



## ‘ Technology Development With Younger Minds ’

A young student from Iran, studying in Pune, was giving strict 5 minutes of power-point presentation in International Youth Conference organized by TERRE Policy Centre. No, the presentation was not about the nuclear technology-first to come to our mind, the moment we think of Iran. Neither it was about fossil fuel which contributes to Iran’s economy in major way, having 4th largest petroleum resources in the world. It was about manufacturing of photovoltaic cells in more environmentally friendly methods by eliminating the use of harmful metals like lead. As a jury member, I thought that inventions, hitherto dominated by the ‘grown-up minds’ of scientists are now being rejuvenated, literally! The history shows that majority of the inventions, particularly before 1760 when European industrial revolution took its roots, were environmentally disruptive. We see today their disastrous impacts everywhere- much of them are irreversible. Fathers and mothers of technology are getting younger and younger, not necessarily by age but in terms of the fresh, and visionary thoughts that are NOT driven by the sole motive of profit making. They are thinking ‘young’ and out-of-box. Their questions are child-like: can farmers, apart from harvesting food-grains, also harvest energy? Can the house-owners also be owner a power plant on their roof to generate and sell the electricity to the power-grid? Can campuses of educational institutes

apart from developing tomorrow’s leaders also be the leaders in making the campuses more energy efficient and energy independent?

The time for technology revolution by young minds has arrived. The world took 150 years to realize that the invention of incandescent bulbs is the most inefficient way of lighting homes, because of the fact that 90% of energy consumed by incandescent bulbs goes for heating and remaining only 10 % for lighting. Young mind then invented Compact Fluorescent Light (CFL) and commercialized in 1990s. Now, younger minds have taken just about few years since then to commercialize the invention of Light Emitting Diodes (LED) as more energy efficient device that uses more environment friendly materials than CFL. Development for environment friendly technology is taking place exponentially with ‘hockey-stick’ graphics. The prices of the photovoltaic cells and windmills are falling with precipitous rate. In just about 40 years the prices of photovoltaic cells have come down from USD 80 per watt to just about less than a dollar per watt, mainly because of technology change and its commercial deployment by young minds. Such a fall in prices of nearly 99 percent is historic and is irrespective of the rise or fall of fuel oil prices.

United Nations General Assembly declared 2014 to 2024 as decade of Sustainable energy for ALL. 10 years is long time for young mind. In that time, ALL



The CCAC (Climate and Clean Air Coalition to reduce short-lived climate pollutants) organized a workshop for constructing a communication strategy for the CCAC.

The workshop was held in Oslo, Norway from 2nd to 4th February 2015. 35 partners of CCAC attended this workshop to devise a strategy for the CCAC website, social media and communication as a whole. The focal points of CCAC partners will meet in Oslo were to

- *update the Coalition’s long-range communication strategy,*
- *develop a detailed 2015 communication plan,*
- *discuss issues concerning the website, social media, news media, branding and the CCAC health campaign.* TERRE Policy Centre President, Dr. Vinitaa Apte was present for this workshop. In continuation with the 2 day workshop for communication strategy, she was also present at one day workshop on Health organized by their ministry of external affairs.

will not only get access to energy but ALL will become energy producers and sellers. Young minds will be the game changers.

by **Rajendra Shende**,  
Chairman of TERRE Policy Centre  
former Director UNEP



## TERRE YuCon

From 20th to 21st of February, the experts from corners of earth gathered at the invitation of TERRE Policy Centre to give the vibrant youth participating in the International Youth Conference, TERRE YuCon, a platform to present their work to fellow environmentalists from diverse areas. The theme of this congress was water, climate and sustainable energy.

