

# **Climate Change Community**



# **Community Update** No. 55: 1<sup>st</sup> July, 2014 In this Issue

# FROM THE RESOURCE PERSON

Dear Members,

Greetings from the Climate Change Community!!

We are delighted to present the 55<sup>th</sup> Edition of the Community Update, today. We continue to be overwhelmed by your continued cooperation and support in making this unique knowledge sharing platform **complete five years today**. Reflecting back it looks like we began our journey with you only yesterday. It has been indeed a very exciting journey for me personally and I hope you also enjoyed our knowledge sharing initiatives.

Over the years, the thematic area of climate change has increased in importance significantly. We would like to thank each one of you for highlighting relevant issues in this area and emphasizing the great importance of this field.

The Action Group that is presently active is on **Easy (not so easy) Solutions to Address Climate Change.** The Compendium will include:

- Material that is home based and easily understood and usable by people- to include basic details of where to get it from, cost, advantages, its impact on climate change etc.
- Simple indexing
- Already available material can be collated together.
- Simple solutions for mass utilization to be highlighted in the compendium.

The Compendium is in the process of being finalized and we will be holding a stakeholders consultation meeting soon, most likely next month.

Please send us your comments and suggestions to improve the Community Update. As always, we look forward to hearing from you at all times.

Thanks & best regards, Ramesh Kumar Jalan Resource Person & Moderator Climate Change Community, Solution Exchange-India United Nations Development Programme New Delhi

**DEVELOPMENT IN THE SECTOR** 

# **Opting for coal-based energy 'wasteful approach' by government: IPCC**

The article can be downloaded at: <u>http://www.business-standard.com/article/pti-stories/opting-for-coal-based-energy-wasteful-approach-by-govt-ipcc-114062800606 1.html</u>.

We would like to thank all those who attended the lecture at the India Habitat Centre on Saturday, 28<sup>th</sup> June, 2014.



Emphasizing on the need to decarbonize electricity generation, Intergovernmental Panel on Climate Change (IPCC) chairman R K Pachauri today termed as a "wasteful approach" by the government to opt for coal-based power projects and pressed for the use of renewable and nuclear energy sources to satisfy the country's power needs.

"...We would need to decarbonise electricity generation. Renewable energy technologies are an option, nuclear energy could be an option," he said while speaking about the threat posed to climate by carbon-emitting coal-based power sector.

Noting that major investment and time goes into coal-based energy generation in the country, Pachauri said by that time 300 million people, who are electricity deprived, can be served power using renewable energy sources.

Speaking at the United Nations Public Lecture here, he said huge losses are involved in transmission and distribution of electricity generated from coal-based power plants.

"There is a huge amount of loss at various stages...To my mind that is clearly very wasteful approach. And today we have the benefit of renewable energy technology, which if you take all the costs and all the benefits into account, is clearly a winner in economic terms," Pachauri said.

He said the world emitted around 49 gigatonnes of Carbon Dioxide equivalent of Green House Gas in 2010 as against 39 gigatonnes in 2000, adding that "in 10 years, we have increased 10 gigatonnes of CO2 emission."

"Each year we have added an average of 1 gigatonnes of emission. Clearly, we are on a path where emissions on Green House Gases continue to increase. This all happens despite the fact that it was in 1992 the world accepted the UN Framework Convention on Climate Change," he said.

As per the latest IPCC report, India's high vulnerability and exposure to climate change will slow its economic growth, impact health and development, make poverty reduction more difficult and erode food security.

**United Nations Resident Coordinator, Lise Grande**, said energy has to be accessible, available and affordable for all people, most importantly poor people. "There also has to be

accountability in the system so that people know their needs are being met and can do something about it if they're not," she said.

# **NEW CDKN Report:** Integrating climate change concerns into disaster management planning: The case of Gorakhpur, India

Download the full report: <u>Integrating climate change concerns into disaster management</u> planning: The case of Gorakhpur, India.

Gorakhpur District is recognised as one of the most flood-prone districts in Eastern Uttar Pradesh, India. The data over the past 100 years show a considerable increase in the intensity and frequency of floods, which are now recurring every 3 to 4 years. Gorakhpur District is home to 4.4 million people, most of them live in rural areas. Roughly 20% of the population is affected by floods, and in some areas, flooding has become an annual occurrence, causing huge loss of life, health and livelihoods for the poor inhabitants and extensive damage to public and private property.

This new case study, <u>Integrating climate change concerns into disaster management planning:</u> <u>The case of Gorakhpur, India</u>, by Shiraz A. Wajih of the Gorakhpur Environmental Action Group and Shashikant Chopde of the Institute of Social and Environmental Transition, describes how the programme implemented by Global Change for SysTem for Analysis, Research and Training (START) and Climate and Development Knowledge Network (CDKN) is currently addressing many of these issues in Gorakhpur.

It looks at how the programme was developed, what factors have contributed to its success, and evaluates how a climate mainstreaming programme such as Gorakhpur's might inspire other local governments in a similar position.

#### Key messages from the report:

- The District Disaster Management Plans created as a result of India's Disaster Management Act (2005) can be an effective mechanism for promoting climate-sensitive planning at district level.
- Integrating climate concerns in District Disaster Management Plans can be aided by using the 'Shared Learning Dialogue' process with various government departments at district level. This requires proper facilitation.
- The 'Shared Learning Dialogue' process is critical to developing the capacity of various departments to understand, appreciate, plan and respond to climate risks.
- Climate projections must be appropriately interpreted and presented in a way that fosters understanding of their implications for development programmes across government departments.

# The cost of developmental inaction: TERI's agenda for the New Government and how it can reinvent sustainable development for all

The article is available at: <u>http://www.teriin.org/featured\_services/may/index.php</u> .

TERI has proposed few quick solutions which are basic and easily implementable. The measures will not only bring down the costs of inaction, but improve the lives of millions in a sustainable manner. Some key issues that need to be addressed by the new government are :

**WATER:** Development of 'Water and Sanitation Safety Plans' for Jal Boards, Urban Local Bodies and rural piped water supply and sanitation services could be made mandatory in order to maintain high standards in the sector. A high-level committee may be formed having representations from all the relevant Ministries, Boards, Water and Sanitation organizations and important stakeholders in order to ensure effective and efficient implementation of the water and sanitation safety plans.

The existing tariff for water consumption for domestic use is fixed and not volume-based, which discourages the promotion of best practices for the water conservation as the users do not feel any responsibility in managing the resources. A differential tariff structure on volumetric basis is recommended.

**AIR POLLUTION:** Improvement in fuel quality and advancement of vehicular emissions norms is the key to reduce vehicular emissions. The emission reduction that can be accrued through the introduction of BS-VI fuel quality and vehicular norms can result in the reduction of 127,000 mortalities by 2030, and economic benefits ranging between Rs 3.9-6.7 lakh crore cumulatively till the year 2030. Benefits of implementation of these norms will soon outweigh the costs incurred on initial capital investments.

**WASTE:** The way to address waste mismanagement would be to build waste reduction strategies in overall waste management programmes, increase waste processing, maximize resource recovery, recycling and ensure that land requirement for ultimate disposal is minimized by adopting resource efficient processes. The suggested policy changes would include:

- ✓ A formal waste management policy addressing all the different diverse waste streams centered around elements of 3Rs (Reduce, Reuse, Recycle) and the need for closing the material use cycle,
- ✓ Incentive-based mechanism for enhancing/promoting waste reduction and recycling-based programmes,
- ✓ Mechanism for creation and promotion of market for recycled products.

The suggested institutional changes would include:

- ✓ Integration of clean technology and waste minimization and pollution prevention schemes of Ministry of Environment and Forests to deal with waste-related issues in a holistic manner,
- ✓ To address the problem of indifference in sectoral ministries of environmental issues, environmental cells at the central and state level should be constituted. MoEF should sensitize these cells and also monitor their functioning,
- ✓ The Ministry of Urban Development, being the nodal Ministry dealing with issues related to urban solid and liquid wastes, needs to set up a dedicated cell for implementation of proposed waste management policy at the national level with similar cells to be constituted at the State level.

**GREEN INFRASTRUCTURE:** Energy efficiency measures can be implemented on the energy supply as well as demand side across the energy intensive end-use consuming sectors. For instance, in the transport sector, key interventions include introduction of energy efficiency standards and encouraging use of public transport. Within the industrial sector, the Micro, Small and Medium Enterprise (MSME) segment is associated with low efficiencies due to several barriers such as use of obsolete technologies, non-availability of readymade technological solutions, low level of awareness/information availability, non-availability of technology providers at local/cluster level, relatively high cost of technologies and poor access to finance. **It is estimated that there is a possibility to reduce energy consumption by up to 25-30 per cent by introducing energy efficiency measures in these sectors.** 

**ENERGY SECURITY:** Energy efficiency measures can be implemented on the energy supply as well as demand side across the energy intensive end-use consuming sectors. For instance, in the

transport sector, key interventions include introduction of energy efficiency standards and encouraging use of public transport. Within the industrial sector, the Micro, Small and Medium Enterprise (MSME) segment is associated with low efficiencies due to several barriers such as use of obsolete technologies, non-availability of readymade technological solutions, low level of awareness/information availability, non-availability of technology providers at local/cluster level, relatively high cost of technologies and poor access to finance. It is estimated that there is a possibility to reduce energy consumption by up to 25-30 per cent by introducing energy efficiency measures in these sectors. It is proposed that a Cabinet of Secretaries (CoS) be set up with representation from the ministries concerned to define policy and address all issues in an integrated manner. To ensure this, there is a need to gradually move towards a single energy regulator. It is envisaged that the structure for Single Energy Regulatory Commission is such that the existing energy sub-regulators would automatically become a part of the Commission at the member level.

**RENEWABLES:** Wind Mission should be launched as early as possible. Consistent long-term policy is needed for stable business environment, and, land for wind projects can be allotted on priority basis. Integrated renewable energy policy to mainstream renewables is the need of the hour. **Solar mission needs impetus and JNNSM targets can be advanced.** The Union government should focus on bioenergy development and the Indian Bio-Mission should be launched.

United Nations Public Service Announcement (PSA) Urges Global Citizens to Think Green: UNDP unveils first-ever animated PSA on World Environment Day

The article is available at:

http://www.telegraphindia.com/pressrelease/prnw/prna\_086\_1403890\_0.html .

To mark World Environment Day, UNDP launched its first-ever animated **Public Service Announcement (PSA)** in China on the topic of green consumption and an accompanying social media campaign to promote environmental awareness.

The animation, entitled "Green", stresses that simple lifestyle changes can make a big difference if communities come together and adhere to a more environmentally conscious way of living. Narrated by top Chinese actress and UNDP China Goodwill Ambassador Zhou Xun and produced by awarding-winning film director Du Jiayi, the short film introduces the concept of green consumption, encouraging viewers to optimize green trade-offs and personal impact in a world facing critical challenges like climate change and unprecedented urbanization.

"Nature is sending us a message that the earth is sick. If we do not pay attention, it will become irreversible," says United Nations Secretary-General Ban Ki-moon in an interview with Xinhua News Agency during his recent visit to China from 18 to 23 May. "This planet is our home and that of our children and grandchildren. We must act now to provide stability and greater prosperity to the world's growing population."

