



## "Trade in the Age of AI: Expert Addresses Concerns by Sharing Insight into Skill Enhancement amid Policy Dynamics"

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### How Must India Adapt to AI Changes and Master Global Trade - Dr. HV Singh's Deep Insights

**Intro:** This week on **Socio-Economic Voices** we deep dive into the world of digital transformation, global trade, where the impact of artificial intelligence has become a big worry, amid job losses - **Artificial intelligence will affect 40% jobs, says International Monetary Fund (IMF)**. Thus, to decode a better future for India, senior journalist **Mahima Sharma** speaks to **former DDG of World Trade Organization (WTO) - Dr. Harsha Vardhana Singh**, who is now the **Chairman of IKDHVAJ Advisers LLP**. From navigating the intricacies of digital marketing strategies for hotels to understanding the evolving landscape of AI in the job market - yes, he covers it all. Additionally, his insights into the skills needed for adapting to global trade complexities offer a roadmap, not just for trade professionals but also for university-level students. Join **Indiastat** in this insightful conversation that explores the nuances of the modern business landscape.

**MS:** **Artificial intelligence will affect 40% jobs, said the International Monetary Fund on Jan 16, 2024. Indians who migrated, also to a significant number, are at risk. What do you foresee and is there a way that the damage can be controlled in a better way, considering that neither AI training nor replacement of their jobs can happen overnight.**

**Dr HV Singh:** As mentioned in the question above on AI, the structural changes due to AI will lead to increase in efficiency, new job opportunities and also job losses. I foresee an overall increase in economic efficiency and opportunities, though accompanied by job losses as well. As in the past, whenever technological changes have been infused in production processes, the educated and skilled part of the labor force has benefitted while the unskilled have lost out in terms of lower wages or fewer relevant jobs. **Therefore, it is important to provide training and information especially to unskilled workers.** The AI tools themselves can be used to do so, in combination with smartphones and apps created specifically for the purpose. While this training or replacement of jobs will not happen overnight, the impact of AI has just begun and anticipating the impact together with new tools and relevant knowledge, the gap could be filled in the not too distant future.

Yet another area to look at is the fact that for several tasks, major markets have started finding it difficult to get the relevant people to perform those tasks. This gap is worth investigating and steps be taken to connect workers to the information. According to OECD, labor shortages for particular jobs began to emerge in many developed economies even before COVID-19. According to Manpower Group's 2020 report on "Closing the Skills Gap: What Workers Want", the top ten areas in short supply cover: skilled trades (electricians, welders, mechanics); sales and marketing (including graphic designers); technicians (quality controllers, technical staff); engineering (chemical, civil, electrical,

mechanical); driving and logistics; IT (cybersecurity experts, network administrators, technical support); accounting and finance (certified accountants, auditors, financial analysts); manufacturing (production and machine operators); construction (laborers); and healthcare (doctors, nurses and other non-nursing health professionals). The “Future of Jobs Report 2023” states that, “Forty-five percent of businesses see funding for skills training as an effective intervention available to governments seeking to connect talent to employment.”

**MS: How should India recalibrate its trade strategies to diversify its economic partnerships and minimize vulnerability to geopolitical uncertainties? Also, what new regions must India tap and offer strategic economic collaborations with it?**

**Dr HV Singh:** Usually, the major trade related concerns on account of geopolitical dynamics arise due to the tensions and uncertainties on account of US-China relations, the Russia-Ukraine war, and the disruptive experience during the Covid-19 period. The situation is complicated because of the existing trade linkages among major economies, and the fact that new trade regulatory requirements are being emphasized by a few countries that are seen as a major concern by other countries. The trade related concerns must comprehensively consider both the geopolitical issues and the other major areas of trade concerns. These issues will need two types of broad solutions: one, through partnerships with other countries, and another where the main effort will be a domestic one. These are broadly as follows.

