

OF INVENTIONS & INNOVATIONS THE WINNERS

CATEGORY 1 COMMUNITY

Community-based mitigation and adaptation of water resources, agriculture, forestry and other land uses

Focus is on initiatives related to conservation of water and land resources reflecting mitigation and adaptation goals aimed at increasing resilience of communities, to tackle challenges arising out of climate change.

Nature Environment and Wildlife Society (NEWS)

Initiative of engaging vulnerable communities has promoted mangrove regeneration, restoration and reforestation, community nurseries of threatened species, sustainable agricultural and low carbon practices. This initiative builds capacities of communities to deal with the challenges posed by climate change. Earth Care Awards recognise the efforts of Stewards, Community and its leaders, Government Agencies and the NEWS team for successfully demonstrating livelihood based climate change adaptation model.

Practical Action

Bangladesh, innovated the Sandbar Cropping model, which has enabled poor and landless communities to access underutilised river sand bars for pumpkin cultivation. This initiative has put in place processes ranging from beneficiary identification to market research and market links. Communities in climate stressed areas have found new hope with this initiative. Earth Care Awards commend the efforts of Practical Action Team.

CATEGORY 2 INNOVATION

Innovation for climate protection

Focus is on development and use of innovative product or services which help reduce the greenhouse gas emissions.

Saguna Rural Foundation

Saguna Rural Foundation, led by Chandrashekar Bhadsavle, has innovated the Saguna Rice Technique (SRT) of paddy cultivation. The technique contributes to reduction of time, resources and chemical inputs in paddy cultivation. Use of simple mould on raised beds enables farmers to sow seeds with less drudgery and cost. Earth Care Awards recognise this innovative technique which has the potential to revolutionise farming practices with emphasis on paddy cultivation not only in India but also in the whole of Asia.

CATEGORY 3 URBAN

Leadership in urban climate action

The focus is on initiatives that reflect incorporation of climate change adaptation and mitigation addressing vulnerability and reduction of greenhouse gas emissions associated with cities.

Cochin International Airport

Became the first airport in the world to be fully powered by solar energy by commissioning a 12 MWp solar power plant. ECA lauds Cochin International Airport's commitment to reduce its Carbon footprint and recognises its leadership in Urban Climate Action.

The Corporation of the City of Panaji (CCP)

The integrated decentralized solid waste management system introduced in the city of Panaji by The Corporation of the City of Panaji (CCP) has been able to achieve 100% source segregation. The efforts of Panaji have resulted in a landfill-free and bin-free city. The award acknowledges the CCP's actions which have led to benefits like better environment and better health for its citizens, and cost saving on waste disposal.

Salute to India's green heroes

Earth Care Awards Bring Recognition To Community Groups & Corporations That Show Eco Initiative

When Mr Chandrashekar Bhadsavle walked on to the stage last week to receive the 7th JSW The Times of India Earth Care Award 2016 in the Innovation for climate protection category, for his simple yet innovative technique of farming, it marked a shift in the way we perceive the farming community.

Being the son of a freedom fighter, Mr Bhadsavle, a BSc in agriculture, did his Masters in Food Science and Technology from University of California, USA, came back to India in 1976 for good and started farming on his ancestral property. With support from his family and a team of farmers, he developed Saguna Baug to its current glory.

Rice production in India is mainly rain fed and hence is vulnerable to climate change. Conventional methods used for rice cultivation are highly labour and water intensive. Mr Bhadsavle of Saguna Rural Foundation has innovated the Saguna Rice Technique (SRT), a simple method of cultivation in which raised beds are used for cultivation. These beds allow the farmers to sow seeds directly, reducing labour costs and the amount of water required for the cultivation of crops.

Launched in 2007-8, Earth Care Awards seek to recognise actions and innovations for climate change mitigation and adaptation by communities, entrepreneurs, industries, and urban bodies. The awards recognise and promote the initiatives and inventions in greenhouse gases (GHG) reduction, natural resource conservation, development and promotion of innovative eco-friendly practices across various sectors.