The message in "Green" comes a few months prior to the international Climate Summit, to be held in New York in September. Convening world leaders to build political momentum and bring about action on climate change, the Summit aims to showcase solutions and help nation's better forge partnerships toward a sustainable future, as well as assist governments in completing their work on a new universal climate agreement by 2015. Along with renewed commitment in areas such as energy, cities and transport, finance, resilience, agriculture, and short-lived climate pollutants, individual-driven environmental protection on a mass scale will be key in reversing the impacts of climate change.

With outreach led by UN Secretary-General Ban Ki-moon; UNDP Administrator Helen Clark; Chairman of the Nobel Prize-winning Intergovernmental Panel on Climate Change Rajendra K. Pachauri; world-renowned pianist and UN Messenger of Peace Lang Lang; honorary UN Messenger for World Environment Day and chairman of Internet giant Baidu Robin Li; and UN Goodwill Ambassadors from various agencies, the collective message formed by "Green" and its campaign on World Environment Day advocates efforts toward a more responsible future.

Likewise, the campaign urges the participation of all social media users not only in the conversation on green but in applying the environmentally conscious mindset and practices in daily life. As the world builds cities, brings people out of poverty, and changes the climate like never before, it must start considering and acting on the matter of sustainability now and for the future.

"We've all been witness to extreme weather events and related natural disasters. These drive home the reality that the effects of climate change are not just limited to the striking figures listed in UN reports ? they are already palpable and widespread," says "Green" star Zhou Xun. "Hopefully, this PSA released on the occasion of World Environment Day will contribute to the global discussion on what we can do to help save our ailing planet."

The PSA was funded by China Women's Development Foundation and Hong Kong Federation of Women and is an extension of a UNDP project to promote community-based green consumption. The initiative supported outreach and participatory activities in Beijing to positively impact consumption mentality in urban communities and help inform local policymaking on environmental protection.

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations. For more details, please visit: <a href="http://www.undp.org">http://www.undp.org</a>.

Questionnaire for Developing a tool to assess Carbon Neutral and Sustainability of educational campuses.

TERI University is developing a tool to assess Carbon Neutral and Sustainability of educational campuses, supported by UNDP. Based on your expertise, we kindly request you to spare some time and fill this questionnaire.

The objective of the study is given below. We kindly request you to fill the questionnaire below, which will help us in developing this tool.

A group of researchers at TERI University is working on a UNDP sponsored project titled "Carbon Neutral and Sustainable Campuses". The objective of this study is to prepare a manual for carbon neutrality and sustainability of educational campuses.

It comprises of two parts- the calculation of the net carbon footprint of the campus and the assessment of the campus sustainability. The Carbon Footprint analysis comprises of five indicators. While for the assessment of the sustainability of the campus we are deriving a Campus Sustainability Index which comprises of four main components and 30 indicators.

To develop this index we need to determine which of the selected components and

indicators are more important for the assessment than the others and assign different importance scores to each component and subsequently the indicators.

The purpose of this questionnaire is to seek your help in assigning these scores to:

- The carbon footprint analysis, and
- The campus sustainability analysis which comprises of four major components and 30 indicators

Based on the scores you assign we will apply statistical tools to determine the final weightage for each component and indicator and form the carbon neutral and sustainability index.

Please click on the link to complete the questionnaire: <u>https://bit.ly/1j5IpS7</u>.

# World Environment Day: Launch of greening tutorial

The tutorial will be made publicly available soon on: <u>www.greeningtheblue.org</u> .

## **GREENING UNDP**

On the occasion of World Environment Day, 5<sup>th</sup> June, 2014 and as a leading organization promoting environmental sustainability and the fight against climate change, UNDP is committed to "**walk the talk**" by demonstrating that we run our operations based on the same principles we preach.

#### **UNDP's progress**

Substantial progress has been achieved in moving UNDP towards "greener," resource-efficient and more resilient operations both at HQ and in many Country Offices and Regional Centres. From green building renovations and use of photovoltaic power to bicycling programs, staff throughout the organization is developing efficient and creative solutions to reduce our reliance on fossil fuels and minimize our overall impact on the environment.

#### What can each one of us do to make a difference?

There are a lot of things each and every one of us can do to make a difference. UNDP together with UNEP has developed a short tutorial which will help you find ways to reduce your carbon footprint. The tutorial will be made publicly available soon on <u>www.greeningtheblue.org</u>.

Helen Clark, Administrator, UNDP confirmed that "UNDP is committed to minimizing the environmental impact of its operations and to achieving overall climate neutrality. By demonstrating that we run our operations in a resource efficient, sustainable, and accountable way, UNDP strengthens its global position as a strong and reliable partner."

We encourage all of you to take action and further mainstream environmental considerations into your office life and work procedures

## India's new development goals. The article is available at:

http://www.livemint.com/Opinion/jw40P9LmOSCc3IzNCITHSI/Indias-new-development-goals.html .

The cliché references to India as the land of the poor—the fight against absolute poverty has been won, while that against inequality has just begun—and so on are just not valid any more.

Once we accept this hypothesis, the development paradigm before the country's policy planners too is fundamentally altered. As in the run-up to the 2014 general election, the defining characteristic is aspiration; earlier it was survival.

Indians saw an unprecedented improvement in their material circumstances in the first decade of the new millennium. Census 2011 revealed how people who were walking are now cycling, those using two-wheelers graduated to four-wheelers and so on.

Together with the entitlement regime ushered in by the UPA—guaranteeing rural jobs, education, information and, most recently, food security—has ensured that the level of poverty dropped to a historic low of 22%. In one stroke, about 150 million people have been added to the rapidly growing middle class.

This neo-middle class is not necessarily to be found in metros or big cities of India—**110 million people lifted out of poverty are in rural India**. They are located closer to rural areas and are part of the phenomenon of rurbanization and captured by the Census 2011 as the phenomenon of census towns.

The growth in the number of census towns in the last decade spurted by over 50%. In fact, in some states such as Kerala, urbanization spiked from a rate of growth of 26% in the decade ended 2001 to 47.7% in 2011. The census, using its definition of urbanization, estimates that a little less than a third of the total population lives in urban centres as compared with 27.8% in 2001 and 25.5% in 1991.

More evidence of this structural shift is visible in the latest consumption data put out by the National Sample Survey Office. The rural consumer, like his or her urban counterpart, now spends less than 50% of the household budget on food. Instead the bulk is spent on non-food products such as durable goods, fuel, clothing, footwear and consumer products.

Consequently, the policy challenge is **now not to reduce absolute poverty; instead it is to mitigate growing inequality**. It is, given the state of the education system, lack of jobs and skills, only getting accentuated. Unchecked, especially in the context of the overwhelming young demography, **it could spiral into a social crisis**, **as it has in countries like Spain where youth unemployment is 50% plus**.

The new Union cabinet has created a separate ministry for skill development. The solution, obviously, has to be both short term and long term. The best way to combat inequality in a society seized by aspirations is to better equip the population. Indians no longer necessarily want fish, but wish to learn how to fish. The focus will have to be on developing the human and physical capital of the country.

Any such strategy would begin with refocusing the priority for education. Enrolment is no longer the issue, quality of education and the dropout rate are. The quality of education is critical in determining skill development and employability of a person. **At present, the skill deficit is so large that even if indeed jobs were created, they will remain vacant.** A simple example is that India's software leaders actually retool all their fresh recruits by sending them to a boot camp.

Simultaneously, priority will have to be accorded to improving health standards. **The neo middle** class in particular is vulnerable as they are just an illness away from falling back into

**poverty.** It goes without saying that better physical infrastructure which guarantees road connectivity to more people in the country would be a similar prerequisite for the government to level the playing field.

# New IISD reports highlight challenges with direct-deposit LPG and kerosene subsidy schemes

Subsidies to Liquefied Petroleum Gas in India: An assessment of the direct benefit transfer in Mysore is available at: <u>https://www.iisd.org/gsi/sites/default/files/ffs\_india\_lpg\_mysore.pdf</u>.

Evaluation of the Pilot Project on Direct Transfer of Kerosene Subsidies in Kotkasim, Alwar is available at: <u>https://www.iisd.org/gsi/sites/default/files/ffs\_india\_kerosene\_alwar\_final.pdf</u>.

Two reports released this week by the International Institute for Sustainable Development's <u>Global Subsidies Initiative</u> examine India's subsidy disbursement mechanisms for Liquefied Petroleum Gas (LPG) and kerosene. The first studied the Direct Benefits Transfer (DBT) for LPG in Mysore district; the second evaluated another cash-transfer program that was used to distribute kerosene subsidies in the Kotkasim block of Alwar district.

The DBT is an electronic payment system for centrally funded social protection schemes. Under the DBT-for-LPG (DBTL), households order an LPG cylinder from a distributor, receive a payment equivalent to the current subsidy amount via electronic transfer to their bank account, then pay the full (unsubsidized) market price for the cylinder in cash on delivery. The program was suspended earlier this year.

The <u>DBTL in Mysore</u> found the scheme reduced access to subsidies, transferred incorrect subsidy amounts and imposed a time burden on LPG consumers. Apart from design and implementation issues, the DBTL increased short-term borrowing among poorer households. Households also reduced their consumption of LPG by increasing the use of alternate fuels like firewood, biomass and kerosene. The DBTL posed particular problems for women, who are usually responsible for household budgeting, but often lack their own bank account (which are most often in the name of the male head of household).

<u>The second report</u>, produced in partnership with <u>The Energy and Resources Institute</u>, evaluated a pilot project for direct cash-transfer of kerosene subsidies in Kotkasim, Alwar. The study found a drastic drop in kerosene sales at 'fair price' shops in Kotkasim over the period of the pilot scheme.

Part of this decline is likely due to the scheme's success in curbing leakage of kerosene to the black market. However, the study also raises concerns that the higher upfront price of kerosene, a lack of easy access to banking facilities and a poor understanding among households as to how the program operates, also contributed to a reduction in kerosene consumption.

Both reports note that poor levels financial inclusion in rural India pose serious problems for the effectiveness of such direct deposit subsidy schemes. The suspension of the DBTL and the decision to not expand the cash transfer for kerosene subsidies reflects this limitation, among others discussed in the reports.

What Do People See in the Landscape? The Metamorphosis of Ecosystem Services After Disaster

The article is available at: <a href="http://sustainablecitiescollective.com/nature-cities/264701/what-do-people-see-landscape-metamorphosis-ecosystem-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-landscape-services-after-line-line-line-landscape-services-after-line

disaster?utm\_source=feedburner&utm\_medium=email&utm\_campaign=Sustainable+Cities+Colle ctive+%28all+posts%29

Various studies have been undertaken since 2010 have made us realize that the services provided by natural areas in particular, or ecosystem services, are context specific and are conditional to what people see in the landscape. Ecosystem services vary on one hand, on the physical attributes of natural systems, meaning their elements and organization, which in turn, affect their provisioning capacity, their appearance and the way people perceived them. On the other hand, ecosystem services vary with the socio-cultural aspects of a community, which influence the possibilities of people to value natural areas as useful for their specific needs at specific times. Our studies also support the idea that people's perception of nature and their capacity to perceive potential uses after disaster depends on their knowledge and familiarity with the landscape.