**(a) Partnerships with other nations will be a major part of the response for most geopolitical issues and several emerging concerns, including resilience of global value chains, emerging trade/ technology related partnerships including improving access to critical technologies and critical minerals, (e.g., IPEF, EU-India Trade and Technology Council, US-India Initiative of Critical and Emerging Technologies), reducing large dependence on a single (or limited) source of major inputs, cybersecurity issues, addressing future global emergencies, and new unilateral trade related measures (e.g., CBAM).**

India is moving ahead with several economic partnerships to address these concerns, particularly after its G20 Presidency. These initiatives cover the relevant countries. However, with respect to additional access to global markets, the focus should be not only on new markets but also on new market shares in existing major markets of India. This requires discussions with industry/exporters as well as trade analysis of potential opportunities in major markets. Thus, new markets may be opened for particular products such as auto-components in, for example, countries in Africa and Latin America, and additional export potential for several items would become evident in existing important trade partners such as South Korea, EU and the US.

**(b) The other major issues need a primary focus on domestic efforts. They include addressing national security related concerns, changes in patterns of international trade due to inward policy orientation by major economies, new emerging standards-related paradigm (e.g., due diligence legislation), digital regulatory requirements impacting international trade (e.g., EU act and the AI act), addressing the changing trade paradigm due to use of digital and other new technologies, and preparing domestic systems to meet new/ emerging requirements linked to “trade plus” issues, e.g., environment, labor, meeting sustainable development standards, corruption, human rights.**

Many of these areas require more focused and concerted efforts by India than are being made at present. In addressing these concerns, it is particularly important to identify solutions which address both the categories of issues discussed above.

**MS: Given the urgency of climate action, how can India use trade policies as a tool to incentivize green practices and technologies, both domestically and in its international trade relations?**

**Dr HV Singh:** For addressing climate change, trade policies must be considered as part of a larger set of industrial policy initiatives. The objectives would be two-fold: to reduce the climate change impact within the country, and to meet the environmental criteria emphasized by major global markets so that sustained global market access is possible for Indian exports.

Major global markets are emphasizing green products and technologies, as well as environment-friendly production, low emission in the use of the product, and environment-friendly disposal/recycling of the product. Another important effort is needed to have access to the relevant inputs for renewable energy products, which include importantly critical/rare minerals. That needs partnerships with other nations to acquire them. These efforts would need to be supplemented with developing domestic sources and support policies to efficiently mine and process them.

These initiatives require access to relevant knowledge, skills, technologies, products, institutions and infrastructure. Much of this must come from abroad, through trade, investment, training, and partnerships. A relevant policy framework to enable these interactions, exchanges, and partnerships needs to be established, together with a complementary effort to spread the techniques domestically.

**In terms of trade, important initiatives that are now evolving include monitoring/limiting carbon emissions for individual parts of a Global Value Chain for an exported product, life-cycle assessment for measuring and curbing the environmental impact of a product/technology, implementation of circular economy in specific priority areas, and taking steps to promote green products/use of green technologies so that India's exports meet the evolving global requirements.** It is significant that solutions to some of these aspects have been developed in India. They need to be cataloged and encouraged through support policies similar to those implemented for start-ups.

The usual policy measures include product and technology-related standards, financial incentives, training, encouragement of specific FDI initiatives, and promotion of private sustainable standards for both goods and services (India has a national platform for these standards). Their implementation could begin with the traded sector and then be spread within the domestic market. Thus, these policy initiatives would focus on both domestic sales as well as traded products, and include bilateral or joint efforts with other nations to promote environment-friendly trade.

**MS: As carbon border adjustments gain traction, how can India navigate these mechanisms to ensure a fair and sustainable transition while maintaining competitiveness in global markets?**

**Dr HV Singh:** Carbon Border Adjustment (CBA) mechanisms need to be addressed at multiple levels. One, these are unilateral trade measures which need to be raised and protested at the WTO and also bilaterally with the country implementing the measure. Second, estimates of indirect taxation in India suggest that India imposes a considerably high tax on energy products like coal, petrol and diesel. Estimates of these taxes per unit of the products subject to CBAM should be calculated to have a meaningful international discussion on the issue, including with the country imposing CBAM.

