

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 161**  
TO BE ANSWERED ON 04.12.2023

**MoU for Cooperation in the field of Environment**

161. SHRI RAMDAS C. TADAS:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the Government has signed any Memorandum of Understanding (MoU) with many countries of the World for cooperation in the field of environment;
- (b) if so, the details thereof;
- (c) whether the said treaty will help to introduce or transfer green technology in the country; and
- (d) if so, the details thereof?

**ANSWER**

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE  
(SHRI ASHWINI KUMAR CHOUBEY)

**(a) to (d):** Yes, Sir. The details of Memorandum of Understanding (MoU) signed with countries of the world for cooperation in the field of Environment and related areas are at **Annexure**.

Memorandum of Understanding (MoU), inter alia, relate to promoting cooperation, collaboration, exchanges of ideas and best practices, etc. in the field of environment and related areas including in green technology. The details of areas of cooperation in the signed Memorandum of Understandings (MoUs) are at **Annexure**.

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**ANNEXURE REFERRED TO REPLY IN PART (a) to (d) OF LOK SABHA UNSTARRED QUESTION NO. 161 DUE FOR 01.12.2023 REGARDING 'MOU FOR COOPERATION IN THE FIELD OF ENVIRONMENT' RAISED BY SHRI RAMDAS C. TADAS**

**List of Memorandum of Understanding**

<b>Sl. No.</b>	<b>Name of Country and Year of Signing of MoU</b>	<b>Area of Cooperation</b>
<b>1.</b>	<b>Australia</b>  Memorandum of Understanding on Cooperation in the field of Environment, Climate & Wildlife. 2017	<ul style="list-style-type: none"> <li>i. Environmental Information Systems</li> <li>ii. Wastewater management, treatment and re-use of treated effluents</li> <li>iii. Coastal and marine ecosystems</li> <li>iv. Marine wildlife ecosystems, with a particular focus on dugongs, sharks, turtles and cetaceans that occur in the Indian Ocean</li> <li>v. Management of UNESCO world heritage sites</li> <li>vi. Addressing illegal trade in fauna and flora, including cooperation to support well-managed, legal and sustainable trade under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)</li> <li>vii. Conservation and recovery of threatened species</li> <li>viii. Climate change</li> <li>ix. Ecosystem conservation and sustainable use</li> <li>x. Control of air and water pollution</li> <li>xi. Clean Coal Technology, including both pre-mining and post-mining technologies; and</li> <li>xii. Other areas related to the protection of the environment as mutually decided upon.</li> </ul>
<b>2.</b>	<b>Austria</b>  MoU between MoEF, Govt. of Republic of India and Federal Ministry of Environment, Youth and Family Affairs, Republic of Austria. 1994	<ul style="list-style-type: none"> <li>i. Air Pollution</li> <li>ii. Waste Management, technical and financial aspects</li> <li>iii. Vehicle Exhaust Emissions</li> <li>iv. Nature protection, particularly in mountain areas,</li> <li>v. Any other area</li> </ul>
<b>3.1</b>	<b>Bangladesh</b>  MoU on Conservation of Sundarbans. 2011	<p>Identified the following areas of cooperation for exploiting the potential of the Sundarban for development and alleviation of poverty:</p> <ul style="list-style-type: none"> <li>i. joint management and joint monitoring of resources:</li> <li>ii. mangrove regeneration habitat restoration and rehabilitation programs, which would</li> </ul>