For instance, ecological knowledge can help to differentiate between water bodies useful for drinking, among others which are useful for washing only. Similarly, a high familiarity with the landscape can help discover services in natural areas, such as hidden recreational pathways in the forest, which can be much valued as evacuation routes after a tsunami.

For these reasons, not every park, hill and wetland among other natural sites, are used in the same way after disaster. Why does utility vary between sites? Are the uses of natural areas for daily life and for a post-disaster situation compatible? And most importantly for landscape professionals, can design and urban planning improve the role of natural systems after disaster?

Yes! By identifying the biophysical attributes that are perceived by people, understanding the manner in which they are organized, the services they provide, and the meanings (e.g. uses) they convey after disaster, we have useful information to make landscape interventions which are compatible with both, nature and people's needs.

These questions motivate the research we have been carrying out since 2010 in different cities of Chile affected by earthquakes and tsunamis, with particular emphasis on the use and role of natural systems located both inside and outside the city limits. We know that landscape properties are valued due to both, the services landscapes provide (provisioning, regulating, cultural and supporting services)and to the capability of the people to see them.

This idea has been widely explored and proved in other landscape types and urban areas, with a focus on the study of affordances, or the 'useful things' that people 'see' in the environment (Gibson, 1979; Heft, 2003). Affordances are not things themselves but are resources that arise between the interactions of the properties of the environment and of the perceiver (Chemero, 2003); hence, are available for people that are capable of perceiving and using them. Landscapes elements are typically valued because they are useful in some way at specific times, in relation to people's abilities and in particular contexts.

We know that natural systems provide invaluable provisioning, regulating, cultural and supporting services. Flood and climate control, urban water cleaning, biomass and atmospheric oxygen production, recreation, aesthetic experiences and wellbeing, are only few of the services provided by natural areas. However, it is important to highlight the role they take in the post-disaster context. There are ecosystem services that are not relevant during everyday life but this does not mean they are less important. Some services are dormant resources, which are activated only after a major disturbance; such is an earthquake or tsunami.

The role of wetlands, dunes and mangroves to mitigate tsunamis and floods, as well as the role of vegetation communities with flora which is fire retardant are well documented in the literature (Chiang et al., 2014; Hoehn et al., 2003; Link 5; Walker and Salt, 2006) and used in the planning and design of urban environments. In the same manner, it is important to keep exploring and including in the planning and design of cities the role of nature to provide cultural and provisioning services at the local scales after disaster.

Ecosystem services after disaster and at the local scale are affordances, conditioned by the interaction between the needs of the community after disaster, the possibilities of the natural system to satisfy such requirements, and the biophysical aspects that shape the utility of the space. Therefore, these services are rooted in a specific physical and cultural context, and not transferable from one community to another. Accordingly, the capacity of metamorphosis of the natural systems after disaster and of the values people assign to them, changing from their usual recreational and/or economic use to places that provide provisioning and cultural services, should be taken into consideration during the planning and design of cities.

Different needs emerge in cities after disaster which can be satisfied by the use of natural systems within and between urban environments. As a consequence, the 'nature of cities' after disaster change, including physical landscape change and the way people perceive, use and afford it.

# With Developing World's Policy Support, Global Renewable Energy Generation Capacity Jumps to Record Level

Now 95 emerging economies nurture renewable energy growth through supportive policies, up six-fold from just 15 countries in 2005.

The report can be downloaded from: <u>http://www.ren21.net/REN21Activities/GlobalStatusReport.aspx</u>

The number of emerging economy nations with policies in place to support the expansion of renewable energy has surged more than six-fold in just eight years, from 15 developing countries in 2005 to 95 early this year. Those 95 developing nations today make up the vast majority of the 144 countries with renewable energy support policies and targets in place. The rise of developing world support contrasts with declining support and renewables policy uncertainty and even retroactive support reductions in some European countries and the United States.

These are some of the findings of the latest edition of the annual <u>Renewables Global Status</u> <u>Report</u>, launched at the UN-hosted Sustainable Energy for All in New York by the Paris-based Renewable Energy Policy Network for the 21st Century (REN21). The 2014 report, of which ICLEI – Local Governments is a contributor, credits support policies with a central role in driving global renewable energy capacity to a new record level last year — 1,560 gigawatts (GW), up 8.3% from 2012. More than 22 % of the world's power production now comes from renewable sources.

Developing and emerging economies account for 70% of countries globally that support RE uptake through relevant policies and actions.

Cities and regions are adopting very ambitious goals of meeting 100% of the energy demand by transitioning to renewable energy, either in specific sectors or across the economy. This is

possible only through technology and market developments, finance models, as well as stable and predictable renewable energy policies, which need to be systematically linked across the public and private sectors in order to support and drive the transition process.

In 2013, an estimated 6.5 million people worldwide worked directly or indirectly in the renewable energy sector. Additional highlights of the report include:

- Overall last year, renewable electricity capacity achieved a new record level, jumping 8.3% and accounting for more than 56% of net additions to global power capacity: renewables meet almost one-fifth of world final energy consumption.
- Hydropower rose by 4% to approximately 1,000 GW in 2013, accounting for about onethird of renewable power capacity added during the year. Other renewables collectively grew nearly 17% to an estimated 560 GW.
- Renewable energy provided 19% of global final energy consumption in 2012, and continued to grow in 2013. Of this total share in 2012, modern renewables accounted for 10% with the remaining 9% coming from traditional biomass the share of which is declining.
- For the first time, more solar PV than wind power capacity was added worldwide.
- Even as global investment in solar PV declined nearly 22% relative to 2012, new capacity installations increased by more than 27%. The solar PV market had a record year, adding about 38 GW in 2013 for a total of approximately 138 GW. China saw spectacular growth, accounting for nearly one third of global capacity added, followed by Japan and the United States.
- China, the United States, Brazil, Canada, and Germany remained the top countries for total installed renewable power capacity.
- China's new renewable power capacity surpassed new fossil fuel and nuclear capacity for the first time.
- Growing numbers of cities, states, and regions seek to transition to 100% renewable energy in either individual sectors or economy-wide. For example, Djibouti, Scotland, and the small-island state of Tuvalu aim to derive 100% of their electricity from renewable sources by 2020.
- Uruguay, Mauritius, and Costa Rica were among the top countries for investment in new renewable power and fuels relative to annual GDP.
- More than 35 GW of wind power capacity was added in 2013, totalling just more than 318 GW. However, despite several record years, the market was down nearly 10 GW compared to 2012, reflecting primarily a steep drop in the U.S. market. Offshore wind had a record year, with 1.6 GW added, almost all of it in the EU.
- Heating and cooling from modern biomass, solar, and geothermal sources account for a small but gradually rising share of final global heat demand, amounting to an estimated 10%.
- Global new investment in renewable power and fuels was at least USD 249.4 billion in 2013 down from its record level in 2011.

As cities seek to share and scale up best practices, highlight their commitments to renewable energy, and account for their achievements, local governments are increasingly prioritising systematic measurement and reporting of climate and energy data.

# Health Without Harm: Reducing Risk from Healthcare Waste in India

The article is available at:

http://www.in.undp.org/content/india/en/home/ourwork/environmentandenergy/successstories/health-without-harm/.

Highlights

- The Global Healthcare Waste Management project is helping promote best practices in healthcare waste management in a hospital in the King George's Medical University in Lucknow
- The project, implemented by UNDP and funded by GEF, has helped reduce the amount of infectious waste in the hospital by 80 percent
- Training in proper segregation, transportation and treatment of bio-medical waste has also helped in reducing health and environment risks through bio-medical waste
- The hospital also earns INR 18,00,000 (US\$ 32,700) annually through recycling the hospital waste

The Global Healthcare Waste Management project, implemented by UNDP in partnership with the Ministry of Environment and Forests and supported by WHO and Health Care Without Harm is helping promote best practices in healthcare waste management and mercury waste management at King George's Medical University in Lucknow, India. The project is funded by the Global Environment Facility. As a result of a series of interventions, the hospital has been able to reduce the amount of infectious waste generated by 80 percent due to proper segregation, transportation and treatment of waste practices.

In the north Indian state of Uttar Pradesh (UP), the King George's Medical University (KGMU) has added a new milestone to its 100-year legacy. One of the largest hospital complexes in north India, it has been transformed over the last few years from a hospital that did not have any healthcare waste management system in place to an institution which today embodies sound healthcare waste management practices, generating less than one-fifth of the infectious waste generated three years ago.

Efforts at KGMU are a result of the hospital's participation in the Global Healthcare Waste Management project, an initiative underway in eight countries to demonstrate and promote best practices aimed at reducing the health and environmental risks of waste generated in hospitals. Implemented by UNDP with support from WHO and Health Care Without Harm, the project is funded by the Global Environment Facility. In March 2013, the Bio-Medical Waste Management Committee of the hospital received a Special Recognition Award from the global project team.

Spread across 1.5 kms, KGMU has 49 buildings and a 3,000 bed hospital in Lucknow, the capital of UP. Five-hundred resident doctors cater to almost 2,000 outpatients every day. However, with a ratio of one nurse to every 60 patients and limited human and financial resources, implementing sound bio-medical waste management practices was a challenge.

Before project interventions began in 2010, 2,500 kgs of waste generated at the hospital every day was simply disposed of in the open with the risk that it would find its way into the rest of the city's municipal waste. The health risk of such an approach is summarized by Dr. Kirti Srivastava, Member Secretary, Bio Medical Waste Management Committee, KGMU, who says, "Between 10-20 percent of waste generated by a hospital is infected waste but if you don't segregate this infected waste from general waste, similar to say household waste, then you will actually need to treat 100 percent of the waste generated in your hospital."

The hospital complex had no systematic bio-medical waste management programme in place to segregate bio-medical waste from ordinary waste. Handling infectious waste was considered the responsibility of sweepers and waste handlers who had no training on the infectious potential of the wastes nor given any protective gears. Bins of overflowing waste lying around were a common sight.

After three years of intensive efforts at KGMU, the situation has been completely transformed. Infrastructure for treating waste has been built and specially designed waste segregation storage

containers are used by hospital staff. Special trolleys for collection and transportation of waste have been made. The KGMU Bio-Medical Waste Management Committee recruited a doctor from each of forty-nine departments to monitor progress of each unit. In addition, training in proper waste management practices is regularly provided to all hospital staff.

Today, KGMU generates less than 500 kgs/day of infectious or hazardous waste. The hospital also earns INR 18,00,000 (US\$ 32,700) annually through recycling this waste. Further, initiatives have been taken to handle general waste. A general waste collection area and a programme to compost organic waste are being initiated. In addition, KGMU is shifting to non-mercury thermometers, sphygmomanometers, and other medical instruments, and is developing programmes to collect and manage its e-waste and liquid waste.