The main focus should be that India already domestically imposes the indirect taxes to create the relevant price wedge that addresses the carbon emission. **This should be combined with certain recent tools developed to assess the carbon emissions by each part of the value chain.** One such tool, developed by experts located in India, has been used by the German industries to estimate carbon emission by different parts of the value chain. Data

generated by this tool will help make credible persuasive arguments of the extent to which carbon emissions are generated and whether or not the domestic tax system already compensates for it. This exercise will also identify the areas that need to be given priority in terms of reducing carbon emissions. And a domestic program to implement the relevant schemes could be generated. Such a program would also be a substantive basis to make the argument that the nation is industry concerned and is not generating the carbon emissions which are a basis of the duty, or that the program to address such emissions is already under way and should be considered as a basis to not impose CBAM duties.

**MS: How can India advocate for policies within the WTO that balance the protection of innovation and the need for affordable access to medicines?**

**Dr HV Singh:** The issues you raise have been a subject of discussions at WTO over two decades. A number of WTO decisions have been taken for easier access to medicines, particularly for least developed countries. Later experiences, such as during the covid-19 period brought additional issues that arise in addressing major public health issues that affect a large number of people.

Easier access to therapeutics, diagnostics and vaccines, and also enabling their production by not blocking/restricting exports of inputs for their production became major issues of focus. Much more progress is needed to address these concerns, and efforts in this direction are not progressing due to the positions taken by certain WTO members.

**India could work with coalition partners within WTO and also the major health related NGOs to suggest key points in the framework to trigger facilitating responses in situations of future pandemics, including improving upon the present conditions of access to medicines, therapeutics, diagnostics, and vaccines.**

**In the context of WTO, this would cover:**

- facilitation of trade or not restricting trade in relevant products and services,
- collaboration among different nations to provide relief,
- activation of major funds to support provision of medicines,
- financial resources,
- and other medicinal requirements through requisite rapid response systems, and relaxation of IPR rights together with technical support to enable quick response.

**This would include collaborative effort across a number of international organizations, major corporations, development agencies, and domestic Governments of WTO members.** Key steps required for each stakeholder could be identified and provided within a framework for future response, based on the experience of Covid-19. In addition, a small group of global experts could be established in parallel to WTO discussions, to suggest practical options and solutions for the future, to be taken up further through discussions at the WTO.

**MS: In times of global economic crises or pandemics, how can the WTO enhance its crisis response mechanisms to provide timely and effective support to member countries like India?**

**Dr HV Singh:** The WTO response during the 2008-09 economic and financial crisis and the more recent Covid-19 crisis provide some insights into the crisis response systems to be adopted by WTO, which build upon previous efforts and introduce new options. One of the new initiatives during the 2008-09 crisis was a monitoring report introduced by WTO DG Pascal Lamy to report on market restrictions and market opening measures introduced by individual WTO members, and these reports were discussed in a special meeting by the WTO membership. This encouraged keeping markets open during those difficult days. The WTO members had decided to consider working on a possible

framework within the WTO for addressing the issues of global relevance in times of pandemics and exigencies in future. Work on this could begin by examining steps taken during the Covid-19 period.

2008-09 was also a time when G20 was emphasized by President Obama and the Group worked to develop support systems and solutions to problems that included suggestions by the WTO which was among the institutions invited by G20 to contribute to the efforts. Ideas implemented included easier conditions for trade finance, assured larger funding for Aid for Trade to help developing countries and Least Developed Countries, "US\$ 50 billion provided to support social protection, boost trade and safeguard development in low income countries", increased funding to the international and regional development banks to generate growth, and inter alia providing credit guarantees for bank lending for trade finance, which led to multiplying the availability of trade finance to enterprise across developing countries. The Aid for Trade initiative at WTO could examine specific key steps needed to build resilience for LDCs and work could begin on building the relevant parts of the systems.

**The G20 also agreed to OECD, UNCTAD and WTO preparing a report to monitor trade and investment measures of G20 members that were discussed and discussions were held to reduce the negative impact and increase the positive impact of these measures.** Similarly, during Covid-19, trade facilitation measures were encouraged and reported upon by WTO, and discussions were held on identifying bottlenecks and solutions to trade related options that could improve options and provide better solutions to the problems faced by different nations. Likewise, information on the different support policies implemented by WTO members was collected so that there were examples of measures that could be used by the membership if considered useful. Members used the WTO to discuss ways to reduce trade related difficulties and adopt solution-oriented collaborative response mechanisms.

