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Staying out is no option

SOUTH Asia is caught between an aspiration to tap the growth potential offered by digital technologies, and a reluctance to engage in the making of global rules on e-commerce. The reluctance owes partly to the fact that the Doha Round of trade negotiations of the World Trade Organization (WTO), launched in 2001 with the aim of effectively addressing the core development concerns and agendas of the developing and least-developed economies, is in almost a state of coma. Initiating comprehensive negotiations on e-commerce rules is considered premature also because the WTO's Work Programme on Electronic Commerce of 1998, mandated to examine all issues of global e-commerce by taking into account the economic, financial and development needs of developing countries, is seen as having yet to fully deliver on its mandate.

Quite a few developing countries, including all South Asian WTO members, have stayed out of the parallel-track discussions on e-commerce under the Joint Statement Initiative (JSI) of December 2017, born after 71 ministers at the Eleventh WTO Ministerial Conference in Buenos Aires issued a statement to initiate "exploratory work" toward "future WTO negotiations on trade-related aspects of electronic commerce".

The JSI was further backed by a joint statement issued by 76 WTO members at the World Economic Forum in Davos in January this year with a decision to commence WTO negotiations on trade-related aspects of e-commerce, and the Osaka Track that was launched at the G20 Summit in June by 24 WTO members.

Positions on e-commerce at the WTO are not explained by the traditional divide between developing members and developed members. Allies in the Doha Round are in opposite camps. China and Brazil are part of the JSI, while India opposes the very notion of the parallel-track discussions. Joining the discussions to influence the outcome to our advantage would be a better strategy than having to accept a result negotiated by others as *fait accompli*. Those participating in the JSI appear to agree on instituting a permanent prohibition on the imposition of customs duties on e-commerce. This raises concerns about revenue loss and tariff-based industrial policy being rendered impotent, especially in view of the increased tradability of services via electronic means and the fair chances of 3D printing becoming scalable and cost-effective.

There are divisions among JSI participants on crucial issues, though. For instance, China and Brazil favour regulating data flows and data storage through domestic regulations, even as most of the other participating members want free flow of cross-border data. China has been able to build its digital prowess thanks to data localization requirements in its laws and regulations. China's stance is partially echoed in India's draft national e-commerce policy that treats data as a national asset, gives the country the policy space to seek disclosure of source code, and tends to support data localization.

In an ideal world, the Doha Development Agenda would have already been implemented, and the WTO membership would have meaningfully completed the 1998 Work Programme. But the reality is that nearly half of the WTO members deem the Work Programme to be too restrictive to speak to the rapid digital transformation of global trade and are willing to sign a plurilateral agreement among themselves. Sheer pragmatism dictates that South Asian countries join the talks. This might inspire other developing and least-developed countries to follow suit, which would in turn strengthen negotiating positions on matters of critical development concern. Divisions among existing JSI participants can be turned to South Asia's favour. South Asia could then advocate that the negotiating process that characterized the Trade Facilitation Agreement be replicated, and that the least-developed countries be exempt from assuming any additional obligations.

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India, Bangladesh to finalize new waterway

INDIAN and Bangladeshi officials will be finalizing various aspects of a proposed waterway between the two countries, according to Chief Minister Mr. Biplab Kumar Deb of India's Tripura State.

"Union Shipping Ministry officials have informed that senior authorities from both the countries, including from the Inland Waterways Authority of India (IWAI), will finalize the different issues of the proposed waterway between the two countries involving Tripura," said Mr. Deb. He said that construction works to develop the 35 km waterway between Tripura's Gomati River and Bangladesh's Meghna River was slated to begin next month.

A four-member IWAI team visited Tripura's Sonamura in December 2018 to select the site for a terminal building (jetty).

The famous Akhaura canal, built by the erstwhile kings of princely Tripura, was earlier used to ferry goods to and from Bangladesh by boats and small vessels. "After the partition of India, the transportation through the Akhaura



Nepal seeks pesticide clearance for Indian fruits, vegetables

SEVENTEEN trucks carrying onions and potatoes from India were stopped at Bhairahawa Customs point following the Nepali government's decision to allow entry of fruits and vegetables into the country only after verifying that they were free of pesticides.

The government had published a notice on 17 June that quarantine test and pesticide residue examination must be done at the customs point while importing fruits and vegetables.

Following the notice, the movements of trucks carrying fruits and vegetables halted at the border points.

However, the government withdrew the decision on 3 July owing to lack of adequate infrastructure—laboratories and testing facilities at the border points.

The decision was implemented under the government's trade deficit minimization plan. (*myrepublica.nagariknetwork.com*, 24.06.2019 and 06.07.2019)





canal was stopped," according to veteran writer Mr. Salil Debbarma.

The Indian Oil Corporation had ferried diesel and cooking gas to Tripura from Assam via Bangladesh in 2016. The Food Corporation of India had transported 23,000 tonnes of rice in three phases since 2014 from Kolkata to Tripura via Bangladesh, using Dhaka's Ashuganj River Port, which is about 50 km from Tripura.

In 2012, Bangladesh had allowed state-owned Oil and Natural Gas Corporation to ferry heavy machinery, turbines and over-dimensional cargoes through Ashuganj Port for the 726 MW Palatana Mega Power Project in southern Tripura. (https://www. business-standard.com, 24.01.2019)

Bangladesh and India overcome trade barriers, mainly on apparel

DHAKA and New Delhi have agreed to overcome trade barriers that have curbed growth of bilateral trade. This is expected to give a boost to apparel export from Bangladesh to India

"We will take steps to increase trade with India. We will identify trade barriers and take necessary action to resolve it," Bangladeshi Commerce Minister Mr. Tipu Munshi said on 18 March after meeting newly appointed Indian High Commissioner to Bangladesh Ms. Riva Ganguly Das.

"India is a big export market for Bangladesh. There is huge demand for Bangladeshi apparel in the Indian market. Bangladesh will benefit from apparel exports to India. We

know about this potential and are working towards it," he said at a press conference.

In return, Indian High Commissioner Ms. Ganguly said, "There is big scope to increase bilateral trade between India and Bangladesh. We must exploit these opportunities. We will discuss on aspects of trade barriers and try to resolve them through dialogue."

Bangladeshi policymakers think that the country has the capability to export US\$2 billion worth of apparel to India in the next two years on the back of its duty-free access to the market and a rising demand for garment items at competitive prices. (bdapparelnews.com, 19.03.2019)

Herat-Delhi Air Corridor launched



THE first cargo of Afghan goods was sent to New Delhi from Herat Airport on 11 March, making it the third air corridor between Afghanistan and India after Kabul and Kandahar.

The shipment contained 200 kg of saffron and 1,600 kg of pistachios.

"Through air corridors, we can connect Afghanistan's private sector with world markets," said Deputy Minister of Industry and Commerce of Afghanistan Ajmal Hamid Abdul Rahimzai.

"India is a very big market and I am sure that once this saffron from Herat goes to India, Afghanistan will not have enough saffron to export to India, because, then, there will be so much of demand," said Mr. Kumar Gaurav, India's consul general in Herat.

Local officials expected that in the next flights, besides dry fruits and saffron, other agricultural products and industrial goods will be sent to India.

Government statistics show that Afghanistan has so far sent 5,400 tons of goods, worth at least US\$100 million in 425 flights to different countries through air corridors. (tolonews. com, 13.03.2019)

Nepal signs deal to access seven Chinese sea and land ports

NEPAL and China signed the 'Protocol on Implementing Agreement on Transit and Transport' and six other agreements, in Beijing, on 29 April. This came after delegation level talks between President Bidya Devi Bhandari and her Chinese counterpart, Xi Jinping.

The protocol had been pending since Nepal and China signed the Transit and Transportation Agreement in March 2016, during Prime Minister KP Sharma Oli's visit to the northern neighbour.

The signing of the protocol makes it possible for Nepal to use four Chinese sea ports in Tianjin, Shenzhen, Lianyungang and Zhanjiang and three land portsin Lanzhou, Lhasa and Shigatse for third-country imports. It will also allow Nepal to carry out exports through six dedicated transit points between Nepal and China.

"First, to execute the protocol, we have to upgrade the infrastructure on our side. Second, the protocol allows us to use all three kinds of services—inland, road and rail. This will help boost investors' confidence as



well," said former Joint-Secretary at Ministry of Industry, Commerce and Supplies, Mr. Rabi Shankar Sainju, who held a series of negotiations with the Chinese side leading up to the deal.

Currently, only two Nepali entry points—Rasuwagadhi and Tatopani—are being used for trade and business with China.

President Bhandari was participating in the Second Belt and Road Forum, which concluded on 27 April. The visit also saw Kathmandu's proposal of Nepal-China Trans-Himalayan Multi-Dimensional Connectivity Network, including cross-border railway, included in the joint communiqué.

After the meeting, the two sides signed six more agreements regarding economic and technical cooperation for Nepal worth NPR16.8 billion, according to the Nepali embassy in Beijing. (*kathmandupost.ekantipur.com*,, 30.04.2019)

India wins solar case against US at WTO

A dispute settlement panel has pronounced that subsidies and mandatory local content requirements instituted by eight American states on renewable products breached global trade rules. With the pronouncement, India has won a major trade dispute against the United States (US) at the World Trade Organization (WTO).

The three-member panel largely upheld India's claims that subsidies and local content requirement in 11 renewable energy programmes in eight US states violated core global trade rules. The panel also asked the US to ensure that these states are in conformity with the trade rules.

