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# India & Mother Earth

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# Introduction

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The Covid-19 pandemic has revealed how interconnected and vulnerable the human population is to the sudden manifestation of new or mutated viruses. In the Indian worldview, as enunciated in the Bhagavad Gita, “the human world is inextricable from nature. But, as a human world, it is upheld by our relationships and responsibilities to one another”.<sup>1</sup> Everything in nature is interconnected. Degradation of the environment, whether man-made or caused by nature, affects the climate and climate change further has a profound impact on the environment. Often, it is humankind’s actions that curate new and anticipated responses by nature and Mother Earth. Given the symbiotic relationship, between humans and nature, and between action and reaction, the climate and the environment in which we exist have a profound effect on the health of all living beings. Climate change inexorably leads to global warming which, in turn, proves devastating through the effects of severe heat-waves, forest fires, the disappearance of glaciers, frequent floods, droughts and famines, and, rising sea-levels that threaten small island nations as well as the ecology of coastal areas everywhere.

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1. “Indian philosophy helps us see clearly, act wisely in an interconnected world”, The Conversation, June 14, 2020 at <https://scroll.in/article/964443/ancient-indian-philosophy-offers-timely-reflections-on-the-interconnectedness-of-the-world>

India has always adopted a global outlook in regard to Climate Change. India's policies are driven by its civilizational ethos of Vasudhaiva Kutumbakam (The World Is One Family). When it comes to preserving a balance in Nature and protecting the equilibrium in Mother Earth that has evolved over millions of years, Indian thought is permeated by a desire to work in concert with the global community. In any case, global warming and Climate Change are universal in terms of their impact. They have scant regard for national boundaries.

At the 2021 Climate Adaptation Summit, Prime Minister Narendra Modi underscored the significance of "climate adaptation in being a key element of India's developmental efforts".<sup>2</sup> Outlining India's commitment to mitigate climate change, anchored in global collaborative partnerships, he "promised to not only create new capacities but also make them an agent for global good".<sup>3</sup>

It augurs well that just hours after assuming office as the 46th President of the United States, Joe Biden signed an executive order confirming that the US was re-joining the Paris climate accord.<sup>4</sup> Tackling global warming will remain one of the

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2. "PM Modi's Address at Climate Adaptation Summit 2021", Narendra Modi, January 25, 2021 at <https://www.narendramodi.in/pm-modi-s-address-at-climate-adaption-summit-2021-553541>
  1. Ibid.
  1. "Executive Order on Tackling the Climate Crisis at Home and Abroad", The White House, January 27, 2021 at <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

greatest challenges before humankind, and countries like the US and India are committed to working together to mitigate its impact. US Secretary of State Antony Blinken has already stated that there is a “very strong potential” for the United States and India to deepen ties by cooperating on the climate crisis, and building on the work done by previous administrations in other spheres such as civil nuclear cooperation and defence.<sup>5</sup> In fact, at his confirmation hearing before the Senate Foreign Relations Committee, Blinken also acknowledged the role played by India.<sup>6</sup> “At the current rate things are going, India is poised over the next two or three decades to catch up to China in terms of the emissions that it produces”, he averred, adding that “at the same time, as you know, Prime Minister Modi has been a very strong advocate for looking at renewable energy and different technologies, I think there’s a very strong potential for our countries to work together in that area”.<sup>7</sup>

The respect that Indians have for Nature and Mother Earth is rooted in an ancient past. Hinduism is replete with spiritual and poetical references to Mother Earth. The Prithvi Sukta or Bhumi Sukta hymn in the Atharva Veda says “Earth is my mother. I am her son.” Prithvi or Bhumi Devi is the Goddess who personifies Mother Earth.

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5. “Climate Crisis Can Be New Area Of Cooperation For India, US: Antony Blinken”, The Hindustan Times, January 20, 2021 at <https://www.hindustantimes.com/world-news/climate-crisis-can-be-new-area-of-cooperation-for-india-us-antony-blinken-101611117242898-amp.html>
  6. Ibid.
  7. Ibid.

Ancient Indian texts have always recognised and respected the causal relationship between nature and sentient beings. A few examples are<sup>8</sup>:

- \* “Do not cut trees, because they remove pollution.” (Rig Veda, 6:48:17)
- \* “Do not disturb the sky and do not pollute the atmosphere.” (Yajur Veda, 5:43)
- \* Destruction of forests is taken as destruction of the state, and reforestation an act of rebuilding the state and advancing its welfare. Protection of animals is considered a sacred duty (Charak Sanhita).

