental Organizations (NGOs), all of whom provided guidance to the participants.

### **Inauguration**

Pune's DISHA event was inaugurated by Dr. Dilip Boralkar, Member Secretary of the Maharashtra Pollution Control Board (MPCB). The welcome address was by Prof. Kashyap, Principal of BNCA, who also spoke about the activities of BNCA College; especially Prakrutee - an event organized by BNCA with EMC. Mr. N Prabhakar, Territory Manager of Bharat Petroleum Corporation Limited (BPCL)<sup>1</sup> talked about BPCL's commitment to the environment and about BPCL's new products that lower air emissions and enhance vehicular mileage.



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<sup>1</sup> DISHA in Pune was supported by Bharat Petroleum Corporation Ltd. (BPCL) through advertising at BPCL petrol pumps in Pune.

In his inaugural address, Dr. Boralkar emphasized three district areas in which career opportunities abound or will potentially increase in the future. He suggested that if and when certifications become mandatory for operation and maintenance of pollution control facilities, jobs in this area will grow and there will be a demand for highly trained, certified and skilled operators. Further, he stated that as the growing common infrastructure needs of the State of Maharashtra are met in the form of new Common Effluent Treatment Plants (CETPs), Common Hazardous Waste Disposal Facilities (CHWDF), and Common Bio-Medical Waste Disposal Facilities (CBMWDF), several job seekers will find good positions. He specifically focused on the need for qualified people in the newly emerging areas of BMW and electronic (e)-waste management. Finally the third area where new positions open up year round is MPCB itself. Dr. Boralkar suggested that the Board is making every effort to increase their technical staff and has a long term vision of employing competent and technically superior employees who will use their education and expertise to help the Board follow its mandate of conservation, protection and overall sustainable management of the State's environment. Dr. Boralkar also briefly described his academic background and his professional experiences in the environmental and regulatory fields and presented the various activities of MPCB.



## **DISHA**

There is a lack of orientation and awareness among young environmental students and professionals, despite the scope in this field. Dr. Modak exemplified this statement by pointing to his observations on the huge gap between demand and supply, where business organizations face a shortage of trained professionals and the young aspirants are confused about their prospects in environmental management. This gap he explained was the driving force behind conceptualizing DISHA. He explained EMC's vision of DISHA as an opportunity for knowledge enhancement of the environmental domain for those interested in careers in this field. Getting stalwarts in the environmental field under one roof to counsel those interested, ensuring an interactive forum and distributing resource materials such as the CD ROM all go a long way in helping with environmental career building and this is the premier objective of DISHA.

### **Evolution of the Environmental Field:**

Sessions in Pune's DISHA event ranged from conservation, environmental advocacy, infrastructure, finance, law, training, industrial management and sustainable architecture. Despite this broad range of subjects, the environmental field had rather humble beginnings in the form of sanitary engineering and public health engineering. Dr. Modak elaborated on this by explaining how the environmental field evolved from focusing on municipal solid waste (garbage) alone to accommodating the entry of

trade wastes and air pollution. This was followed by new considerations in technology, management and governance, all of which expanded the scope of this field but also caused fragmentation of the areas of environmental practice. Then began a parallel movement in which ecology and engineering merged to pave the way for several allied areas with an environmental theme. Areas that focused on protection of marine and coastal zones, forests and wildlife, prevention of natural resource depletion and degradation, management of toxic chemicals and factors contributing to global climate change became important. These areas brought in biologists, chemists and other experts in life sciences to the fore. Interfaces of mechanical engineering, chemical engineering and economics into the environmental field triggered further advances and expansions in this area. Today, environmental impact assessments and integrated management systems have helped bring together most of these seemingly disparate areas.

Dr. Modak also remarked that corporatization of the environment with inclusion of green terminologies such as green productivity and green cities into the corporate world are gaining importance. Dr. Modak ended by explaining how capacity building is creating a new breed of environmental institutional specialists and talked about the exciting new opportunities ahead. He then answered questions related to emerging fields in environmental management and careers in this field.