Award winners with the jury members

The Centre for Environment Education (CEE) is the knowledge partner for the awards. CEE has been instrumental in conceptualising a technical and methodological framework for assessment of the mitigation and adaptation parameters to define the evaluation process. In 2011, this initiative extended its reach to all SAARC countries and was joined

Development Studies director, Aneta Benninger, Dr Suhas Wani Director ICRISAT, Kartikeya V Sarabhai, Founder Director, Centre for Environment Education, Chandra Bhushan, Deputy Director General, Centre for Science and Environment.

During the ceremony chief guest Dr R A Mashelkar, FRS, president, Global Research Al-



7th JSW - THE TIMES OF INDIA EARTH CARE AWARDS-2016

liance said, "Speed, scale and sustainability are three most important things for a country to move ahead. How do we scale to make a difference? Innovation is not doing things differently but doing a different thing. Going forward, how we can achieve this is of utmost importance." "Earth Care Awards simply stand out from others for three reasons. First, the critical global



Dr R A Mashelkar with Sangita Jindal

challenge of climate change adaptation and mitigation that these awards champion. Second, the range of stakeholders, from an individual to an institution and from an industry to a community, that it recognises. Third, the extraordinary rigour that is followed in the selection process," said Dr Mashelkar.

Highlighting the commitment to save the earth through concerted action on the ground, JSW Foundation Chairperson Sangita Jindal said: "We are ready to create a platform to share our learnings and to be part of the larger

movement to make our earth livable. To quote our prime minister: "fighting climate change calls for innovation, cooperation and will power to make the changes that the world needs."

In the category 'Leadership in Urban Climate Action', Corporation of the City of Panaji (CCP) won the award for making the city of Panaji bin free and landfill free. CCP has been able to achieve change in policies and implementation of policies such as collection of sanitation fee of ₹ 1 per household per day annually with property tax. It has made build-

il Aviation and Airport Authority of India (AAI) have agreed to install solar panels across 16 airports in India.

Nature Environment and Wildlife Society (NEWS) won the 'Community Based Mitigation and Adaptation of Water Resources, Agriculture, Forestry and Other Land Use' award. NEWS has worked extensively for conservation of ecosystems in the fragile and highly vulnerable mangrove areas of Sunderbans. Creating community participation combined with rigorous scientific knowledge, NEWS has



ing composting units in housing societies a compulsory. These strategies have helped to achieve the four 'R's of reduce, reuse, recycle and recovering of the waste. It has also been able to achieve 100% source segregation and door to door collection. The city of Panaji has thus been landfill free and bin-free for 10 years, thus reducing the GHGs.

Cochin International Airport Limited (CIAL) won an award in the same category — 'Leadership in Urban Climate Action' for becoming the first airport in the world to be fully powered by solar energy. Looking at the success of CIAL in solar, Ministry of Civ-

been successfully able to bring about regeneration of the area.

Bangladesh is one of most vulnerable countries facing the threat of Climate Change. Challenges include drought, salinity intrusion, cyclones, tidal waves, flooding, water logging and river erosion.

Practical Action (Bangladesh) — an international non-governmental organisation (NGO) that uses technology to challenge poverty in developing countries, won the Earth Care Awards 2016 Commendation in the category 'Community Based Mitigation and Adaptation in Water Resources, Agriculture, Forestry and Other Land Use'.

'India's development sector has evolved over the past decade'

Sangita Jindal, chairperson, JSW Foundation, spoke to Sheetal Srivastava on why organisations today have become more accountable when it comes to corporate social responsibility. Excerpts from an interview:

CAN YOU DESCRIBE HOW THE CONCEPT OF JSW FOUNDATION CAME ABOUT?

Today, organisations have become more responsible and accountable, and I would attribute it largely to the formal steps taken by the government in defining the CSR Bill where you mandatorily spend at least two per cent of profit. However, for us, it started much earlier when we created the Dharmada account which meant that a percentage of our sales would be kept aside for Dharmada. "Charity." The collected funds were focused towards various initiatives meant for improving the lives of the people.

As JSW Group expanded, the need for a social development arm of the organisation was felt. Hence in 1989, JSW Foundation was created to initiate a more formal and structured approach towards very many ground initiatives that we were already planning and implementing. Today JSW Foundation is working in a holistic and integrated manner keeping the core business strategy in perspective for addressing social and environmental impacts of businesses.