India had claimed that the "domestic content requirements



and subsidies instituted by the governments of the states of Washington, California, Montana, Massachusetts, Connecticut, Michigan, Delaware and

Bangladesh lifts import ban on Nepali yarn

BANGLADESH has lifted the ban on import of yarn from Nepal via the Banglabandha land port after nearly 17 years.

The National Board of Revenue of Bangladesh decided to lift the ban on import of acrylic yarn from Nepal through the Banglabandha land port on 28 December. The move conditionally allows Nepal to export only acrylic yarn through the port. The ban is initially being withdrawn for only one year. Nepal has long been demanding that Bangladesh open the gateway for exporters of Nepali yarn.

Bangladesh imposed the restriction on yarn import through the land port in 2002 to safeguard the local cotton yarn industry from foreign products. As an alternative, the country instead opened up its Benapole land port and Chittagong sea port for yarn import.

However, Nepali traders had been reluctant to use the Benapole

port, which connects Petrapole of India, stating that they faced a lot of hassles while using the gateway that passes through the Indian land customs. Likewise, traders say that using Chittagong makes them accrue heavy costs.

Mr. Navaraj Dhakal, spokesperson of Ministry of Industry, Commerce and Supplies, said Nepal had been putting forward the issue as a main agenda in most of the bilateral talks with Bangladesh. "However, the ministry has yet to receive an official letter from Bangladesh regarding the matter," Mr. Dhakal said.

Nepal exports polyester and viscose blend yarn worth over eight billion Nepalese rupees annually. Although Bangladesh has lifted the ban, the country still continues to maintain stern measures while accepting goods from Nepal. (*kathmandupost. ekantipur.com*, 10.01.2019)



Minnesota in the energy sector" violated several provisions of Trade-Related Investment Measures (TRIMs) Agreement and Subsidies and Countervailing Measures Agreement.

The panel urged the US to bring the eight states in conformity with the obligations under Article III:4 of 'national treatment'. Under the national treatment provision, foreign producers must be treated on a par with domestic producers.

The US can still challenge the panel's ruling before the Appellate Body (AB); however, the AB itself is feared to have become dysfunctional after 11 December because the US has been blocking appointments to it. (*livemint.com*, 27.06.2019)

China RMG factories may shift to Bangladesh



SOME Chinese garment makers have expressed their interest to set up factories under joint venture in Bangladesh. They see the country as a competitive destination to relocate their plants amid the raging US-China trade war and rising costs in the world's second largest economy.

Chinese textile and garment industry owners have invested heavily in neighbouring Vietnam and Cambodia in the last two decades, but now they are focusing to shift their factories to Myanmar and Bangladesh.

The reasons for the change include a lack of skilled workforce in the Chinese textile and garment industry, rising costs of production, shifting industrial base to industries such as information technology and over-investment in Vietnam and Cambodia, where labour costs are lower.

Some entrepreneurs of Hong Kong-based Chinese Manufacturers' Association visited Dhaka from 22 to 26 May to explore the investment opportunities.

So far, Bangladesh has not allowed foreign investment in basic apparels, limiting their presence in high-end and value-added textile and garment items. (*thedailystar.net*, 02.06.2019)

PepsiCo offers to settle with Indian potato farmers after backlash

PEPSICO has faced a backlash after suing four Indian farmers, who allegedly grew a patented strain of potatoes used in its Lay's chips without the company's permission.

The company originally sought about US\$150,000 in damages from each of the farmers. It argued that they broke the law by sourcing and dealing in the patented potatoes. PepsiCo later offered to settle 'amicably' when the case went to court in the western Indian city of Ahmedabad, on 26 April. The case sparked outrage among farmers and others who were concerned that PepsiCo was using its clout to interfere with the country's food supply. The role of foreign companies in producing and selling food in India is a hotly contested issue, particularly when it concerns genetically modified (GM) crops.

A number of farmers' groups in India banded together to protest against the multinational's court case. Mr. Ambubhai Patel, the vice-president of a farmers' association, Bharatiya Kisan Sangh, said that they were lobbying the government to support the accused farmers.

PepsiCo said the farmers who grew its strain of potatoes without permission were hurting the interests of the many people working with the company to produce them for its Lay's chips. It supplies those farmers with seeds and subsequently buys back the potatoes.

PepsiCo is India's largest process-grade potato buyer and

Indian tea exports to Pakistan set to rise

INDIA'S tea exports to Pakistan are expected to increase to 20-25 million kg in 2019 from 15.83 million kg in the previous year, the tensions between the two countries over the Pulwama terrorist attack and the subsequent air strike in Balakot notwithstanding.

Industry executives said that since Kenya's tea crop had declined owing to a severe drought, prices shot up 15-20 percent at the Mombasa auction. Last year, Kenya had produced a record crop of 492.9 million kg, leading to a fall in tea prices in the global markets and impacting Indian teas as well. But this year, the crop in Kenya will be much less.

"Payments from Pakistan are regular and Indian tea exporters have not faced any problem over payment. If this trend continues, we hope to achieve 20-25 million kg of tea exports this year," said Mr. Sujit Patra, secretary, Indian Tea Association.

Nearly 80 percent of the tea exported to Pakistan is from southern

India while the rest is from Assam. Pakistan had recorded a massive 35.8 percent increase in per capita consumption of tea between 2007 and 2016, according to the Food and Agriculture Organisation



amongst the first companies to work with thousands of local farmers to grow a specific protected variety of potatoes for it. The company said that it was compelled to take legal action as a 'last resort'.

Companies such as PepsiCo have previously faced criticism for their use of natural resources. It faced a boycott in one drought-hit Indian state in 2017 for allegedly using excessive amounts of water to manufacture soft drinks. (*theguardian.com*, 26.04.2019)

(FAO) of the United Nations. Currently, Pakistanis consume 172,911 tonnes of black tea, and the figure is expected to rise to 250,755 tonnes by 2027. (economictimes. indiatimes.com, 09.05.2019) ■



Electronic cargo tracking for Nepalbound freight



CONTAINERIZED rail cargo carrying third-country imports of Nepal through the Indian ports of Kolkata and Vizag will no longer require clearance by Indian Customs authorities as both ports have introduced the electronic cargo tracking system (ECTS).

ECTS is an electronic seal that, unless tampered with, ensures free movement of a container through the international border.

The system has already been introduced at Vizag Port. It was introduced by Kolkata Port a few months ago.

The electronic cargo system at Kolkata now does away with Indian Customs' check of Nepal's third-country imports. Nepal had for long been resisting checks by Indian Customs of its third-country imports. The customs authorities had defended the move, citing the prospect of diversion of cargo.

With rail movement of containers easing up, Kolkata Port authorities are planning to introduce ECTS for road movement of containers as well, but in phases. While Vizag doesn't have any road cargo for Nepal, a large section of third-country container imports through Kolkata take the road.

Meanwhile, the transition to ECTS has resulted in a shift of cargo from Kolkata Port to Vizag. According to sources at the Container Corporation of India (Concor), 70 percent of the Nepal-bound container cargo was through Kolkata Port till two months ago. (*www.thehindubusinessline.com*, 07.05.2019)

Paris pact not enough to save Hindu Kush-Himalayas: ICIMOD

EVEN the goal of the Paris Agreement on climate change—limiting global temperature rise to 1.5°C —may not prevent the Hindu Kush Himalaya (HKH) region from some of the adverse effects of climate change, which could endanger livelihoods and well-being of millions, the latest report on the impact of global warming in the region warns.

The Hindu Kush Himalaya Assessment: Mountains, Climate Change, Sustainability and People published by the International Centre for Integrated Mountain Development (ICIMOD) points out that even if global warming is kept to 1.5°C, warming in the HKH region will likely be at least 0.3°C higher. In the northwest Himalaya and Karakoram it will be at least 0.7°C higher. Such rise in temperature could trigger a multitude of biophysical and socio-economic impacts. They include biodiversity loss, increased glacial melting, and less predictable water availability—all of which will impact livelihoods and well-being in the region.

The HKH is one of the biggest mountain systems in the world, covering 4.2 million sq. km across eight countries: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. The region is home to the world's highest peaks, unique cultures, diverse flora and fauna, and a vast reserve of natural resources. It is the source of 10 major river basins and provides ecosystem services (including water, food, and energy) that directly sustain the livelihoods of 240 million people in the mountains and hills.

Edited by a team consisting of Ms. Philippus Wester, Mr. Arabinda Mishra, Ms. Aditi Mukherji and Mr. Arun Bhakta Shrestha, the report addresses the environmental, economic and social pillars of sustainable mountain development. It is expected to serve as a basis for evidence-based decision making to safeguard the environment and advance people's well-being.

Citing historical climate data, the assessment points to the erratic climate pattern in the region and projects dramatic changes in the future. It calls out for urgent actions to mitigate the effects and consequences of climate change.

The HKH region is geologically fragile with young and rising mountains that are vulnerable to erosion

> Changes in the HKH region have had, and will continue to have, major consequences not only for people living in the region but globally.

and landslides. Even without human interference, extreme climate events tend to have a devastating impact here. Moreover, the region is undergoing rapid change, driven by forces such as economic growth, globalization, infrastructure development, land use change, migration and urbanization, not just climate change and natural disasters.

Increased climate variability is already affecting water availability, ecosystem services and agricultural production. Extreme weather is causing flash floods, landslides and debris flow. Changes in the HKH region have had, and will continue to have, major consequences not only for people living in the region but globally, the report cautions.

Such impacts would hit the region's poor the hardest in the form of increased vulnerability. About one-third of the 250 million mountain people in the region live on less than US\$1.90 a day. More than 30 percent of the region's population does not have enough to eat and around 50 percent face some form of malnutrition, with women and children suffering the most.

