



Press Release

## **TERI Releases National Environment Survey on World Environment Day**

*The survey was carried out in six major cities of India namely- Chennai, Delhi, Hyderabad, Kolkata and Mumbai. It aimed to gauge people's perception, behavior, awareness and opinions pertaining to various environmental issues.*

**New Delhi, 3 June, 2013:** The Energy and Resources Institute (TERI) today has released the result of **Environment Survey 2013** for six cities **Bengaluru, Chennai, Delhi, Hyderabad, Kolkata and Mumbai.** The total sample of 4039 was divided as a proportion of the total population of the six cities with 401 from **Bengaluru, 431 Chennai, 1114 Delhi, 379 Hyderabad, 704 Kolkata and 1010 Mumbai.**

This survey report highlights some of the key findings on the different environment domains such as overall **environment, air quality, water quality, waste and waste management, climate change and green cover.** It is aimed to gauge people's perception, behavior, awareness and opinions pertaining to various environmental issues and overall environmental changes in the past five years.

Launching the key findings, **Dr. R.K. Pachauri, Director General, TERI** said "We are releasing the findings of the Survey which we have found out by way of public attitudes in the six metros of the country. Our purpose is to see that issues related to environment and development get embedded in the consciousness of the people, and of course if we carry out an assessment of people's attitude and how they view these issues, then clearly we are also creating awareness on the major changes that are required to ensure we move on the path of sustainable development".

He further added that "TERI Environmental Survey 2013 provides a useful basis for initiatives that can bring about effective action on the part of the public, driven by appropriate attitudes and values. The survey is an accurate indicator of current attitudes and values". *(To view the full report, please click: <http://www.teriin.org/pdf/Environmental-Survey.pdf>)*

**Dr. V.Rajagopalan, Secretary, Ministry of Environment and Forests, Government of India** said "I value such a survey which provide very valuable inputs on civil society's perception on what's happening on the ground".

**Dr. Ligia Noronha, Executive Director, TERI** said "In order to bring about any improvements in environmental quality in metros, we need to align different interest



groups – civil society, government, business. Understanding how people of a city perceive the environment and its quality is key to building such alliances, knowledge networks and specific action points".

The six themes selected for the study were: *overall environment, air quality, water quality, waste and waste management, climate change and forest/green cover.* (To view the full report, please click: <http://www.teriin.org/pdf/Environmental-Survey.pdf>)

## **KEY FINDINGS**

### **Overall Environment:**

According to the survey, **air quality** in these six cities has become worse in the last five years or seen no change. In terms of **drinking water quality and its availability**, there is a perception that it has improved in all cities except for Hyderabad, where the respondents felt it has worsened. Surface water quality seemed to have deteriorated in all cities apart from **Mumbai** (no change). Five cities saw a fall in **ground water availability** (excluding Chennai), **number of trees, birds and animals saw a decline in all six cities.** Respondents from Bengaluru, Chennai, Delhi and Hyderabad claimed worsening of **waste management in their city**, while respondents from Kolkata and Mumbai have witnessed an improvement.

### **Government Policies:**

Mixed opinions were gathered while people's perception and awareness on government policies, relating to different environmental domains, was assessed. Delhi showed dismal performance in terms of awareness in all domains of environment with 70 - 80 per cent of the respondents being unaware of policies on air & water pollution, water availability, waste management, forest conservation and climate change. On the other hand respondents from Bengaluru, Hyderabad, Kolkata, and Mumbai felt that the policies on climate change are either inadequate or not well implemented while in Chennai 42 per cent of the respondents were not aware of policies related to climate change.

### **Responsibilities for improving state of the environment:**

According to the survey, respondents from Bengaluru, Chennai, Delhi, and Mumbai expressed that the responsibility for improving the state of the environment in the



city rested with the government followed by business sector. Respondents from Kolkata felt that government should take the lead, followed by the consumer who could be a key agent in improving environment. Whereas respondents from Hyderabad felt that academic and research organisation should take the lead followed by Government.

### **Environment and Development:**

The result varied on maintaining a balance between environment protection and development. When asked to choose between environment protection and development, 30 per cent of the respondents from Chennai prioritised environment protection, while an equal number of respondents said that protection and development should go hand in hand. About 59 per cent respondents from Delhi and 34 per cent respondents from Mumbai also agreed to the latter. Nearly 65 per cent respondents from Kolkata felt that environment protection should be given priority. However, 85 per cent of the respondents from Hyderabad felt that environment protection and development should be treated differently, with almost 50 per cent giving priority to development.

### **Air Quality:**

The survey revealed that air pollution is seen to be a big concern in all cities. Transportation is the major source of air pollution, followed by factories in Delhi, Chennai, Kolkata and Mumbai, according to the survey responses. Whereas in Bengaluru, factories were identified as the source of maximum air pollution followed by transportation. Respondents in Hyderabad cited construction activities as a primary source of air pollution.