While India has taken many steps over the past few decades to address pollution caused by healthcare waste, it is estimated that only just over 50 percent of the country's 84,809 hospitals and healthcare facilities in India properly treat their waste and properly segregate infected waste from non-infected waste.

Improving healthcare delivery systems is a key priority for countries like India where, for example, there are only 45 doctors for every 100,000 people. The experience of KGMU holds important lessons for India's healthcare system to realize the objective of ensuring **'health without harm'**.

## What is your water footprint?

How much water does it cost to make a product? Will calculating this cost or the 'corporate water footprint' help make businesses more water sustainable? The greatest challenge of climate change will be the shortage of fresh water around the world.

The article is available at: <u>http://www.indiawaterportal.org/articles/what-your-water-footprint</u> .

India has about 16% of the world's population but only 4% of its water resources, according to a UNICEF Report titled Water in India: Situation and Prospects. The path to development demands more of this precious resource at an alarming rate. The Millennium Development Goals (MDGs), through its eight international development goals, greatly emphasise the need for sustainable access to safe drinking water as well as sanitation.

Judicious use of this resource is imperative but unless one knows how much water is being used, how can they take steps to limit their usage?

## Water footprint

A water footprint helps one understand the amount of water being used at an individual level all the way to a national level and in the numerous processes involved in manufacturing and producing our goods and services.

An accurate water footprint also takes into account the amount of water contaminated during the manufacturing and production process. This tool gives a solid water accounting framework and aids us all in our efforts to be more efficient and conservative with our water use.

The water footprint of an individual is the amount of water they use in and around their home, school or office throughout the day. It includes the water used directly, like that from a tap as well as the water used indirectly, like the water it took to produce the food they eat, the products

they buy, the energy they consume and even the water they save by recycling.

The water footprint of a business, the 'corporate water footprint', is defined as the total volume of fresh water that is used directly or indirectly to run and support a business. The water footprint concept was introduced in 2002 by Arjen Y. Hoekstra from UNESCO-IHE .

#### The business of water

With increasing scarcity of freshwater resources, industries are becoming more and more conscious of their usage pattern. Few companies have come up with strong water strategies and water disclosure by companies is the first step in this direction.

A recent report by TATA showcases a water sustainability roadmap for the Tata Group and accounts for the water consumption and pollution in four companies of the Tata Group – Tata Steel, Tata Chemicals, Tata Motors and Tata Power.

#### How can you reduce your water footprint?

#### 1. Direct footprint:

- Install water-saving toilets and showerheads
- Close the tap while brushing your teeth and shaving
- Use recycled water in the garden
- Harvest rainwater and use it for recharging groundwater or for secondary uses like washing cars and gardening.

#### 2. Indirect footprint:

Be conscious of what you buy. Make sure that you buy products that have a comparitively lesser water footprint. For example, buy a product that is produced from a place that is less prone to water scarcity. Switch to products that have a lesser water footprint. Eat more vegetables than meat, choose tea over coffee. This will encourage industries to be more water conscious and transparent in their water consumption.

#### Calculate your water footprint

The Water Footprint Network has developed a calculator which can help individuals assess their water footprint based on their lifestyle and their location. The calculations are based on the water requirements per unit of product as in the country of residence.

#### Conclusion

How much of water does an individual use? How much water does a company use?Does it recycle any and most importantly how much does a finished product cost in terms of water? Only once such an evaluation is carried out, can the water footprint, both in terms of fresh water used & polluted wastewater released, be reduced.

A transparent water accounting of an industry's needs is a tool that can lead to better response strategies- strategies that are not only topical, but also custom built per location and season that will help consumers make an informed choice.

With India facing the bleak prospect of becoming a water scarce nation by 2020, this information should be our immediate priority. A data bank of this crucial knowledge is the first step to make industries more water sustainable.

Indian Standard Organisation (ISO) is working on a procedural standard on how to incorporate water footprint in a product Life Cycle Assessment (LCA). Responsible citizens too need to be aware of their duty, make wise choices and demand for transparency in information related to use of water for all products that they use.

It's time industrial water disclosure changed from voluntary to mandatory. After all scarcity of water will lead to a drought in business too!

According to Benjamin Franklin: When the well is dry, we know the worth of water.

## **Clean Energy Solutions Center Releases New Fact Sheet.**

Additional information can be found at : <u>https://cleanenergysolutions.org/tools/policy-databases</u> .

We are pleased to announce that the Clean Energy Solutions Center has released a new fact sheet, Developing an Online Database of National and Sub-national Clean Energy Policies (<u>http://www.nrel.gov/docs/fy14osti/60656.pdf</u>).

The document highlights the major policy, research, and technical topics to be considered when creating a clean energy policy database and website similar to the U.S. Database of State Incentives for Renewables and Efficiency (DSIRE) (<u>http://www.dsireusa.org/</u>) and the Indian Renewable Energy and Energy Efficiency Policy Database (IREED) (<u>http://www.ireeed.gov.in/</u>).

As national and subnational governments enact policies and incentives to promote renewable energy and energy efficiency, it can be difficult for consumers, businesses and policymakers to determine which policies and incentives apply to a clean energy project. **Online databases like DSIRE and IREEED provide a single location for the public to access this information and provide insight on a country's clean energy policy.** 

Yet, creating a clean energy policy database is a complex undertaking that requires close coordination between policy and IT experts. This fact sheet provides an overview of many of the components that a project team developing a similar database may wish to consider. The guidance provided by this fact sheet is based on nearly two decades of experience providing information on clean energy policies in the United States through DSIRE and more recent experience with IREEED.

The fact sheet also:

- Provides an overview of policy and research topics, focusing on identifying target audiences, defining project scope, planning initial research and maintaining the database
- Offers guidance and best practices on the technical needs for similar policy databases
- Highlights some of the factors that impact budget and project timing, though specific estimates are not provided as they are highly dependent on multiple factors.

Solar energy to power street lights in the slums of Pune City.

The article is available at: <u>http://timesofindia.indiatimes.com/city/pune/Solar-energy-to-power-street-lights-in-slums/articleshow/36405531.cms</u>.

The slums in Pune city will promote the use of unconventional energy if the civic body's plan to use solar energy to power lights is approved.

A proposal to fit solar street lights in the slums has been tabled before the standing committee. The Shivajinagar assembly constituency has been selected for the project, followed by slums in Bopodi, Khairewadi and Patil Estate areas.

"This is the first time the slums in the city will have solar lights. Shivajinagar assembly areas have been selected for a rollout. The remaining areas will be taken up as and when the funds are available," said S S Chaudhari, executive engineer of PMC, told TOI on Thursday.

The project will be completed in 60 days after its commencement. Funds worth Rs 1 crore will be utilised. Nearly 160 streets lights will be installed at a cost of Rs 62,500 each. A 43 watt bulb will be fit to the streetlight along with the solar panel.

Most slum areas are congested and there is hardly any space to lay cables for street lights. "Solar poles will be easy to install as they take little space. The intention is to promote unconventional energy sources. It will also reduce the expenses on electricity for street lights," said Chaudhari.

Forty per cent of Pune's population, or an estimated 14 lakh people, lives in slums. The population has grown by 176% since 1991 due to migration. Of the 244 sq km under the PMC limits, about 15 sq km, is encroached upon by slums.

The Town and Country Planning Organisation (TCPO), the technical arm of the ministry of urban development, government of India, ranks Pune third among the cities with the largest number of slums in India. **Mumbai stands first with 55% of its total population in slums, followed by Meerut with a slum population of 44%.** 

As for the main street lights, the civic body has plans to install about 10,000 Light Emitting Diodes (LED) streetlights across the city, replacing the existing high pressure sodium vapour lamps (HPSV) wherever possible.

A Union urban development ministry advisory issued last week to the administrations of all the states and cities sought better street lighting to make public places safer at night.

## **Innovations of Steel**

The article is available at: <a href="http://www.in.undp.org/content/india/en/home/ourwork/environmentandenergy/successstories/in">http://www.in.undp.org/content/india/en/home/ourwork/environmentandenergy/successstories/in</a> novations-of-steel/

#### Highlights

- UNDP's intervention in the energy-intensive steel sector has helped the sector save up to 40 percent on energy consumption and entrepreneurs reap greater profits
- Environmentally viable energy-efficient technologies have reduced furnace oil consumption by 30 percent and coal consumption by 50 percent
- Burning loss has been reduced by 50 percent and mill utilization has improved by 15 percent in 25 units
- Several model units have been recognized by national and state governments for their efforts in reducing energy consumption
- Steel production in India generates roughly 1.2 tons of solid waste and 2.5 tons of carbon dioxide and other pollutants annually, and relies heavily on outdated, high cost technologies

A joint partnership between UNDP and the Ministry of Steel, Government of India and Global Environment Facility is helping **energy-intensive steel sector save up to 40 percent** on energy consumption enabling entrepreneurs to reap greater profits.

Results from a UNDP pilot project demonstrate that small and medium steel re-rolling mills can now save up to 40 percent on energy consumption, enabling entrepreneurs to reap greater profits. Steel production is an energy intensive process that generates roughly 1.2 tons of solid waste and 2.5 tons of carbon dioxide and other pollutants annually. India's 1,200 odd steel rerolling mills, many of them small-scale are a critical link in the supply of steel, and contribute more than 57 percent of steel produced countrywide. Yet many of these mills operate with outdated, high cost technologies that are largely self-financed.

Environmentally viable energy-efficient technologies have reduced furnace oil consumption by 30 percent and coal consumption by 50 percent. Burning loss has been reduced by 50 percent and mill utilization has improved by 15 percent in 25 units. Overall, the pilot has demonstrated that small and medium enterprises (SMEs) can save up to 40 percent on their energy consumption.

As India's economy continues to grow, small and medium sized enterprises need to become more efficient to remain commercially viable. Working with small-scale steel re-rolling mills, UNDP is demonstrating the possibilities of win-win solutions wherein increasing energy efficiency and reducing costs of SMEs can enable entrepreneurs to earn greater profits from cleaner technology.

The steel re-rolling sector in India has over the past seven years, managed to turn the tables on historically high energy consumption. The success of many of the model units has been acknowledged by the state and central government.

# From Anticipation to Action - Can the Climate Technology Mechanism Offer a Solution for Sustainable Development?

The article is available at: <u>http://climate-l.iisd.org/guest-articles/from-anticipation-to-action-can-the-climate-technology-mechanism-offer-a-solution-for-sustainable-development/</u>.

In the opening of this year's UN Technology Dialogue, UN Secretary General Ban Kimoon noted that making tangible progress in facilitating the development of environmentally sound technologies is a key component of the post-2015 development agenda. However, the scale of current efforts remains modest in comparison with the needs and challenges involved in technology cooperation and dissemination.

Participants of the Dialogue agreed on the need to find a common vision for "a facilitation mechanism that promotes the development, transfer and dissemination of clean and environmentally sound technologies by assessing the technology needs of developing countries, options to address those needs and capacity-building" as prescribed by the UN Conference on Sustainable Development (UNCSD, or Rio+20) Outcome Document The Future We Want.

