

Mains Master

Is de-globalisation a reality?

Context:

The narrative of de-globalization has become increasingly prominent in recent years, fueled by several factors. These include:

- **Trade tensions:** Rising trade tensions between major economies, particularly between the US and China, have led to concerns about the future of free trade and global cooperation.
- **Supply chain disruptions:** The COVID-19 pandemic exposed vulnerabilities in global supply chains, highlighting the risks associated with dependence on single sources for critical materials and goods.
- **Technological advancements:** Advancements in automation and manufacturing technologies could potentially enable some countries to become more self-sufficient, reducing their reliance on international trade.
- **Geopolitical considerations:** Some countries are increasingly prioritizing national security and strategic alliances over purely economic considerations when making trade decisions.

Background:

While the world has witnessed a period of **hyper-globalization** in recent decades, characterized by rapidly increasing **levels of cross-border trade and investment**, concerns have emerged about the potential downsides of this **interconnectedness**. These concerns include:

- **Job losses:** Some argue that globalization has led to job losses in developed economies as companies move production to countries with lower labor costs.
- **Income inequality:** Increased competition from low-wage countries has been blamed for widening income inequality within developed nations.
- **Environmental concerns:** The transportation of goods across long distances raises concerns about environmental impacts, such as increased carbon emissions.
- **Political instability:** Some argue that over-reliance on global trade can make countries vulnerable to economic shocks and political instability in other parts of the world.

What is De-globalization?

De-globalization refers to a **potential shift away** from the high levels of interconnectedness and interdependence that have characterized the global economy in recent decades. It could involve:

- **Increased trade barriers:** Countries could implement tariffs, quotas, or other measures to restrict imports and protect domestic industries.
- **Reduced foreign direct investment:** Governments could discourage or restrict foreign companies from investing in their economies.
- **Formation of regional trade blocs:** Countries with shared interests could form regional trade agreements that exclude other countries.
- **Shorter and more localized supply chains:** Companies, in an effort to increase resilience and reduce risks, may move production closer to home or source materials from a wider range of countries.

Is De-globalization Underway?

While the narrative of de-globalization is prevalent, there is limited evidence to suggest that it is a widespread phenomenon. Here's a breakdown:

- **Limited evidence for full-scale de-globalization:** While some sectors have seen a decline in trade due to policy changes, research suggests that underlying economic interdependence persists even when trade patterns shift.
- **Continued growth in certain areas:** Despite concerns, global trade in services, financial flows, and student mobility have continued to grow in recent years, indicating ongoing international interconnectedness.
- **Focus on reconfiguration rather than complete decoupling:** Instead of complete separation, many countries seem to be pursuing **"friend-shoring"** strategies, aiming to strengthen economic ties with trusted partners while reducing dependence on specific countries.

Concerns about De-globalization:

Despite the limited evidence for a full-blown de-globalisation scenario, potential negative consequences exist if such a trend were to fully materialize:

- **Reduced global GDP:** De-globalization could lead to a decline in global economic output and growth, particularly in developing economies that rely heavily on international trade.
- **Lower labor productivity:** Reduced access to global markets and expertise could hinder innovation and efficiency, leading to lower labor productivity.
- **Misallocation of resources:** De-globalization could lead to inefficient allocation of resources, as countries become more self-sufficient and potentially duplicate production efforts.
- **Hindered knowledge sharing:** Reduced global interaction could hinder the sharing of knowledge and technology, potentially slowing down innovation and development.

Causes of De-globalization Trends:

Several factors might be contributing to the observed shifts away from hyper-globalization:

- **Geopolitical tensions:** Rising tensions between major powers, like the US and China, have led to concerns about the reliability of global supply chains and the potential for trade disruptions.
 - **Economic anxieties:** Concerns about job losses, unfair trade practices, and income inequality in some countries have fueled support for protectionist policies.
 - **Technological advancements:** Advancements in automation and 3D printing could enable some countries to become more self-sufficient in certain sectors, potentially reducing their reliance on imports.
- Shifting From Hyper-Globalization to De-globalization:

While the era of hyper-globalization in terms of trade in goods might be over, evidence suggests that globalization is not dead:

- **Growth in services, technology, and knowledge sharing:**

While trade in goods might see some changes, areas like services, financial transactions, and international

Impact on India:

- **India can navigate this changing landscape by:**
 - Balancing security concerns with economic opportunities.
 - Leveraging its strengths in services and fostering domestic manufacturing through initiatives like PLI and Make in India.
 - Participating in regional trade agreements and improving

infrastructure connectivity.