The realities of mountain life, such as inaccessibility, fragility and remoteness, make it difficult for people to earn a living. Nonetheless, the report says that mountain people have the potential to earn incomes by better utilizing the region's resources, such as its hydropower potential.

Since the region encompasses multiple countries and requires interdisciplinary efforts, high-level transnational cooperation and local participation is necessary to meet the challenges. These would allow them to cope with conflicts arising due to rapid demographic change, increasing land use, over-exploitation of natural resources and weak governance systems. However, the report cautions that regional cooperation on resource sharing alone will not improve regional prosperity, unless global commitments to climate mitigation are also upheld. HKH countries and institutions must work together to build mechanisms and fora to debate and negotiate key challenges, such as data sharing, and incentivization of regional cooperation and cross-learning.

This piece is excerpted from ICIMOD's latest report The Hindu Kush Himalaya Assessment: Mountains, Climate Change, Sustainability and People.

Mega deals drive FDI growth in South Asia

MEGA deals in manufacturing, communication and financial services helped foreign direct investment (FDI) inflows to South Asia grow by 4 percent, according to the latest *World Investment Report* published by the United Nations Commission on Trade and Development (UNCTAD).

The investments were primarily driven by India, Bangladesh and Sri Lanka. Investment in India, the subregion's largest recipient, rose by 6 percent to US\$42 billion with strong inflows in manufacturing, communication, financial services and cross-border merger and acquisition (M&A) activities.

Notable mega deals included the acquisition of Flipkart, India's biggest e-commerce platform, by Walmart (United States). In addition, telecommunication deals involving Vodafone (United Kingdom) and American Tower (United States) amounted to US\$2 billion. Similarly, flows to Bangladesh and Sri Lanka rose to a record level, to US\$3.6 billion (up by 68 percent) and US\$1.6 billion, respectively. On the other hand, Pakistan witnessed a 27 percent decline in investment, down to US\$2.4 billion. This was largely due to the completion of some projects related to China-Pakistan Economic Corridor, and a balance-of-payments challenge that may have delayed new inflows. FDI flows increased in Nepal by 24 percent to US\$161 million.

Contrary to the South Asian increment, overall global FDI flows continued their slide in 2018, falling by 13 percent to US\$1.3 trillion. The global decline, the third consecutive year of fall in FDI, was mainly due to large-scale repatriations of accumulated foreign earnings by multinational enterprises based in the United States (US) in the first two quarters of 2018, following tax reforms introduced in that country at the end of 2017.

FDI flows to developed economies reached the lowest point since 2004, declining by 27 percent. Inflows to Europe halved to less than US\$200 billion, due to negative inflows in a few large host countries as a result of funds repatriations and sizeable drop in the United Kingdom. Inflows in the US also declined by 9 percent to US\$252 billion.

Flows to developing countries remained stable, rising by 2 percent. As a result of the increase and the anomalous fall in FDI in developed

Contrary to the South Asian increment, overall global FDI flows continued their slide in 2018, falling by 13 percent to US\$1.3 trillion.

countries, the share of developing countries in global FDI increased to 54 percent, a record. FDI flows to structurally weak and vulnerable economies continued to account for less than 3 percent of the global total. Flows to the least-developed countries recovered from their 2017 fall, back to US\$24 billion.

The report says that the underlying FDI trend has shown anaemic growth since 2008. Even after deducting one-off factors, such as tax reforms, mega deals and volatile financial flows, FDI has averaged only 1 percent growth per year for a decade, compared with 8 percent in the 2000–2007 period, and more than 20 percent before 2000. Explanations include declining rates of return on FDI, increasingly asset-light forms of investment and a less favourable investment policy climate.

The long-term slide of greenfield investment in manufacturing halted in 2018, with the value of announced projects up 35 percent from the low value of 2017. Among developing countries, where manufacturing investment is key for industrial development, the growth was mostly concentrated in Asia and pushed up by high-value projects in natural resource processing industries.

The report calls attention to new national investment policy measures of the countries across the world. which show a more critical stance towards foreign investment. In 2018, some 55 economies introduced at least 112 measures affecting foreign investment. More than one third of these measures introduced new restrictions or regulations-the highest number for two decades. They mainly reflected national security concerns about foreign ownership of critical infrastructure, core technologies and other sensitive business assets. Furthermore, at least 22 large M&A deals were withdrawn or blocked for regulatory or political reasons. Screening mechanisms for foreign investment are gaining importance.

Nevertheless, attracting investment remains a priority globally, the report acknowledges citing 40 international investment agreements (IIAs) that were singed in 2018. Many countries are also developing new model treaties and guiding principles to shape future treaty making. IIA reform is progressing, but much remains to be done, the report concludes.

This piece is excerpted from UNCTAD's World Investment Report 2018.

eTrade for all

To benefit from e-commerce and digital innovation, developing countries require a concerted, cross-sectoral and multi-stakeholder approach to policy-making.



Sven Callebaut

The digital economy is evolving fast and developing economies are benefiting. According to the Information Economy Report 2017: Digitalization, Trade and Development published by the United Nations Conference on Trade and Development (UNCTAD), global Internet traffic was 66 times higher in 2018 than in 2005. Global e-commerce sales reached US\$25 trillion in 2015, including US\$189 billion of cross-border e-commerce. Developing countries accounted for nearly 90 percent of the 750 million people that went online for the first time between 2012 and 2015. There were 100 million people employed in the information and communications technology (ICT) sector in 2015, and ICT services exports rose by 40 percent between 2010 and 2015. Also, more than 70 percent of the population in some developed countries are buying goods and services online, but for least-developed countries (LDCs), the figure is close to just 2 percent.

The adoption of digital technologies will provide inclusive and sustainable socio-economic development across all states. Digitalization will create opportunities for entrepreneurs and businesses while also bringing enormous benefits to consumers. Digital technologies have a bearing on the prospects for micro, small and mediun enterprises (MSMEs) to participate in global trade. They allow enterprises to cut costs, streamline supply chains and more easily market products and services worldwide. However, the disruption that digital technologies have brought can be scary. The 'digital economy' is complex and multi-faceted and not everyone, everywhere, benefits from it. For instance, digitalization will disrupt existing practices, expose incumbents to competition and change skills requirements of workers. To derive the benefits, MSMEs in developing countries will need to overcome various barriers.

E-commerce is key

E-commerce is one of the main drivers of growth and innovation in the world today. It has significant poten-

tial for LDCs, developing countries and for MSMEs all over the world. If applied properly, e-commerce can make MSMEs more competitive and allow them to grow and thrive in a highly competitive global market.

What is e-commerce? The commonly accepted, although slightly outdated, definition of an e-commerce transaction was proposed by the Organisation for Economic Cooperation and Development (OECD) as the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. With this definition, payment and delivery of goods do not have to be conducted online. E-commerce includes business-to-business (B2B) transactions, such as online sales between enterprises, including linked to outsourcing and offshoring; business-to-consumer (B2C) transactions, for example, e-commerce enterprises and traditional bricks-and-mortar firms adding online sales channels;

consumer-to-consumer (C2C) transaction such as eBay and Taobao; government-to-business (G2B) transactions, for example, e-procurement; and government-to-people (G2P) transactions in the delivery of public services through online means.

Despite the impressive and continued growth in terms of connectivity and global e-commerce sales, there are massive gaps affecting the ICT uptake:

- *Global connectivity gaps:* 50 percent of the world population remains offline; only one in six in LDCs is connected.
- Gender gap: Gender gap in Internet use is most pronounced in developing countries.
- Readiness gap: MSMEs are less prepared to take advantage of the digital economy.

There are risks that digitalization could actually widen existing gaps, create new ones and result in job losses if inadequate attention and support are given.

In other words, for developing countries, there are both opportunities and risks. The impact e-commerce and digital innovation may have on developing countries' development agenda depends on the readiness of countries and their enterprises and people to take advantage of digitalization. Preparing for a digital economy requires a concerted, holistic, cross-sectoral and multi-stakeholders approach to policy-making.

The UNCTAD assists governments of developing and transition economies towards increased participation in the information economy. This is to cope with the worldwide spread of mobile telephony and communication systems, the growth of Internet networks and widespread use of broadband infrastructure as these have an impact on international production and trade patterns.

Since 2016, UNCTAD has coordinated a new multi-stakeholders' initiative entitled eTrade for all (etradeforall.org). It aims to improve the ability of developing countries, particularly LDCs, to use and benefit from e-commerce. The eTrade for all initiative was launched at the fourteenth Ministerial Conference of UNCTAD in July 2016. It is a practical example of how to harness the digital economy in support of the 2030 Agenda for Sustainable Development, notably Sustainable Development Goals (SDGs) 5, 8, 9, and 17. The initiative seeks to raise awareness, enhance synergies and increase the scale of existing and new efforts by the development community to strengthen the ability of developing countries to engage in and benefit from e-commerce. To achieve this, the initiative focuses on seven relevant policy areas:

- E-commerce readiness assessment and strategy formulation,
- ICT infrastructure and services,
- Trade logistics and trade facilitation,
- Payment solutions,
- Legal and regulatory frameworks,
- E-commerce skills development, and
- Access to financing.

As part of the eTrade for all initiative, the UNCTAD has created a 'Rapid eTrade Readiness Assessment for LDCs' programme to help countries quickly identify barriers to further e-commerce development. These demand-driven assessments provide a basic analysis of the current e-commerce situation in the countries concerned to identify opportunities and challenges. The resulting reports serve as a valuable input to these countries' involvement in various discussions related to e-commerce and digital trade.