**The WTO can examine these efforts and prepare for more efficient implementation, or identify steps to fill in the gaps which would improve efficiency. In addition, technical tools such as AI and relevant work of organizations that are preparing safety nets would be important areas of focus for being included among the options to be available in emergency situations.** In addition, discussions within WTO could be held for countries to share their experiences on how they were able to effectively address major emergency situations.

**MS: As the telecom sector embraces innovations like IoT and AI, how can regulators strike a balance between encouraging technological advancements and protecting consumer privacy, especially in the era of pervasive data collection?**

**Dr HV Singh:** IoT or Internet of Things (or Machine to Machine communication) and AI are changing the way normal activity is conducted. IoT is embedded in 5G and in several consumer products such as automobiles, refrigerators, aircrafts, house security systems, and telephones. AI has a much wider ambit and involves many regulation-related aspects compared to IoT, both positive and negative/cautionary. The positive impacts need to be augmented and encouraged, while the negative ones to be curbed.

International organizations such as the UN and ITU are analyzing the issues in great depth to give greater clarity for regulatory issues and balance. **A key regulatory concern is to build fundamental trust and transparency of AI models as well as address the ethical considerations that arise due to for example:**

- bias (due to gaps in accuracy,
- quality of data if AI results are based on,
- insensitivity towards disability, gender and racial considerations);
- data availability and ownership (circumstances under which data may be made available and to whom);
- data privacy and security;

- limited know-how;
- and inequitable usage (e.g., lack of widespread availability, including to small and medium enterprises/farmers).

Regulators have tried to build ecosystems to create trust, develop national AI strategies and policies. Several countries have put in place their regulatory frameworks to achieve these objectives. In addition, the first effort to propose regulatory principles under an AI Act is by the European Parliament. **The envisaged framework includes categorization of the levels of risk associated with specific AI systems. The regulatory requirements differ based on the perceived risk, with AI systems presenting 'unacceptable' risks being prohibited, and those with "limited risk" being subject to very light transparency obligations.** Regulatory requirements are to be imposed on those with "limited risk". This process is still not complete and the details are to be worked out after discussions. You can read more on [www.europarl.europa.eu](http://www.europarl.europa.eu)

- According to the ITU, by 2020 18 countries had regulatory strategies for AI, 15 for IoT, and 131 for Data Policy.
- In addition, the EU and UNESCO have brought out ethics guidelines for AI, and several international collaborative efforts are emphasized regarding AI regulation. These efforts provide models for regulations and best practices.

**India is preparing legislation to address AI related issues and many other linked new digital technologies, under the Digital India Act which is expected to be notified in 2024. One part of the Digital India Act, i.e. Digital Personal Data Protection Act (DPDPA) 2023 was notified on 11th August 2023. DPDPA 2023 covers the relevant regulatory issues regarding data privacy, e.g., enabling full potential for use of the data while maintaining confidentiality of the identity of the person whose data is considered, use of data to be based on explicit consent of the person concerned, and conditions for relevant information made available to the regulator.**

Other relevant issues which would arise include the issue of compensation provided when personal data is used by companies for commercial gain, and ethical issues for use of data, for instance, in certain health related enquiries. **While the DPDPA 2023 is a major advance on previous discussions and efforts, it would be useful to again consider the recommendations of the TRAI made in 2018 regarding "privacy, security, and ownership of data in the telecom sector"** and include within the regulations aspects which might be relevant for effective implementation of the privacy issues.

**MS: In the face of natural disasters or cybersecurity threats on the rise by the month, how can countries like India enhance the resilience of their telecom infrastructure to ensure uninterrupted services and communications during critical times?**

**Dr HV Singh:** Natural disasters and cybersecurity are two different kinds of threats, and broadly need different solutions.

