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Rajendra Shende – Curriculum Vitae

Key Expertise

Former acclaimed UN Diplomat and international expert on Sustainable Development, Green Economy, Climate Change, Energy, Ozone Layer Protection and Food security.

Educated in IIT Bombay, former professional in Private Sector including Tata Chemicals, currently Chairman of TERRE Policy Centre, a not-for-profit organization working for environmental and societal benefits.

Successfully led a global team of 50 UN staff with diverse cultural background and with near perfect gender balance in UNEP's Paris office and Regional offices in Bangkok, Bahrain, Nairobi and Panama City. Closely worked with top level delegates of 146 developing countries to enable them to comply with one of the most successful multilateral environmental treaty (the Montreal Protocol on substances that deplete the ozone Layer), through capacity building, institutional strengthening and regional networking.

Has direct experience in international and national environmental policy formulation and forging innovative partnerships with governments, NGOs, intergovernmental organisations and private sector on critical issues like strengthening synergies and coherence within UN system to integrate the environmental dimension into the sustainable development dialogues and strategies.

Reviewer, Contributor and Coordinating Lead Author of IPCC report on Ozone Protection and Global Climate, that shared the Nobel Peace prize in 2007, hence proud winner of Nobel Peace Prize citation. It involved the modelling exercises for forecasts of HCFCs, HFCs and the market penetration globally. Continues to be part of the strategic committees and reviewer of UNEP's publications on climate change.

Assisted A 5 countries in developing Country programmes on policy needs, technology penetration, forecast of production and consumption through modelling and growth rates of economy of the countries. Developed the country wise needs in the A 5 country programmes for the financial assistance .

Developed the programme in UNEP on Energy Efficiency, Promoted formulation of new Safety standards for flammable and other refrigerants, illegal trade of Chemicals and related training programmes.

For TEAP, developed simplified brochures for sectoral reports when in UNEP, later as Senior Expert helped developed the reports as requested by Parties on 'SDGs and the Montreal Protocol', Energy efficiency, Replenishment Report for 2021-2024.

Strong attributes for consensus building at local, national and international platforms on the challenging and sensitive environmental negotiations. Expertise in encouraging and inspiring creative concepts and practical programmatic approaches in developing, implementing, reporting and monitoring national strategies for ecosystem nurturing.

Oversight expertise in managing multi-locational regional offices of UNEP and their programmes, including administrating and monitoring the delivery and budgets.

Leadership in inspiring the innovation driven vision at global and regional as well as local and enterprise level to engage cross section of the stake holders in encouraging in

deployment of ozone and climate friendly technologies, reduce carbon footprints, strengthen Corporate Social Responsibility, community-led nature conservation and restoration.

Winner of numerous awards including USA awards(two times)one on Ozone Layer Protection and Second for Climate change, Winner of JFK School of Governance, Harvard University award and LifeTime Achievement Award from Babasaheb Ambedkar Marathwada University.

Felicitated by Dr APJ Abdul Kalam,former President of India in special ceremony in Rashtrapati Bhavan for developing Solar Vaccine Cooler for communities in remote area.

Reviewer, Contributor and Coordinating Lead Author of IPCC report, that shared the Nobel Peace prize in 2007, hence proud winner of Nobel Peace Prize citation. Continues to be part of the strategic committees and reviewer of UNEP's publications on climate change.

Intense and passionate follower of principles of 'leading-by-examples', 'practicing-what-we-preach' and 'walking-the-talk'.

Professional Experience

2011 onwards

- ◆ ***Chairman, TERRE Policy centre, India (Not-for-Profit Organisation)***
 - ***Implementing flagship projects for sustainable living among the village communities, sustainable living of communities around World Natural Heritage, Smart Campus Cloud Network of college/university campuses, Urban forestry, TERRE Olympiad, and Network of Carbon Neutral Campuses and solar-schools.***
 - ***Indian Government Nominated and unanimously elected by UN Meeting of the Parties as Senior Expert of UNEP's Technology and Economic Assessment Panel.***
 - ***Expert reviewer and member of UNEP/WMO Science Assessment Panel on Ozone Layer Protection***
 - ***Steering Committee member of UNEP on reports on HFCs-Critical link in protecting climate and ozone layer and Non-CO2 gases, Emission Gaps.***
 - ***Advisor as Civil Society representative to the Minister of Environment Forest and Climate Change, India.***
 - ***Partnering with Government of India, private sector, local governments, NGOs and Academics.***
 - ***Promoting Sustainable Agriculture, Renewable energy , Water Conservation in my own of Rahimatpur, adopted by IIT-Alumni***
- ***Promoting policies and projects in energy and food security, including Renewable energy, energy efficiency, micro-grids, organic farming, sustainable agriculture,***