WHAT DO YOU THINK CAN BE DONE TO MAKE THE BUSINESS WORLD AWARE OF THE NEED FOR CORPORATE SOCIAL RESPONSIBILITY?

India's development sector has evolved substantially over the past decade and a lot of the en-



couragement can be attributed to the commendable work done by the business world.

While the Companies Act, 2013 gave the mandate for corporate social responsibility (CSR) which meant formal introduction of CSR to the dashboard of the corporates, the exiting foundations were already making an impact with initiatives they felt passionate about such as education, health, malnutrition, amongst others.

Today, it's not about awareness. Collaboration is the key. If you want inclusive and sustainable growth, you need to provide more platforms for not just Public Private Partnerships but also encourage individual corporates to collaborate with each other for jointly undertaking CSR activities. This will not just help reduce operational costs; we will also be able to undertake long-term projects and sustain them and more importantly learn from each other's experiences.

TO WHAT WOULD YOU CREDIT THE SUCCESS OF JSW FOUNDATION PRACTICING SOCIALLY RESPONSIBLE BUSINESS?

Success is very subjective. As I mentioned earlier, Dharmada was the core belief with which we began. Today, having invested emotionally and intellectually, I can say that the journey that our foundation undertook was not easy. With each milestone we get nostalgic and feel emotional about the efforts put in by each and every one of our team member and their ability to collaborate. For us, at JSW Foundation, this journey has just begun and we have miles to go.

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HOW HAS EARTH CARE AWARDS 2016 BEEN DIFFERENT FROM THE PREVIOUS YEARS?

Being in the seventh year now, I think the consistency to deliver and ensure that we not only expand the region of awardees but also improve the applications, both quantitatively and qualitatively, echoes the sentiment with which we started. I am happy to share that we received 300 plus applications this year. While the number of applicants have increased our eminent jury members have become extremely stringent with the evaluation process. That says it all!

'India has to jump a development cycle'

Dr. R A MASHELKAR, FRS, President, Global Research Alliance, speaks to Sheetal Srivastava about climate change and why it is often cited as the world's greatest challenge. Excerpts:

Climate change is often cited as the world's greatest challenge and the largest threat to human life in the future. Do you agree?

Yes, I believe so. But there are solutions, and they no longer champion just 'environmentalism' but both the ecology and the economy.

India has to jump a development cycle and we have done this many times. For example, we jumped the landline and went straight to the mobile phone era. Then within a record time, we gave a billion Indians Aadhar cards, which provide both identity and authentication. Using these two, we took another pole vault. We created the fastest and the biggest ever (encompassing over 250 million Indians) financial inclusion through JAM, i.e. Jandhan Yojna, Aadhar and Mobile. This is what I mean by pole vaulting instead of leapfrogging. Today, we have the same opportunity with power generation — we could transition from predominantly coal to the optimum mix of renewable energy and non-renewable energy. Within a year, we have installed around 180 million LEDs. We should aim at going from 'carbon neutral' to 'carbon negative'. The success factors, as always, will be the speed, scale and sustainability of our implementation. The digital revolution is another critical enabler which can provide a plethora of solutions that limit our environmental impact. India must be no less than the world leader in setting the sustainability example, both in policy and in practice.

Should western countries be forced to pay more attention to reducing carbon footprint than countries like India, as the developed world has contributed more towards damaging the environment?

Climate change adversely affects us all. Yes, developed countries must certainly focus on urgently reducing their vast and unsustainable carbon footprint. They must take responsibility for their historic emissions and support developing countries to help avoid dangerous climate change.

At the same time, developing countries have a responsibility to not be near-sighted and make the same mistakes as the developed economies did! We need

to do one better to make sure the world remains habitable for our future generations. Climate change is a truly global issue and requires concerted effort from all — countries, as well as individuals.

Do you see globalisation as a positive or a negative in the world? If positive, in what ways? If negative, in what ways?

Globalisation is most certainly a positive force in the world. There is no doubt that multilateral free trade boosts world productivity and prosperity and has contributed to pulling millions out of poverty. Some observers have expressed concerns about 'peak globalisation' or even 'deglobalisation', quoting incidents like BREXIT. I believe such incidents may mark the end of globalisation as we have known it. These so-called deglobalisation events and trends are an indication of welcome structural changes in the global economy.