Prime Minister Modi recently emphasised “India’s civilisational values which teach Indians the importance of living in harmony with nature”.<sup>9</sup> He stated, “Our ancient scripture Yajurveda teaches us that our relationship with planet earth is that of a mother and her child. If we take care of mother earth, she will continue to nurture us. To adapt to Climate Change, our lifestyles must also adapt to this ideal”.<sup>10</sup>

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8. Chattopadhyay, I. (2017), “Environmental Concern in the Vedās”, IOSR Journal Of Humanities And Social Science, 22 (6): 21-23.
  9. PM Modi’s Address at Climate Adaptation Summit 2021”, Narendra Modi, January 25, 2021 at <https://www.narendramodi.in/pm-modi-s-address-at-climate-adaption-summit-2021-553541>
  10. Ibid.

India is one of the world's largest and most populated countries. When India achieved independence, its population was around 350 million, which was already quite substantial for that time.<sup>11</sup> Today, the figure has reached 1.37 billion people.<sup>12</sup> Even with the advances made in science and technology and agriculture, it is inevitable that the entire landmass of the nation would suffer the pressure of such a massive population. Whether forests or other green cover in urban areas, rivers, lakes or village ponds, groundwater table or other manifestations, all these have been systematically ravaged over time. Plastic and chemical effluents from industrialisation have further traumatised the earth and its resources.

Over the last several years, Prime Minister Narendra Modi's Government has attached special importance to the subject of climate change, clean energy, protection of the environment, flora and fauna, sustainable development and healthcare. The approach is also premised on striking a chord with the intrinsic connect that Indians feel with Nature, and drawing on values inherent in Indian civilisation. This is reflected in schemes such as the National Plan on Climate Change, National Clean Air Programme, Swachh Bharat Mission, Pradhan Mantri Ujjwala

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11. "Variation in Population Since 1901", Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India, [https://censusindia.gov.in/Census\\_Data\\_2001/India\\_at\\_glance/variation.aspx](https://censusindia.gov.in/Census_Data_2001/India_at_glance/variation.aspx)
  12. "Population, Total – India", The World Bank, <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=IN>

Yojana, Namami Gange Programme, to name a few. All these are aimed at reversing the degradation and healing the scars that have been inflicted on Mother Earth.

There is no doubt that Prime Minister Modi himself is an individual imbued with a deep love and respect for nature. In August 2019, he participated in Discovery channel's "Man Vs Wild" with the famous adventurer Bear Grylls, undertaking a trek in the jungles of the Jim Corbett National Park in Uttarakhand. The park itself has long epitomised the health of the broad swathe of foothills of the Himalayas, with its rich forest cover and teeming wildlife. Prime Minister Modi talked about his idea of love of nature, the importance of not exploiting it for one's own ends, and of bequeathing the gift of nature to future generations. "You should never be afraid of nature because when we think that we are in conflict with nature is when the problem starts," he said.<sup>13</sup>

It is this magnetic pull of Nature that perhaps drew Mr. Modi to the mountains at a very young age. According to Kalindi Randeri, author of "Narendra Modi: The Architect Of Modern State", one day Mr. Modi simply left his home and wandered off to the Himalayas. He spent the next two years living the difficult life of a monk, surrounded by nature. He also told

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13. "Narendra Modi Walks in Wild with Bear Grylls, Talks About Conserving Nature", Mint, August 12, 2019 at <https://www.livemint.com/news/india/narendra-modi-walks-in-wild-with-bear-grylls-talks-about-conserving-nature-1565632920992.html>

an itinerant monk who asked him about the purpose of his wandering that he was in search of God. By that, presumably, he also meant that he was a seeker of the ultimate truth, and the ultimate linkage between all things in nature.<sup>14</sup>

It is perhaps his spiritual streak and love of nature that also led him to undertake the arduous trek to Mount Kailash and Lake Manasarovar in Tibet in 1988 as part of the annual pilgrimage organised by the Ministry of External Affairs for pilgrims from across India. It was a year after he had moved from the Rashtriya Swayamsevak Sangh (RSS) to the BJP and scripted the party's first victory in the Ahmedabad municipal elections. A passionate amateur photographer, particularly of nature, he even held a photo exhibition in Ahmedabad upon his return under the banner of the 'Club of Karnawati'.<sup>15</sup> Many of the pictures displayed captured nature beauty along the scenic route in the pristine, unblemished environment of the Himalayas.

Today, there is growing concern that the ancient mountains and valleys of the Himalayas are under siege on account of overpopulation and unregulated development. In 2015, there

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14. "Strength I gained living in Himalayas still within me: Modi", Outlook, August 13, 2019 at <https://www.outlookindia.com/newsscroll/strength-i-gained-living-in-himalayas-still-within-me-modi/1595663>
  15. "From Photo Master to Prime Minister: Tracking Narendra Modi's 3-Decade Journey as a PM", News18, May 28, 2019 at <https://www.news18.com/news/politics/from-photo-master-to-prime-minister-tracking-narendra-modis-3-decade-journey-as-a-pm-2162757.html>

was talk of a possible visit by Prime Minister Modi, who by then was a year into his first term in office, to Kailash and Manasarovar via the second route through Nathula in Sikkim.<sup>16</sup> Although the trip did not take place, there is little doubt that had he travelled, he would have noticed the sharp difference in the climate and the environment in the Himalayas in the intervening decades.