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		<p>eventually increase the potential for carbon sequestration.</p> <p>iii. the long-term strategy for creating ecotourism opportunities.</p> <p>iv. map and delineate human settlements on respective sides for a better understanding of the relationship between human settlements and the ecosystems</p>
3.2	<p><b>Bangladesh</b></p> <p>Protocol on Conservation of Royal Bengal Tigers of Sundarbans 2011</p>	<p>Bilateral initiatives for ensuring the survival and conservation of the tiger in the unique ecosystem of Sunderban</p>
4.	<p><b>Bhutan</b></p> <p>MoU on cooperation in the areas of Environment. 2021</p>	<p>i. Air ii. Waste iii. Chemical Management iv. Climate Change v. Any other areas jointly decided upon</p>
5.	<p><b>Brazil</b></p> <p>MoU on cooperation in the field of Environment. 2014</p>	<p>i. Climate Change ii. Biological diversity iii. Afforestation in drylands iv. Water conservation and protection of wetlands v. Waste management including agricultural waste and electronic waste vi. Waste water management and re-use of treated effluents vii. Use of bio-fuels viii. Use of Non-Timber Forest Products and medicinal plant products ix. Air and water quality management x. Environmental information systems xi. Sustainable Management of forests &amp; REDD &amp; REDD+ matter xii. Wildlife Management; and Forest Fire Control</p>
6.	<p><b>Canada</b></p> <p>India-Canada MoU on Climate Change and Environment. 2022</p>	<p>i. Climate change, including increasing renewable energy capacity and the Decarbonization of Heavy Industries ii. Clean Technology iii. Plastics Pollution and Circular Economy iv. Air Pollution v. Sustainable development and management of Water Resources vi. Sustainable Consumption</p>

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		<ul style="list-style-type: none"> <li>vii. Biodiversity and Conservation</li> <li>viii. Sound Management of Chemicals and Wastes</li> <li>ix. Any other areas that the participants may jointly decide upon</li> </ul>
7.	<p><b>Cambodia</b></p> <p>Cooperation in biodiversity conservation and sustainable wildlife management recovery strategy of tiger and its habitat. 2022</p>	<p>Cooperation in biodiversity conservation and sustainable wildlife management recovery strategy of tiger and its habitat</p>
8.1	<p><b>China</b></p> <p>Agreement on Climate Change. 2009</p>	<ul style="list-style-type: none"> <li>i. Energy Conservation</li> <li>ii. Renewable energies</li> <li>iii. Clean Coal</li> <li>iv. Methane recovery and utilization</li> <li>v. Transportation</li> <li>vi. Sustainable habitat</li> </ul>
8.2	<p><b>China</b></p> <p>Agreement on Forestry Cooperation. 2006</p>	<ul style="list-style-type: none"> <li>i. Prevention and management of desertification Development and utilization of forestry resources Supporting technological cooperation between research organizations, forestry institutions, and other units</li> <li>ii. prevention of plant diseases, insects and pests, and intrusion by external organisms.</li> <li>iii. Prevention and control of forest fire.</li> <li>iv. Co-operation on the wood-based industry, sustainable forestry enterprise, trade and Policies'</li> <li>v. Enhancing livelihood opportunities of local communities through NTFP</li> </ul>
8.3	<p><b>China</b></p> <p>Bilateral Protocol on Tiger Conservation. 1995</p>	<p>Crackdown on illegal activities of poaching tiger, smuggling and selling tiger, tiger bones and other parts of tiger as well as its derivatives</p>
9.	<p><b>Cyprus</b></p> <p>Memorandum of Understanding between India and Cyprus on Cooperation in the Areas of Environment. 2018</p>	<ul style="list-style-type: none"> <li>i. Water pollution control;</li> <li>ii. Air pollution control;</li> <li>iii. Waste Management;</li> <li>iv. Biodiversity conservation including;</li> <li>v. (i)Bio-safety</li> <li>vi. (ii)Survey of Bio-resources</li> <li>vii. (iii)Wetland management</li> <li>viii. Harmful chemicals management;</li> <li>ix. Clean technologies including : <ul style="list-style-type: none"> <li>(i) clean water and air technologies;</li> </ul> </li> </ul>