The fact that fragmentation and gaps persist in the current international system of technology development and transfer was readily agreed upon, yet proposals for addressing this challenge took many forms, including: an effort to support better analysis and reporting on technology activities; a special technology bank for least developed countries (LDCs); establishment of an entirely new UN global technology organization.

Many participants noted that technologies are transferred via so many different means and types

of initiatives (public or private, commercial or non-commercial) that it is hard to envision how a single entity could be capable of providing technology oversight for all sustainable development activities. Furthermore, the role of private companies, finance, markets and enabling policies must all be considered in the development of an effective technology transfer solution.

The path that climate technology has taken might provide a useful example for this effort. These same issues had been intensively negotiated in the UN Framework Convention on Climate Change (UNFCCC) for more than 15 years, when a major breakthrough was achieved during the 2009 Copenhagen Accord. At that time, Heads of State called for the creation of a special Technology Mechanism to accelerate technology development and transfer in support of climate change adaptation and mitigation. These leaders envisioned a country-driven approach guided by national priorities that would encourage collaboration between academia, the private sector and public and research institutions in order to both develop and transfer existing and emerging environmentally sound technologies.

#### A Technology Executive Committee (TEC) and Climate Technology Centre and Network (CTCN) were thus created under the UNFCCC umbrella to provide a twopronged approach to addressing climate technology needs.

The TEC promotes strategic policy cooperation with relevant international technology initiatives, stakeholders and organizations and promotes coherence and cooperation across technology activities.

The Climate Technology Centre, with its consortium of 11 independent, regional organizations led by the UN Environment Programme (UNEP) and the UN Industrial Organisation (UNIDO), facilitates a network of international, regional, national and sectoral technology organizations, private sector firms and academic/research initiatives, which work to build capacity and share climate technology expertise from neighbouring countries in order to accelerate the implementation of relevant, effective technologies.

To date, the TEC has analysed developing countries' own Technology Needs Assessments, and identified prioritization trends for climate mitigation (energy efficiency and renewable energy technologies) and adaptation (agriculture and water management). It also highlighted the economic, financial, policy, legal and regulatory challenges that pose the main barriers to technology development and transfer.

The CTCN is working with countries like Chile, who have engaged the Centre and its vast network to find solutions to their technology-related adaptation or mitigation needs.

Nearly 80 countries have established national CTCN focal points (known as National Designated Entities) who collaborate with national stakeholders to develop and relay requests. The CTCN has received a diverse array of technical assistance requests already, spanning from renewable energy policies to public transportation and from biodiversity monitoring to saving mangrove forests for coastal protection.

It is evident that we need both strategic and practical actions to ramp up our progress in technology facilitation. My hope is that the UNFCCC's model of country-driven requests, South-South-North collaboration that includes the private sector and strategic advice via an established UN entity may prove to be an effective technology response.

Plastic waste causes US \$13 billion damage to marine ecosystem: UN

The article can be downloaded at: <u>http://www.firstpost.com/india/plastic-waste-causes-13-bn-damage-marine-ecosystem-un-1586521.html</u>.

Plastic waste causes an annual damage of \$13 billion to the marine ecosystem, two UN reports have said and underlined the need of recycling and redesigning plastic products to bring multiple green economy benefits.

"Plastic contamination threatens marine life, tourism, fisheries and businesses," the eleventh edition of the UN Environment Programme (UNEP) Year Book, which updates 10 issues previously highlighted over the past decade and provides mitigation steps for each, said.

"Plastics undoubtedly play a crucial role in modern life, but the environmental impacts of the way we use them cannot be ignored," UNEP Executive Director Achim Steiner said.

As per conservative yearly estimates, widespread plastic waste causes \$13 billion financial damage to marine ecosystems, the UNEP-supported report "Valuing Plastic" said.

Making a case for managing and disclosing plastic use in the consumer goods industry, the report added, "Over 30 percent of the natural capital costs are due to greenhouse gas emissions from raw material extraction and processing. Marine pollution is the largest downstream cost, with the \$13 billion figure most likely a significant underestimate."

Calculating the negative financial impact of issues such as marine environment or air pollution caused by incinerating plastic, the report said that the overall natural capital cost in the consumer goods sector each year is \$75 billion.

# A large and unquantifiable amount of plastic waste enters the ocean from littering, poorly managed landfills, tourist activities and fisheries.

Some of this material sinks to the ocean floor, while some floats and can travel over great distances on ocean currents – polluting shorelines and accumulating in massive mid-ocean gyres.

"These reports show that reducing, recycling and redesigning products that use plastics can bring multiple green economy benefits: from reducing economic damage to marine ecosystems and the tourism and fisheries industries – vital for many developing countries – to bringing savings and opportunities for innovation to companies while reducing reputational risks," Steiner said.

The environmental damage due to plastic waste include mortality or illness when ingested by sea creatures such as turtles, entanglement of animals like dolphins and whales and damage to critical habitats such as coral reefs.

"One emerging issue is the increasing use of microplastics directly in consumer products, such as microbeads in toothpaste, gels and facial cleansers," the UNEP report said.

"These microplastics tend not to be filtered out during sewage treatment, but are released directly into rivers, lakes and the ocean."

Microplastics have also been identified as a threat to larger organisms, such as the endangered northern right whale, which is potentially exposed to ingestion through filter-feeding, it said.

Production trends, use patterns and changing demographics are expected to cause increasing plastic use, and both reports call for companies, institutions and consumers to reduce their waste.

Consumer goods companies currently save four billion dollars each year through good plastic management, such as recycling, plastic use disclosure is poor, the report said.

Recommendations of the reports include that companies monitor their plastic use and publish the results in annual reports and commit to reducing the environmental impact of plastic through clear targets, deadlines and efficiency and recycling innovations.

Since plastic particles can be ingested by marine organisms and potentially accumulate and deliver toxins through the food web, efforts should be stepped up to fill the knowledge gaps and better understand the capacity of various plastics to absorb and transfer persistent, toxic and bio-accumulating chemicals.

# **12 Ways to Slow Down Traffic in a Car-Oriented City**

The article can be downloaded at: <u>http://sustainablecitiescollective.com/bloomingrock/262221/12-ways-slow-down-traffic-car-oriented-</u> <u>city?utm\_source=feedburner&utm\_medium=email&utm\_campaign=Sustainable+Cities+Collective+%28all+posts%29</u>.

For a long time now, the purpose of roads was to get people in cars to their destination as quickly and efficiently as possible. This is why we have highways, they're all about moving cars long distances at a fast rate. But recently, cities have started reclaiming roads as places for pedestrians, cyclists as well as vehicles. But this has meant slowing down cars to accommodate slower modes of transportation.

Sounds good right? Well, not if you want your city to be people-oriented instead of car-oriented. A people-oriented city is about creating spaces for people to walk, bike, stand, sit and gather in the public in ways that are safe and enjoyable. It's about making the city accessible and safe for people to inhabit outside of their cars. **It's not so much about moving people along as it is for creating a space for humans to be humans, whether they are moving or not.** 

Slow traffic is not only good for encouraging street life, it's also good for motorists, believe it or not.

Slower traffic results in fewer accidents. The Sierra Club notes that, "recent studies have shown that narrow streets slow traffic and reduce vehicular crashes, increasing neighbourhood safety."

#### Here are 12 ideas to slow down traffic:

1. Add bike lanes. Often times, motorists object to streets being narrowed and bike lanes being added precisely because it achieves its intended purpose – it slows down traffic. Cyclists on the road force motorists to slow down and pay attention. Bike lanes not only narrow the road, but they add cyclists to roads, which are a sort of "obstacle" for motorists to navigate, which means they have to slow down.

2. Add parallel parking. Though adding more parking is not an ideal way to slow down traffic, in many places in Phoenix, this would be a first step in slowing down traffic. Cars parked on the street effectively narrow the street and once again add an "obstacle" that cars need to slow down and be aware of.

3. Add roundabouts. Roundabouts force cars to slow down because they can no longer go in a

straight-line. Roundabouts make cars slow down.

4. Add trees. Planting trees close together makes drivers feel as if they are going faster, so they slow down. In the UK, more than 200 trees were planted on the approach roads to four rural villages in north Norfolk which had a history of speeding problems. The experiment was carried out by Norfolk County Council at a cost of  $\pounds$ 70,000, funded by the Department for Transport. Provisional results found that drivers reduced their speed on the roads into Martham, Horstead, Mundesley and Overstrand by an average of two miles per hour.

5. Add crosswalks. Painted crosswalks signal to pedestrians that they can cross the street. But on really fast arterials, HAWKs, or lighted crosswalks, that trigger a red light when a pedestrian or cyclist pushes a button are more useful. Pedestrians crossing the road make motorists more wary and force them to slow down. Crosswalks and HAWKs encourage more pedestrian activity.

6. Narrow the street with sidewalk neckdowns. Crosswalks are most effective when the street is narrow. So neckdowns or sidewalk bulbouts are a great way to narrow the street AND add more space for pedestrians on the sidewalk. Intermittent neckdowns that alternate down the street, or chicanes, are even better because they add unpredictability to the road which makes drivers slow down and pay attention. Mill Avenue in Downtown Tempe has some good examples of successful neckdowns.

7. Eliminate bus turn-offs. Bus turn-offs are where buses have an additional space on the road to pick up and drop off passengers. Again, this sounds fantastic if you want to speed up traffic. But if you want to slow traffic down, it's important to incorporate the pace of transit and people into the natural flow of the street. Sure, a stopping bus in front of you is annoying, but it does serve to slow traffic, which is what we're after.

8. Encourage sidewalk cafes. Sidewalk cafes add visual interest and a human scale to streets. A good example of this in Phoenix is on McDowell Rd. and 7th Avenue in central Phoenix. Even though McDowell Rd. is one of those 7-lane arterials, the scale and pace of this intersection has considerably slowed down thanks to the concentration of restaurants there with sidewalk cafes. Watching people sit, laugh, converse and enjoy themselves on the sidewalk introduces an entirely different pace to the busy street and helps slow traffic.

9. Make that turn lane into a landscaped raised median. A middle turn lane takes a car that is waiting to make a left turn out of the flow of traffic, which helps keep the pace of traffic fast. Replacing a middle turn lane would serve three purposes. One is that it would eliminate a lane, thereby effectively narrowing the street. The second is that it would reinsert the car waiting to make a left turn back into the traffic flow, thereby slowing down traffic. And the third is that a landscaped median with trees would in and of itself help slow traffic, as per point 4.

10. Add public art along the road that is visible from cars passing by. Public art, whether it's part of a bus stop, free standing markers, shading devices at crosswalks, marquee signs that span the street width adds visual interest and a human scale back into the street. Some public art is designed to be noticed on by pedestrians, some can be seen while on a bicycle and some can be noticed from the speed of a car. Public art that is visible from a speeding car is most effective at slowing down traffic, as it catches the attention of a motorist, hopefully brings the motorist back into the present and makes her more aware of her surrounding and makes her slow down. Wall murals are also a great way to slow down traffic.