## **Renewable Energy to Mitigate Climate Change**

Today, India is the only country among the G20 nations which is on track to meet the targets that it had committed to in 2015 under the Paris Agreement on Climate Change.<sup>17</sup> India is also on track to exceed these targets.<sup>18</sup> In his address at the virtually-held Climate Ambition Summit on 12 December 2020, Prime Minister Modi said that India had reduced its emission intensity by 21 per cent over the 2005 levels.<sup>19</sup> He

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16. “2nd Route for Kailash-Manasarovar Yatra to Open Next Month: PM”, The Hindu Business Line, January 23, 2018 at <https://www.thehindubusinessline.com/news/2nd-route-for-kailashmanasarovar-yatra-to-open-next-month-pm/article7209432.ece>
  17. “India Only G20 Nation on Track to Meet Paris Pact’s 2°C Goal”, The Times of India, November 19, 2020 at <https://timesofindia.indiatimes.com/home/environment/global-warming/india-only-g20-nation-on-track-to-meet-paris-pacts-2c-goal/articleshow/79292694.cms#:~:text=NEW%20DELHI%3A%20India%20is%20the,the%20US%20and%20the%20EU.&text=In%20fact%2C%20no%20country%20has,Celsius%20aligned%20renewable%20energy%20targets>
  18. Ibid.
  19. “Message by Prime Minister at Climate Ambition Summit”, Ministry of External Affairs, Government of India, December 12, 2020 at [https://mea.gov.in/Speeches-Statements.htm?dtl/33288/Message\\_by\\_Prime\\_Minister\\_at\\_Climate\\_Ambition\\_Summit](https://mea.gov.in/Speeches-Statements.htm?dtl/33288/Message_by_Prime_Minister_at_Climate_Ambition_Summit)

further added that India's solar capacity had grown from 2.63 GW in 2014 to 36 GW in 2020, underscoring that India's renewable energy capacity was the fourth largest in the world.<sup>20</sup> He shared his vision of an even more ambitious target for India to achieve 450 GW of renewable energy capacity by 2030, up from the earlier target of 175 GW by 2022.<sup>21</sup> He assured the world that India was well on its way to surpass all expectations in meeting targets by 2047, the centennial of independence.<sup>22</sup>

India is seeking to restore 26 million hectares of degraded land by 2030. Its forest cover is expanding along with an increase in the population of lions and tigers, both veritable symbols of Indian culture.<sup>23</sup> India has sought to build a “circular economy”<sup>24</sup> anchored in next-generation infrastructure such as metro networks and water-ways which promote cleaner environment.

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20. Ibid.

21. Ibid.

22. Ibid.

23. “Prime Minister’s address at the G-20 Summit Side Event: ‘Safeguarding the Planet - The Circular Carbon Economy Approach”, Ministry of External Affairs, Government of India, November 22, 2020 at [https://mea.gov.in/Speeches-Statements.htm?dtl/33228/Prime\\_Ministers\\_address\\_at\\_the\\_G20\\_Summit\\_Side\\_Event\\_Safeguarding\\_the\\_Planet\\_\\_The\\_Circular\\_Carbon\\_Economy\\_Approach](https://mea.gov.in/Speeches-Statements.htm?dtl/33228/Prime_Ministers_address_at_the_G20_Summit_Side_Event_Safeguarding_the_Planet__The_Circular_Carbon_Economy_Approach)

24. “Circular economy is a systemic approach to economic development designed to benefit businesses, society, and the environment. In contrast to the ‘take-make-waste’ linear model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources”. “The Circular Economy in Detail”, Ellen MacArthur Foundation, <https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail#:~:text=A%20circular%20economy%20is%20a,the%20consumption%20of%20finite%20resources>.