### **Speaker Presentations:**

The panelists were introduced by Mr. Shantanu Roy of EMC. Each resource person contributed to the participants' understanding of the various careers in environmental management.

### ***Traditional Areas:***

Presentations by the speakers included a dialogue on the traditional areas in the environmental field. For example, in discussing conventional areas, Mr. Mhaskar, a specialist in the area of environmental law, explained career opportunities in industrial waste water treatment and operation & maintenance of Effluent Treatment Plants (ETPs) in addition to opportunities in specialized areas such as cooling water management and boiler operation management. He stressed that knowledge of environmental laws helps environmental engineers tackle pollution problems in an efficient way.

In the same vein, Dr. Patwardhan, a retired faculty member from Veermata Jijabai Technical Institute (VJTI) stressed that while looking at waste treatment, one should also look at reducing water consumption / pollution and by-product recovery.

### ***Emerging Areas:***

For the most part, DISHA's Pune panelists focused on introducing the new frontiers in environmental careers to the participants. The scope of the environmental domain expands every day as new areas such as sustainability, eco-design, eco-tourism, natural resource management, environmental laws and renewable energy add to the traditional areas of practice such as water, wastewater, air quality, hazardous waste management, environmental compliance, Environmental Management System (EMS) certification and health and safety.

This diverse scope was duly highlighted by several speakers. For example, Dr Modak, spoke about new areas, that are opening up to environmental professionals such as, Environmental Management Systems (EMS), Total Quality Management (TQM) and the 5S methodology. He also pointed to the shift in focus in industries from processes to products such as eco-labeling of products, eco-product design, Life Cycle Assessment (LCA), sustainable consumption and environmental communication.

Mr. Anand Palkar who specializes in environmental finance, talked to participants about how investments in environmental infrastructure are generating more jobs for environmental professionals and how knowledge of economics pays well in the environmental field. He included carbon trading / exchange as another emerging area along with environmental infrastructure and finance that those interested should pursue.

Dr. L. Ramakrishnan, who specializes in industrial environmental management, said that the environmental consciousness amongst multinational companies has increased several fold in recent years. He explained career choices such as environmental lead auditor, ETP operator and environmental data manager. He indicated that, contributing one's skill sets and expertise to an organization as one climbs the corporate ladder and learning from the organization, its personnel and experiences is a symbiotic process. He emphasized those that are recruiting must be made aware of the availability of trained environmental professionals in the market.

Education was also focused on by some speakers. For example, Mr. Sanjay Joshi stressed the importance of a masters degree in the field of environmental infrastructure. Mr. Mandar Parasnis provided tips on developing an international image in pursuing education and careers abroad.

### ***Allied Areas:***

Careers in areas allied to the mainstream and emerging environmental arena were also discussed.

Mr. Deepak Apte a renowned figure in conservation spoke about careers in field photography and green governance. He stressed that passion for the environment and field work is a must to make a career in photography. He also informed participants that around 15-20 positions are currently available in the Bombay Natural History Society (BNHS).

Ms. Anagha Paranjape, a faculty at BNCA, talked about the emerging areas of sustainable design and eco-architecture and briefed attendees on career opportunities available to architecture students in environmental planning.

Mr. Tapan Wagle said that the requirement of Environmental Health and Safety (EHS) personnel is very high in the industries, hence in addition to environmental field experience, professionals must do industrial safety courses.

Mr. Debi Goenka, an executive trustee with the Conservation Action Trust, introduced the career choice of working for Non-Governmental Organizations (NGOs). However, pointing to the reality in this line of work, he stressed that students wanting to work in NGOs, should be content with a lower pay cheque, as this sector is not financially rewarding. He reasoned that students interested in this line of work should have a true interest in environmental protection and developing their knowledge base rather than financial incentives alone. On the positive side, he did mention that NGOs are flexible and there is no rigid work agenda.

Dr. A.D. Patwardhan talked about entrepreneurship as a career choice and gave practical inputs for starting one's own business or a small organizations such as a laboratory.