11. Put the parking lot in the back. When a huge sea of parking is visible from the street, it reinforces the idea that the city is built for cars and not for people. On the other hand, when businesses have front doors right on the sidewalks oriented towards pedestrians, like the

businesses on the Miracle Mile on McDowell Road, it reintroduces the human scale to the road and this helps slow traffic.

12. Light Rail/Transit. One of the objections of adding the Light Rail on a street like Central Avenue was that it would slow traffic. And as predicted, it's considerably slowed traffic, and that's a good thing. The Light Rail moves at a relatively slow speed with frequent stops. Plus, the Light Rail introduces people onto the road at the Light Rail stations. The presence of people on the road is a good way to slow down speeding cars.

#### An eco-friendly solar-powered two-wheeler designed in New Delhi

The article is available at: <u>http://www.thaindian.com/newsportal/business/an-eco-friendly-solar-powered-two-wheeler-designed-in-new-delhi 10057662.html</u>

Twenty-eight-year old Rafi Alam in New Delhi has designed a two-wheeler that can run on both solar energy as well as wind power. It took Rafi two years to design this scooter and incidentally the final version was ready on the World Environment Day.

With his redesigned two-wheeler he seeks to provide a unique solution to the energy crisis as well as the problem of pollution as the scooter propels itself by using both solar energy and wind power. The scooter is fitted with a few electrical gadgets and uses both solar and wind energy simultaneously to charge a battery that then runs the vehicle.

The solar panel is installed on the front of the vehicle while a fan that delivers wind energy has been mounted on the front wheel cap. It's a button operated scooter. There is no mechanism involved and there is only one electrical circuit working. There is a solar panel which charges the battery and this drives the motor which in turn drives the scooter, said Rafi Alam.

For extreme emergencies, the scooter has a small petrol tank but Alam has also ensured that the battery keeps charging itself while the scooter is running on petrol so that the shift can be made after some time. Once fully charged, vehicle can run between 80 to 100 kilometers at a speed of 50-60 kilometers per hour.

As all the innovations come at a price this innovation too has a price tag of 934 US dollars attached to it. With formal education only up to class IX, Rafi is currently working as a supervisory mechanic at a car workshop in Delhi. Rafi does not want to limit his creativity to scooter only. He wants to replicate the technology on four-wheelers too.

#### Learning from each other is important: India & Bhutan

The article is available at: http://www.countercurrents.org/nitesh160614.htm

With the first foreign tour of Indian Prime Minister to the neighbor country Bhutan, millions of eyes are looking towards this small country that is part of South Asia and situated between India and China (the two comparative big countries). The possibility of this high profile visit is being seen as diplomatic visit on economic purpose.

It was told that probably there can be various agreements with and after the visit, whereby Indian companies may find market in Bhutan. Bhutan also hopes and welcomes projects especially of hydel projects for electricity and hopes to export electricity to India after the desired investment for construction of such projects. On the other hand, the five T formula of Indian prime minister that includes trade, tradition, talent, tourism and technology may be utlised in strategic manner to make a positive tie with Bhutan.

With its emergence from absolute monarchy to constitutional monarchy in the year 2008, it adopted a democratic system of government. A habitat of only approx 8 lakhs people with very low population density of approx 18 per square kilometer, Bhutan is a land of peace, of environment, of rivers and mountains. For every Indian and rest of other countrymen who are interested to know about Bhutan, they must see the virtue that Bhutan has and that it can teach to others as well.

This small country has a record of being the happiest country in Asia as per Business Week survey in the year 2006. Though with its confined identity and over-protective approach towards conserving tradition seemed to reflect its choice of being isolated from modern pace of development, but gradually it adopted the development path. With the smallest economy of the world, the country is one of the rapidly growing economies now. It is astonishing to see that a country where television and internet was banned till the year 1999 has transformed itself as a welcoming state for foreigners and is moving towards making ties on economical projects.

At a time, when everywhere environmental conservation is on the peak, a country like Bhutan, that is sensitive towards its tradition and environment, will pose as a case study for sociologists, environmentalists and development professionals to see that how it will balance both. With one proved example to make this balance is being the first 100 percent organic country in spite of being opened for trade with other countries. Making this balance is also a constitutional provision where 60 percent area must be covered with forest. With the increasing travel and tourists, this major carbon sink country, this country innovated ideas of green schools (with all materials recycled and agriculture and environmental conservation as subject) and green tax on private vehicles with one weekday designated as pedestrian day.

Another case is that Bhutan is emerging from its own cage and getting dignified as a sovereign country without any of moral and political pressure even in the form of advise. Just five years back in 1999, it revised the 1949 agreement with India, where earlier it was told that Govt of Bhutan agrees to be guided by Govt of India in regard to its external relations. Now, this part has been removed. Even if Govt of Bhutan practiced this agreement in its foreign affairs or not is another matter, but having such an agreement is unfortunate for any country and for the dignity of its people.

Also, with its Gross Happiness Index, Bhutan is the only country in the world that measures happiness of its people. Though it is a matter of innovation and a welcome move of Govt of Bhutan to take such a step to measure happiness, this GHI is contradictory with the facts of discrimination with people of other communities living there. Many have been forced to move out of Bhutan in recent years and termed as illegal. These people (mostly hindu community of Nepali origin) expelled from Bhutan and still living in shelters in Nepal and other countries with assistance of UNHCR.

With all such points, it must be understood that though India is one of the fast growing economy that is source of many conflicts associated with development, environmental challenge, indigenous group's interests, rehabilitation of affected people and other damages, Bhutan is a country that is aspiring to be one of the rapid growing economy with industries and projects but till now it tried its best to balance environmental system at its own place. With learning from each other, both countries can find the best way together with a fine balance of such development, as well as accepting and fair treatment to refugees and migrated people.

# MEMBER POSTINGS

Workshops and Conferences

# **Upcoming:**

#### FICCI Quality Forum is organizing third edition of Indian Conference on Life Cycle Management (ILCM 2014) on 29-30 September in New Delhi.

ILCM is a flagship event of FICCI which aims to promote Life Cycle Thinking in India. For more information, you may refer to <u>http://www.indialca.com/</u>. The deadline for the call for abstracts for ILCM 2014 is today, i.e. 1 July 2014.

#### First Global Conference on Climate Change and Health.

Further details are available at: <u>http://climate-l.iisd.org/events/first-global-conference-on-climate-change-and-health/</u>

This three-day conference, hosted by the World Health Organization (WHO) at its headquarters in Geneva, Switzerland, will bring together leading experts in the fields of health and climate change.

The Conference aims to articulate a shared vision on how the health sector can best prepare for climate change, and to give voice to the health benefits of climate actions.

The outcomes will inform the UN Secretary-General's Climate Summit 2014 in September, as well as discussions on Climate Change and Sustainable Development taking place this year.

The salient aspects are given below: **Dates: 27-29 August 2014 Venue:** WHO headquarters **Location:** Geneva, Geneve, Switzerland **Contact:** Marina Maiero **Phone:** +41 22 791 2402 **e-mail:** <u>maierom@who.int</u> **Web link:** <u>http://www.who.int/en/</u>

# The 2014 Millennium Development Goals Congress in Asia to be held in Hiroshima, Japan from August 6-8, 2014

Further details are available at the link: <a href="http://www.esdfocus.org/millennium-development-goals-congress/">http://www.esdfocus.org/millennium-development-goals-congress/</a>

**The 2014 Millennium Development Goals Congress in Asia** is scheduled to be held in Hiroshima, Japan from August 6-8, 2014.

# **EVENTS**

World Environment DAY celebrated on 5<sup>th</sup> June, 2014

The United Nations Secretary-General Message on World Environment Day, 5 June 2014 "Raise Your Voice, Not the Sea



Level"

World Environment Day 2014 falls during the International Year of Small Island Developing States, declared by the United Nations General Assembly to raise awareness of the special needs of this diverse coalition as part of the global discussion on how to achieve a sustainable future for all.

The world's small island nations, which are collectively home to more than 63 million people, are prized renowned as destinations: places of outstanding natural beauty, vibrant culture and music appreciated around the globe. While small in total, the land size of small island nations does not The 2014 Millennium Development Goals Congress in Asia invites scholarly interactions among academics, researchers, doctoral students, and representatives from industry, entrepreneurs, and non-profit and non-governmental organization professionals.

Authors are welcome to submit from a range of topics, perspectives, and disciplines. The range of research submissions may include conceptual, empirical, experimental, and case studies.

The congress theme of **The Future We Want: Perspectives on the Millennium Development Goals for Asia** seeks to explore such issues and their links to the notion of sustainability through the combined and holistic lenses of an interdisciplinary approach.

Asia MDGs 2014 is an international, peer-reviewed congress. Full papers are welcome, but not required. Registered participants with an accepted abstract and/or refereed full paper will be published in the Asia MDGs 2014 Congress Proceedings.

## **3 Day Course on Renewable Energy for Rural Areas** July 14-16, 2014 at IIT Bombay.

The objective of this course is to give participants an awareness of renewable energy technologies - their importance as well as the issues in field implementation and deployment in rural areas. This course will help in understanding and appraising current renewable energy technologies. They will be able to actively contribute to the drafting of appropriate energy strategies for rural areas, taking the renewable energy potential into account. After the completion of the course, participants will have acquired professional skills and knowledge on assessing the energy demand and supply situation in rural areas. Also, participants will be able to assess the economic viability of the utilization of a renewable-energy options in various contexts. Apart from the lectures, hands-on laboratory sessions are planned at IIT. The course also includes tutorials to help participants understand the concepts involved.

#### **ABOUT IIT BOMBAY & CTARA**

The Indian Institute of Technology Bombay is one of the premier technological institutes in India with students and faculty who are comparable with the best in the world. IIT Bombay has several undergraduate, postgraduate and doctoral programmes in the engineering, basic sciences, humanities and management and has also initiated programmes in inter-disciplinary areas such as energy, environment and health. The institute has a vibrant research culture and has several linkages with Indian and international industries and institutes.

The Centre for Technology Alternatives for Rural Areas (CTARA) in the Indian Institute of Technology (IIT), Bombay was established in 1985 to respond to the marginalized and disadvantaged sections of

reflect their importance as stewards of nature's land wealth on and They sea. play an important role in protecting the oceans and manv biodiversitv are hotspots, containing some of the richest reservoirs of plants and animals on the planet.

Despite these assets, Small Island Developing States face numerous challenges. For а significant number, their remoteness affects their ability to be part of the global supply chain, increases import costs especially for energy - and limits their competitiveness in the tourist industry. Many are increasingly vulnerable to the impacts of climate change – from devastating storms to the threat of sea level rise.

Small Island Developing States have contributed climate little to change. Their combined annual output of greenhouse gases is less than one per cent of total global emissions, but their position on the front lines has projected many to the fore in negotiations for a universal new legal climate agreement in 2015. Others are leaders in disaster preparedness and prevention or are working to achieve climate neutrality through the use of renewable energy and other approaches.

Small island nations share

society and neglected regions in the country. CTARA offers M.Tech. in "Technology and Development" & Ph.D. programmes and currently has 10 faculty members with 60 students. CTARA carries out multi-disciplinary, multi-dimensional, and grounded policy studies and research on key technology and development related sectors. Further, CTARA works for the development and dissemination of technologies relevant for the felt needs of rural society.