At the 2020 G-20 Summit Side Event on ‘Safeguarding the Planet - The Circular Carbon Economy Approach’, Prime Minister Modi stated – “climate change must be fought not in silos but in an integrated, comprehensive and holistic way. Inspired by our traditional ethos of living in harmony with the environment, and the commitment of my Government, India has adopted low-carbon and climate-resilient development practices”.<sup>25</sup>

## A Leadership Role for India

India’s commitment to climate change and preservation of the environment have been acknowledged at the global level. On 3 October 2018, the UN Secretary General António Guterres presented to Prime Minister Narendra Modi the Champions of the Earth Award for Policy Leadership for 2018. In his remarks, he said<sup>26</sup>,

*“Today, we recognize a statesman who embodies the true meaning of leadership. Prime Minister Modi recognizes that climate change poses a direct existential threat to us all. Prime*

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25. “Prime Minister’s address at the G-20 Summit Side Event: ‘Safeguarding the Planet - The Circular Carbon Economy Approach’”, Ministry of External Affairs, Government of India, November 22, 2020 at <https://mea.gov.in/Speeches-Statements.htm?dtl/33228/prime+ministers+address+at+the+g20+summit+side+event+safeguarding+the+planet++the+circular+carbon+economy+approach>

26. “Remarks on presenting Champion of the Earth Award to Prime Minister Narendra Modi of India”, United Nations Secretary-General, October 3, 2018 at <https://www.un.org/sg/en/content/sg/speeches/2018-10-03/champion-earth-award-narendra-modi-india-remarks>

*Minister Modi knows what we need to do to avert catastrophe. And Prime Minister Modi understands the enormous benefits of climate action”.*

The “Champions of the Earth” is the UN’s highest environmental honour. It is given to outstanding public figures from the public and private sectors and from civil society whose actions have had a transformative positive impact on the environment. Launched in 2005, the award has been bestowed on exceptional individuals and organizations, who, through their extraordinary vision and achievements, have made a huge difference to the lives of millions of the earth’s inhabitants.

Guterres also lauded Prime Minister Modi as representing an extraordinary legacy that is rooted in India’s philosophy and culture as well as the readings of Mahatma Gandhi.<sup>27</sup> He went on to applaud Prime Minister Modi for his government’s remarkable achievement in installing 300 million LED light bulbs in India, along with some 40 million clean-burning cooking stoves in Indian homes that protected the health of women and children. Equally remarkable, he added, was the launch by the Prime Minister of India and the President of France of the International Solar Alliance in Paris on 30 November 2015 on the sidelines of COP-21, which gained the support of a coalition of 121 countries dedicated to harnessing

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27. Ibid.

solar energy around the world for the benefit of the people and the planet. He acknowledged that “thanks to Prime Minister Modi’s leadership, India became the fourth largest producer of solar power and the fifth-largest producer of renewable energy in the world”.<sup>28</sup>

## **Plastic Free India**

What really stood out in the UN Secretary General’s remarks on the occasion was his impromptu decision to rid the Executive Office of the United Nations in New York of all single-use plastic<sup>29</sup>, taking a cue from Prime Minister Modi’s decision to rid India of single-use plastic in less than five years. Here was an example of a global leader admitting that leadership in regard to reduction of environmental pollution could come from a large and populous country like India where plastic pollution is a wide-spread curse and where a single leader had made it his life’s mission to wage an all-out war against plastic.

Prime Minister Modi has long been advocating the elimination of single-use plastic. He has used several international platforms to propose a ban on the product. Today, the nation has also responded to his clarion call, just as it has robustly responded to his clarion call for Open Defecation Free (ODF) India.

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28. Ibid.

29. Ibid (18).

During the G7 Summit in Biarritz in August 2019, Prime Minister Modi highlighted India's large scale efforts towards eliminating single use plastic, conserving water, harnessing solar energy and, protecting flora and fauna for a sustainable future.<sup>30</sup>

According to figures of the Environment Ministry, India generates about 20,000 tonnes of plastic waste daily of which only 13,000-14000 tonnes are collected.<sup>31</sup> The lack of collection and recycling systems has long plagued the country.

During his Independence Day speech in 2019, Prime Minister Modi called upon the people of India to start a new revolution against plastic from October 2, which would be the 150th birth anniversary of Mahatma Gandhi, and to make India a plastic-free nation. He urged startups and experts to devise ways to recycle plastic, such as using recycled plastic waste to build highways. He appealed to shopkeepers to commit themselves to relinquishing the use of plastic and to display notices in front of their shops so that the ordinary customer could be informed.<sup>32</sup>

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- 30. “G7 Summit 2019: PM Modi Highlights India’s Large Scale Efforts Towards Eliminating Single-Use Plastic”, Business Today, August 26, 2019 at <https://www.businessstoday.in/top-story/g7-summit-2019-pm-modi-highlights-india-large-scale-efforts-towards-eliminating-single-use-plastic/story/375429.html>
  - 31. “After PM Modi’s Call, RWAs Up Efforts to Cut Single-Use Plastic”, The Times of India, August 16, 2019 at <https://timesofindia.indiatimes.com/city/gurgaon/after-pms-call-rwas-up-efforts-to-cut-single-use-plastic/articleshow/70693591.cms>
  - 32. “Independence Day: Full Text of Narendra Modi’s Red Fort Speech”, News18, August 16, 2019 at <https://www.news18.com/news/india/independence-day-full-text-of-narendra-modis-red-fort-speech-2271575.html>