To be eTrade ready, governments also need to ensure that ICT skills and knowledge are infused at all levels of education.

eTrade readiness

Since the launch of the eTrade Readiness Assessment Programme (eT-Ready) in late 2016, assessments have been produced in nine LDCs and one recently graduated country: Bhutan, Cambodia, Lao PDR, Liberia, Myanmar, Nepal, Samoa, Senegal, Solomon Islands and Vanuatu. Assessments are underway in Bangladesh, Burkina Faso, Madagascar, Uganda, Togo and Zambia. There is growing interest from non-LDC developing countries as well as transition economies to follow these examples. Among other things, the assessments have catalyzed discussions among and within the public and private sectors around e-commerce and the digital economy.

To be eTrade ready, governments have multiple roles to play. They need to improve coordination of digital economy and e-commerce, engage the private sector in dialogue, formulate or update e-commerce enabling laws and regulations, ensure that their mobile connectivity (and mobile broadband) is accessible and affordable for the majority, and make sure that ICT skills and knowledge are infused at primary, secondary and tertiary education.

Ensuring that the vast benefits of trade and eTrade reach MSMEs in developing countries and LDCs is a work in progress, which has just started. LDCs are gearing up to ensure that they do not miss the bandwagon. Development partner communities have started to respond, although modestly. Leading e-commerce firms, business incubator and innovation funds have helped fuel the e-commerce engine in South Asia and South East Asia, where some key e-commerce players are looking at opportunities to invest. This is just the beginning of a fantastic development era, where old aid models will, eventually, be disrupted too.

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India's policy to protect E-COMMERCE market and consumer

For a developing country like India, e-commerce holds great potential, but increasing use of consumer data is an added regulatory challenge

Sunayana Sasmal and Suvayan Neogi

A country's competition policy and consumer policy are aimed at protecting, respectively, the firm and the consumer that are inextricably linked. For example, while the regulatory frameworks for competition look to maintain a level playing field for firms on the market, the ultimate end goal is the well-being of consumers.

This is especially true for the burgeoning e-commerce industry. For a developing country like India, which offers a large potential market that is backed by increasing Internet penetration, e-commerce holds great potential.

Customization, which is an important feature of e-commerce, means an increasing use of consumer data. This has various consequences. It is an added regulatory challenge from both the perspectives of consumer exploitation and market distortion. Let us analyze the current Indian scenario, which is on the threshold of making legislative reforms.

Regulatory Issues

The unique nature of e-commerce, in comparison with the traditional model of selling, lies in the use of platforms.

The utility of e-commerce is much higher at both seller's and buyer's ends.

- Seller's End: Moving beyond business-to-business (B2B) and business-to-consumer (B2C) models, technology companies funded by foreign direct investment (FDI) have connected sellers and buyers like never before by employing the platform model of doing business.
- Buyer's End: Increased accessibility, availability and affordability of cheaper but quality products, increased innovation and diversification of product and service bases, are some well-known benefits. The downsides have also come to

the downsides have also come to the fore. There is the danger of companies with deep pockets and large market shares offering deep discounts. They use their large inventory for preferential control. Also, consumer privacy issues are at stake. These negatives have created adverse effects on local producers and sellers.

Network effects are predominant in the digital marketplace, where the value of products depends on their use by other people. This has created a threat of association between some giants to create a monopoly-like situation and capture the market. This needs to be immediately addressed. The threats to fair competition from e-commerce have invited the ire of regulatory bodies in the European Union (EU)¹ and Mexico.² This has led to further investigations to draw up workable solutions. India faced similar issues earlier this year.³

The Organisation for Economic Co-operation and Development (OECD) has identified a few major competition issues emanating from setting up online shops. They are: ease of free-riding on offline counterparts, cross-subsidization through different participants in the web of e-commerce and tracking consumer preferences through data collection and analysis. Exclusive distribution models cut down on intra-brand competition, an example being the agreement for exclusively selling OnePlus phones on Amazon.

Over time, different jurisdictions have developed different approaches to dealing with antitrust issues. For example, in the United States (US), vertical restraints are checked upon the touchstone of 'reasonableness' leaving space for a subjective assessment. That is also the reason why 'Retail Price Maintenance', a concept which was developed to counter the ill effects of free riding, is not banned in the US, but is banned in certain jurisdictions like the United Kingdom (UK) due to its ill effects on intra-brand competition.

Reading beyond the letter of the law in India that exists in the shape of Competition Act 2002, India has been battling with the changes that have been initiated in recent years, with technological giants like Amazon and Walmart entering the country. The Act allows Competition Commission of India (CCI) to oversee any such issues.

Meanwhile, a national e-commerce policy is much awaited. After two drafts of the policy and several comments on it, it has become certain that misuse of incompetent legal provisions displaces the several benefits that flow from increased e-commerce in both goods and services. Solutions are necessarily to be multifaceted and, therefore, lie in the use of different government instruments.

In 2018, All India Online Vendors Association filed a complaint with CCI that Flipkart was abusing its dominant position on the market. It was ruled that the industry at the moment did not consist of any companies with dominant positions. The failed challenge of discriminatory pricing, favouring certain sellers, and the presence of conflicts of interest; are likely to have inspired certain policy changes. To enable free competition, the December 2018 review of the policy on FDI in e-commerce introduced restrictions, such as:

- No FDI in inventory models,
- Ban on exclusive sale arrangements between vendors and companies that use the marketplace model,
- Restriction on the company's ownership of an inventory to only 25 percent, and

• Restrictions on deep discounting. These rules were lauded by local and smaller players, who had long felt exploited by the powerful position of others in an environment of weak regulations and enforcement. The much awaited FDI norms was a step in the direction of levelling the playing field for both big and small, foreign and local players. However, these norms are still riddled with some grey areas with respect to their operation.⁴

Data: new monster

Amidst all that in e-commerce which draws suspicion from the competition



regulatory authorities, abuse of data to maintain dominance takes the cake. Capture of a large market size through a huge online presence has been enabled by algorithmic manoeuvring of large volume of data to make the partner companies' profiles appear first in online search results. In India, this led to the famous Google order of February 2018, where CCI ruled that Google was to pay damages to the tune of INR 1.36 billion for 'search bias'. This was a breach of competition laws by using its dominant position on the market.⁵

In another case, the Commission implied that deep discounting may amount to a vertical restraint. Though this was not a direct ruling on its legality, the issue could still be addressed by the FDI Policy. However, later, in a case by All India Online Vendors Association, the Commission decided not to intervene in the e-commerce market and prevent stifling of innovation.6 This practice adopted by the Commission leads to a level of uncertainty and instability. Moreover, competition laws and privacy laws need to be coherently designed to ensure a judicious access and use of consumer data in a distortion-free manner.

As consumers, the preference to purchase from only certain marketplaces stems from repeated customized advertising on different electronic platforms. This is enabled by control over users' data. Such targeted advertising works to the advantage of the more powerful market players. It is not directly caught by competition policies. However, it is enabled by appropriating consumer data without their free and informed consent and without any payment in return. Consumers cannot even withdraw the consent, which is a basic tenet under consumer rights. This adds to a cycle of distortions in the market. Since this influences consumer behaviour, it attracts both consumer and competition laws.

The cyclical process of data colonialism is a process resonant with earlier and known forms of colonialism. Here, appropriation of resources takes place at zero cost, but are sold back at

e-commerce regulation

higher costs. In the e-commerce economy, the data issue is much nuanced. Technology powerhouses can afford expensive data analytics to market themselves better, at the cost of the consumer's free, informed and revocable consent (covered by consumer laws), through targeted advertising. Therefore, they can cyclically generate more revenue in comparison with smaller firms that have less abilities (covered by competition laws).

The effects of Big Data analytics on increasing e-consumerism have been the talk of the past few years. Insights provided by aggregating and analyzing data, generated every second across demographics, hold immense exploitable value, something that is being tapped by powerful companies. Increased personalization, dynamic pricing and heightened transparency have made e-commerce lucrative, but the cost of engaging in it has not been realized in full yet. Apart from privacy issues, the economic loss that occurs from data getting appropriated from consumers, without free consent, is a major issue.

Exploitation without adequate justification is the reason for the call for increased regulation of the tech-giants like Google, Amazon, Facebook and Apple. Big Data has allowed these giants to come together and capture the market through manipulative practices of using legalistic jargon in privacy policies to make them unintelligible for the common consumer. In India, the WhatsApp privacy case⁷ clearly implanted the intersectional nature of these issues, though there has been no interim order yet. How the cycle goes about is demonstrated in the Figure.

Targeted advertising does not just increase consumerism by tracking consumer preferences closely. It also leads to the abuse of the firm's dominant position in the market using search engine websites that favour their own or their partner websites. Here, the search results are made to favour one firm over others through prominent display. Similarly, advertisements can be prioritized through prime placements (relaxed exclusivity strategy), frequency of advertising, etc. For example, Amazon looks to restrict advertisements of third party sellers by promoting the more profitable firms or their own private labels. Google Inc. has recently been fined by the EU antitrust authorities for imposing anti-competitive contractual restrictions on third-party websites because it was abusing its dominant position on the online search advertising intermediation market. In the EU, Google has also been fined for abusing its dominance as a search engine and other illegal practices in Android devices. In India, a similar ruling has been made by the CCI. It has stated that mandatory pre-installation of Google applications amounts to 'unfair conditions'.9

It is undeniable that Google is able to exert its influence only by virtue

of continuous monitoring of large amounts of consumer data. Therefore, the competition issues arising out of abuse of dominance, in essence, stems from the issue of data regulation and consumer protection. This makes it a complicated intertwining of not just economic factors affecting the market, but also the individual consumer's behaviour and society as a whole.

