

'Sharing is Caring'

If you have friends preparing for Civil Services, tell them that they can also receive Updates from PrepMate IAS by sending 'Name' and 'State' through WhatsApp on 75979-00000

1. Russian gas supply to Europe via Ukraine stopped: Why now — and which countries will be affected?**Introduction**

Russian gas supplies sent to Europe via Ukraine for more than 40 years came to a stop on January 1 after Kyiv refused to renegotiate a five-year-old transit deal amid war with Moscow.

Why has Russian gas via Ukraine to Europe stopped?

Despite the ongoing war, Ukraine's President Volodymyr Zelenskyy on December 19 said Kyiv might consider allowing the flow of gas if payments to Moscow were withheld until the fighting comes to a halt. While critics said that such a measure was not feasible, Russian President Vladimir Putin claimed that it was too late to renew the deal.

As a result, the deal, which was signed in 2020 and applicable for five years, was not extended.

Which European countries will be affected?

The biggest brunt will be borne by Eastern European countries — primarily Austria, Slovakia, and Moldova. Austria was receiving most of its gas from Russia via Ukraine, while Slovakia was getting gas amounting to approximately two-thirds of its annual demand. Moldova is expected to be the worst affected. The country has already declared a state of emergency over the impending gas shortage.

Has Russian gas supply to Europe entirely stopped?

The gas supply which was halted recently took place through the Soviet-era Urengoy-Pomary-Uzhgorod pipeline. It carried gas from Siberia via the town of Sudzha — currently, under the control of Ukrainian military forces — in Russia's Kursk region. The pipeline flows through Ukraine to Slovakia where the pipeline splits into branches going to the Czech Republic and Austria.

However, Moscow is still using the TurkStream pipeline on the bed of the Black Sea to export gas. The pipeline has two lines, one feeds the domestic market in Turkiye, while the other supplies central European customers including Hungary and Serbia.

Before the outbreak of the Russia-Ukraine war in February 2022, Moscow's share of European gas imports stood at 35%. But in the following months, pipelines such as the Yamal-Europe pipeline through Belarus and the Nord Stream pipeline under the Baltic Sea which sent gas to Germany were shut down. Currently, Russia's share of European gas imports is at 8%.

Relevance: GS Prelims; International Issues

Source: Indian Express

2. India's emissions inventory & efforts at mitigation

Introduction

As part of its global climate commitments, India recently submitted its latest report detailing its greenhouse gas emission (GHG) inventory and the efforts it has taken to curb emissions.

The report highlighted that the emissions intensity of its gross domestic product (GDP), which reflects the energy efficiency of its economic activities, reduced by 36% between 2005 and 2020. The report also detailed sources of emissions, and the status of targets spelt out on climate action.

What is the Biennial Update Report (BUR)?

Under the United Nations Framework Convention on Climate Change (UNFCCC), developing countries are obliged to submit a detailed report on their efforts towards climate action. This report, submitted as part of obligations under the Paris climate agreement, is called the Biennial Update Report or BUR.

Important submissions in BURs comprise an overview of the country's national circumstances vis-à-vis climate, socio-economic factors, and forestry, as well as a detailed inventory of the national greenhouse gas (GHG) emissions, their sources, and natural sinks. It also contains important updates on national action plans to mitigate emissions, methods to measure those

actions along with information on the financial, technological and capacity-building support the country has received to combat climate change.

What are the BUR-4's highlights and submissions on emissions inventory?



India's BUR-4 updates the third national communication. It was submitted to the UNFCCC on December 30. The report contains the national GHG inventory for the year 2020, and has submitted that India is on track to meet its climate commitments.

As part of the nationally determined contributions (NDCs) submitted under Paris agreement in 2015, and later updated in 2022, India has committed to reduce its GDP emission intensity by 45% compared to 2005 levels by 2030. BUR-4 has submitted that between 2005 and 2020, India's emissions intensity of GDP reduced by 36%.

GDP emission intensity refers to the reduction in the GHG emissions per unit of economic output. Switching from fossil fuel to renewables and fossil fuel to electricity, are some of the examples of reducing emissions intensity while expanding economic activity.