During the 14th Conference of Parties to the UN Convention to Combat Desertification (UNCCD) hosted by India in September 2019, Prime Minister Modi said that it was time to say “goodbye” to single-use plastic urging people to attempt curbing its use.<sup>33</sup>

## **International Solar Alliance**

Bold, often simple, yet “out of box” concepts have characterized Prime Minister Modi’s thinking in dealing with complex issues that confront humankind. This is reflected in the manner in which he addressed climate change, especially the lack of clean renewable energy to help bring development to millions around the world. One of the outstanding initiatives towards mitigation of climate change effect and the use of renewable energy in the world today is the International Solar Alliance (ISA). It came early on in Prime Minister Modi’s first term. It was launched during the COP 21 Summit in Paris on 30 November 2015. Today, ISA is among the fastest growing International Organisations, with 88 signatories.

## **The Sun: Inexhaustible Source of Clean Energy**

Why did Prime Minister Modi come up with this idea? What drove him to pursue it so vigorously with the support of the

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33. “PM Modi Addresses 14th Conference of Parties to UNCCD in Greater Noida, U.P”, Narendra Modi, September 9, 2019 at <https://www.narendramodi.in/pm-modi-addresses-14th-conference-of-parties-to-uncd-546376>

French President, making it a joint initiative between India and France?

The ISA is predicated on the premise that the sun is an infinite source of clean energy and will remain so for centuries to come. India is blessed with abundant sunshine, far above the global average.

In his remarks at the launch of the ISA, Prime Minister Modi said that it was his “long cherished dream of an international alliance of solar-rich countries”.<sup>34</sup> The real source of his inspiration was the reverence with which the sun is admired and worshipped in several ancient cultures, including Hinduism. As an individual steeped in Indian culture and tradition, he was quick to draw on this aspect in his speech made in the presence of his collaborator, the then President Francois Hollande.

Prime Minister Modi said, “Since ancient times, different civilizations have given a special place to Sun. In the Indian tradition, Sun is the source of all forms of energy. As Rig Veda says, Sun God is the Soul of all beings, moving and non-moving. Many in India begin their day with a prayer to the Sun.

Today, when the energy sources and excesses of our industrial age have put our planet in peril, the world must turn to Sun to

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34. “Huge interest in solar alliance launched by PM Modi: India”, Business Standard, December 1, 2015 at [https://www.business-standard.com/article/pti-stories/huge-interest-in-solar-alliance-launched-by-pm-modi-india-115120101509\\_1.html](https://www.business-standard.com/article/pti-stories/huge-interest-in-solar-alliance-launched-by-pm-modi-india-115120101509_1.html)

power our future”.

For him, the question was simple. As he put it, “the vast majority of humanity is blessed with generous sunlight round the year. Yet, many are also without any source of power.”<sup>35</sup>

Prime Minister Modi did not solely rely on his admiration of ancient Indian culture to promote solar energy. He emphasized in his remarks the need to seek convergence between “economy, ecology and energy”.<sup>36</sup> He called for research and development, the exchange of best practices globally, investments, joint ventures and the development of innovative financing mechanisms to realize “the dream of universal access to clean energy”.<sup>37</sup>

Then, he announced an audacious goal, by declaring that “India has a capacity of 4GW and we have set a target of adding 100 GW of solar power by 2022. By the end of next year, we would have added 12 GW.” He also generously offered India’s financial support of approximately US\$ 30 million and readiness to host the initiative on the premises of the National Institute of Solar Energy.<sup>38</sup>

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35. “Remarks by Prime Minister Shri Narendra Modi At the Launch of the International Solar Alliance COP 21, Paris, 30 November 2015”, Press Information Bureau, Government of India, November 30, 2015 at <https://pib.gov.in/newsite/PrintRelease.aspx?relid=132121>

36. Ibid.

37. Ibid.

38. Ibid.

In his remarks at the inauguration of the India Pavilion at the COP21 summit on 30 November 2015, Prime Minister Modi went into the details of India's deep connect with Nature and the Sun as a perennial source of renewable energy,

"In India, Nature has always been treated as Mother. Since ancient times, we have seen humanity as part of Nature, not superior to it. The divine has manifested in Nature's diverse forms. We have always believed that Nature does not exist for human race, but that we can't exist without Nature. So, Nature is meant to provide and nurture, not to exploit. When Nature is in equilibrium, our lives and our world will be in balance. This is what we learn from Kshetrapati Sukta in our Rig Veda.