Conclusion:

While some trends suggest a shift from hyper-globalization, complete de-globalization seems unlikely. India can adapt and thrive in this evolving environment by adopting strategic policies.

A new success

Context:

- Moon landings are regaining momentum after a period of relative inactivity.
- More countries (like India) and private companies (like Intuitive Machines) are actively participating in lunar exploration.
- This participation brings a wider range of goals and definitions of success compared to the traditional focus on human landings.

Background:

- **Established space agencies:**
 - **ISRO (India):** Seeking to validate its technological advancements and solidify its position as a leading space research and flight provider.
 - **Roscosmos (Russia):** Aiming to regain its past reputation after facing challenges in recent years.
- **Private companies:** Emerging as significant players in the space sector, often receiving support from space agencies in their early stages.

Key Issues:

- **Technical challenges:**
 - **Navigation:** IM's recent landing encountered navigation instrument malfunctions, highlighting the vulnerability to technical glitches and requiring quick adaptation.
 - **Data transmission:** Weak data links can create delays in confirming landing success and receiving crucial mission data.
- **Balance between competition and collaboration:**
 - Private companies offer innovative approaches and increased agility, but a healthy public-private space ecosystem is vital for sustained progress.
 - Finding the right balance between competition and collaboration among various players is crucial for optimal utilization of resources and expertise.

Recent Initiatives:

- **NASA's Commercial Lunar Payload Services (CLPS) program:**
 - **Purpose:** Aims to leverage private expertise while contributing to scientific goals.
 - **Function:** Funds the inclusion of scientific instruments onboard commercial lunar missions, enabling broader scientific exploration and data gathering.
 - **Details:**
 - Provides funding for instruments, not the entire mission.
 - NASA involvement includes suggesting landing sites and contributing some equipment.
 - As of 2020, NASA had contracted 14 companies and allocated \$2.6 billion for the program.
- **India's approval of 100% foreign direct investment:**
 - **Objective:** Aims to foster a more dynamic and competitive space industry within India.
 - **Expected outcome:**
 - Potential for increased investment and innovation in the Indian space sector.
 - Creation of a more competitive landscape, potentially leading to improved efficiency and cost reduction.
 - Increased collaboration between Indian and foreign entities, fostering knowledge exchange and expertise sharing.

Way Forward:

- **Extensive collaboration:** Both globally and within nations, extensive collaboration is crucial for the advancement of space exploration. This includes:
 - **Coordination between government agencies:** Sharing resources, expertise, and knowledge to avoid duplication of efforts and accelerate progress.
 - **Public-private partnerships:** Leveraging the strengths of both public and private entities to combine government resources with private sector agility and innovation.
 - **Nurturing space ecosystems:** Encouraging the growth of private space companies by:
 - Fostering an environment conducive to innovation and investment.
 - Implementing policies that promote healthy competition and collaboration.
 - Providing support through initiatives like funding programs and infrastructure development.

By embracing collaboration, fostering a diverse space ecosystem, and navigating the challenges involved, nations and private companies can work together to achieve shared goals in the new era of moon exploration.

At the high table

Context:

- The **Raisina Dialogue** is India's annual flagship conference on foreign policy and geo-strategy.
- It aims to be a premier platform for global leaders to discuss critical issues and challenges facing the world.

Background:

- The 9th edition of the Dialogue aimed to engage global leaders on critical issues and challenges facing the world.
- The Dialogue aligns with India's aspirations for a more prominent role in international decision-making and shaping the global order.

What is the Raisina Dialogue?

- Launched by the Ministry of External Affairs (MEA) in 2016.
- Aims to be a "**Global Public Square**" for open and inclusive discussions on foreign policy issues.
- Brings together world leaders, diplomats, policymakers, scholars, and business leaders.
- Focuses on a wide range of issues, including global governance, security, economics, and technological advancements.