The biggest highlight of BUR-4 is that in 2020, India's total GHG emissions were 2,959 million tonnes of carbon dioxide (CO₂) equivalent. After counting the absorption by forestry sector and land resources, the country's net emissions were 2,437 million tonnes of CO₂ equivalent. The total national emissions (including land use, land-use change, and forestry) fell 7.93% compared to 2019, although it has increased by 98.34% since 1994, as per BUR-4.

The main contributors to the total GHG emission are CO₂ emissions generated from burning fossil fuels, methane emissions from livestock, and increasing aluminium and cement production, the report said.

A breakdown of the emissions based on the GHGs revealed that CO₂ accounted for 80.53% of emissions, followed by methane (13.32%), nitrous oxide (5.13%) and others 1.02%.

Sectoral contributions to emissions were highest from the energy sector at 75.66%. Agriculture contributed 13.72% emissions while Industrial Process and Product Use and Waste sector contributed 8.06% and 2.56%, respectively. In the energy sector, electricity production alone accounted for 39% of emissions.

What does BUR-4 say about the status of India's climate commitments?

As part of its global commitments, India updated its NDCs in August 2022. One of the key targets is to achieve 50% cumulative electric power installed capacity from non-fossil fuel resources by 2030. Reducing energy intensity of GDP was the other key target.

India also committed to create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030. "During 2005 to 2021, an additional carbon sink of 2.29 billion tonnes of CO₂ equivalent has been created," as per BUR-4.

Prior to the NDC update, in 2021, India also pledged to reach net zero or carbon neutral, by 2070.

Updating its progress on these fronts, India has said that as of October 2024, the share of non-fossil fuel-based power generation capacity in the country is 46.52%, as per the Central Electricity Authority.

The report also talked about emissions reduced using the 'Perform, Achieve and Trade' scheme, which was launched in 2011 to reduce energy consumption and enhance energy efficiency across the industrial sector. Through five cycles between 2012 and 2022, the scheme has led to cumulative energy savings of 3.35 Mtoe (million tons of oil equivalent) in the Cement industry, 6.14 Mtoe in the Iron and Steel industry, 2.13 Mtoe in the Aluminium industry, 0.33 Mtoe in the Textile industry, 0.63 Mtoe in the Paper and Pulp industry.

Across the thermal power sector, the PAT scheme has led to energy savings of 7.72 Mtoe and prevented emissions of 28.74 million tonnes of CO₂ equivalent till 2021-2022.

What has the report said about India's tech needs for climate conscious growth?

With India significantly affected by climate change, it needs advanced technology for low-carbon growth and to adapt to impacts of climate change. India has noted it is largely relying on domestic resources and that barriers such as slow technology transfer and intellectual property rights are impeding adopting of technologies. Across sectors, it highlighted the technologies the country requires.

In the energy sector, it pointed to ultra-efficient photovoltaic cells, advanced photovoltaic cells, floating wind turbines, and geothermal technology as some examples. In the industrial sector, it highlighted the carbon capture, utilisation and storage sector for hard to abate sectors such as cement, iron and steel. In the water sector, it said that solar and wind powered desalination technology can help arid areas.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

3. Farmers refuse to meet Supreme Court panel: Why, what the panel's mandate is

Introduction

As farmers continue to protest at the Punjab-Haryana border, recently, the Samyukta Kisan Morcha (Political) refused to meet a high-powered committee set up by the Supreme Court to look into their demands.

The committee has met members of Samyukta Kisan Morcha (Non-Political), of which Jagjit Singh Dallewal, the farmer leader on a fast unto death, is the convener. However, only its second-rung leadership attended the meeting.

What did the SKM say?

SKM leader Balbir Singh Rajewal said they discussed the issue for two days and decided that the panel's mandate had nothing to do with the farmers' demands. He claimed the high-powered committee had to work on providing a space to agitating farmers at Khanauri and Shambhu borders, but was unable to do anything.

"Hence, we decided not to be a part of their meeting on January 3, as we feel it will harm the interests of the agitation," Rajewal said. He also said they did not want to be seen participating in the meeting when Dallewal is on a fast unto death.

What is the panel's mandate?