Honorable minister of the Ministry of Forest, Environment and Climate Change, Mr. Prakash Javadekar, sent a video message for the audience of TERRE YuCon. While congratulating TERRE Policy Centre for its initiative in collaboration with MITSOM College and MACS College, he said, "The mission of country today is: clean water, clean air, clean energy, clean environment and more green. Thus, issues of life will be targeted in this conference. Do write me the report of these deliberations." This point was underlined by Dr. Ram Bhooj of UNESCO when he said that this event was absolutely "timely" as it is falling in global game changing years in terms of climate change. Other members of Jury

## Yes, we are walking the green path-beginning from TERRE YuCon- Honorable minister, Prakash Javadekar



panel were Mr. Rajendra Shende (former UNEP director), Mr. Ramakant Narayane (Superintendent Engineer, Water Management Circle, Maharashtra Jeevan Pradhikaran, Nagpur), Dr. Gurudas Nulkar (Professor at Symbiosis Centre for Manage-

ment & HRD), Dr. Deepak Waikar (Managing Partner, EduEnergy Consultants LLP, Singapore), Ms. Nita Mathur (Owner, Marketways Arabia).

**“ NUMBER OF THE MONTH \$3.2**

IMPERILED MONARCH BUTTERFLIES GET \$3.2 MILLION FROM U.S. GOVERNMENT

A NEW PARTNERSHIP INVOLVES GOVERNMENT, PRIVATE DONATIONS, AND A LOT OF MILKWEED.

”

There was a total of 32 participants for paper presentation and 8 for poster presentation. These belonged to the faculty of engineering, sciences, management and even some young professionals. They came from various countries, states and cities with common motive of sharing of knowledge and experience base. Some of the striking examples of advancements were shown by the participants. These include: Ms. Azam Mayabadi of Iran. She presented a paper on semiconductor sensitized solar cells for clean energy. Her research has given rise to generation of a novel device making solar energy harnessing more ecofriendly. Mr. Anil Lalwani presented a paper on assessment and suggestions regarding ground water harvesting in regions of basaltic rocks. It was a very iconoclastic approach towards rainwater harvesting. He explained how same, pre-defined design and pattern to achieve

Find the Hon Minister Prakashji Javadekar's message on the following link <http://youtu.be/DRnW5JC0ypk>



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**CHANGE THE COURSE**

A finite supply of freshwater must meet the needs of everyone living today, future generations, and nature. Many of us consume more water than our fair share, but by taking a pledge to conserve, we can help an iconic river—the Colorado—reach the sea again.

Did you know that the AVERAGE AMERICAN uses **2,000 GALLONS OF WATER A DAY**

**OUR DIETS**  
 50% **634 GALLONS** to make one burger  
 37 GALLONS for one cup of coffee

**ENERGY USE**  
 30% **13 GALLONS** to make 1 gallon of gasoline  
 5 GALLONS/HOUR for a 60-watt light bulb

**PRODUCTS WE USE**  
 10% **2,900 GALLONS** for a pair of blue jeans  
 700 GALLONS to make a cotton T-shirt

10% **NONE**  
 COOKING · CLEANING · WASHING · DRINKING

The U.S. footprint is **2X THE GLOBAL AVERAGE**

And it lands all over the world, depleting rivers and groundwater.

One of those rivers is **THE ICONIC COLORADO**

**30 MILLION** DEPEND ON IT FOR  
 DRINKING · FOOD · RECREATION · ENERGY · WORK

But so much water is wasted that it no longer reaches the sea anymore.

**Infographic:**  
<http://environment.nationalgeographic.com/environment/freshwater/change-the-course/infographic/>

**Yes, we are walking the green path-beginning from TERRE YuCon- Honorable minister Javadekar**

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 groundwater recharge becomes non-functional in most of the cases, especially in basaltic terrain. Ms. Aishwarya Markad presented a poster of probiotic bacteria isolated from different sources like curd, milk, and human probiotics on growth of zebrafish. Her research is indicating that the fish fed on such probiotic diet show better growth than fish fed synthetic food alone. Ms. Saloni Deshpande presented a paper on awareness status and rate of use of



water in Pune. It mostly reflected shocking rate of irrational and extravagant use of such a valuable resource in the city of literate people.