climate change

- Networking with World Natural Heritage (WNH) sites of UNESCO to advance the sustainable living of the communities, eco-tourism and nature conservation around WNH.
- Forging Partnership with Business, International Organisations, Academic Institutes for CSR, Youth through demonstration projects on renewable energy-Organic farming, energy efficiency, rainwater harvesting,
- Developing Policy Papers on CSR, Ocean Pollution, Environmental crime, and Energy and food security.
- Catalysing actions in rural area for the sustainable living, reverse migration from urban area, waste management and social entrepreneurship
- Promoting evidence-based policies and action-based project/pilot demonstrations that could be replicated using social media and modern communication mechanisms.
- Engaging the NextGen stakeholders, i.e. youth and marginalised groups like women, farmers, senior citizens and artisans for seeking and implementing sustainable solutions to the present development imperatives.

2004 – 2011

◆ **United Nations Environment Programme (UNEP) Paris, France
Head of OzonAction Branch (Director)**

- **Led a global programme (annual budget from multiple funding agencies USD 25 million) for safeguarding the ozone layer and the climate system through provision of policy advice and support for technology transformation for 146 developing countries.**
- Delivered the financial and technical aid for capacity building of government and industry focal points in developing countries through UNEP's Division of Technology, Industry and Economics to achieve climate mitigation benefits as well as ozone layer protection under the Montreal Protocol.
- Mobilized finances from the Multilateral Fund, GEF, bilateral donors and fostered partnerships with the private sector, civil society, and international organisations (UNDP, UNIDO, World Bank, FAO, WHO, UNICEF, WCO, UNODC, INTERPOL) for programme development and project implementation
- Developed and implemented projects related to alternatives to ozone depleting substances, that would provide cross-cutting and multiple benefits in the sectors such as climate change, chemical management, energy efficiency and waste management
- Formulated, negotiated, implemented and evaluated the annual and rolling business plans, work programme, outputs, outcomes, and feedback from clients to manage a fully regionalised UN Programme with more than 50 staff with annual budget up to USD 25 million,
- Monitored the result-based and compliance-rigorous projects.

From 1999 -2004:

◆ **United Nations Environment Programme (UNEP) Paris, France
Head of Energy and OzonActionUnit, (Director)**

- **Headed the new unit by conceptualising and establishing the Energy Programme in the Division and enhancing the activities on Ozone Layer Protection by re-orienting the compliance assistance through UNEP's regional offices.**
- Provided capacity building services and strategic policy advice to developing countries to develop and implement plans to eliminate CFCs and other ozone depleting substances and greenhouse gases as per the United Nations Framework Convention on Climate Change.
- Facilitated and promoted transfer of environmentally sound and energy efficient renewable energy technologies to developing countries through cooperative and financial mechanisms including the Clean Development Mechanism.

1992-1999:

○ **United Nations Environment Programme (UNEP) Paris, France
Coordinator OzonAction Programme(Coordinator)**

- **Launched and managed the Capacity Building Programme to enable the compliance of developing countries under the Multilateral Fund of the Montreal Protocol.**
- **Established international information clearinghouse**, preparation and implementation of National Strategies, facilitation of institutional strengthening, promotion of regional networking of government officers, training of the key stakeholders to develop sector management plans.
- Led a Taskforce in the Division to initiate pilot activities under GEF for developing countries in the field of sustainable development, climate change mitigation and ozone layer protection.