क्षेत्रस्य पते मध्मन्तमर्मिं धेनुरिव पयो अस्मासु धुक्ष्व ।  
मधुश्चुतं घृतमिव सुपूतमृतस्य नः पतयो मृलयन्तु ॥

This means: O Lord of Field, with the Sweet Waves of Mother Nature's blessings, may you milk our Fields like the Milk of a Cow With the Sweetness of Mother Nature's bounty, which falls like Clarified Butter, may You shed your Grace on us.

This is why Atharva-Veda calls it a bounden duty that we must protect the Earth so that Life can be sustained. This is what we see in Gandhiji's life and his advice that the world has enough for everyone's need but not for anyone's greed. This is what we have tried to capture in the publication PARAMPARA that we

have released today. This is why recycling and conservation comes naturally to us. And, why we have sacred groves across our nation.”

Again, at the COP21 Plenary that day in Paris, Prime Minister Modi emphasized<sup>40</sup>,

“Democratic India must grow rapidly to meet the aspirations of 1.25 billion people, 300 million of whom are without access to energy. We are determined to do so, guided by our ancient belief that people and planet are inseparable; that human well-being and Nature are indivisible. So, we have set ambitious targets. By 2030, we will reduce emissions intensity per unit GDP by 33-35% per cent of 2005 levels, and 40 per cent of our installed capacity will be from non-fossil fuels.

We will achieve it by expanding renewable energy - for example, by adding 175 Gigawatts of renewable generation by 2022. We will enlarge our forest cover to absorb at least 2.5 billion tonnes worth of carbon dioxide”.

On 23 September 2019, Prime Minister Modi, in his remarks at the Climate Action Summit at the 74th UN General Assembly, stated:

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40. “Statement by Prime Minister at COP 21 Plenary in Paris (November 30, 2015)”, Ministry of External Affairs, Government of India, November 30, 2015 at <https://www.meaindia.gov.in/Speeches-Statements.htm?dtl/26071/>

“In India, we are going to increase the share of non-fossil fuel, and by 2022 we plan to increase our renewable energy capacity to much beyond 175 GW, and later till 450 GW. In India we have made plans to make our transport sector green through e mobility. India is also working to considerably increase the proportion of the biofuel blend in petrol and diesel. We have provided clean cooking gas to 150 million families. We have launched the Jal Jeevan mission for water conservation, rainwater harvesting and for the development of water resources. India is going to spend approximately 50 billion dollars on this in the next few years.

On the International forum, almost 80 countries have joined our International Solar Alliance campaign. India and Sweden together with other partners are launching the Leadership group within the Industry transition track. This initiative will provide a platform for governments and the private sector with opportunities for cooperation in the area of Technology innovation. This will help to develop low carbon pathways for industry. In order to make our infrastructure disaster resilient, India is launching a Coalition for Disaster Resilient Infrastructure. I invite Member states to join this coalition. This year on the occasion of India’s Independence Day on 15th August, we called for a peoples movement to end the use of single use

plastic. I hope that this will create an awareness at a global level about the harmful effects of single use plastic".<sup>41</sup>

Prime Minister Modi's Environment Minister Prakash Javadekar hit an optimistic note at the CP25 meeting on 10 December 2019 in Spain, where he said,

"India has reduced emissions intensity of GDP by 21 percent and is on track to achieve the goal of 35% emissions reduction as promised in Paris. Prime Minister Modi announced 175 Giga Watts targets for renewables under Paris Agreement. We have already achieved 83 Giga Watts. Prime Minister has subsequently increased the target to 450 Giga Watts at the recent UN Climate Action Summit. We are simultaneously progressing on solar, biomass and wind energy".<sup>42</sup>

Today, India has come a long way in renewable energy in the past decade. The country's installed capacity has increased by 226 per cent to over 89 GW now.<sup>43</sup> India's renewable energy capacity is the fourth largest in the world and is expected to reach 175 GW before 2022. India's ambitious target of

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41. "PM's Remarks at Climate Action Summit 2019 During 74th Session of UNGA", Narendra Modi, September 23, 2019 at <https://www.narendramodi.in/pm-modi-s-remarks-at-summit-on-climate-change-546575>
  42. "Statement of Union Environment Minister at UNFCCC COP25", Press Information Bureau, Government of India, December 10, 2019 at <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1595787>
  43. Ibid (30).

achieving 450 GW of renewable energy capacity by 2030 is not without a firm basis.<sup>44</sup>

Four of the top seven largest solar parks worldwide are in India including the second largest solar park in the world at Kurnool, Andhra Pradesh, with a capacity of 1,000 MW.<sup>45</sup>