Free consent vs. autonomy

Anti-competitive actions of deep-pocketed technology companies that track consumer data are increasingly coming under the public scanner. Consumer's data must be guarded by privacy laws prevailing in a jurisdiction.

The Parliament of India passed the Consumer Protection Bill 2019



to replace the Consumer Protection Act 1986. The provisions in the bill are contemporaneous with the era of trading through e-commerce. The provisions relate directly to electronic service providers and are aimed at covering the liabilities of marketplaces and platforms that allow sale of goods and services from third party sellers.

Product liability issues can be taken up by a complainant against a product seller, which, as per Section 2(37) of the bill, also includes an electronic service provider. The language implies stronger legal protection for consumers from not just the sellers on platforms, but the platforms themselves, provided that certain conditions are fulfilled.

Interestingly, Section 94 of the bill allows India's government to take any measure it deems appropriate to curb unfair trade practices in e-commerce, direct selling and protect the interest and rights of consumers. In doing so, far-reaching powers have been given to maintain policy space to regulate and intervene in the e-commerce market in the interests of consumers. Since this is undefined, only future jurisprudence can outline the contours of this power. Could it then be found to include the behavioural changes in consumers that has been induced by gradual but continuous advertising? Only time will tell if the interpretation can be stretched to that extent.

Further, in the definition of 'unfair trade practices', the bill includes the disclosure of any personal information given in confidence by the consumer to other person, unless such disclosure is made in accordance with the provisions of any law in force for the time being. In the absence of a data protection and privacy law¹⁰, this can only mean that any disclosure is, therefore, illegal.

On 2 August 2019, following the Consumer Protection bill, the Indian government also published a set of draft guidelines to specifically govern consumer rights in an e-commerce setting. It is now open for public comments and seeks to cover all B2C models. It relates to a range of provisions, such as prohibition of deep discounting, mandatory declaration of compliance, maintaining a level playing field and prohibition of unfair trade practices in the realm of data. It seeks to protect only the personally identifiable information of the consumer in accordance with Information Technology (Amendment) Act 2008. The latter essentially mandates corporations to undertake reasonable security practices and procedures to protect personal data.

The whole gamut of competition and consumer issues presents a complex web of inter-linkages among fair trade, free competition, consumer protection and Big Data. However, by virtue of their very new nature, issues of this kind had not been caught in the net of any black and white legal rules in the past. Moreover, when the problem at hand is one of economics and its intersection with private rights

Anti-competitive actions of deep-pocketed technology companies that track consumer data are increasingly under the public scanner.

as well as behavioural sciences, it has lent a hint of abstraction. Thus, bringing it under legal actionability is a task at hand. Taking cognizance of the fact that these are issues of a new nature, the existing system needs to be reviewed and must undergo upheaval, if found necessary. Cosmetic changes and introduction of vague laws are not going to provide practicable solutions.

Brink of success

With many powerful hands joining together to make e-commerce swifter, it is now more necessary than ever for the concerned regulatory bodies to weigh in. Earlier this year, CCI ordered a market study of e-commerce in India to make stronger policy recommendations so as to address any existing legal and operational flaws. With this and the new consumer protection bill, the awaited privacy laws and national e-commerce policy, India is on the brink of successfully orchestrating coordinated efforts between different regulatory bodies to protect its market and its consumers. However, it is recommended that the current piecemeal approach be soon replaced by comprehensive laws on data protection for better coherence and ease of execution.

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- ⁹ Reuters. 2019. "Google found guilty of misusing Android dominance in India, CCI orders wider probe". *Business Today* June 28.
- ¹⁰ A Data Protection Bill has been tabled in India in 2018.

cover feature

International Rules on Electronic Commence A South Asian Perspective

It would be pragmatic for South Asian countries to engage in multilateral e-commerce negotiation process and protect their interests rather than accept the agreement fait accompli.

Posh Raj Pandey

Defining electronic commerce

Digital transformation is fundamentally changing the way people, business and government interact. It presents new opportunities to promote inclusive economic growth by connecting rural and urban economies, opening up new channels of trade for landlocked countries, facilitating the participation of women and micro-enterprises in the formal economy, providing micro, small and medium enterprises (MSMEs) access to a global consumer base and facilitating cross-border trade in services previously considered technically unfeasible.1 Electronic Commerce, or e-commerce, is one of the business models of such interactions. It takes place through a range of different commercial relationships, involving any possible pairing of consumer, business or government. These include business-to-business (B2B) transactions, business-to-government (B2G) transactions, business-to-consumer (B2C) transactions, consumer-to-business (C2B) transactions and peer-topeer relationships, which take place between two or more individuals.

There does not seem to be a consensus, however, on the definition of e-commerce. The Organisation for Economic Co-operation and Development (OECD) has defined e-commerce as the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders.² It means that a commercial transaction qualifies as e-commerce if it is ordered through computer networks irrespective of the characteristics of the product transacted, the parties involved, the mode of payment or the delivery channel. This definition accommodates not only streaming of digital contents but also 3D printing, delivery drones, online platforms or local store pick up and other wide varieties of new and emerging delivery systems. This sometimes blurs the goods and services dichotomy.

The United States (US) Census Bureau has also adopted a similar definition of e-commerce but adds that e-commerce might also include sales where the price and terms of sale are negotiated over the Internet, a mobile device (m-commerce), extranet, Electronic Data Interchange (EDI) network, email, or other comparable online systems.3 Statistics Canada4 and the Japanese Ministry of Economy, Trade and Industry⁵ have also defined e-commerce in a similar manner. The private sector, however, understands e-commerce in a limited sense, focusing only on B2B and B2C transactions.6

The World Trade Organization (WTO) Work Programme on Electronic Commerce defines e-commerce in a broad sense as the "production, distribution, marketing, sale or delivery of goods and services by electronic means".⁷ This definition not only includes goods and services purchased over the Internet and delivered to consumers in non-electronic form, but also the provision of Internet services as well as electronic delivery of services.

Despite the challenges in defining and measuring e-commerce,⁸ it is estimated that the global value of e-commerce was US\$29 trillion in 2017, which was a 13 percent rise from the 2016 level, and an equivalent of 36 percent of the global gross domestic product (GDP). The largest chunk of global e-commerce constitutes B2B transactions, which was US\$25.5 trillion in 2017, which is about 87 percent of the total. The remaining was B2C transactions worth US\$3.9 trillion. Cross-border B2C sales were estimated to be US\$412 billion and cross- border B2B sales to be US\$3.8 trillion in 2017.⁹ The US is the market leader in global e-commerce with 30 percent share, followed by Japan and China.

E-commerce in WTO

Issues of e-commerce entered the WTO in 1998 when the US put forward a proposal of not imposing customs duties on electronic transmission.¹⁰ This led to the adoption of the Ministerial Declaration on Global Electronic Commerce in the WTO the same year.11 The Ministerial Declaration has two operative parts: i) to establish a comprehensive Work Programme to examine all issues relating to global e-commerce by taking into account the economic, financial, and developmental needs of developing countries, and ii) to continue with the current practice of not imposing customs duties on electronic transactions.

Following the mandate of the Ministerial Declaration, the WTO General Council adopted the Work Programme on Electronic Commerce on 25 September 1998. Four WTO bodies are designated to take forward relevant specific issues. They are: i) the Council for Trade in Goods to examine and report aspects of electronic commerce relevant to the provisions of GATT 1994 and the multilateral trade agreements covered under Annex 1A of the WTO Agreement, ii) the Council for Trade in Services to examine and



report on the treatment of electronic commerce in the General Agreement on Trade in Services (GATS) legal framework, iii) the Council for the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) to examine and report on intellectual property issues arising in connection with electronic commerce, and iv) the Committee on Trade and Development to examine and report on the development implications of e-commerce. The General Council remains central to monitoring and oversight of work.¹²

So far, there has not been any substantive progress under the Work Programme, and almost all the ministerial meetings have ended up with the decision to continue the Work Programme on Electronic Commerce and with the moratorium of not imposing customs duties on electronic transmission. However, the landscape of e-commerce in the WTO changed at the eleventh Ministerial Conference held in Buenos Aires in December 2017, where 71 ministers issued a joint statement stating that they had agreed to initiate "exploratory work together toward future WTO negotiations on trade-related aspects of electronic commerce".¹³ Consequently, members of the Joint Statement Initiative (JSI) were requested to identify issues of their interest.