**Natural disasters** disrupt the infrastructure and communication systems, and regulators need to work with disaster management agencies to both help identify and devise options to keep relevant communication systems readily available when required. There are different kinds and levels of solutions that could be considered. One is to ensure that people can be warned before disaster hits the place. Smart cables (both undersea and land) are being developed that are sensitive to bending and vibration and based on the disturbances they sense, they send information about likely disasters. Another is to address the problem of network choking due to large usage when disaster happens. Flexible network/spectrum management is enabled for the network to automatically adjust and increase capacity through "self optimisation network" (SON) technology. Technological advances have also been developed for structural strengthening of towers in cyclone prone areas and for protection of critical infrastructure. In addition,

networks can be designed in such a way that disruptions in any part can be limited in their impact by using alternative parts of the network or redundancy built into the system. There are also backpack devices and satellite communication systems that provide options for communications during disaster situations.

Taking all these into account, telecom regulators prepare plans and options to address communication problems in disaster situations. For instance, the Indian regulator, TRAI, has worked on these issues for a long time. Examples of these efforts are available at TRAI and ITU websites.

### **Cybersecurity threats**

Two kinds of cybersecurity threats need to be addressed, **one to the IT system** (e.g., the phone or laptop) and **the other to the OT or operational technology**, e.g., impacting the chlorine mixing plant in a water system or operation of the power plant. Cybersecurity operations build additional layers of protection for safety of OT, with alert mechanisms. Cyber incident response teams (CIRT) scan and take precautionary action where necessary. **Recent efforts to safeguard critical infrastructure and activities include the use of quantum mechanics and developing specialized encryption which makes it difficult to manipulate the content of the software.** These are among the critical technologies being developed and would be among the relevant solutions for safeguarding the telecom infrastructure, together with other conventional mechanisms to improve cybersecurity. **The Indian government has selected telecom as one of the seven critical sectors identified for special focus for cybersecurity.** A recent effort to improve information and provide knowledge of best practices includes the National Cyber Security Reference Framework (NCRF) 2023. The issues addressed in the answer to Part 2 of Question 8 overlap with this question and the two responses could be considered as being complementary.

The issue of cybersecurity is a global phenomenon. According to European Union Agency for Cybersecurity (ENISA), during 2023 the largest number of threats in EU had a digital impact (damaged or unavailable systems, corrupted data files), followed by economic impact (direct financial loss, damage to national security leading to important loss or ransom demand), and social impact (widespread disruption with adverse effects on people).

**Since cybersecurity risks are global, nations need to take a coordinated and collaborative approach.**

International organizations and groups of countries are working with such collaborative frameworks and sharing information among member countries.

**MS: Over-the-top (OTT) services have disrupted traditional telecom revenue models. How should regulators navigate the balance between fostering innovation in OTT services and ensuring the sustainability of traditional telecom operators?**

**Dr HV Singh:** Over the top (OTT) services are not new and the issue of appropriate revenue models has been considered for several years by both regulators and the companies. A solution which has emerged is that the telecom service providers changed their tariff models from per minute charging to charging for data packages in terms of MB or GB of data. This is similar to the older revenue model which relied on monthly rentals to general net positive revenues rather than the per minute call charges.

**However, in principle the issues relevant to the OTT developments still need to be considered because the revenues of the OTT service providers increase when the network coverage is extended within the nation.** And this happens without any effort on the part of the OTT service providers. In this situation, a relevant question would be whether or not the OTT service providers with revenues above a particular revenue threshold (similar to the CSR

legislation), contribute to the extension of the network particularly in the rural area. This contribution could be to the Universal Service Obligation Fund or a Network Development Fund created for extending broadband in rural areas.

The issues to be considered, however, are complex and ideally a consultation process should be initiated for addressing the concern.

**MS: Digital Trade- in your experience and expertise what is the scope of Domestic and International Digital Trade via India in the next decade and how must India bolster this.**

**Dr HV Singh:** Digital trade is increasing rapidly in India and internationally. There is nonetheless a need to further bolster it, because of the low participation rates, especially for the small and medium enterprises. The scope of growth is immense, and digital technologies can potentially enable achieving a number of policy objectives which are otherwise difficult to achieve. Digital technology removes the difficulty due to geographical distances, size, location, inclusion of women in the labor force, gaps in skills and communication.