### ***Common Thoughts:***

Several resource members (Mr. Debi Goenka, Mr. Sanjay Joshi and Mr. Mandar Parasnis) stressed the importance of developing contacts and networking as a huge factor in an individual's success. Dr. A. D. Patwardhan noted that every skill learned in professional life counts and helps in developing one's career.

Overall, despite the differences in presentation styles and at times content, the speakers conveyed a common central message to all attendees that emphasized an understanding of the scope in this field and the possibilities of making a career in this domain regardless of their background, past education, current positions and experiences. For example, Mr. Sanjay Joshi stated that luck plays a huge part in first jobs and whatever be this entry point, individuals can then cautiously tailor their career paths in any chosen direction, by taking well researched and informed decisions. The important thing, suggested Mr. Tapan Wagle is to have an open mind to explore new areas in the field of environment.

### **DISHA's Resources CD-ROM:**

Another highlight of DISHA was knowledge sharing in the form of distribution of resource materials that all participants could benefit from. Mr. Rahul Datar of EMC introduced DISHA's Resources CD-ROM. He explained that the contents of the CD are broadly classified into four modules such as Research & Education, Contacts for job opportunities, Preparing for jobs & higher education and Documents & Software.

Documents and software are further categorized into Communities & Environment, Corporate Social Responsibility (CSR), Environmental Assessment (EA), ISO 14001, Sustainable Production, Trade & Environment and Air Pollution News Letter Series.

This CD, compiled by EMC's team members is a useful tool for students and young professionals alike since it opens up several doors in knowledge enhancement. From documents and software that can add to the technical proficiency of its users to long lists of contacts to approach in one's job searching pursuits, to lists of educational and research institutions to further one's academic dreams to tips on writing a Curriculum Vita (CV), interacting in Group Discussions and presentation skills, this CD provides a complete package to anyone interested in an environmental career.

All in attendance, including participants and resource persons received a copy of this CD.

### Interactions:

During the panel discussions, blank question slips were circulated among participants, who were instructed to write questions to specific panel members. These slips were conveyed to the resource persons for answers. During tea sessions, the participants got an opportunity for one to one discussions with panel members.

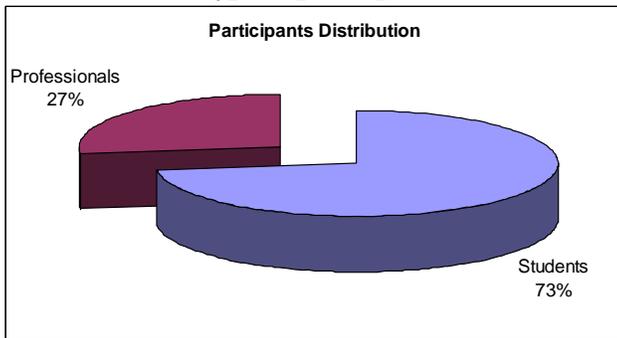
### In Conclusion:

Mr. Shantanu Roy thanked all resource members for their contribution in making Pune's DISHA event successful and all participants for taking this opportunity to attend this first event in the DISHA series and interact, network and above all learn from these leaders in the environmental field in India. Participants and panel members in turn expressed their appreciation of the EMC team for organizing DISHA and for providing guidance and counseling to those interested in an environmental career. EMC requested all participants and panel members to register on the EMC web site [www.emcentre.com](http://www.emcentre.com) to get updates about the DISHA events and to post their queries related to the environmental field. The list of participants and EMC team members is attached as annexure 1 to this document.

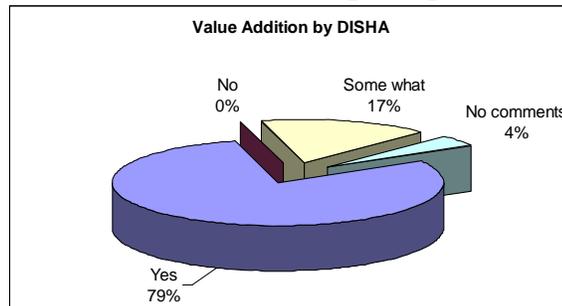
### How was Pune's DISHA Event Rated?