Discussions under the JSI are organized under four main themes based on the issues raised: i) enabling digital trade/e-commerce, ii) openness and digital trade/e-commerce, iii) trust and digital trade/e-commerce, and iv) cross-cutting issues, includ-

ing development, transparency and cooperation. Under enabling digital trade, the discussion is focused on trade facilitation measures related to customs and logistics, and measures to facilitate electronic transactions such as trade-related aspects of online payment solutions, electronic authentication, e-signatures and e-contracts. Market access of goods and services relating to e-commerce and trade-related aspects of cross-border flow of information are the main themes under openness. Issues of consumer and personal data protection, protection of industry data, source code and algorithms, intellectual property and cyber security are taken up to increase trust on digital trade. A variety of cross-cutting issues relating to the publication and accessibility of laws and regulations relating to e-commerce; ways of addressing the digital divide, including through the provision of technical assistance, longer implementation timeframes and relevant market access commitments; and the importance of cooperation between WTO members' regulatory authorities, public and private sectors, and between relevant international organizations, are also discussed.14

Thus, work on e-commerce in the WTO is taking place simultaneous-

There has not been any substantive progress under the Work Programme on Electronic Commerce.

ly under the Work Programme and under the JSI. Work under the JSI is fast moving despite the views of some members that it is premature to consider negotiating rules on e-commerce.15 Not only in the WTO, but also in other forums, WTO members have taken up the issues of liberalizing e-commerce. At the World Economic Forum (WEF) in Davos on 25 January 2019, 76 WTO members¹⁶ issued a joint statement and decided "to commence WTO negotiations on trade related aspects of electronic commerce" and sought "a high standard outcome that builds on existing WTO agreement and framework".17 It is understood that new rules will focus, among other things, to improve consumers' trust in the online environment and combat spam, to tackle barriers that prevent cross-border sales, to guarantee validity of e-contracts and e-signatures, to permanently ban customs duties on electronic transmissions and to address forced data localization requirements and forced disclosure of source code.18 Similarly, at the sidelines of the G20 Summit on 28 June 2019, leaders of 24 WTO member countries19 adopted the 'Osaka Declaration on Digital Economy' and launched the 'Osaka Track'. The Osaka Track affirms their commitment to promote efforts on international rule-making on trade-related aspects of electronic commerce at the WTO.20

Under the JSI, the most common issues raised in the country proposals included open trade environments, trade facilitation, customs duties, privacy protection and online security, infrastructure for digital trade, electronic payments and paper-less trading, intellectual property, data localization, domestic regulations, developing countries' and LDCs' interests, and inclusion of women and MSMEs in e-commerce. However, members circulated their negotiating proposals after the Davos Declaration of the WEF. In the negotiating text proposals, members have proposed an independent new multilateral agreement on e-commerce and to establish a Committee on Trade-Related Aspects of Electronic Commerce.21 There appears to be a broad consensus on the scope of the agreement to cover all measures-which affect trade by electronic means-adopted or maintained by a member,²² and on the prohibition of the imposition of customs duties on e-commerce.23 Similarly, there appears to be convergence among members regarding the inclusion of many issues in the new agreement, such as, access to and use of the Internet for e-commerce, non-discriminatory treatment, electronic contract, electronic authentication and electronic signatures, protection of source code, paperless trading, trade facilitation, consumer protection, protection of personal data and privacy, restriction on unsolicited commercial electronic messages, cyber security, use of cryptography, standardization and interoperability, control of anti-competitive practices, no prior authorization requirement, transparency, domestic regulations, open government data, regulatory cooperation, public policy objectives, and general and security exceptions.24 However, on the issues of data localization and localization of computing facilities, there are divergent views among the JSI members. China and Brazil are in favour of regulating data flows and data storage through domestic regulations²⁵ whereas most of the other members want free flow of cross-border data, information and their processing and analysis. Few of the members have proposed special and differential treatment for developing and least-developed countries.26 In fact, most of the members have put forward their proposals drawing from the provisions included in the respective regional groups in which they are signatories.

Electronic commerce in regional trade agreements

An increasing number of regional trade agreements (RTAs) have incorporated specific provisions related to e-commerce, partly in response to the increasing importance of the digital economy and partly in response to the perception that the WTO Work Programme on Electronic Commerce has made no substantive progress. There are 75 RTAs, among and between developed and developing countries, notified at the WTO, which explicitly address e-commerce.27 Most of these are mainly driven by the US, Australia, and Singapore.²⁸ The European Union (EU) seems less enthusiastic about including rules on digital trade in free trade agreements, as can be seen in the Japan-EU Economic Partnership Agreement.29 The provisions on e-commerce in the different RTAs are highly heterogeneous in terms of addressing various issues such as customs duties, non-discriminatory treatment, domestic regulation framework, electronic signature, consumer protection, data protection, paperless trading, unsolicited or undesired electronic message, and so on.

South Asia and e-commerce

A proper estimation of the value of e-commerce transactions in South Asia

is lacking. In order to fully realize the benefits of e-commerce, there needs to be a well-developed ecosystem, including appropriate regulatory system, adequate infrastructure and connectivity and access to required technology. Thus, the state of e-commerce in South Asia is assessed based on the B2C index prepared by the United Nations Conference on Trade and Development (UNCTAD) and the trade in information and communication technology (ICT) products. The B2C index shows that most of the South Asian countries have a lower rank, except for Sri Lanka and India (Table 1). Similarly, export of ICT products in total exports of goods is less than one percent for all the countries, except for Bhutan, but the share of ICT products in services exports is more than 10 percent for all the countries, except Bhutan, with India as the star performer (Table 2).

Despite the fact that India possesses globally competitive digital infrastructure and skills, most of the South Asian countries suffer from limited knowledge of the digital market and e-commerce platforms, lack of appropriate and functioning institutional and regulatory framework, absence of enterprise development mechanisms, lack of infrastructure and technology, limited use of e-payments, logistics constraints for the delivery of goods, and insufficient consumer protection mechanisms. These could be the rea-

	Table 1 B2C E-c	able 1 2C E-commerce Index, 2016							
	Rank/144	Country	Share of individu- als using internet (%)	Share of individu- als with an ac- count (%)	Secure in- ternet server per 1 million people (nor- malized)	UPU postal reliability	B2C E- com- merce Index		
	73	Sri Lanka	32	83	47	45	52		
ł	83	India	30	53	39	56	44		
	100	Bhutan	42	34	51	18	36		
	103	Bangladesh	18	31	24	68	35		
	108	Nepal	20	34	33	52	35		
	120	Pakistan	16	13	29	39	24		
	132	Afghanistan	11	10	22	23	17		

Source: UNCTAD B2C E-commerce Index 2017

Table 2

Trade in ICT goods and services, 2017									
Country	Share of ICT goods in total goods exports	Share of ICT goods in total goods imports	Share of ICT services in total services exports	Share of ICT services in total services imports					
Afghanistan	NA	0.25	12.59	1.92					
Bangladesh	0.04	3.05	13.57	1.09					
Bhutan	15.87	2.38	0.25	1.88					
India	0.86	9.71	29.59	3.67					
Maldives	0.00	4.62	3.13	6.75					
Nepal	0.63	5.29	18.03	0.92					
Pakistan	0.19	4.68	17.53	4.18					
Sri Lanka	0.55	4.73	12.30	7.01					
World	12.41	13.44	9.3	NA					

Source: UNCTAD Statistics, latest available

sons for the less engagement of South Asian countries, except India, in the WTO on issues of e-commerce. None of the South Asian countries are part of the JSI. India is against continuing the moratorium on imposing customs duties on e-commerce, arguing that it has huge revenue implications.³⁰ Similarly, India has expressed its reservation on the free flow of data and information.

Regional cooperation on e-commerce in South Asia

The ecosystem for electronic commerce in most of the South Asian countries is weak and underdeveloped. It is extremely difficult for them, particularly the least-developed countries, to adapt to digital industrialization and participate in the fourth industrial revolution on their own. Although most of the countries have enacted laws to regulate electronic activities and unveiled their e-commerce strategies, they lack adequate digital infrastructure, digital skills, computing infrastructure and data infrastructure that contribute to the digitalization of manufacturing and services through the use of Artificial Intelligence (AI), cloud computing, 3D printing, robotics and Internet of Things (IoT). Regional cooperation among the South Asian countries in the form of regional digital cooperation would not only contribute to

the promotion of e-commerce and development of value chains in the region, but also to their digital industrialization. To start with, South Asian countries may consider initiating regional digital cooperation with limited scope, such as phased liberalization of e-commerce, digital infrastructure cooperation, and sharing of knowledge, skills, experiences and digital capacity building. Nonetheless, the goal of such cooperation should be to progressively achieve a regional digital single market.

A regional e-commerce strategy, which supports national e-commerce strategy and helps harmonize rules and regulations on e-commerce, could be developed. Areas that can be explored for regional cooperation could be cross-border contract rules for consumers and businesses, regulations on consumer protection, digital payment, measures in areas of parcel delivery, rules on digital content, measures for cybersecurity, rules on geo-blocking, and so on. The second area of cooperation could be building digital infrastructure, which includes developing ICT infrastructure (access, connectivity and affordability), complemented with digital skills. Similarly, South Asian countries can cooperate on building data infrastructure where Big Data are formed through data analytics and transformed into AI with appropriate framework for data ownership, cloud computing infrastructure, and strengthened broadband infrastructure. For building digital infrastructure, India can play the role of digital growth pole and assist other countries of the region in developing their digital infrastructure. The third component can be sharing of experiences, knowledge and skills among the South Asian countries in areas of e-government and use of digital technology in providing public services such as transportation, water supply, energy, law enforcement, education, medical services, etc. as well as in agriculture and manufacturing.³¹

Conclusion

WTO members, which collectively command more than 90 percent share in global economy and trade, have initiated negotiations on e-commerce under the banner of the JSI with an aim to conclude a multilateral agreement on e-commerce. The progress on the JSI indicates that the WTO Work Programme on Electronic Commerce



could be undermined and most of its works nullified. Thus, it would be pragmatic for South Asian countries to engage in the negotiation process and protect their interests rather than accept the agreement fait accompli. South Asian countries could insist to replicate the negotiation process of the Trade Facilitation Agreement and the flexibilities in the commitment. Similarly, they can argue that LDCs should not be required to assume any additional obligation as mandated by the Doha Declaration. As digital trade could be a potential tool for social and economic transformation, it is imperative that South Asian countries act on regional digital cooperation to progressively attain a regional digital common market.

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E-Commerce in LDCs Evidence-based assessments

Addressing the challenges in key areas of policy and investment focus will help unlock the full eTrade potential of LDCs.