Such innovative ideas at TERRE YuCon inspired every single attendee of the conference. TERRE will publish the best papers and all the abstracts in e-journal soon.



**CSR... A new act.. A new problem for you??**

- Let us **help you with it**
- Let us **reduce your confusion**
- Let us **introduce you the NGOs you are looking for**
- Let us **Plan your social activities effectively**

TERRE has initiated a Global CSR forum where industries and NGOs will be on one platform and can network with like-minded organizations. We appeal industries and NGOs to join us and register with us.

With this initiative we aim at utilizing the CSR funds for high impact projects

For more details please visit [www.terrepolicycentre.com](http://www.terrepolicycentre.com)





# “To think is good but to act is better”

## Rendezvous with Archana Godbole

“To think is good but to act is better” is practiced and tacitly preached by TERRE Policy Centre. We are inspired and encouraged further by all those who practise this practice. To disseminate this inspiration further, we organize a monthly event called “Rendezvous” with people working for environment. This second session was organized with the savior of biodiversity Northwestern Sahyadri Ghats, Dr. Archana Godbole on 13th of February 2015. The zealous and passionate Dr. Godbole delivered a lecture on work of her team in the Konkan area in the state of Maharashtra.



Biodiversity of a region characterizes the power of nature sustain life of diverse forms. Most of these diverse species have symbiotic association with each other to support individual livelihood. Thus sustenance of each species is equally important. And our formidable Sahyadri supports around 6208

species within Konkan area. Out of these, 2048 are endemic ones. With massive magnitude of deforestation, many of these are critically endangered. To protect such biological hot-spots, work is to be done not only to enhance biodiversity but also to maintain living standards of people who depend on these forests. Most of the people living in close vicinity of these hot-spots of Konkan are poor and dependent on the primary occupations like farming, fishery, livestock husbandry etc. To tell these people that forest conservation or biodiversity conservation as a whole, is essential and therefore, cutting down of forest should be stopped, is impractical! As Dr. Godbole puts it, “...you have to be a part of the place where they live, spend time and understand their true problems”. No wonder 20 years spent by Dr. Godbole and her team in the Konkan has earned them credibility in the eyes of the Konkani peasants. Now, they do support the work of AERF (Dr. Godbole’s NGO) and contribute a major share of the success of the coupled efforts.