The mandate for Globalisation 2.0 is to be an 'Inclusive Globalisation'. And there are indications that this countries previously left out of the world economy are now beginning to participate. In spite of BREXIT, China is pushing for a pan-Asia free-trade zone; the 10-member Association of South-east Asian Nations is forming a common market; and African countries have started negotiating a continent-wide free-trade area. Speaking locally, Indian companies invested USD139 billion abroad in 2015 — a 43 percent increase in only five years. I believe this new and improved globalisation is here to stay.

Do you consider the preservation of archaeological sites important and the allocation of resources for their preservation a good use of these resources?

Absolutely! As a scientist, I don't see archaeological sites as just silent witnesses of eras gone by; but as portals that offer deep insights into our collective future. As they say: "if you do not know where you come from, then you don't know where you are going." Without careful preservation and study of archaeological sites we would have no knowledge of Homo Erectus, no records of the copper or bronze ages, no tomb of Tutankhamun, no civilisation from Harappa...

Think of the valuable boost these sites give to our economy through domestic and overseas tourism. At the same time, archaeological sites hold cultural and emotional value.

THE WINNERS

Sunderbans is a fascinating ecosystem which provides livelihood to people. I believe that no conservation works without its communities. And these are people who live close to the forest area. The Earth Care Awards will translate the message into all mangrove centred areas. It is a kind of moral booster for us as well as our villagers.

—Biswajit Roy Chowdhury
Nature Environment & Wildlife Society

We have evolved rice-based no-till farming system. This is the complete solution for rice-growing countries like India for overcoming catastrophic problems of food Shortage and global warming. Winning this award is a good stepping stone in my life. I am sure my work will be recognised by the masses as well as policy makers.

—Chandrashekar Bhadsavle
Saguna Rural Foundation

We are the first green field airport in the country with public private partnership. On 18th August 2015, we became the first airport in the world to be fully powered by solar energy. These awards will certainly give other airports a major boost to become self-sufficient.

—Jose Thomas
Cochin International Airport Ltd (CIAL)

We are glad that we have been recognised for our extraordinary leadership to make Panaji safe, resilient and sustainable and reduce the adverse per capita environmental impact of cities, including by paying specific attention to air quality and municipal and other waste management.

—Clive Paiva
Corporation of the City of Panaji

THE JURY

<p>It is good to see these awards achieve their potential of rewarding inventions and their successful on-ground application, resulting in adding to the toolkit for climate change adaptation and mitigation. The award is given on a very high and objective standard of evaluation.</p> <p>—Prof. Aneta Benninger Executive Director, Centre for Development Studies and Activities</p>	<p>The rigorous process of discovery and selection has led to surfacing of amazing, innovative models which could scale up and make a significant impact on availability of resources for large parts of our population, which are deprived of water, power and other sources of energy.</p> <p>—Rajat Gupta, Senior Partner, McKinsey India</p>	<p>The videos take the jury on a virtual tour to the shortlisted applicants which present not only the minds of the innovators but also the practical benefits that accrue to climate and societies. The intense discussion process among the jury literally churns the ocean to upwell the pearls that deserve the rewards.</p> <p>—Rajendra Shende Chairman TERRE Policy centre, former director UNEP</p>	<p>These awards are unique in the sense that they recognise the innovations for adaptation and mitigation strategies to minimise the impact of climate change on the planet in different categories such as individuals or institutions undertaking the innovations.</p> <p>—Dr Suhas P Wani, Director, ICRISAT Development Center</p>	<p>These awards have established a rigorous process of identifying truly outstanding examples of work in the area of climate change. In recognising innovative work it is also setting new standards and challenging communities to do better.</p> <p>—Kartekeya Sarabhai, Founder Director, Centre for Environment Education</p>	<p>These awards now have to move towards awarding and promoting innovative and scalable ideas — ideas that can move India towards low-carbon growth and help us build a resilient economy that can withstand the onslaught of climate change.</p> <p>—Chandra Bhushan Deputy Director General Center for Science and Environment</p>