Fanan Biem

Electronic commerce or digital commerce provides an avenue for business that transcends traditional barriers. The distinction between the 'e-economy' and 'the economy' is blurring out in many parts of the world. Nevertheless, important gaps remain in some countries' readiness for this new phase of the global economy.

In 2017, global e-commerce sales increased by 13 percent up to an estimated US\$29 trillion.¹ An estimated 1.8 billion people purchased goods online in 2018.² Web-based transactions are popular because e-commerce leverages technological innovations and telecommunications developments to create cross-border trade and value chains without the limitations of geography. It matches cutting-edge technology with new resources and ideas in ways that were never possible before.

E-commerce was built on decades of digital innovation and investment in infrastructure. The rise of new technologies is projected to further reduce trade costs, which declined by 15 percent between 1996 and 2014.³ Digital technologies such as Artificial Intelligence, the Internet of Things, additive manufacturing (3D printing) and Blockchain are projected to lead to further exponential reductions in trade costs. But, to date, the implementation and productivity capture in e-commerce and international value chains has been uneven at best, and has widened economic development gaps between developed countries and least-developed countries (LDCs), at worst.

These realities signal many challenges and raise difficult questions. In a world where e-commerce benefits those who already have a place in the global economy, where is the space for LDCs? How can LDCs access technological innovation? What is the path to overcome the 'digital divide'? How can Aid for Trade resources be best used to meet these needs? Most importantly, how can e-commerce drive development?

Within the community of international organizations dedicated to economic development, focus has shifted to understanding the practical foundations that enable e-commerce within each country's own path to development. For example, one of the core objectives of the Enhanced Integrated Framework (EIF) is to harness the technological revolution for inclusive growth. Now, more than ever, there is a focus on making sure that LDCs are ready for e-commerce.

New focus, new tools

Addressing the digital divide depends on improving evidence-based policies and regulatory frameworks for trade and investment. The starting point for this can be analyzing what describes and defines the dynamic comparative advantages of LDCs in the digital economy. Next, designing and implementing policies that promote skills development and facilitates adoption of technology and innovation is crucial.

Rapid eTrade readiness assessments contribute to this evidence -to-policy approach. These assessments are based on requests by LDC governments to help evaluate a country's ability to join the global digital economy. The goal of the eTrade readiness assessment is to understand the progress of e-commerce and the barriers that exist for future growth. As of 2018, the EIF has funded nine Rapid eTrade Readiness Assessments, all of which were undertaken by the United Nations Conference on Trade and Development (UNCTAD). To date, six have been completed (Liberia, Nepal, Samoa, Solomon Islands, Vanuatu and Lesotho) and an additional three are in the research phase (Kiribati, Malawi and Tuvalu). The EIF-funded Diagnostic Trade Integration Studies (DTIS) also cover e-commerce, albeit at a broader level.

While the eTrade readiness assessments are country-specific and depend on the context of each individual country's development path, there are several common key areas of policy and investment focus that deserve special consideration. Addressing the challenges in these areas will help unlock the full trading potential of the LDCs. Except where otherwise noted, the following information comes from these eTrade Readiness Assessment reports.

Lessons learnt

Trade logistics and trade facilitation Business-to-Consumer (B2C) transactions form a substantial part of e-commerce transactions and are a high potential area, particularly for the LDCs. While these transactions depend on virtual buying and selling, they still need physical delivery of goods. Nepal assessment observed that transportation volumes were too low to attract major logistics players. Liberia assessment also revealed similar significant logistics constraints. For the island nations of Samoa, the Solomon Islands and Vanuatu, the assessment revealed constraints related to geographical isolation, lack of physical postal addressing systems, and unsupportive import procedures for parcels. Despite the reduction of transport costs and improvements in shipping connectivity, there still exists a gap between the best- and worst-connected countries, making transport costs

and delivery times high.⁴ Improving customs and border procedures to make B2C transactions more secure, transparent and less costly remains a major priority for mainstreaming e-commerce in the LDCs.

One outcome of the 2013 World Trade Organization (WTO) Ministerial Conference was that it aimed to address precisely these types of challenges in the landmark Trade Facilitation Agreement (TFA). There is a correlation between implementing the TFA and increases in B2C transactions. Research reveals that countries that notified the implementation of trade facilitation measures in 2014 have an average B2C Internet use rating of 4.54 while the rating is only 3.44 for those countries that notified in 2018.5 Further compliance with TFA measures has been noted to be a good basis for building a secure, transparent and more efficient business environment for businesses and consumers.⁶

Payment solutions

Payment solutions are an essential element of e-commerce transactions. These include credit cards, digital wallets, cash on delivery, among many others. eTrade assessments have shown that e-commerce users in the LDCs prefer cash-on-delivery payment methods as compared to digital payment gateways. In Nepal, this preference is estimated at 85 percent of consumers. Difficulties in cross-border money transfer were also highlighted across the South Asian LDCs as consumers encounter difficulties in using their payment cards to purchase goods from international e-commerce platforms. E-commerce businesses in Nepal are now finding alternatives to traditional banking for digital transactions.⁷

In Liberia, the assessment revealed a weak knowledge base and trust, resulting in consumers' hesitancy to divert from the traditional model of neighbourhood shopping. However, promising developments are now underway. New interoperability between banks and the emergence of local card payment gateways that can connect to international networks and electronic payment solutions for utilities should alleviate security and trust concerns. The expectation is to ease the transition from the traditional models to mainstream e-commerce. Similar limitations in the development and uptake of e-payment solutions were highlighted in Samoa, the Solomon Islands and Vanuatu, including a lack of trust in cashless payment options, limited customized product offerings by financial institutions and cultural barriers. In Vanuatu, the legal and



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technical reforms undertaken by the Reserve Bank of Vanuatu in 2017 now incentivize banks and mobile network operators to offer competitive electronic payment solutions.

ICT infrastructure and services

Steady investment in information and communications technology (ICT) has enabled major growth in mobile and Internet penetration across the majority of the LDCs. This has opened several opportunities and created healthy competition among financial service and payment service providers. This growing demand has been linked to a young, educated and technology-reliant population. Liberia's ICT infrastructure faces challenges related to reliability, affordability, and speed of the Internet coverage. Nevertheless, broadband and mobile Internet prices are projected to drop amidst rising operator competition. Internet penetration in Solomon Islands has rapidly increased in the past decade. However, the difficult geography and high cost of Internet has remained a hindrance to the roll-out of related services such as mobile banking and mobile money. The impending arrival of a submarine cable with Australian assistance is expected to boost Internet speeds and reliability. Policies that promote investment in high-speed broadband Internet are a major outcome of the eTrade readiness assessments and are positioning LDCs to better participate in the digital revolution.

Legal and regulatory framework Assessments have revealed non-existent or weak supportive laws for the regulation of e-commerce transactions. Regulations and enforcements were seen to lag behind across a majority of the LDCs. The Solomon Island's consumer protection legislation was found to be outdated requiring a revision to include e-commerce. In Samoa, the pieces of legislation which existed did not cover e-commerce. Through the broader framework of EIF interventions, the LDCs are making efforts to address some of these regulatory gaps. In Cambodia, the Ministry of Commerce is currently

formulating an e-commerce strategy, through the EIF-funded Sustainability Support Project. Two officials from the Ministry attended the Digital ASEAN workshop organized by the World Economic Forum in Vietnam in August 2019. The workshop covered topics critical to Internet users like data policy, digital skills, e-payment and cyber security. In Lesotho, bills have now been prepared covering areas such as e-transactions, cybercrime, consumer protection, and competition. These are positive steps towards filling the regulatory gap.

Access to financing

On a global scale, the gap between supply of and demand for trade finance is estimated to be US\$1.5



An increasingly savvy young population in the LDCs is a promising factor for e-commerce skills development.

trillion globally, or about 10-15 percent of the market.⁸ In the LDCs, the gap is significantly higher as over half of trade finance requests are estimated to be rejected by banks; consequently, about US\$100 billion of trade finance opportunities are missed in Africa and US\$ 700 billion in Asia.⁹ The broad challenges faced by micro, small and medium-sized enterprises (MSMEs) in accessing trade finance are even more evident in financing for e-commerce. Across the majority of the LDCs assessed, e-commerce is considered a risky sector for which banks are still reluctant to develop customized financial products. In Lesotho, the assessment revealed a majority of MSMEs resort to private and informal sources of funding. This was similar in the Solomon Islands where MSMEs depended mostly on community-based lending solutions rather than on commercial banks. Some encouraging developments are now underway as the government of the Solomon Islands has made some efforts to establish special schemes to offset the lending gap. There is a growing demand by the LDCs and interest on the part of development partners for the conduct of further diagnostic analysis of the supply and demand constraints of trade finance.

E-commerce skills development

An increasingly savvy young population in the LDCs is a promising factor for e-commerce skills development. Universities in the LDCs such as Nepal and Samoa are now starting to embed skills required for e-commerce, such as data analysis and programming, into ICT curricula. In Vanuatu, government-led efforts, backed by development partners, are attempting to bridge perceived skills gaps by enabling more schools and higher education bodies to become ICT-ready.

On a broader scale, start-up and innovation culture is currently gaining traction across the LDCs. A joint report by the Global System for Mobile Communications Association (GSMA) and Briter Bridges identified 618 active tech hubs across the African continent in July 2019. This represents a 40 percent leap from the 2018 number of 442. Across the Asia-Pacific region, 565 active tech hubs were identified.¹⁰ These hubs offer support to budding tech entrepreneurs and are categorized to include incubators, accelerators, technology parks and university innovation hubs. Services offered include tech-focused support programmes and funding. The LDCs have not been left out. In Africa, Senegal has 15 tech hubs, Tanzania has 17, Uganda has 10, Mali has 14 and Togo has 13.11 In South Asia, Nepal has 12, Bangladesh has 15 and Cambodia has 14

tech hubs.¹² This is a positive sign for e-commerce skills development across these LDCs. The Pacific Island LDCs still lack properly developed tech ecosystems due to infrastructure and market challenges. However, positive signs are emerging, including the announcement of a new ICT submarine cable in Samoa and the establishment of a Technology Institute in Kiribati.