CTARA also draws upon the resources and expertise available with the National Centre for Photovoltaic Research and Education (NCPRE) and Department of Energy Science and Engineering (DESE) at IIT Bombay.

# **COURSE VENUE**

The programme will be held at the Conference Hall (Ground Floor), Van Vihar Guest House, IIT Bombay. Endowed with a green cover rich in natural flora and fauna, IIT Bombay is a small township in itself. The campus extends over 220 hectares amidst picturesque surroundings with Vihar and Powai lakes on either side.

## **COURSE CONTENTS**

- Overview of India's Rural Energy Scenario
- Rural energy needs and consumption patterns
- Rural electrification
- Resource assessment
- Basics of renewable energy technologies
- Choice of appropriate renewable energy technology for specific context
- Solar PV applications
- Solar thermal and wind energy
- Waste to energy
- Transportation biofuels
- Renewable energy applications for small scale industry
- Energy efficiency and performance assessment
- Energy economics
- Sustainable business models
- Policy framework and user participation
- Case studies: Solar PV, Biomass based electricity, Biogas, Waste to energy
- Lab visits Solar lab, Biodiesel plant, Gasification pilot plant etc.

# WHO SHOULD ATTEND

State Nodal Agencies, PRIs, NGOs, Academia, CSRs, SMEs, Entrepreneurs and Individuals interested in renewable energy applications.

For more details, send an email to <a>cep.ctara@gmail.com</a> .

a common understanding that we need to set our planet on a sustainable path. This demands the engagement of all sectors societv in of all countries. On World Environment Day, millions of individuals, community groups and businesses from around the world take part in local projects -from clean up campaigns to art exhibits to treeplanting drives. This year, I urge everyone to think about the plight of Small Island Developing States and to take inspiration from their efforts to address climate change, strengthen resilience and work for a sustainable future. Raise your voice, not the sea level. Planet Earth is our shared island. Let us join forces to protect it.

The 2014 World Day to Combat Desertification global observance event focused on the theme of ecosystembased adaptation, with a rallying call "Land Belongs to the Future – Let's Climate Proof It."

Approximately 400 from representatives government, intergovernmental and civil society organizations (CSOs) registered for the event, which took place on **Tuesday, 17 June 2014**, at World Bank headquarters in Washington, US. DC, The event was also webcast, and speakers

responded to questions from a global audience. The United Nations Convention to Combat Desertification (UNCCD) organized the event, which was hosted by the World Bank in partnership with the Global Environment Facility (GEF), TerrAfrica and Connect4Climate.
On the twentieth anniversary of the adoption of the UNCCD, speakers at the global observance event considered the requirements for ecosystem-based adaptation to address issues related to desertification, land degradation and drought as well as shared successful cases of combating desertification in drylands.
Keynote speakers discussed national efforts, and panelists presented research and lessons learned to address land degradation and foster adaptation and resilience. Two short films were screened, demonstrating additional projects and lessons learned. The Land for Life award winners were also announced. This briefing note summarizes the event's proceedings.

# Announcements

International conference on Development, Biodiversity and Climate Change: Issues and Challenges" from 3-5, October, 2014.

More details are available on web page of the conference: <u>www.conferencechamba.com</u> and also from Mohinder Slariya at: <u>mkslariya@gmail.com</u>

Second All India Environmental Journalism Competition. The "Call for Entries" was released on the occasion of World Environment Day on June 5, 2014.

The concept note is available at: <a href="http://ftp.solutionexchange.net.in/public/clmt/resource/res">http://ftp.solutionexchange.net.in/public/clmt/resource/res</a> info 09061401.pdf .

# The overall deadline for receiving entries is now 15<sup>th</sup> August 2014.

To encourage improved media coverage of environmental issues:

- GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) through its Indo-German Environment Partnership (IGEP) programme
- ICLEI South Asia,
- Asian College of Journalism,
- The Third Pole
- Deutsche Welle Akademie

are organising a competition for journalists reporting on environmental issues in India, in cooperation with **IFAT India Fair** and under the patronage of the **German Embassy**.

By acknowledging and awarding good journalistic reports, the competition aims to inspire journalists to take up a wider range of topics with regards to the environment as a part of their work and highlight solutions and positive stories.

German Embassy has announced a Special Award on "**Clean Ganga**" to support media coverage on River Ganga as part of the ongoing All India Environmental Journalism Competition.

Contribute to spreading environmental knowledge and submit your work!

The overall deadline for submission of entries is extended till 15th August, 2014.

For details about the competition, please visit www.igep.in or send email at snigdha.kar@giz.de

# UNDP and the Equator Prize 2014 - Recognizing local sustainable development innovations at the grassroots.

It gives us both great pleasure to announce the thirty-five community winners of the Equator Prize 2014. Summaries on the winners can be found <u>here</u> and the official UNDP press release <u>here</u>.

The <u>Equator Initiative</u> is a UNDP-led partnership that is dedicated to recognizing and advancing local sustainable development solutions for people, nature and resilient communities. Every two years the Equator Prize is awarded to outstanding local efforts to reduce poverty through the conservation and sustainable use of biodiversity.

Equator Prize 2014 winners were selected from a record 1,234 nominations from more than 120 countries across the world. This massive outreach effort was followed by the success of the nomination campaign, resulting in the high-quality of the winners' projects.

They span fields of work ranging from wildlife management to marine protected areas, smallholder agriculture to forest management, and sustainable energy to food security. They reinforce that local civil society groups working on ecosystems and natural resource management

deliver development benefits well beyond nature conservation. Many of the winning groups evolved specifically to fill gaps in public service provision and deliver benefits in the areas of health, education, energy and water access, livelihoods, food security, governance, conflict resolution, disaster recovery, risk management, empowerment of women, and more.

This announcement marks the conclusion of a detailed peer-review process undertaken by an advisory committee of international environment and development experts. First time countries where communities are being recognized with the prize include Central African Republic, Chad, Chile, Haiti, Jamaica, Nepal, Palestinian Territories, and Turkey.

Since 2002, the Equator Prize has been awarded to 187 communities, now representing a global movement of grassroots innovation, leadership and achievement in over 70 countries around the world. Detailed case studies on past winners can be found <u>here</u>.

Experience tells us that local organizations are the primary organizing bodies and normative institutions amongst the poor. For the post-2015 framework, the Sustainable Development Goals (SDGs), and international efforts to address climate change to maximize their relevance and traction with the most vulnerable and marginalized communities, local civil society groups and local partnerships are one of the foundations on which national progress towards sustainable development goals can be built.

Twenty-five of the winners will be recognized at a high-level award ceremony at Lincoln Center in New York on Monday, 22<sup>nd</sup> September, 2014.

#### Renewable Energies for Developing Countries: Environmental Necessity – Economic Opportunity

Presented by <u>CIFAL Scotland</u>, UNITAR, University of Strathclyde in partnership with the Scottish Government; **8 September to 27 October 2014 ; Register your place** <u>HERE</u>

"Sustainable energy—energy that is accessible, cleaner and more efficient—powers opportunity. It grows economies. It lights up homes, schools and hospitals. It empowers women and local communities. And it paves a path out of poverty to greater prosperity for all." (UN Sustainable Energy for All)

This on-line programme will give a comprehensive overview of renewable energy as a means to enable sustainable development and explore how renewable energies represent at the same time an environmental necessity but also an economic opportunity for developing countries.

The course aims to enhance the capacity of local decision makers, energy/sustainable development officers and other personnel, from Africa, Latin America, Caribbean, South-East Asia and Pacific regions, to make an informed decision on which renewable energy technologies will meet their own needs or the needs of their countries, communities, villages or neighborhoods. It aims to provide an overview of clean, secure and sustainable technology options for the development and offer insights into the management of renewable energy projects, from small scale, through to major projects. The course is aimed at those in the business, non-profit, public and academic sectors who wish to install renewable energy systems in urban and rural settings or simply make their contribution to reducing carbon emissions through energy efficiency and use of sustainable energy sources.

#### Methodology

Learning activities are based on UNITAR's sound adult learning pedagogical principles. They include, among others, readings, a case study to apply knowledge practically, quizzes and online

group discussions. They are distributed in such a way to ensure the achievement of the learning objectives in a flexible manner: learning materials can indeed be consulted in a non-linear way so as to provide participants with a high degree of flexibility in choosing the learning pace that is the most adequate to them. Recognized experts from the University of Strathclyde will moderate the course.

#### **Course Outline**

Module 1: The Role of Energy in Society Module 2: Selecting a Sustainable Energy Solution Module 3: Elements of a Sustainable Energy Solution Module 4: Solar Energy and its Applications Module 5: Wind Module 6: Marine and Hydro Module 7: The Role of the Public and Private Sectors in Ensuring the Development of Low Carbon

Energy Solutions

For more information contact: <u>e-learning@cifalscotland.org</u>

Full information about the course is available at <u>here</u> and in the course flyer. **Deadline for** registration is 1 September 2014.

## New CDKN film on Climate change and migration in Bangladesh: Living on the go

The film is available at: <a href="http://cdkn.org/2014/06/film-climate-change-and-migration-in-bangladesh-living-on-the-go/">http://cdkn.org/2014/06/film-climate-change-and-migration-in-bangladesh-living-on-the-go/</a> .

Densely populated and low-lying, Bangladesh is one of the most climate-vulnerable countries in the world. How can millions of Bangladeshis protect their families and incomes from rising sea levels, erratic rainfall and temperature extremes?

The film-makers follow a group of researchers as they investigate how climate change is causing people to migrate within Bangladesh, as a way of coping. They visit communities in the Gabura, Satkhira region that were affected by Cyclone Aila in 2009.

Some families, exasperated by the damage to croplands, decide to migrate to inland cities for good, while others try their hand at seasonal work in the city, returning to their home village every few weeks or months.

The situation facing these communities in Bangladesh is very relevant to many areas of India. It can also provide insights into the experiences of international climate-induced migrants. The work of the Government of Bangladesh and local research community to understand the drivers to climate-induced migration is therefore of interest to the Indian climate practitioner community.

## The <u>India Climate Dialogue</u> has been launched by the <u>thethirdpole.net</u>.

India Climate Dialogue is a website with news, views and discussions about climate change issues, **with a focus on India**.

It has six broad thematic areas:

- <u>Science</u>
- <u>Impacts</u>
- <u>Mitigation</u>

- <u>Adaptation</u>
- Negotiations
- Policymaking

We're excited about the launch at this crucial time with COP 20 at Lima around the cornerand we hope you will be too.

Please go to <u>www.indiaclimatedialogue.net</u>, read the articles, comment, and give us your feedback.

Also, please contribute articles, reports, opinions and inform us of fresh developments.

Together we can make <u>India Climate Dialogue</u> a site for constructive discussion on the complex issues facing the climate change dialogue in the world today which need to be resolved at the earliest.