1972-1992:

○ **Corporate Manager in Private sector in India including Tata Chemicals (Gujarat), Hindustan organic Chemicals (Maharashtra), Armour Chemicals (Maharashtra) and SRF (New Delhi)**

- **Advanced progressively starting as trainee and then taking up higher responsibilities as cleaner-production supervisor, project manager, R&D manager for ozone friendly and in-charge of strategic business diversification and resource efficiency.**
- **Provided advisory service to top-management on strategic diversification and mainstreaming environmental protection in corporate operations.**
- **Environment Friendly Technology assessment, selection and transfer agreement for chlorinated and fluorinated chemicals.**
- Led the technology development for ozone-friendly CFC and HCFC-substitutes and halon-substitutes.
- Implemented a cleaner production (enzymatic) process to manufacture semi-synthetic antibiotics using clean energy.
- Provided consultancy services for feasibility studies, trouble-shooting, heat-recovery, energy efficiency, eco-efficiency and engineering for chemical plants

- manufacture of semi- synthetic antibiotics,
- Implementation of ‘green field’ projects to manufacture PTFE (Teflon) with resource efficient and energy efficient process
- Studies and implemented deployment of use of solar energy in chemical industry and implemented

Achievements

National

- Launched and operated technical and policy consultancy unit in public sector for cleaner and safer production, technical assistance for the inefficient industries, trouble shooting, energy-efficiency and use of renewable energy. (1976-82)
- Developed and implemented a concept for the use of solar energy to heat water in large chemical manufacturing plants (1985-86)
- Successfully managed implementation of a “green-field” project to set up a large chemical complex from “Concept to Commissioning” for the production of the Flour-polymer. (1983-1986)
- Developed cleaner and energy efficient enzymatic process in the laboratory and scaled up to commercial manufacture of semi-synthetic antibiotics.(1986-1988)
- Nominated by the Government of India to the national task force to develop India’s strategy for the ratification of the Montreal Protocol.
- Played advisory role for developing the strategy for the Government of India that led to the ratification of the Montreal Protocol. (1988-1991)
- Participated in the intergovernmental negotiations and contributed to the establishment of the Multilateral Fund of the Montreal Protocol, the first ever fund to implement the MEA in developing countries.

International

- Starting with an annual budget of US\$ 1.5 million and 5 staff members, developed Capacity Building activities with a budget of up to US\$ 25 million with 50 staff members in five UNEP’s offices. The programme is now proving to be model for the implementation of other Mesa (1992 onwards)
- Successfully initiated GEF projects in UNEP (1995 onwards) and established the Energy Programme in the Division (1999 onwards)
- Under my guidance, 106 developing countries were assisted in preparing their country strategies for the implementation of the Montreal Protocol and for implementation of Institutional strengthening projects.
- Developed for the first time in UNEP, activities under climate change mitigation such as capacity building workshops for CDM, publications for ‘No Regret Options’ for the emission reductions, Voluntary Initiatives for the climate change mitigation. (1996 onwards)
- Developed and led a number of innovative mechanisms in capacity building such as Regional Networks of national Montreal Protocol focal points, South-South cooperation, B2B web site for international trading in controlled substances, regional compliance management programmes for the small and Least Developed Countries (LDCs), participatory processes to prepare country strategies to implement MEAs and training of customs officers. (1997 onwards)
- Guided and authored a number of strategy and policy papers that have resulted in the reorientation of UNEP’s programmatic approach to respond to changing needs, including:

- Strategic Reorientation of the OzonAction Programme to meet the emerging compliance needs (2001)
- Energy Strategy for UNEP. (1998)
- Climate Change strategy for UNEP (1999)
- Strategy for the coherent and coordinated implementation of the MEAs. (2003)
- Strategy for the GEF-BusinessPlan implementation (2003-2005) under Ozone Focal area by leveraging the opportunities for broad based chemical management. (2003)
- Initiated Successful Partnerships with industry:
 - Voluntary pledge: by the multinationals to assist developing countries in ODS-alternative product training.
 - With ARAP-USA: on Responsible use of HFCs
 - With USEPA: on automobile car manufacturers for emission reduction and fuel efficiency for the Mobile Air Conditioning in India and China
 - Solar Chill: partnership with WHO, UNICEF, Greenpeace and private sector to develop technology for a vaccine freezer that uses non-ODS, non-GHG and operates on renewable energy.
 - Refrigerants, Naturally!: Partnership with Coca Cola, Unilever, McDonalds, Pepsi and Red Bull for ODS free and GHG free energy efficient appliances
 - With Air India t: o initiate environmentally friendly activities for the aviation industry.
- Mobilised resources, co-financing and partnerships with Governments through specific projects, including Japan, Sweden, Australia, France, Germany, Austria, Czech Republic, Norway, Finland, Canada, USA, Spain, Portugal, Israel, Hungary and The Netherlands.
- Launched innovative integrated capacity building programme for enforcement officers entitled the *Green Customs Initiative*, with partnership of six convention secretariats (CITES, Basel, Montreal, Stockholm, Rotterdam, Cartagena), and five international organisations (Chemical Weapons Convention, WCO, INTERPOL, UNEP, UNODC).
- Interviewed on national and international TV, newspapers and journals and delivered keynote speeches in numerous international conferences in Europe, America, and in developing countries, notably in MIT-USA, Beijing University, Press Club in Beijing, Kennedy Centre, Washington DC.
- Overseeing the activities as **Chairman of TERRE Policy centre** a not for profit, NGO working with communities to promote Sustainable Development and mitigation and adaptation to Climate Change. **TERRE is partner and accredited with IUCN, UNESCO, UNFCCC, ESCAP and UNEP.**

