



News Analysis (08 Oct, 2018)

 drishtiias.com/current-affairs-news-analysis-editorials/news-analysis/08-10-2018/print

Global Warming of 1.5°C -IPCC Report

Recently, a special report, which was commissioned to specifically explore the scientific feasibility of the 1.5°C goal set in the Paris Agreement, on global warming has been released by IPCC.

- It suggests that it has become extremely improbable to achieve the 1.5°C goal purely by reducing emission.
- As per the IPCC Report, at current rate of emissions, the world is set to breach the global warming limit of 1.5°C between 2030 and 2052. At present, the world is 1.2°C warmer compared to pre-industrial levels.
- The latest report was requested by various countries in 2015 to explore the possibilities of keeping the temperature rise within 1.5°C. This was the key demand made by a number of smaller and poorer countries, especially the small island states, which face the maximum risks from the impact of climate change.
- One of the key messages from this report is that we are already seeing the consequences of 1°C of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice, among other changes.

Background

- As of now, the world is striving to prevent the temperature rise beyond 2°C, in accordance with the stated objective of the Paris Agreement of 2015. To meet that target, the aim is to reduce greenhouse gases by only 20 percent, from 2010 levels, by the year 2030 and achieve a net-zero emission level by the year 2075.
- Net-zero emission is achieved when the total emissions is balanced by the amount of absorption of carbon dioxide through natural sinks like forests, or removal of carbon dioxide from the atmosphere through technological interventions.

- In its earlier reports, which have formed the basis of global action, the IPCC has said that climate change could have “irreversible” and “catastrophic” impacts if the global average temperatures were allowed to rise beyond 2°C.

Key Findings

- It projects that a 1.5°C world would witness greater sea level rise, increased precipitation and increased frequency of droughts and floods, more hotter days and heatwaves, more intense tropical cyclones, increased ocean acidification and salinity.
- While 1.5°C rise in global temperature will be precarious, a 2°C rise would be catastrophic. The report points out that the risk transition from 1.5°C to 2°C is very high and the impact of a 2°C rise will be more devastating than what IPCC’s earlier Report had indicated.
- Coastal nations and agricultural economies of Asia and Africa would be the worst affected. Decline in crop yields, unprecedented climate extremes and increased susceptibility could push poverty by up to several hundred million by 2050.
- When global warming is limited to 1.5°C instead of 2°C:
 - By 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C.
 - Climate related-risks in terms of food productivity, crop yields, water stress, health hazards and economic growth will be lower than at 2°C.
 - Limiting global warming to 1.5°C rather than 2°C is projected to prevent the thawing of a permafrost area in the range of 1.5 to 2.5 million sq km.
 - The land area at risk is projected to be approximately 50 percent lower at 1.5°C compared to 2°C.
 - Limiting global warming to 1.5°C reduces risk of rising ocean temperatures and salinity, thereby making marine ecosystems less vulnerable.
 - The likelihood of an Arctic Ocean free of sea ice in summer would be once per century with global warming of 1.5°C, compared with at least once per decade with 2°C.
 - Coral reefs would decline by 70-90 percent with global warming of 1.5°C, whereas virtually all (over 99 percent) would be lost with 2°C.
- Considering the scale and intensity of devastation that 1.5°C temperature rise can cause, the focus of the upcoming discussions must only be on this target instead of 2°C as only the rich would survive in a world that is warmer by 2°C and the poor would be drowned.
- Adaptation needs will also be lower for global warming of 1.5°C. It implies that limiting global warming to 1.5°C compared to 2°C is projected to lower the impacts on terrestrial, freshwater, and coastal ecosystems and retain more of their services to humans.

- To limit global warming to 1.5°C, net-zero emissions would have to be achieved by 2050 and emissions would need to be drastically cut by at least 45 percent by 2030. The corresponding rates of reduction to limit warming to 2°C would require a 20 percent reduction by 2030 and net-zero emissions by 2075.
- The science shows that current climate efforts would not limit global warming to 1.5°C, even if they are supplemented by an increase in the scale and ambition of emissions reduction after 2030.

Way Forward

- Technologies for Carbon Dioxide Removal (CDR) are still undeveloped and untested. Varying amounts between 100 to 1000 gigatons (billion tonnes) of carbon dioxide would need to be removed from the atmosphere. The world currently emits about 47 billion tonnes of carbon dioxide every year.
- There is a requirement of rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems to curb carbon emissions.
- Global net anthropogenic CO₂ emissions must decline by about 45 percent from 2010 levels by 2030 and net-zero emission should be achieved by 2050. This is difficult, and would require rapid and unprecedented economy-wide transformation in each country.
- Countries need to undertake massive de-carbonisation while the developed countries must also address consumption in their countries.
- It would involve upscaling of low-carbon technologies in all carbon-intensive sectors of the economy, energy efficiency and enhancement of carbon sinks for sequestering carbon globally.
- There must be renewed emphasis on adaptation, which requires transformation and incremental shifts with more finance directed towards adaptation.
- The focus must now be on how developed world can lead and support this transformation. Therefore, even though urgent action is a necessity, it should be equitable and the onus of addressing climate change cannot fall on the developing world.
- Science has delivered its verdict. It has also provided hope for action and results. It is up to the policymakers to carry out necessary action for survival at 1.5°C. For that to happen, IPCC's findings must guide the discussions on the Talanoa Dialogue and COP 24 at Katowice (Poland) in December, 2018.