The world's largest solar power plant - Bhadla Solar Park - is being constructed in Rajasthan with a capacity of 2,255 MW and is expected to be completed shortly.<sup>46</sup>

India is promoting nuclear power as a safe, environmentally benign and economically viable source and with a 2.2 per cent share in current installed capacity, the country aims to achieve 63 GW installed capacity by the year 2032.<sup>47</sup>

## **Coalition for Disaster Resilient Infrastructure**

Another area where India has donned the mantle of leadership is in regard to disaster resilient infrastructure. On 24 September 2019, Prime Minister Narendra Modi announced a

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- 44. "Message by Prime Minister at Climate Ambition Summit", Ministry of External Affairs, Government of India, December 12, 2020 at [https://mea.gov.in/Speeches-Statements.htm?dtl/33288/Message\\_by\\_Prime\\_Minister\\_at\\_Climate\\_Ambition\\_Summit](https://mea.gov.in/Speeches-Statements.htm?dtl/33288/Message_by_Prime_Minister_at_Climate_Ambition_Summit)
  - 45. "The World's Largest Solar Park - Kurnool, India", NRDC, October 31, 2017 at <https://www.nrdc.org/experts/anjali-jaiswal/worlds-largest-solar-park-kurnool-india>
  - 46. "Five Largest Solar Power Plants in India Profiled", NS Energy, April 30, 2020 at <https://www.nsenergybusiness.com/features/largest-solar-power-plants-india/#>
  - 47. Ibid (30).

global Coalition for Disaster Resilient Infrastructure (CDRI), at the UN Climate Action Summit 2019 held in New York City, USA, on September 23, 2019.<sup>48</sup>

According to an official press release on the occasion of the announcement of the coalition, Prime Minister Modi stated<sup>49</sup>,

*“What is needed today is a comprehensive approach that covers everything including education, values to lifestyle and development philosophies. What we need is a global people’s movement to bring about behavioural change; need, not greed is our guiding principal. So, therefore India is here today to present a practical approach and roadmap...In order to make our infrastructure resilient in the face of disasters, India is launching a Coalition for Disaster Resilient Infrastructure. I invite all member states to join this Coalition.”*

*“The partnership of national governments, UN agencies and programmes, multilateral development banks, financing mechanisms, private sector, and knowledge institutions will promote the resilience of new and existing infrastructure systems to climate and disaster risks, thereby ensuring sustainable development”.*

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48. “Prime Minister Announces Coalition for Disaster Resilient Infrastructure at UN Climate Action Summit 2019”, Press Information Bureau, Government of India, September 24, 2019 at <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1586051>

49. Ibid.

*“Developed through consultations with more than 35 countries, CDRI envisions enabling measurable reduction in infrastructure losses from disasters, including extreme climate events. CDRI thus aims to enable the achievement of objectives of expanding universal access to basic services and enabling prosperity as enshrined in the Sustainable Development Goals, while also working at the intersection of the Sendai Framework for Disaster Risk Reduction and the Paris Climate Agreement”.*

*“Established as a platform for generating and exchanging knowledge, CDRI will conduct country-specific and global activities. CDRI will provide member countries technical support and capacity development, research and knowledge management, and advocacy and partnerships to facilitate and encourage investment in disaster resilient infrastructure systems.”*

*“In its formative stage, CDRI will focus on developing resilience in ecological infrastructure, social infrastructure with a concerted emphasis on health and education, and economic infrastructure with special attention to transportation, telecommunications, energy, and water”.*

*“Within 2-3 years, the coalition aims to have a 3-fold impact of achieving considerable changes in member countries’ policy frameworks, future infrastructure investments and high*

*reduction in economic losses from climate-related events and natural disasters across sectors. CDRI will uphold the UN Agenda 2030 principle of leaving no one, no place, and no ecosystem behind, focusing on the most vulnerable regions and populations, while enabling inclusive and deliberative processes that recognize national and local efforts as primal”.*

Later, at the G20 Summit in Osaka on 29 June 2019, Prime Minister Modi told his audience in the session on Quality Infrastructure Investment and Development Cooperation that, “Disaster resilient infrastructure is required not only for development, but it is also necessary to combat natural calamities” and that “in this regard I stressed upon the need of an international coalition in the G20 conference of Buenos Aires [in 2018].”<sup>50</sup>

The CDRI was first proposed by Prime Minister Modi during the 2016 Asian Ministerial Conference on Disaster Risk Reduction held in New Delhi. No doubt, Mr. Modi’s experience in dealing with the massive destruction wrought by the 2001 Gujarat earthquake, as the then Chief Minister of Gujarat, had given shape to the idea. This was yet another example of India launching a major initiative outside the UN system, the first

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50. “PM Modi Invites G20 Countries to Join Global Coalition on Disaster Resilience”, The Hindustan Times, June 29, 2019 at <https://www.hindustantimes.com/world-news/pm-modi-invites-g20-countries-to-join-global-coalition-on-disaster-resilience/story-Jx8zGFLTG4Tvozk1qzfzVJ.html>

being the International Solar Alliance. The ISA and the CDRI are both part of Prime Minister Modi's attempts to position India as a global leader in matters relating to climate change.