## Future Earth: Science on co-producing knowledge for policy

The article can be downloaded at: <u>http://www.iisd.ca/unep/unea/unea1/enbots/26jun.html#event1</u>

Future Earth would be a science-policy-technology interface that builds on existing earth system science, mentioning partner organizations like DIVERSITAS, the International Geosphere-Biosphere Programme (IGBP), the International Human Dimensions Programme (IHDP) and the World Climate Research Programme (WCRP) as partners of a single umbrella programme.

Recognizing that science often operates in silos, Cheikh Mbow, World Agroforestry Centre (ICRAF), stressed a need for improved interaction among scientists, policymakers and local communities to enable a transition towards sustainability.

Future Earth's role will be in promoting the co-design, co-production and co-development of science to support decision making.

Farooq Ullah, Executive Director, Stakeholder Forum, emphasized the need to move from consultation towards collaboration, wherein science moves from a one-way data collection method, to a more collaborative research process based on dialogue. He reminded delegates, however, that these processes are not linear and that co-design of science may need to go through several stages before co-production and co-dissemination of science can take place.

Arab Hoballah, UNEP Division of Technology, Industry and Economics (DTIE), emphasized the need to **decouple economic growth from resource consumption**, and requested researchers to provide scientific evidence on decoupling to support decision makers. He pointed to the difference between relative and absolute decoupling, recommending that developed economies should strive for the latter, while developing economies should strive for relative decoupling whereby their resource consumption continues, but at a lower rate.

Underscoring the unprecedented growth rate of Gross Domestic Product (GDP), trade and investment, Pushpam Kumar, UNEP Division for Environmental Policy Implementation (DEPI), called for **mainstreaming natural capital** into economic discussions: as a concept, in projects and strategies, and within policies. He pointed to UNEP's Inclusive Wealth Index, which balances man-made capital with natural and human capital.

During discussion, delegates addressed, among other issues:

• Translating the language of science to engage stakeholders;

- Practicing the science-policy interface in different research areas;
- Finding synergies across disciplines, bearing in mind that problems are not confined by disciplinary boundaries;
- Spreading the message of a green, inclusive GDP and considering how to do so, knowing that many indicators will reflect negative results;
- Addressing the rebound effect which results from increased efficiency;
- Focusing on lifestyle and behavior.

# China's emission cap pledge shocks India

The article is available at:

http://www.thethirdpole.net/chinas-emission-cap-pledge-shocksindia/?utm\_source=third+pole+newsletter&utm\_campaign=2b14ff6a6cthethirdpole+June+newsletter+2013&utm\_medium=email&utm\_term=0\_43686cf8d5-2b14ff6a6c-46416721\_.

The recent announcement by a senior Chinese official that the country will cap its carbon emissions has caused shock and dismay among Indian climate negotiators, who feel that New Delhi will now be further isolated and under pressure to make a similar pledge.

Indian negotiators – some of whom are now in Bonn for the ongoing talks of the subsidiary bodies of the United Nations Framework Convention on Climate Change (UNFCCC) – have been asked to seek clarifications from their Chinese counterparts. Most important, they want to know if China will agree to make any emission cap legally enforceable under an international treaty.

India has so far been strongly against any legally enforceable emission cap. During the UNFCCC summit in Durban in December 2011, then environment minister Jayanthi Natarajan had made an impassioned speech in the middle of the all-night final plenary session, pleading for the right to development of millions of Indians, and thus ensuring – at least for the time being – that a legally enforceable cap would not be the only treaty option.

The Chinese delegation was then India's staunchest supporter, as it has been at least since the landmark 2007 UNFCCC summit in Bali. Both countries led the developing world into demanding their right to develop without any emission cap, while insisting that the rich world tighten the caps on its own emissions that have been responsible for most of global warming since the start of the Industrial Age.

But now He Jiankun, chairman of China's Advisory Committee on Climate Change, has said, "The government will use two ways to control CO2 (carbon dioxide) emissions in the next five-year plan, by intensity and an absolute cap." China's next five-year plan starts in 2016.

Both China and India made voluntary pledges in 2009 to reduce the carbon emission intensity per unit of GDP – India by 20-25% by 2020 compared to 2005 levels, and China by 40-45%. Right now China is the world's highest carbon emitter, followed by the US and India.

India's new government has not yet made up its mind on the stance it will take at UNFCCC negotiations. As an active member of the global legislators' organization on climate change GLOBE – and its first India head – current Minister for Environment, Forests and Climate Change Prakash Javadekar understands the issues and knows the various pressure groups.

"We can't be shown as a villain. We will play a positive, proactive role. We will provide a new vocabulary on which the world will react," said Javadekar while addressing the press and media on World Environment Day. But he is less than a fortnight into his ministerial job, and officials in

the ministry say he has not yet discussed the issue with them. One possible reason is an expected ministry expansion, and Javadekar does not know which of his two portfolios he will be asked to keep – environment or information and broadcasting.

Given this situation, Indian officials have little choice but to carry out a holding operation at the ongoing Bonn talks, their colleagues and ex-negotiators say.

With climate change gathering pace, its effects showing and the Intergovernmental Panel on Climate Change coming up with grave findings in its recent reports, no one in New Delhi disputes that human-induced carbon emission need to be reined in. As before, the question remains, who should do it?

Indian officials repeatedly point out that the country's per capita emissions are one-tenth of that in the US and one-fifth of that in the European Union. Now with China "breaking ranks" – as some of them put it – they also point out that per capita emissions in India are about 40% of that in China, and that India needs to provide electricity to about 400 million people who are still outside the grid.

In this situation, Indian negotiators fear isolation by the international community in the run-up to the proposed Paris treaty in end-2015, and expect increased pressure from rich countries to sign up to an emission cap that will be legally enforceable after 2020. A recent study of a low-carbon development pathway predicted that India's emissions will rise at least till 2030.

That is why Indian officials are anxious to know what China is planning. A day after He Jiankun's statement, the Indians were reassured when the Chinese foreign ministry spokesperson did not make any reference to it, and limited himself to hoping the recent cap on emissions from coal-fired power stations announced by US President Barack Obama would be effective.

Though India has not said anything officially, in private Indian bureaucrats are rather dismissive of the Obama announcement. They feel it goes no further than Obama's 2009 voluntary pledge that the US would slash its emissions by 17% by 2020, compared to 2005 levels.

However, the Indians fear American negotiators will use the recent Obama announcement to pile more pressure on India to sign up to a legally enforceable cap. The stance that India will take will probably be better known in September, when climate change will be the main topic at the annual UN General Assembly session.

India's new Prime Minister Narendra Modi is expected to attend the session and have a summit meeting with Obama immediately afterwards. Indian climate negotiators are now trying to ensure that climate change forms parts of the agenda at the bilateral summit.

## Asia to have its 1st Resilient Cities conference in 2015!

**Resilient Cities Asia 2015: 1st Asian forum on Urban Resilience and Adaptation, 11-13 February 2015; Bangkok, Thailand** promises to be *the* Asian platform for urban resilience and climate change adaptation, offering cities in the region a variety of innovative solutions and opportunities to the threats and challenges they are currently facing.

Research and empirical evidence have established Asia as one of the world's most vulnerable regions to the impacts of climate change - particularly cities, due to rapid and often unplanned urbanisation. Building on the success of the series 'Resilient Cities - The Annual Global Forum on Urban Resilience and Adaptation' taking place in Bonn, Germany, since 2010, ICLEI – Local Governments for Sustainability is now creating a similar platform in Asia, to provide local

governments in the region with access to good practices, initiatives and tools across a variety of themes that will help mainstream resilience considerations into policy and practice. <u>Read more.</u>

#### Local Leaders Champion Resilience Building - ICLEI South Asia at Resilient Cities 2014

Making cities resilient to disaster and the impacts of climate change has undoubtedly become a responsibility of all local leaders. This became evident during deliberations by over 400 experts, and practitioners who convened for Resilient Cities 2014: <u>The 5th Global Forum on Urban</u> <u>Resilience and Adaptation</u> in Bonn Germany and was nicely captured by Emani Kumar, ICLEI Deputy Secretary General and ICLEI South Asia Executive Director "*Since a COP-21 agreement in Paris will not come into effect until 2020, the real responsibility of doing the necessary work until then will fall upon cities and local governments."* 

The Congress brought together 90 local government representatives as well as experts from international organizations, national governments, research institutions, business and media. As every year, the South Asian region was represented by ICLEI South Asia staff and a number of city representatives: Tikender Singh Panwar, Deputy Mayor of Shimla; Shamim Al Razi, Mayor of Singra, Bangladesh; Md Fayzul Karim Moyun, Mayor of Moulvibazar, Bangladesh; Tejas Shah, Health Officer, Ahmedabad Municipal Corporation, India; and Ms Seema Redkar, Researcher, Mumbai, India. The South Asian delegation showcased projects and initiatives from the region in several sessions.

"Accepting the concept of 'thinking global and acting local' seems to be a true way of achieving sustainable goals and represents a way everyone should live by" stated Tikender Singh Panwar Deputy Mayor of Shimla, India, who was also <u>interviewed</u> at the event and asked what steps Shimla is taking to become more resilient. <u>Read more.</u>

#### New film captures how Asian cities are responding to climate change

According to <u>Climate Change 2014</u>: <u>Impacts</u>, <u>Adaptation and Vulnerability</u>, released by the UN intergovernmental panel on climate change in March this year, Asian cities are expected to suffer particularly acutely from the impacts of global warming. In a <u>film</u> released, as part of the AsianCitiesAdapt project, at the <u>Resilient Cities 2014</u> Conference in Bonn (Germany) on Friday, 30 May 2014, city officials and scientists shared their experiences of developing and implementing local action plans. Participants placed a particular emphasis on the importance of good communication, forward planning and simple actions to help communities cope in increasingly difficult urban conditions.

The four Indian cities that were a part of the <u>AsianCitiesAdapt</u> project were Howrah, Madurai, Kochi and Vishakhapatnam. The video features the city of Howrah, together with interviews of the ICLEI South Asia project team and Professor Dash, Indian Institute of Technology, Delhi. <u>Read more.</u>

Latest issues of monthly newsletters released by www.ThinktoSustain.com.

Climate Change Newsletter; June 2014 Issue is available at: <a href="http://news.thinktosustain.com/newsletter/climate-change-newsletter-46.html">http://news.thinktosustain.com/newsletter/climate-change-newsletter-46.html</a>

http://news.thinktosustain.com/newsletter/corporate-sustainability-newsletter-39.html

#### Biogas-fuelled community kitchen opened in Coimbatore

The article is available at- <u>http://m.thehindu.com/news/cities/Coimbatore/biogasfuelled-</u> <u>community-kitchen-opened-in-coimbatore/article6159743.ece/</u>

Women of Kamaraj Nagar in ward 6 will be able to save big on LPG cylinder usage, thanks to the Coimbatore Corporation's Rs. 17.80 lakh initiative to provide them biogas-fuelled community kitchen.

The Corporation engaged the company, Nirmal Biogen Technology, to construct a biogas tank, which uses human waste as inputs to generate the gas. The objective was to make use the green energy to help the people.



Solution eXchange

Solution Exchange is a UN initiative for development practitioners in India. For more information please visit <u>www.solutionexchange.net.in</u>