About IPCC

- The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change.

- It was set up in 1988 by the World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP) to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.
 - IPCC assessments provide a scientific basis for governments at all levels to develop climate related policies, and they underlie negotiations at the UN Climate Conference – the United Nations Framework Convention on Climate Change (UNFCCC).
 - IPCC assessments are written by hundreds of leading scientists who volunteer their time and expertise as Coordinating Lead Authors and Lead Authors of the reports.
-

India-Russia Summit 2018

President of Russia federation, Vladimir Putin visited India for annual India-Russia Summit 2018.

- It is the 19th edition of the India-Russia annual bilateral summit.
- The Annual Summit meeting between the Prime Minister of India and the President of the Russian Federation is the highest institutionalized dialogue mechanism in the strategic partnership between India and Russia.

India-Russia Relations

- India-Russia diplomatic relations are more than 70-years-old.
- India had friendly relation with USSR since 1950's and relations were further strengthened by the **Indo-Soviet Friendship Treaty of 1971**.
- The substantive relationship was cemented when the two countries signed the Declaration on the India-Russia Strategic Partnership in October 2000.
- In December 2010, the Strategic Partnership was elevated to the level of a **Special and Privileged Strategic Partnership**.
- India-Russia ties in the post-Soviet era have acquired a qualitatively new character with enhanced levels of cooperation in almost all areas of the bilateral relationship including political, security, trade and economy, defense, science and technology, and culture.

Major Agreements Signed during the Summit

- During the course of the visit, India and Russia signed a number of agreements which further strengthened India's cooperation with Russia.

- India signed a \$5.43 billion deal with Russia for the supply of **S-400 Triumph missile defense system**.
 - S-400 can destroy hostile aircraft, stealth fighters, missiles, and drones at 400 km range.
 - S-400 radars can track hundreds of targets simultaneously.
- India and Russia have set the target of **increasing mutual investments up to \$15 billion**. Currently, the bilateral trade is less than \$10 Billion.
- Indian Space Research Organization (ISRO) and the Federal Space Agency of Russia 'ROSCOSMOS' signed a MoU for **cooperation on India's human space mission project Gaganyaan**.
- Memorandum of Cooperation was signed between the Indian and Russian Railways through this which Russian railways company will help India build modern railroads.
- Action Plan for Prioritization and Implementation of Cooperation Areas in the Nuclear Field was signed and by this agreement, Russia will **build 12 units of Nuclear Power Plants in the next 20 years**.
- Other areas of agreements include MoUs on small industries, fertilizers, and consultation between foreign ministries.

Way Forward

- The S-400 missile defense system deal was the major focus of the visit as India went ahead with the deal despite the US warning of sanctions on India under Countering America's Adversaries through Sanctions Act (CAATSA), a US law which imposes sanctions on countries having major trade relations with Russia, Iran, and North Korea. The signing of the deal is the assertion of India's "strategic autonomy" which implies that India's security and foreign policy interests will not be guided by a third country.
- Agreements signed during the summit cover a diverse area of cooperation like civil nuclear, railways and space along with the usual area of cooperation defense, signifying Russia's importance for India and the fact that with changing times India is looking to go beyond Defense cooperation to deepen its ties with Russia.

More About India-Russia Relations

Swachh Bharat Mission

The Swachh Bharat Mission (Grameen) entered its fifth and final year of implementation. It was launched on October 2, 2014.

- The Mission Coordinator for SBM is Secretary, Ministry of Drinking Water and Sanitation (MDWS) with two Sub-Missions, the Swachh Bharat Mission (Gramin) and the Swachh Bharat Mission (Urban).
- Together, they aim to achieve Swachh Bharat by 2019, as a tribute to Mahatma Gandhi on his 150th Birth Anniversary.
- In contrast to the construction or supply led programs of the past (Central Rural Sanitation Programme), SBM is a demand-centric model. It focuses on behaviour change to generate demand for sanitation services by the rural population which is then followed by supply.

Progress

- The rural sanitation coverage of India has increased significantly, from 39% in October 2014 to 95% in 2018.
- Nearly 8.7 crore household toilets have been constructed under the Mission. Not only quantity but focus is being maintained on the quality of the work on the ground as well.
- The National Annual Rural Sanitation Survey (NARSS) conducted under the World Bank support project found that 93.4% of the households in rural India who have access to a toilet use it, confirming that behaviour change is happening on the ground.

Communication Strategy

At ground level, the SBM foot soldiers, Swachhagrahis, participate in the triggering of communities for behaviour change and sustaining improved behaviours through Inter-Personal Communication which is being complemented with mass media at the national level as well.