Key Outcomes of the Dialogue:

- **Discussions on global governance:**
 - The Dialogue aimed to spark discussions on reforming the **global governance architecture**, including addressing inequalities at the top of the **UN Security Council** and promoting its wider representation.
 - India emphasized its desire for a more prominent role in global decision-making, echoing External Affairs Minister S. Jaishankar's characterization of India as a "**bridging power**."
- **India's strategic outreach:**
 - The Dialogue served as a platform for India to showcase its success in hosting the G-20 in 2023 and foster strategic partnerships.
 - The large ministerial contingent from Central and Eastern Europe, including representatives from the **Baltic-Nordic forum**, reflected India's efforts to strengthen trade and investment ties with this region.

Areas Where the Dialogue Lacked:

- **Limited diversity in participation:**
 - Absence of senior ministerial presence from major powers like the P-5 (US, UK, France, China, Russia), G-7, and BRICS-10 (Brazil, Russia, India, China, South Africa) nations.
 - Minimal representation from vital regions like South East Asia, Latin America, and South Asia (excluding Nepal and Bhutan). This limited perspective on global challenges.
 - Exclusion of Russia and China from discussions related to the Ukraine war and Chinese assertiveness in the Indo-Pacific region, hindering comprehensive discussions on these critical issues.
 - No representation from the Israeli and Palestinian sides regarding the ongoing conflict, hindering a balanced understanding of the situation.
- **Narrow perspective in discussions:**
 - Panels on democracy avoided discussions on internal Indian concerns regarding declining freedoms, limiting the Dialogue's capacity to address global democratic challenges comprehensively.
 - Limited participation from non-governmental organizations (NGOs) in discussions, resulting in a narrower view of global challenges and solutions. This lack of diverse perspectives potentially hinders the effectiveness of the Dialogue in formulating well-rounded solutions.

Overall Outlook:

While the Raisina Dialogue successfully facilitated discussions on crucial global issues and showcased India's aspirations for a bigger role, the lack of diverse representation from key regions and specific omissions in discussions hindered its potential to be a truly representative "Global Public Square." By addressing these limitations and fostering more inclusive participation, the Dialogue can evolve into a more robust platform for addressing global challenges and fostering international cooperation.



1. Decreasing Share of Food:

- **Explanation:** The share of food in the average monthly per capita consumption expenditure (MPCE) has been steadily declining in both rural and urban areas since 1999-2000.
 - **Rural:** From 59.4% in 1999-2000 to 46.4% in 2022-23 (a drop of 13%).
 - **Urban:** From 48.1% in 1999-2000 to 39.2% in 2022-23 (a drop of 8.9%).
- **Significance:** This aligns with the Engel Curve hypothesis, which suggests that as households experience rising incomes, they devote a smaller proportion of their income to essential items like food, allocating more towards other goods and services.

2. Shift Within Food Expenditure:

- **Cereals and pulses:**
 - **Observations:** Their share in total food expenditure has decreased in both rural and urban areas. This suggests a potential decrease in the consumption of staple food sources like rice, wheat, and lentils.
 - **Possible reasons:** This could be due to various factors, including:
 - **Changes in dietary preferences:** Consumers may be opting for more diverse diets with a wider variety of food groups.
 - **Urbanization and lifestyle changes:** Busier lifestyles may lead to increased consumption of convenient processed foods or eating out, reducing reliance on traditional staples.
 - **Economic factors:** Rising income levels might allow consumers to afford a wider variety of food options.
- **Milk:**
 - **Observations:** Spending on milk has increased significantly, surpassing cereals and pulses combined in 2022-23. This indicates a growing emphasis on the consumption of dairy products, potentially driven by:
 - **Nutritional awareness:** Consumers might be recognizing the importance of milk for protein, calcium, and other essential nutrients.
 - **Improved access and affordability:** Increased availability and affordability of milk products could also contribute to this trend.
- **Fruits and vegetables:**
 - **Observations:** Their share has also increased, with the average Indian now spending more on them than on foodgrains (cereals and pulses) for the first time. This signifies a growing focus on nutritional diversity and inclusion of essential vitamins and minerals in the diet.
 - **Possible drivers:** This increase could be attributed to:
 - **Health concerns:** Rising awareness of the importance of fruits and vegetables for preventing chronic diseases might be driving consumption.
 - **Urbanization and changing lifestyles:** Increased disposable income and busy schedules might lead to a preference for readily available fruits and vegetables.
 - **Improved infrastructure:** Expanding cold storage facilities and improved transportation networks might be making fruits and vegetables more accessible throughout the year.
- **Animal proteins:**
 - **Observations:** Spending on eggs, fish, and meat is also rising, indicating a preference for animal proteins over plant proteins. This shift could be fueled by:
 - **Changing preferences:** Consumers might be seeking higher quality protein sources for various reasons, including taste, perceived health benefits, and social status.
 - **Increased income levels:** Rising income allows individuals to afford more expensive protein sources like meat and fish.
 - **Improved marketing and availability:** Aggressive marketing campaigns and wider availability of animal protein products might be influencing consumer choices.
- **Processed foods:**
 - **Observations:** Spending on processed foods, beverages, and purchased cooked meals has also increased. This trend suggests a growing preference for convenience and ready-to-eat options, potentially due to:
 - **Busy lifestyles:** Time constraints and hectic schedules might encourage reliance on convenient processed foods.
 - **Changing family structures:** Smaller household sizes and dual-income families might lead to less time spent on cooking at home.
 - **Marketing and innovation:** The food industry's continuous development and marketing of new and appealing processed food options can influence consumer choices.