Sl. No.	Name of Country and Year of Signing of MoU	Area of Cooperation
		<ul style="list-style-type: none"> <li>(ii) waste handling technologies;</li> <li>(iii) environmental monitoring technologies;</li> <li>(iv) Technologies to support the substitution of harmful chemicals in processes and products.</li> <li>x. Climate Change</li> <li>xi. Any other areas jointly decided upon.</li> </ul>
<b>10.1</b>	<b>Denmark</b>  MoU on Clean Development Mechanism. 2008	<ul style="list-style-type: none"> <li>i. To facilitate the transfer of technology and knowhow to meet the objectives of the Kyoto Protocol</li> <li>ii. To facilitate the procurement by the Danis Government and or private Danish companies of certified emission reductions (CERs) from energy efficiency, renewable energy and waste management projects in India.</li> <li>iii. To facilitate the support for sustainable development in India through CDM project development based transfer of technology and capacity building</li> </ul>
<b>10.2</b>	<b>Denmark</b>  MoU on cooperation in the areas of Environment. 2009	<ul style="list-style-type: none"> <li>i. Water Pollution Control</li> <li>ii. Air Pollution Control</li> <li>iii. Waste Management</li> <li>iv. Biodiversity Conservation including; biosafety, survey of bio-resources, wetland management</li> <li>v. Harmful chemicals management</li> <li>vi. Clean technologies including clean water and air technology, waste handling technology, environmental monitoring technologies, and technologies to support the substitution of harmful chemicals in processes and products.</li> </ul>
<b>11.</b>	<b>Egypt</b>  MoU on Cooperation in the field of Environment Protection. 2012	<ul style="list-style-type: none"> <li>i. Waste Management including agricultural waste &amp; electronic waste;</li> <li>ii. Tackling the impact of climate change;</li> <li>iii. The use of biofuels;</li> <li>iv. Marine environment protection and integrated coastal zone management;</li> <li>v. Air quality &amp; water quality;</li> <li>vi. The protection of wetlands &amp; water conservation;</li> <li>vii. Biological diversity and nature conservation;</li> <li>viii. Environmental information systems;</li> </ul>

Sl. No.	Name of Country and Year of Signing of MoU	Area of Cooperation
		<ul style="list-style-type: none"> <li>ix. Wastewater management &amp; reuse of treated effluents;</li> <li>x. Afforestation in arid areas.</li> </ul>
12.	<b>Finland</b>  MoU on Environmental Cooperation. 2020	<ul style="list-style-type: none"> <li>i. Air and water pollution prevention and purification, remediation of contaminated soils;</li> <li>ii. Waste management including hazardous wastes, and waste-to-energy technologies;</li> <li>iii. Promotion of circular economy, low-carbon solutions, and sustainable management of natural resources including forests.;</li> <li>iv. Climate change ;</li> <li>v. Environmental and Forest monitoring and data management;</li> <li>vi. Conservation of Marine and Coastal Resources;</li> <li>vii. Integrated water management of Oceanic/Sea Islands; and</li> <li>viii. Any other areas jointly decided upon.</li> </ul>
13.	<b>France</b>  MoU on cooperation in the field of Environment. 2018	<ul style="list-style-type: none"> <li>i. climate change including technologies related to climate change;</li> <li>ii. air quality</li> <li>iii. integrated water resources management including water quality and river management</li> <li>iv. chemical and waste management and circular economy</li> <li>v. forests and biodiversity Protection</li> <li>vi. resource and energy efficiency</li> <li>vii. conservation of marine and coastal Resources</li> <li>viii. control of illegal trade in wildlife and products made therefrom;</li> <li>ix. wildlife forensics</li> </ul>
14.	<b>Israel</b>  Agreement on cooperation in the field of protection of Environment. 2003	<ul style="list-style-type: none"> <li>i. Afforestation in arid areas</li> <li>ii. Combating desertification</li> <li>iii. Pollution problems of mutual concern, their identification and an assessment of relevant control technologies</li> <li>iv. Water conservation</li> <li>v. Recycling of wastewater management and reuse of treated effluents</li> <li>vi. Wildlife preservation and maintenance of diversity of species</li> <li>vii. Low-cost and environmentally sound technologies for pollution control</li> </ul>