At the fourth Ramnath Geonka Lecture in November 2019, India's External Affairs, Dr. Subrahmanyam Jaishankar termed these initiatives a part of India's stronger branding.<sup>51</sup>

Today, the CDRI comprises of 18 countries - including 9 from among the G20 - and 4 international organisations.

Given the links to the Sendai Framework<sup>52</sup>, India and Japan are two countries best placed to share their joint experience in disaster management through the CDRI, and it was logical therefore that one of the first countries that India approached was Japan.

India's remains committed to the CDRI. This is reflected in India hosting the next International Conference on Disaster Resilient Infrastructure later in 2021.<sup>53</sup>

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51. "External Affairs Minister's speech at the 4th Ramnath Goenka Lecture, 2019", Ministry of External Affairs, Government of India, November 14, 2019 at <https://mea.gov.in/Speeches-Statements.htm?dtl/32038External+Affairs+Ministers+speech+at+the+4th+Ramnath+Goenka+Lecture+2019>
52. "3rd Indo-Japan Workshop on Disaster Risk Reduction Held in New Delhi", Press Information Bureau, Government of India, March 18, 2019 at <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1569025>
53. Ibid (2).

Prime Minister Modi's commitment to policy initiatives and out-of-the-box ideas in regard to climate change, renewable energy, sustainable development and protection of environment perhaps draws on an impulse from his own love of nature and an unsaid lifelong appreciation of the importance of preserving harmony in Nature, the earliest traces of which could lead one to his childhood spent in the remote hamlet of Vadnagar in Gujarat. Perhaps, his idea of the International Solar Alliance, the centrepiece of which is the notion of the Sun as a potential source of energy, is also rooted in this past.

Close to Vadnagar lies the ancient site of the Sun Temple of Modhera. The early Chinese traveller Hiuen Tsang (Xuan Zang) had visited the place around AD 640 and had referred to it as Anandpur.<sup>54</sup> The Sun Temple is a Hindu temple dedicated to the solar deity Surya.<sup>55</sup> Situated on the banks of the river Pushpavati, it is reckoned to have been built around 1026-27 CE during the reign of Bhima 1 of the Chaulukya dynasty. Like the famous Somnath temple by the sea near the port of Veraval in Saurashtra, the Sun Temple stands majestically on a

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- 54. "Hiuen Tsang's Gujarat Travel: 'Valabhi Was at Par with Nalanda'", The Times of India, September 14, 2014 at <https://timesofindia.indiatimes.com/city/ahmedabad/hiuen-tsangs-gujarat-travel-valabhi-was-at-par-with-nalanda/articleshow/42471893.cms>
  - 55. "Did You Know About These Incredible Facts About Gujarat's Modhera Sun Temple?", Times Travel, August 26, 2020 at <https://timesofindia.indiatimes.com/travel/destinations/did-you-know-about-these-incredible-facts-about-gujarats-modhera-sun-temple/as77765353.cms>

site that had once been invaded by Mahmud of Ghazni,<sup>56</sup> and was apparently built to commemorate the resistance offered by the local people to his marauding forces. Mahmud of Ghazni is long gone, reduced to dust as is the wont of even the greatest plunderers and invaders in history, but the Sun Temple continues to stand tall and provide inspiration to generations of Indians.

As a young boy, and as a practicing Hindu, Mr. Modi would no doubt have grown up with a strong sense of the presence of this ancient temple devoted to the Sun God, not too far from his home. For a practitioner of “Surya Namaskar” or Sun salutation, which is also symbolized by the eponymous yoga asana, the fiery orb of the Sun has no doubt held special significance for him, as it does for millions of Hindus around the world, as an eternal symbol of the life, energy, healing and purity that it bequeaths, to all sentient beings on Mother Earth.<sup>57</sup>

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56. “Gujarat’s Modhera Sun Temple: Where History And Elegance Meet”, Native Planet, September 10, 2018 at <https://www.nativeplanet.com/travel-guide/gujarat-s-modhera-sun-temple-where-history-and-elegance-meet/articlecontent-pf24702-004825.html>
57. “PM Modi mentions Surya Namaskar in Lok Sabha”, India TV, February 6, 2020 at <https://www.indiatvnews.com/lifestyle/health-pm-modi-surya-namaskar-lok-sabha-parliament-steps-benefits-586394>



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