Post 2011

- Implementing the Project on **Smart Campus Cloud Network of University campuses** to mainstream SDGs in higher education system using digital technology. Project is supported by UNESCO, MHRD, MOEFCC, UGC, GORD and AICTE among others.
- Ongoing innovative projects on **Urban Forestry, Tree plantation along the rivulets , TERRE Olympiad and Carbon Neutral Universities ‘ Not Zero-Net-Zero ‘.**
- **Chairman of International Advisory Committee of Operation Earth, China,**

Awards

OzonAction Programme became the first in the UN system to win the award from United States Environment Protection Agency for its work on the protection of the ozone layer. (2005)

OzonAction Programme received a **special certificate from the President of Senegal** on behalf of all the African countries for assisting the countries in the African continent in building their capacity

and providing technology support to implement the Montreal Protocol. (2005)

The Solar Chill partnership, fostered by me, for the development of the Solar Chill vaccine cooler won **UK Industry award (2006)**.

Received **UNEP award on 20th Anniversary Montreal Protocol for the ‘Outstanding Contribution’** to the implementation of the Montreal Protocol (2007)

OzonAction programme received UNEP **‘Implementation Agency’ award (2007)**.

The Green Customs initiative was awarded the **UNEP Partners Ozone Protection Award** by the Montreal Protocol (2007)

As a coordinating lead author of the IPCC report, **received a Nobel Peace Prize certificate** as a contributor. (2007)

Received a **certificate and appreciation from the Chairman of IPCC and also from the Executive Director of UNEP** for my contribution to IPCC report. (2007)

Won **Climate Protection award from United States EPA** for work in achieving climate benefits from the actions to protect the ozone layer. (2009)

Was **awarded a certificate of the appreciation** for assisting the African countries from Minister of Uganda on behalf of 53 African countries (2011)

The **partnership Refrigerants, Naturally!** Won the **Roy Family award of John F Kennedy school of Government, Harvard Business School**. (2011)

Received awards from Local Governments and organisation : Maharashtra (state) Bhushan, Satara (District) Bhushan, Koregaon (Taluka) Bhushan, Rahimatpur (town) Bhushan . Numerous other organisations felicitated with awards

From 2011 onwards: **Lifetime Achievement Award by Babasaheb Ambedkar Marathwada University** and several awards from local governments (State level, business and voluntary organisations in India

In 2020, conferred **Honorary Doctorate** was conferred by MIT ADT University.

Author, Reviewer Speakers

- **Written more than 50 articles** in well-known mainstream national and international journals, reports and for books. Interviewed on Indian and French TV
- **Review Editor of IPCC** Special report on Technology Transfer.
- **Coordinating Lead Author for IPCC** Special report on safeguarding the Ozone layer and global climate system.
- **Delivered talks in TiE-London, MIT-Boston, Beijing University, Tsinghua University, Nanjing University, IIT-Bombay (Prof S K Bose memorial lecture), IIT-Delhi, Rotary Peace symposium, Pune, Water Symposium, Peru , ITU-Geneva, TEDx-India, Kennedy Centre-Washington DC,**

Education

- *Born and educated in village Rahimatpur, Satara District of Maharashtra*
- *National Merit Scholar and in the state merit list of SSC examination.*

- Chemical Engineering (First Class Honours.) from *Indian Institute of Technology (IIT) - Mumbai (1972)*.
- English, French, Hindi, Marathi (fluent in all)

Languages

Personal

Nationality: Indian,**Date of Birth:** 13 July 1949,

Web sites (personal)www.rajendrashende.com
www.rajendrashende.blog

Web sites (Organisation /projects) www.terrepolicycentre.com
www.sccnhub.com

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