Impact

- A recent WHO study reports that Swachh Bharat will lead to saving of 300,000 lives by 2019 and around 150,000 lives would be saved annually thereafter.
- In a report titled 'The Financial and Economic Impact of SBM in India (2017)' UNICEF estimated that a household in an Open defecation free(ODF) village in rural India saves Rs. 50,000 every year.
- Bill & Melinda Gates Foundation (BMGF) has released a study that shows significant improvements in diarrhoea prevalence and stunting among children in ODF villages, compared to nearby non-ODF villages.

RBI Keeps Policy Rates Unchanged

RBI has decided to keep the benchmark policy rate unchanged at 6.5% and has shifted its instances from neutral to calibrated tightening i.e. rates will either go up or stay steady in the future.

Monetary Policy Committee:

- The monetary policy committee is a **statutory and institutionalized framework** under the Reserve Bank of India Act, 1934, for maintaining price stability, while keeping in mind the objective of growth.
- **MPC consists of 6 members.** Out of 6, 3 members are from RBI and 3 are appointed by the government.
- **Governor of RBI is ex-officio Chairman of the committee.**
- The MPC determines the policy interest rate (repo rate) required to achieve the inflation target.
- An RBI-appointed committee led by the then deputy governor **Urjit Patel in 2014 recommended** the establishment of the monetary policy committee.

Instruments of Monetary Policy

Repo Rate

- The interest rate at which the Reserve Bank lends money to banks against the collateral of government and other approved securities under Liquidity Adjustment Facility (LAF).
- It is also the benchmark policy rate.

Reverse Repo Rate

The interest rate at which the Reserve Bank borrows money from banks against the collateral of eligible government securities under LAF

Liquidity Adjustment Facility (LAF)

- LAF is a tool by which Reserve Bank adjust money supply in the economy.
- It is a monetary policy tool which allows the bank to borrow money through repurchase agreements (repo and reverse repos).

Marginal Standing Facility (MSF)

- It is a special window for banks to borrow from RBI against approved government securities in an emergency situation like an acute cash shortage.
- MSF rate is higher than the Repo rate.

Bank Rate

- This is the long-term rate (Repo rate is for short term) at which central bank (RBI) lends money to other banks or financial institutions. Bank rate is not used by RBI for monetary management.
- This rate has been aligned to the MSF rate and, therefore, changes automatically when the MSF rate changes.

Cash Reserve Ratio (CRR)

- Banks are required to hold a certain proportion of their deposits in the form of cash. This minimum ratio (that is the part of the total deposits to be held as cash) is stipulated by the RBI and is known as the CRR.
- It means that banks do not have access to that much amount for any economic activity or commercial activity.
- Banks can't lend the money to corporates or individual borrowers, banks can't use that money for investment purposes. CRR remains in the current account and banks don't earn anything on that.

Statutory Liquidity Ratio (SLR)

- The share of Net Demand and Time Liabilities that a bank is required to maintain safe and liquid assets, such as government securities, cash, and gold.
- SLR is the amount of money that is invested in certain specified securities predominantly central government and state government securities.
- The banks earn some amount of interest on SLR investment as against CRR where it earns zero.

Open Market Operations (OMOs)

These include both, purchase and sale of government securities, for injection and absorption of liquidity, respectively by Reserve Bank of India.

Market Stabilisation Scheme (MSS):

- This instrument for monetary management was introduced in 2004.
- Surplus liquidity arising from large capital inflows is absorbed through the sale of short-dated government securities and treasury bills.
- The cash so collected is held in a separate government account with the Reserve Bank.

Important Facts for Prelims (08th October 2018)

JIMEX- 2018

- The third edition of Japan-India Maritime Exercise (JIMEX) commenced at Visakhapatnam, Andhra Pradesh.
- JIMEX-18 is aimed to enhance interoperability, improve understanding and imbibe the best practices of each other.
- The last edition of JIMEX was conducted in Dec 2013 off Chennai. The conduct of JIMEX-18 after five years is indicative of an upswing in the Indo-Japanese defence relations and the continued efforts of both Governments to work closely to enhance safety and security of the global commons in keeping with 'rule based order'.
- Japan is also a regular participant in the MALABAR exercise between Indian and US Navies.
- MALABAR-18 was held in Guam in the Pacific Ocean.

India Skills 2018

- The second edition of the nationwide competition organized by the Ministry of Skill Development and Entrepreneurship to identify, recognize, promote and reward the best talents in various skills concluded recently.
 - India Skills is the country's biggest skill competition.
 - Some of winners of the competition of various trades will be given more training, before they are sent to represent India at the 45th WorldSkills Competition at Kazan, Russia in 2019.
 - A number of Divyangs also participated in the competition and the winners will take part at the World level in Abilympics in China. Abilympics (Olympics of Abilities) are vocational skills competitions specifically designed for disabled individuals to enable them to expose their unique talents.
-