The feedback from participants in Pune was encouraging; it is graphically presented into following components.

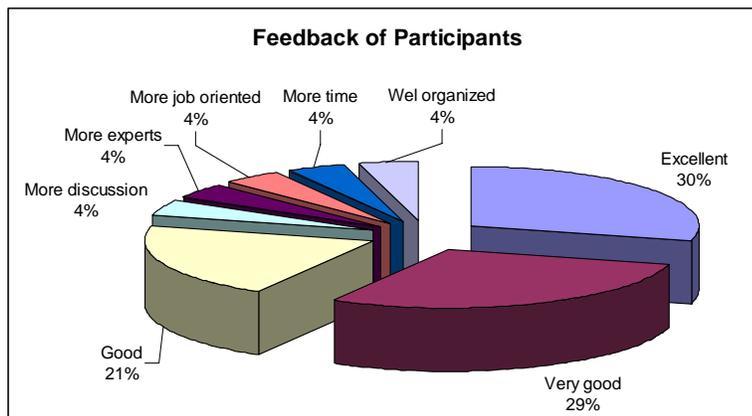
#### Type of participants



#### Value addition to participants



#### Overall feedback



## ANNEXURE 1

### List of Resource Persons

<i>No.</i>	<i>Name</i>	<i>Affiliation</i>
1.	Deepak Apte	Conservation Officer, Bombay Natural History Society (BNHS)
2.	Debi Goenka	Executive Trustee, Conservation Action Trust
3.	Sanjay Joshi	Additional Vice President, Infrastructure Business, Reliance Energy Limited
4.	A. K. Mhaskar	Ex. MPCB officer, Independent Consultant
5.	Anand Palkar	Independent Consultant
6.	Anagha Paranjape	Faculty, BNCA
7.	Mandar Parasnis	Independent Consultant
8.	Dr. A.D. Patwardhan	Retired Professor from VJTI
9.	Dr L Ramakrishnan	Regional Environmental Coordinator, BU:Lamps, Philips Lighting
10.	Tapan Wagle	Independent Consultant

### List of Participants

<i>No.</i>	<i>Name</i>	<i>Contact No.</i>	<i>Email id</i>	<i>Institute</i>	<i>Category</i>
1	Rajesh Adyam	9899706477	<a href="mailto:rajeshadhyam@yahoo.co.in">rajeshadhyam@yahoo.co.in</a>	Degremont	Professional
2	Ranjeet S. Bandiwadekar	94230242457	<a href="mailto:bha_jeet@yahoo.co.in">bha_jeet@yahoo.co.in</a>	KIT's College of Engineering - Kolhapur	Student
3	Sachin B. Barad	9371852122	<a href="mailto:sachinbarad2006@gmail.com">sachinbarad2006@gmail.com</a>	KIT's College of Engineering - Kolhapur	Student
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5	Nitin Deshpande			BEHR India Ltd.	Professional
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13	Prof. B V Kulkarni			Prof: KIT, Kolhapur	Professional
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19	Sanjana Mule			Student - Pune	Student
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22	Sandeep Patwardhan			BAYER India Ltd.	Professional
23	Nisha Prabhakaran	9923137711	<a href="mailto:nisha_prabhakaran@yahoo.co.in">nisha_prabhakaran@yahoo.co.in</a>	University of Pune - Env. Science	Student
24	Kavita Takle			Kirloskar Consultant	Professional
25	Deepali Vaze	9860161119	<a href="mailto:d_pegion@yahoo.co.in">d_pegion@yahoo.co.in</a>	Kolhapur - MSc Env. Science	Student
26	Venugopal			Hyderabad	Professional

#### List of EMC Team Members

	Name	Designation	E-mail
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4	Mr. Kaustubh Phadke	Senior Environmental Engineer	<a href="mailto:Kaustubh.phadke@emcentre.com">Kaustubh.phadke@emcentre.com</a>
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8	Mr. Ankit Devan	Intern	<a href="mailto:ankitdewan@gmail.com">ankitdewan@gmail.com</a>