Sl. No.	Name of Country and Year of Signing of MoU	Area of Cooperation
		<ul style="list-style-type: none"> <li>viii. Collaboration between academic and research institutions</li> <li>ix. Environment awareness</li> <li>x. Environmental impact assessment</li> <li>xi. Environmental monitoring methods and surveillance including the use of environmental information systems</li> <li>xii. Environmental problems in their relation to other policy areas and the relationship between environment and development</li> <li>xiii. Exchange of information and data on research and development</li> <li>xiv. Promoting international cooperation in the field of the environment and cooperation on international environmental matters.</li> </ul>
15.	<p><b>Japan</b></p> <p>Memorandum of Cooperation between India and Japan in the field of Environmental Cooperation. 2018</p>	<ul style="list-style-type: none"> <li>i. Pollution Control (Air, Soil and Water);</li> <li>ii. Chemical and Waste Management including integrated Solid Waste Management (including Environmentally Sustainable Cities) and Hazardous Substance Management;</li> <li>iii. Coastal and marine ecosystems;</li> <li>iv. Environmental Technology;</li> <li>v. Climate change;</li> <li>vi. Conservation and sustainable use of biodiversity including Natural Parks and other nature conservation areas;</li> <li>vii. Wastewater management; and</li> <li>viii. Other areas related to the protection of the environment as mutually decided upon</li> </ul>
16.	<p><b>Mauritius</b></p> <p>MoU between India and Mauritius on Cooperation in field of Protection of the Environment. 2005</p>	<ul style="list-style-type: none"> <li>i. Prevention of coastal erosion, lagoon pollution, loss of biodiversity and damage to the reef system</li> <li>ii. Pollution problems of mutual concern, their identification and assessment of relevant control technologies</li> <li>iii. Exchange of information on legislation related to sustainable development and environmental protection, including law enforcement,</li> <li>iv. Treatment of wastewater from industries and sugar mills,</li> <li>v. Recycling of water,</li> <li>vi. Low-cost and environmentally sound technologies for pollution control</li> <li>vii. Collaboration between academic and research institutions</li> </ul>

Sl. No.	Name of Country and Year of Signing of MoU	Area of Cooperation
		<ul style="list-style-type: none"> <li>viii. Environmental awareness</li> <li>ix. Environmental impact assessment</li> <li>x. Environmental monitoring methods</li> <li>xi. Conservation, management and development of forest</li> <li>xii. Other areas of the environment</li> </ul>
17.	<p><b>Morocco</b></p> <p>Agreement on Environmental Cooperation 2014</p>	<ul style="list-style-type: none"> <li>i. Management and protection of ecologically sensitive areas; wetlands, nature reserves, mountainous eco-systems and coastal areas;</li> <li>ii. Management of municipal wastes; recycle, disposal and reduction of industrial and hazardous wastes;</li> <li>iii. Assessment of urban noise and air pollution;</li> <li>iv. Other areas of cooperation related to environmental protection and improvement are mutually agreed upon.</li> </ul>
18.	<p><b>Myanmar</b></p> <p>MoU for Cooperation on Combating Timber Trafficking and Conservation of Tigers and other Wildlife. 2020</p>	<p>Combating timber trafficking and promoting wildlife conservation</p>
19.	<p><b>Namibia</b></p> <p>MoU facilitate biodiversity conservation with specific focus on servation and restoration of cheetah2022</p>	<p>Facilitate biodiversity conservation with specific focus on conservation and restoration of cheetah in their former range areas from which they went extinct.</p>
20.	<p><b>Netherlands</b></p> <p>MoU between India and Netherlands on Environmental Cooperation. 1988</p>	<ul style="list-style-type: none"> <li>i. Environmental management,</li> <li>ii. Hygiene</li> <li>iii. Technology and</li> <li>iv. Conservation</li> </ul>
21.	<p><b>Russia</b></p> <p>MoU on Cooperation in the field of Protection of Environment and Natural Resources 1994</p>	<ul style="list-style-type: none"> <li>i. Global environmental problems including climate change, protection of the stratospheric ozone layer and conservation of biological diversity</li> <li>ii. Protection and management of water resources including rivers and lakes and development of water storage and purifying technologies</li> <li>iii. Protection of the atmosphere</li> <li>iv. Environment pollution control, including the exchange of information on cleaner production technologies</li> </ul>