While constituting the high-powered committee on September 2 last year, the Supreme Court had stated that the "committee is requested to meanwhile reach out to the agitating farmers at the Shambu border to impress upon them to immediately remove their tractors/trolleys, tents and other accessories from and near the National Highway so as to enable the civil and police administration of both the States to open the National Highway."

Judges Surya Kant and Ujjal Bhuyan also stated, "We hope and trust that one of the major demands of the agitating farmers regarding constitution of a neutral High-powered Committee having been accepted with the consent of both the States, they will immediately respond to the request of the High-powered Committee and will vacate the Shambu border or the other roads connecting the two States without any delay. This gesture will provide huge relief to the general public who are facing extreme hardships due to the blockade of the Highways. It will also facilitate the High-powered Committee and both the States to consider the farmers genuine and just demands in a dispassionate and objective manner."

Their mandate is also about examining the larger issues confronting the farming community. "We may hasten to add that there is a sizeable population of non-agriculture communities in the States of Punjab and Haryana – largely belong to the marginalised sections of the society and live below the poverty line. Most of them are the strength and backbone of agricultural activities in their villages/areas. We acknowledge their contribution towards the agricultural growth and are of the view that their legitimate aspirations, if not enforceable rights, also deserve empathy and due consideration by the Committee, while examining the larger issues which are confronting the farming community in the States of Punjab and Haryana," the SC noted.

Who are the members of the panel?

As per suggestions by Punjab and Haryana, Justice (retd.) Nawab Singh, Former judge of Punjab and Haryana High Court, was appointed chairperson of the panel. BS Sandhu, former Haryana Director General of Police who hails from Punjab; Devinder Sharma, a noted agriculture expert; Prof. Ranjit Singh Ghumman, Prof. of Eminence at GNDU, Amritsar (Punjab); and Dr Sukhpal Singh, agricultural economist, Punjab Agricultural University, Ludhiana are the other members.

The SC had said that the experts in the committee are “distinct in their respective fields and are above board. They are persons of high integrity with a dedicated commitment to the field of their specialisation, with special expertise in the field of agriculture and firsthand knowledge of the hardships being experienced by the rural people including farmers.”

What did the committee’s first report say?

In its first report submitted to the Supreme Court on November 22, the panel listed reasons behind agrarian distress in Punjab and Haryana, including stagnant yield, rising costs, debt, and an inadequate marketing system.

The committee suggested solutions, including examining the possibility of giving legal sanctity to minimum support price (MSP) and offering direct income support.

In its 11-page report, the panel said, “The farming community in the country in general and that of Punjab and Haryana in particular has been facing an ever-increasing crisis for over two decades. The stagnation in yield and production growth since the mid-1990s marked the beginning of the crisis.”

It added, “In 2022-23, the institutional debt on farmers in Punjab was Rs 73,673 crore, while in Haryana it was Rs 76,630 crore as per the National Bank for Agriculture and Rural Development (NABARD). There is also a significant burden of non-institutional debt on farmers, which is estimated to be 21.3 per cent of total outstanding debt on farmers in Punjab and 32 per cent in Haryana, according to the National Sample Survey Organisation (NSSO).”

The report said the farming community across the country was struggling with a suicide epidemic. “In India, over 4 lakh farmers and farm workers have committed suicide since 1995. In Punjab, a house-to-house survey conducted by three public sector universities recorded 16,606 suicides among farmers and farm workers in 15 years (2000 to 2015),” it said.

And what next?

The committee is now preparing its second report on boosting farm income, which also includes MSP. For this, the committee has met various stakeholders, including the directors of agriculture and horticulture departments of Punjab and Haryana. More meetings are lined up from January 7.

It has called institutions that work on agriculture policies. Vijay Pal Sharma, chairman of the Commission for Agricultural Cost and Prices, has been called. NITI Aayog member Ramesh Chand has also been invited. Credit Rating Information Services of India Limited (CRISIL), which had pegged the universal MSP to cost at Rs 21,000 crore last fiscal, has been invited.

Apart from this, the MD of Amul has also been called.

Relevance: GS Prelims & Mains Paper II; Governance

Source: Indian Express