- Recognizing these potential benefits, the Indian Government included e-commerce as a specific chapter in 2023 Foreign Trade Policy, and the Postal Department and Customs are working together to facilitate transfer of goods for international trade as well as domestic trade.
- Officials of the Directorate General of Foreign Trade are working at the district levels to identify and address constraints, provide training and information. They are also installing digital systems to improve monitoring and governance, and improve information systems.
- Likewise, digital technologies and systems are being used to improve logistics and facilitate trade. India's Open Network for Digital Commerce (ONDC) could have a far-reaching impact on promoting digital trade domestically and with countries abroad, and while the current focus is on domestic trade, mechanisms should be added to enable international trade as well.
- Likewise, the activities of the existing e-commerce platforms which focus on international trade have encouraged the emergence of several service providers that facilitate related services like logistics, customs clearance in India and abroad, collection and transfer of receipts and coordinating with other service providers abroad.

The growth of these service providers will play a synergistic role as digital trade increases, including due to ONDC. For improving performance, more spread of information should be organized, and systems and infrastructure for digital trade must multiply.

Further, increase in digital trade will create new and unanticipated problems to be addressed, including problems relating to regulation of digital transactions for both trade related regulators and the Central Bank. **Lessons from experience of other countries would help anticipate and prepare solutions. Regulatory discussions and partnerships with other nations will ease experience sharing, finding solutions to new concerns, and develop information bases to facilitate cost-effective digital trade.**

**Some of the developments could be highly disruptive.** An example is that with an increase in Machine to Machine (M2M) communications and 3D printing will change the underlying basis of regulatory systems of international trade, which is linked to rules of origin. With 3D printing and M3M communications, it will be impossible to determine the origin of the trade transaction. This major disruption will take several years to emerge. In the interim, a consideration of the transition to a new system should be a priority area for discussion.



**MS: Coming onto another aspect, an anti-crime cyber law is not in its due place in India. How must India stride ahead in the next five years to make Digital Domestic and International Trade more secure?**

**Dr HV Singh:** Cyber-crimes in India are addressed under the provisions of the Information Technology Act 2000 and its amendments, particularly the one in 2008. **The Act provides inter alia for an Indian Computer Emergency Response Team (CERT-In) and a Cyber Regulations Advisory Committee. The Government has taken several steps to address cybercrimes, including establishment of a Cyber Swachhta Kendra (Botnet Cleaning and Malware Analysis Centre) in 2017, National Critical Information Infrastructure Protection Centre, National Cybersecurity Policy, and skill development and awareness development initiatives which increase the information on the precautionary steps that would help limit or prevent cyber-crimes.**

The scope and focus of law relating to cyber-crime needs to be updated and made more comprehensive. **The Digital India Act, likely to be notified in the second half of 2024, is expected to address these issues with a larger and more comprehensive coverage.**

The nature of cyber-crimes linked to international trade would be similar to those arising within the domestic context. However, many more international persons are likely to be involved in international trade. This implies a need for close collaboration among international agencies dealing with cyber-crimes. **CERT-In collaborates with its international counterparts and is part of a number of international collaborative groups and initiatives.**

However, the main focus of addressing cyber-crimes today is domestic, and **steps to address significant international trade related cyber-crimes are not given the same priority.** The critical infrastructure for international trade would include critical infrastructure already decided (e.g. telecom and transport), as well as others that are not yet priority but are very important for international trade. **For India, they include, for instance, systems of agencies such as customs and DGFT.** Collaboration between government and industry is crucial to identify vulnerabilities and to assess progress on solutions and systems being implemented to address cybercrimes.

A noteworthy point is that the government is relying extensively on digital tools to improve ease of doing business and facilitate trade. Such systems are immensely important for international trade and need special prioritization to keep trade procedures efficient and timely.

**The importance of preventing cybercrimes and strengthening the resilience of supply chains are internationally given importance,** as shown for instance in the joint principles of the QUAD for cybersecurity. The implementation of these principles must be monitored and their operations improved based on experience.