A little less than half of the respondents from Bengaluru (46 per cent), Chennai (45 per cent), Kolkata (48 per cent), and Mumbai (40 per cent) experienced no change in the air quality. On the other hand, 68 per cent respondents in Hyderabad and 40 per cent in Delhi find it to have deteriorated. A total of 39 per cent of the respondents from Delhi and over 20 per cent in Bengaluru and Mumbai find the air quality to have actually improved.

### **Water Quality:**

Another area of concern was water availability. On asking upon the source for wastage of water, respondents from Chennai, Hyderabad and Mumbai expressed that water is wasted during the distribution to the households. Most respondents from Bengaluru felt that leakages in taps and faucets in households to be a major



reason, while Delhi and Kolkata respondents claimed overconsumption to be the reason for wastage of water.

On a positive note, 68 per cent of respondents in Bengaluru, 41 per cent in Delhi, 47 per cent in Chennai, and 61 per cent in Kolkata perceive drinking water quality and availability to have improved. On the contrary, 60 per cent of respondents from Hyderabad found it to have deteriorated.

With regard to actual cost of water supply for daily usage, around 74 per cent respondents in Bengaluru, 61 per cent in Delhi, 42 per cent in Chennai, 46 per cent in Mumbai, and 56 per cent in Kolkata did not agree with the idea of paying the actual cost of water. A relatively small number from Hyderabad (only 29 per cent) completely opposed the idea of such payment.

### **Forest & Green Cover:**

An overall deterioration was reflected from the responses with respect to forest and green cover (including flora and fauna). Around 80 per cent respondents from Delhi and nearly half the respondents from Bengaluru and Chennai felt that there has been a decline in forest and green cover. While in Mumbai, respondents witnessed no change.

The survey revealed that only one-third of the respondents from all cities participated in the management of park. In Delhi, 90 per cent of the respondents have never participated in the management of parks and a large number of them have never even planted a tree.

### **Climate change:**

The perception of whether or not climate change was occurring varied across the cities. It ranged from 99 per cent in Kolkata to 41 per cent in Chennai. Temperature variations were experienced in most cities, followed by extreme events and precipitation. Mumbai respondents noted significant changes in rainfall pattern.

### **Waste and Waste Management:**

Around 80 per cent of the respondents from Delhi, 53 per cent Bengaluru, 33 per cent Hyderabad and 23 per cent Chennai felt that waste disposal and waste management has deteriorated. Whereas 53 per cent of the respondents from Kolkata and 46 per cent in Mumbai claimed that the situation has improved.



Respondents from Bengaluru, Delhi, Kolkata and Mumbai felt that impacts of improper waste management on human health is very severe. Respondents from Hyderabad said that these impacts were severe, and an equal number of respondents from Chennai felt these impacts were moderate or severe.

#### **KEY SUGGESTIONS FOR IMPROVING THE ENVIRONMENT:**

- Around one fourth of the respondents in all cities suggested improved public transport infrastructure to reduce air pollution and improve air quality.
- Respondents from Bangalore, Delhi and Kolkata suggested that declaration of protected areas was the best strategy for the improvement of forest and green cover. While respondents from Chennai, suggested for reclamation of wasteland for parks and other such green zones. The respondents from Hyderabad and Mumbai felt that the government needs new and improved policies to improve its forest and green cover.
- To manage solid waste, respondents opted for segregation of waste at the source followed by recycling and reducing the generation of waste as the best strategy.

The launch was followed by a panel discussion moderated by **Mr. Pranay Gupte**, renowned Author and Columnist. The panelists included **Dr. V.Rajagopalan** Secretary, Ministry of Environment and Forests, Government of India; **Mr. Ravi Agarwal**, Founder Director, Toxic Links; **Mr. Paras Loomba**, Senior Technical Consultant, National Instruments, India; **Ms. Rintu Thomas**, Co-founder and Managing Partner, Black Ticket Films; **Dr. Ligia Noronha**, Executive Director, TERI and **Mr. Srinivasan Iyer**, Assistant Country Director and Head Energy and Environment Unit, UNDP.

*(To view the full report, please click: <http://www.teriin.org/pdf/Environmental-Survey.pdf>)*

#### **About TERI**

TERI is an independent, not-for-profit research institute focused on energy, environment, and sustainable development and devoted to efficient and sustainable use of natural resources.



Since its inception in 1974, TERI has emerged as an institution of excellence for its path-breaking research, and is a global brand widely respected by the political leaders, policy makers, corporate entities as well as the civil society at large.

**About Survey:**

The survey was carried out in six major cities of India namely ***Bengaluru, Chennai, Delhi, Hyderabad, Kolkata and Mumbai***. It aimed to gauge people's perception, behaviour, awareness and opinions pertaining to various environmental issues. The survey was conducted between December, 2012 and February, 2013, through face-to-face interviews in each city using a standardized questionnaire. The questionnaire made use of the 5-point rating scale and rank order tools to assess the perception of the respondent towards the environment and its various aspects; and the awareness of the respondent towards causes of environmental issues in their cities and the relevant actions being taken to address them.