Sl. No.	Name of Country and Year of Signing of MoU	Area of Cooperation
		<ul style="list-style-type: none"> <li>v. Management and rational use of natural resources and cultural heritage in the context of their inter-linkage with the environment</li> <li>vi. Environment education and promotion of public awareness on environmental issues;</li> <li>vii. Protection of flora and fauna, including the protection of tigers, Siberian cranes, devoting special attention to the prevention of trade in endangered species and setting up of special protection zones, and national parks and natural sanctuaries;</li> <li>viii. Legal and administrative measures related to the protection of the environment</li> <li>ix. Management of sea, coastal zones and marine resources;</li> <li>x. Protection of the environment in cities and other habitats</li> <li>xi. Emergency response to ecological disasters</li> <li>xii. Environment impact assessment procedures and experiences</li> <li>xiii. Any other area of cooperation as mutually agreed.</li> </ul>
22.	<p><b>South Africa</b></p> <p>MoU to facilitate biodiversity conservation with specific focus on conservation and restoration of cheetah. 2023</p>	<p>Facilitate biodiversity conservation with specific focus on conservation and restoration of cheetah in their former range areas from which they went extinct.</p>
23.	<p><b>Sweden</b></p> <p>MoU on Cooperation in the field of Environment. 2009</p>	<ul style="list-style-type: none"> <li>i. Global Environmental issues, including Multilateral Environmental Agreements (MEAs) for their effective implementation.</li> <li>ii. Exchange of knowledge, institutional cooperation including capacity building and commercial relations, regarding, inter alia: <ul style="list-style-type: none"> <li>• Environmental governance in the areas of environmental legislation, regulation, monitoring, enforcement and planning.</li> <li>• Sustainable urban development</li> <li>• Integrated solid waste management</li> <li>• Air and water quality management</li> <li>• Cooperation in new and renewable energy</li> <li>• Clean production and technology</li> <li>• Environmental Health</li> <li>• Other areas mutually agreed upon</li> </ul> </li> </ul>

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		iii. Climate change, including CDM, research and development
24.	<b>Switzerland</b> MoU on Cooperation in the field of Environment 2019	i. Capacity building on Climate Change and Sustainable Water Management; ii. Sustainable Forest Management; iii. Sustainable development of mountainous regions; iv. Environmentally sustainable and resilient urban development; v. Air, land and water pollution; vi. Clean and renewable energy; vii. Climate change risk management.
25.	<b>Turkmenistan</b> MoU for Cooperation in Environmental Protection and Forestry 1997	i. Industrial and non-industrial pollution ii. Protection of water quality from industrial and agricultural pollution iii. Conservation of biological diversity iv. Energy efficiency and new and renewable energy tech. v. National legislation and intl. Agreements to prevent the transboundary movement of hazardous wastes vi. Afforestation and creation of green belt vii. Environment management systems viii. Environment impact assessment ix. Research and training x. Forestry, etc.
26.1	<b>USA</b> MoU to enhance cooperation on Wildlife Conservation and Combating Wildlife Trafficking. 2016	i. Wildlife forensics and conservation genetics ii. Natural World Heritage Conservation iii. Natural Interpretation and Conservation Awareness
26.2	<b>USA</b> MoU to enhance cooperation on Energy Security, Clean Energy and Climate Change. 2016	i. Promoting sustainable growth ii. Clean energy technologies iii. Curb rise in Greenhouse gas emissions iv. Enhance resilience to the impact of Climate Change
27.	<b>UAE</b> MoU between Indian and UAE in Climate Action. 2022	i. Rapid deployment of renewable energy power generation, including through cooperation with the International Renewable Energy Agency and International Solar Alliance;

<b>Sl. No.</b>	<b>Name of Country and Year of Signing of MoU</b>	<b>Area of Cooperation</b>
		<ul style="list-style-type: none"> <li>ii. Agricultural innovation and food and water security, including through the Agriculture Innovation Mission for Climate;</li> <li>iii. Green Hydrogen production and utilization for decarbonization of hard-to-abate sectors;</li> <li>iv. Decarbonisation of heavy industry;</li> <li>v. Adaptation and resilience;</li> <li>vi. Nature-based solutions;</li> <li>vii. Sustainable finance;</li> <li>viii. Carbon markets;</li> <li>ix. Empowering women and youth in climate action;</li> <li>x. Science and research collaborations; and</li> <li>xi. Any other areas of cooperation as jointly decided by the Participants.</li> </ul>
28.	<p><b>Vietnam</b></p> <p>MoU between India and Vietnam on Cooperation in Environment and Forestry 1997</p>	<ul style="list-style-type: none"> <li>i. Conservation and management of national parks and wildlife sanctuaries for plants and animals</li> <li>ii. Management, protection and development of forests</li> <li>iii. Environmental protection and pollution control of rivers, lakes, water bodies, and waste management</li> <li>iv. Environment audit, law, regulation</li> <li>v. Trade and environmental issues</li> <li>vi. Sustainable utilization of water resources</li> <li>vii. Environmental awareness and education</li> <li>viii. Sharing of information in regard to the Framework Convention on Climate Change and related issues.</li> </ul>