### Hiravya Wata

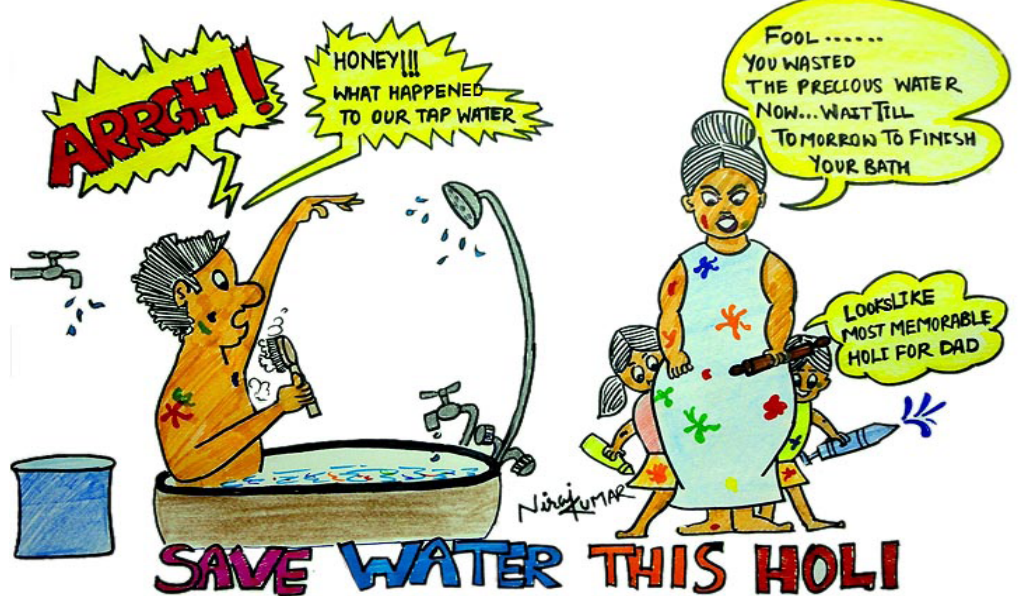


On the occasion of Marathi divas which falls on the birthday of Kusumagraj, a great writer in Marathi, a book entitled “Hiravya Wata” was launched at the hands of Mr. Shrikant Ingalkalikar and its braille version at the hands of Mr. Rajendra Shende, TERRE Policy Centre chairman. The author of this book is Dr. Vinitaa Apte, TERRE Policy Centre President.

“Hiravya Wata” can be translated to as “green paths”. In the walk of life, while reaching our ultimate goals, no matter how big, no matter how small, we walk down our individual paths. These walks form the major part of the journey, as destiny is merely one point. Dr. Apte, in her book, shows how these paths can be pleasant, green, and full of life and pro nature. This beautiful book takes the reader from India, to Egypt, to Cambodia, to many more countries and explains gist of walking green paths in most intriguing manner.

The AERF team began with working for smaller sectors, called “Devrai”. These are the areas of land traditionally maintained by the villagers as sacred places. Dr. Godbole’s team promoted such protections. When they succeeded with such small plots (of a few hectors),

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## Environmental loss worth Rs 1290 crore due to climate change in Sundarbans



Environmental damage in the climate change-hit islands of Sundarbans is costing India Rs 1,290 crore each year, estimates a latest World Bank report.

<http://www.dnaindia.com/india/report-environmental-loss-worth-rs-1290-crore-due-to-climate-change-in-sundarbans-2063125>

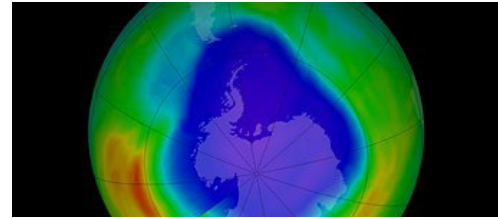
## Climate smart farming tackles challenges of a warming world



With temperatures rising and extreme weather becoming more frequent, 'climate-smart agriculture' is using a host of measures.

<http://www.csmonitor.com/World/Making-a-difference/Change-Agent/2015/0206/Climate-smart-farming-tackles-challenges-of-a-warming-world>

## Scientists alarmed about short-lived ozone-depleting gases



Environmental scientists raised concern on Monday at rising levels of gases that attack Earth's protective ozone layer, especially those chemicals not covered by the relevant United Nations treaty.

<http://www.abc.net.au/environment/articles/2015/02/17/4181729.htm>

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they extended their work to cover larger plots and hence impact the conservation better. The farmers sign a 5-10 years agreement to conduct no deforestation activity on their respective land. These people are generally the poor farmers of the village. To satisfy their need of money, they are paid a little over the amount they would have otherwise received for cutting down of the forest from the contractors.

Now with expansion of scope and widespread of the work, many corporates and individuals contribute to AERF for protection of green cover and maintenance of biodiversity here.

With appeal to join hands with this noble cause of environment conservation initiated by the adept and arduous Dr. Godbole, we conclude this session of Rendezvous and welcome you for the next session in the month of March with another environmentalist.

### SMRITI-VAN



Mahabharata's anuparva said "Those who donate a tree are given salvation by the same trees in the other world."

We appeal you to help to develop a forest where you can cherish a memory. Smriti-Van is the forest of memories where one can plant a tree in memory of an event, celebration, loved people or anything which one wish to cherish. We appeal readers to take part in the noble cause and donate for nature and yourself.

For more details visit our website.

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