3. Policy Implications:

- **Focus shift towards specific sectors:** The HCES data highlights the need to shift policy focus towards promoting production and market access for fruits, vegetables, livestock, and fisheries due to their rising demand and potential for growth.
- **Aligning with growth trends:** This shift aligns with the observed higher growth rate of these sectors compared to cereals and other non-horticultural crops, indicating their potential economic and nutritional significance.
- **Re-evaluating agricultural support systems:** While minimum support prices (MSPs) benefit some crops, the HCES data suggests market-driven demand is driving the growth of fruits, vegetables, livestock, and fisheries. This observation raises questions about the effectiveness and limitations of relying solely on MSPs for all agricultural sectors, and highlights the need to consider alternative or complementary policies to support other sectors with high growth potential.

Prelims Booster

Ahead of Gaganyaan, ISRO's CE-20 engine already has a notable legacy

- The CE-20 cryogenic engine, developed by ISRO, has been successfully human-rated and is utilized to power the LVM-3 launch vehicle in its third stage. This engine is a crucial component for the upcoming Gaganyaan mission, which aims to launch an Indian astronaut into space aboard an Indian rocket. 🚀
- Rockets equipped with the CE-20 engine have already been instrumental in launching significant missions such as Chandrayaan-2 and -3, as well as the OneWeb mission in 2022. This demonstrates the engine's proven track record in supporting various space endeavors. 🌌
- The CE-20 engine utilizes hydrogen as fuel and boasts a higher maximum thrust compared to its predecessor, the CE-7.5 engine. This advancement in engine technology enhances the performance and capabilities of the launch vehicle. 💡
- Human-rating of rockets involves rigorous testing of specific components to ensure that the probability of failures occurring is minimized. This process is essential to guarantee the safety and reliability of the rocket for crewed missions. 🛡️
- ISRO has conducted extensive hot-fire tests of the CE-20 engines, totaling 8,810 seconds, to validate their performance and adherence to the minimum human rating qualification standard requirement of 6,350 seconds. These tests are crucial in ensuring the engine's reliability under mission conditions. 🔥
- The development and success of the CE-20 engine stand as a testament to ISRO's achievements, particularly in the wake of the U.S.'s sanctions against India in the 1980s. This showcases India's prowess in developing indigenous space technologies. 🏆
- The LVM-3 launch vehicle, powered by the CE-20 engine, has the capability to lift payloads of up to eight tonnes to low-earth orbit, making it the preferred choice for the Gaganyaan mission. This highlights the significance of the CE-20 engine in India's ambitious space exploration endeavors. 🌠

Blanets: worlds around black holes

- Scientists in Japan have theorized the existence of "blanets," planets that orbit black holes instead of stars, based on observations of massive dust and gas clouds near supermassive black holes. 🌌
- Blanets are expected to be significantly larger than Earth, approximately 3,000 times its size, and would need to orbit the black hole at a distance of about 100 trillion km to avoid being torn apart. 🌠
- The formation of blanets is hypothesized to occur within the colossal disc of gas and dust surrounding supermassive black holes, similar to the process of planet formation around young stars. 🌌
- Black holes are known to have a significant impact on their surroundings, with their gravitational pull influencing the swirling dust and gas, potentially leading to the formation of blanets within the vicinity. 🌠
- The concept of blanets presents a fascinating exploration of planetary formation in extreme environments, offering insights into the potential diversity of planetary systems within the universe. 🌠