**Sharing of practices and training among the QUAD members, the Indo Pacific Economic Framework (IPEF) Agreement members, and Free Trade Agreement partners should become a regular feature. Likewise, the collaboration of CERT-In with international counterparts should include international trade as a priority area for attention.**

A senior level expert group should be established to provide a comprehensive blueprint of the policy coverage within a consistent framework with timelines and linkages between different activities. Likewise, another expert group should examine the way in which all relevant policies can be WTO consistent.

**MS: With your diverse background in academia and international organizations, what recommendations do you have for enhancing the skills of trade professionals in India to better adapt to the evolving complexities of global trade? Please answer this considering that this interview would also be read by University Level Students as well.**

**Dr HV Singh:** I want to share the areas which I emphasize. Six areas are very important for trade professionals.

- **One is to collect information on major new trade-related issues which are being discussed at various international and regional organizations.** A related area is whether there is an effort by major economies to change the trade regulatory regime in these areas. In this context, it is especially important to follow the developments in the US, EU and China, the areas of partnerships established by the US and EU (such as the EU-US Trade and Technology Council). Keeping track also of the major policy announcements by China is also important.
- **Two, understand the main technological developments which are changing the nature and structure of international trade, especially the growth of digital technologies.** This includes looking at the efforts to change the trade regulatory regimes in the area of digital trade, as shown for example, in Free Trade Agreements and the discussions at the WTO. In addition, it is important to keep track of the commentaries and analyses of these developments.
- **Three, keep track of the forecasts of global output and trade by international organizations and regional development banks.** Understanding the basis of the forecasts for trade developments is important.
- **Four, develop a database with trade developments since 2000. Seek answers to questions on the major trade commodities, top trading nations, how rankings may have remained stable or changed.** Within India, examine with the help of this data, how trade shares of products have changed over time and which are the main countries that are top traders in terms of overall trade and for major trade items. To the extent that India is concerned about the trade deficit, use the database to monitor which product categories account for the bulk of the deficit, both in overall terms and with respect to China (since this is also a concern). In addition, keep track as well of the information on Balance of Payments provided by the RBI and consider the balance on the current account as well as the key developments in the non-goods part of the current account.
- **Five, be aware that trade policy today is an integral part of industrial policy and most of international trade is conducted by global value chains (GVCs).** In this context, study the experience of countries which have emerged as successful exporters, such as Vietnam and China, and understand the policies used by them to achieve successful exports and increase their links to GVCs. Important to compare those policies with the policies in India and identify the differences.
- **Six, track the major policy developments in India which are enabling an increase in competitiveness and ability to trade, and those areas which are in need of improvement.** This assessment would require studying the experience of other countries which have emerged as successful exporters.

#### **About Dr Harsha Vardhana Singh**

*He is the Chairman of IKDHVAJ Advisers LLP and has worked for four decades on trade and investment policy. He worked at the GATT/WTO for 20 years (1985-1997, and later 2005-2013 as Deputy Director General, WTO). He was Economic Adviser, and Secretary, TRAI, Executive Director of Brookings India, Senior Fellow at Think Tanks (Switzerland and Canada), taught at Universities in the US and China, been Chair/Secretary of GATT/WTO Dispute Settlement Panels, and member/Chair of High-Level Expert Groups on international trade/industrial policy and competition policy within India and abroad. Dr. Singh has an MPhil and DPhil in Economics from Oxford University, U.K.*

#### **About the Interviewer**

*Mahima Sharma is an Independent Journalist based in Delhi NCR. She has been in the field of TV, Print & Online Journalism since 2005 and previously an additional three years in allied media. In her span of work she has been*

associated with CNN-News18, ANI - Asian News International (A collaboration with Reuters), Voice of India, Hindustan Times and various other top media brands of their times. In recent times, she has diversified her work as a Digital Media Marketing Consultant & Content Strategist as well. Starting March 2021, she is also a pan-India Entrepreneurship Education Mentor at Women Will - An Entrepreneurship Program by Google in Collaboration with SHEROES. Mahima can be reached at [media@indiastat.com](mailto:media@indiastat.com)

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