



Globalization 4.0

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Why in News

- Globalization 4.0 was the theme for **World Economic Forum Annual Meeting 2019** held in Davos, Switzerland in January 2019.
- Under the rubric of **Globalization 4.0**, a series of "**Global Dialogues**" in Davos focused on the interrelated areas namely geopolitics, future of global economy, global dialogue on industry systems etc.
- Globalization is a phenomenon **driven by technology** and the movement of ideas, people, and goods.
- Globalization 4.0 is latest stage of globalization which involves cutting-edge new technologies like artificial intelligence that powers forward with the explosion of information technology.
- These technologies shrink distances, open up borders and minds and bring people all across the globe closer together.

Timeline: Earlier Waves of Globalization

- **Globalization 1.0**
 - It was pre-World War I globalization, which was launched by a historic drop in trade costs.
 - This globalization came with almost no government support.
 - There was no global governance.
- **Globalization 2.0**
 - It is the post-World War II phase where trade in goods was combined with complimentary domestic policies.
 - The market was in charge of efficiency while the government was in charge of justice.
 - It saw the establishment of institute-based, rule-based international governance, specifically the UN, IMF, World Bank, GATT/WTO, International Labor Organization etc.

- **Globalization 3.0**

- It created a new world of manufacturing in which high-tech was combined with low wages.
- This was achieved through establishment of global supply chains as factories crossed international borders.
- It was variously called New Globalization, Hyper globalization, Global value chain evolution.

Characteristics of 4.0

- **Major turbulence for Service Sector:** While Globalization 1.0, 2.0 and 3.0 were mainly a concern of people who made/manufactured products for a living (since globalization focused on things that we made), Globalization 4.0 is going to hit people in the service sector.
- **Closely integrated with Industry 4.0:** Ever-faster data connection speeds and new artificial intelligence tools like machine translation, big data are opening up services jobs in rich countries like architecture, accounting, and web design to competition from practitioners in emerging economies.
- **Newer modes of Migration:** Due to faster data connection as well as nature of work which may involve no physical presence there may be a global tele-migration in which the skilled migrants never have to leave home.

Industry 4.0

- Building on the foundation given by the Third Industrial Revolution, Fourth Industrial Revolution (Industry 4.0) is moving from an electronic based industry to a process which is the combination of human beings and electronics.
- It includes cyber-physical systems, the Internet of things, big data analytics, cloud computing, cognitive computing, artificial intelligence, 3-D printing, and autonomous vehicles etc.

Challenges of Globalization 4.0

- **Political crisis and Global level conflict:** Globalization 4.0 could, like preceding waves of globalization, have mixed results e.g. even though countries are globally connected political crisis and global level conflict have also increased.
- **Economic exclusion:** Economic opportunities will be uncertain, many may not have the skills needed for the jobs of the future. If countries and communities are not fully prepared for Globalization 4.0, problems may exacerbate.
- **Income Inequality:** Negative effects of globalization have a disproportionate impact on already marginalized populations. Globalization 4.0 may increase income inequality even if it can create more wealth.

- **Human Resource:** Countries like India, if do not step up to meet the skill requirements of globalisation 4.0, may already be staring at demographic disaster, given its huge population and low employment generation.
- **Unintended consequences:** Globalization 4.0 in conjunction with Industry 4.0 will produce many unintended consequences which may not be foreseeable for now and for which world is vastly unprepared the ethical, legal, environmental concerns are yet to be seen for which no framework has been laid out.
- **Infrastructural challenges:** Apart from skilling, India also needs to set up required infrastructure and technology to harness the advantages of globalization 4.0.
- **Challenges for Developing countries:**
 - The European continent, North America and some Asian countries have been able to take advantage of the industrial revolution and globalization, while many African, Latin American and some Asian countries failed to benefit as much.
 - Globalization 4.0 will create additional challenges many African and Asian nations which were already excluded from the benefits of earlier waves of globalization.

Way Forward

- **Invest in strengthening local and regional economies:** We should proactively build resilient local and regional systems that can participate in the next wave of globalization, making sure regions have the right mix of education, employment and infrastructure to create and sustain jobs locally.
- **Prioritizing sustainability and Inclusiveness:** The need of the hour is to design a blueprint from the ground up that can capitalize on new opportunities while prioritizing sustainability and inclusiveness more than ever before.
- **Focus on the most vulnerable populations:** Global and local institutions need to advance both universal and targeted strategies to improve outcomes for everyone ensuring vulnerable population is not left out.
- **Stop climate change:** The challenges of Globalization 4.0 will be compounded if resources that could be put towards strengthening local economies and education are diverted to mitigate climate change. Thus climate change needs to be dealt at global level.
- **Promote Innovation in educational institution and education curriculum:**
 - By 2022, at least 54% of employees globally will require re- and up-skilling.
 - Not only do we need to support people in getting the training they need for jobs in the next five years, but we need to prepare young students with the skills to adapt to the types of jobs we will need in the next 20 years.
 - New Zealand is implementing a national technology curriculum to teach students to be digital creators, as well as consumers.
- **Engagement and imagination:** The task of dealing with challenges of Globalization 4.0 requires two things of the international community: wider engagement,

participation and heightened imagination.