Tangible needs of digitizing economy

Infrastructure

There has been significant progress in improvements to ICT infrastructures as LDC governments, together with the private sector, are at the forefront of making significant strides to address the identified deficiencies. However, there remains sufficient room for support through the Official Development Assistance (ODA), including Aid for Trade (AfT), where there is presently a gap in commitment and actual implementation.13 Of the US\$342.3 billion disbursed as AfT between 2006 and 2016, only US\$6.6 million was channelled to ICT connectivity, with a quarter going to the LDCs.14

Aid for Trade

For the EIF, a demand-driven approach to the integration of the LDCs into the multilateral trading system ensures that EIF investments target country-specific challenges, including those identified in analytical studies such as the Rapid eTrade Readiness Assessments and the Diagnostic Trade Integration Studies. The regional approach is not left out either. A new EIF project in the South Asia region, in partnership with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), South and South West Asia office, is aimed at enhancing the capacities of targeted women entrepreneurs in the application of e-commerce platforms. Skills acquired through the project's support will help expand their businesses and ensure access to regional and global supply chains.

Through other targeted interventions, there has already been remarkable successes across some LDCs in the area of e-commerce. Bhutan, through the adoption of policies that target ICT development, and the support of the EIF through its Infrastructure and Trade Services Development project, has launched an online commodity exchange system and piloted the auctioning of Bhutanese potatoes, one of its top exports. This has led to greater efficiency by reducing processing and payment times as well as a measurable increase in profitability as Bhutanese farmers now gain approximately US\$330 per truck load.

In Uganda, the government has equally taken proactive steps to fill the gaps identified in the eTrade

> Policies that promote investment in highspeed broadband Internet are a major outcome of the eTrade readiness assessments.

readiness assessment. Collaboration has been fostered between the ICT, agriculture, tourism and private sectors to develop private sector capacity in the creation of local digital content. Focus has been on e-commerce platforms for the sale of local products and services offered by SMEs.

A better recipe for trade-led development in the digital age

The focus on the evidence-based realities of trade readiness and these case studies show a new recipe for success. Proactive government coordination and initiatives, coupled with development partners' support, can lead to remarkable gains in addressing the e-commerce constraints across the LDCs. Ownership of these reforms, especially on the policy and regulatory front, must, however, come from the countries themselves. With that ownership, development assistance, coordination and diversification can provide the necessary push for these countries to really benefit from e-commerce.

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Digitalization of Economy and E-commerce in Nepal

Rapidly evolving digital technologies can offer opportunities for LDCs like Nepal to accelerate their development process.

Madhu K Marasini

Digital Development is proliferating at a speed and scale that is remarkable. Current breakthroughs in digital development in the form of technologies such as Artificial Intelligence (AI), robotics, cloud computing, Blockchains, Internet of Things (IoT), 3D printing, and 5G mobile technologies are transporting us to a new era—the fourth industrial revolution. These advances have touched upon various aspects of almost all countries

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or societies, albeit in varying degrees. This transformation has brought unprecedented opportunities, and also a plethora of challenges. The challenges are especially pronounced for a least-developed country (LDC) like Nepal. Hence, concerted efforts are needed to tackle these challenges and benefit from evolving digital technologies and resulting digitalization of economies.

Nepal's economy, although growing impressively for the last three years, suffers from structural weaknesses. Remittance inflows, rather than productive capacity, have been the bedrock of the economy, and trade imbalance has reached an alarming level. Continuous trade deficit during most parts of the last two decades has not only weakened competitiveness, but has also negatively impacted industrialization, employment generation and economic growth. Therefore, the primary challenge for Nepal is to correct this perverse trajectory. A combination of factors, no doubt, is necessary to drive Nepal's economic transformation, but exploiting the

potentials offered by the progress in digital technology is crucial.

The world's economic development experience suggests that countries that successfully injected evolving technologies in their economies propelled and grew faster than countries that failed to do so. Rapidly evolving digital technologies are at the forefront of today's technological progress, and hence they offer opportunities for LDCs like Nepal to accelerate their development process. Against this background, this article discusses one such potential enabler for Nepal's economic development, which is e-commerce.

E-commerce in Nepal

The application of digital technology in Nepal's economy is still at a nascent stage. Yet, the current growth and expansion of information and communications technology (ICT) has created a solid foundation for e-commerce prospects. According to Nepal Telecom Authority, mobile phone penetration in Nepal has reached a resounding 130 percent, and access to the Internet has expanded to 63 percent of the population. Social media platforms such as Facebook, Twitter and Viber are used widely. Besides acting as a medium of communication and socialization, these online platforms have emerged as powerful tools to connect businesses with clients. Similarly, adoption of smartphones is growing fast, particularly among the youth, to seek entertainment, information and various services. Most importantly, this digitally versed youth population outnumbers all other age groups in Nepal, which bodes well for digitalization of the economy.

Against this backdrop, application and internalization of e-commerce can open up new opportunities for doing business in Nepal. All it takes is a mobile phone to connect consumers and producers to the market. This is particularly helpful for small businesses who can now establish connections with consumers and/or suppliers that were erstwhile difficult to access. Digital connection has created a potential for micro businesses in rural areas to get integrated into global value chains. Hence, the biggest beneficiaries of e-commerce, perhaps, could be micro, small and medium enterprises (MSMEs), rural women and youth entrepreneurs, traders and exporters.

E-commerce is not limited to buying and selling of goods. Service industry such as travel and tourism is one of the biggest beneficiaries of the rise of the digital economy. The rise of platform marketing has allowed service providers to promote and market their products at very low costs. Nepali tourism entrepreneurs can use these tools to promote Nepal as an attractive travel destination.

Digitalization of the economy, however, is beset with challenges considering the poor conditions of digital infrastructure. For e-commerce to foster, expanding quality mobile net-

Current growth and expansion of ICT has created a solid foundation for e-commerce prospects in Nepal.

work coverage and ensuring adequate Internet bandwidth is an imperative. In Nepal, these are either lacking or very expensive. Nepal is also plagued by issues related to high logistic costs and absence of electronic payment solutions, which pose challenges for reliable and sustainable operation of e-commerce. Moreover, for a thriving e-commerce, efficient delivery of goods to customers' doorsteps is a prerequisite. Except for certain areas of a few metropolitan cities, there is no provision of assigning systematic addresses in Nepal. Thus, overhauling the current physical address system by properly naming the roads and numbering the buildings is an urgent task. In the absence of these basics, there is uncertainty regarding the sustainable operation of e-commerce in Nepal. Moreover, since a large number of

people still reside in remote areas in Nepal, digitalization of the economy and promotion of e-commerce nationwide is a daunting task. Narrowing the rural-urban digital divide, making technology accessible to all sections of the population, and enhancing digital literacy are equally critical. Furthermore, since cash dominates the payment system, shifting a decent portion of cash transactions to electronic payments is necessary.

To deal with these challenges, Nepal has embarked on a mission to enhance its digital economy, both through domestic initiatives as well as through international support. For instance, the 'Digital Nepal Framework 2018' has outlined eight domains and eighty initiatives to utilize digital development for economic growth. Likewise, the United Nations Conference on Trade and Development, with support from the Enhanced Integrated Framework of the World Trade Organization, carried out an assessment of eTrade readiness in Nepal in 2017. It has made recommendations in seven areas, including the immediate need for an e-commerce strategy formulation, infrastructure development, logistics facilitation, and e-commerce skills development, among others. These areas would require massive investment, which the Government of Nepal alone may not be able to meet. Thus, there is a need to mobilize support from multilateral financial institutions such as the World Bank and the Asian Development Bank, as well as, from development partners and other organizations working in this area.

Nepal can also learn and seek assistance from various international initiatives that offer support to localize the digital economy. For instance, the World Bank Group has introduced the 'Moonshot' assistance programme in the African Union. This initiative aspires to digitally connect every individual, business and government in Africa by 2030, for which it helps set up high-speed connectivity, build skills and necessary infrastructures, and lay the foundations for a vibrant digital economy.



Nepal's e-commerce strategy

Realizing the potential of e-commerce to boost trade and competitiveness, the Government of Nepal has recently released the 'E-commerce National Strategy'. With a vision of expanding trade and creating a technology-friendly economy through e-commerce, the Strategy has set three objectives: i) to ensure smooth supply of quality goods in the market in a competitive manner by reducing cost and time of trade, ii) to integrate MSMEs into domestic supply chain and global value chain, and iii) to promote exports of goods and services by integrating with the international market.

The Strategy has identified six pillars to develop and operationalize e-commerce. They are: i) creation of a legal and institutional framework for the promotion and development of e-commerce, ii) developing and strengthening ICT, data security and related infrastructure, and telecommunication services, iii) strengthening and developing trade logistics and trade facilitation system, iv) enhancing access to finance and electronic payment system and making electronic payment system trustworthy, v) increasing public awareness, developing skills and capacity and promoting the private sector, and vi) integrating Nepali goods and services into domestic supply chain and global value chain by developing and expanding their backward and forward linkages through e-commerce.

Delivering on these strategies remain fundamental to truly transforming the e-commerce landscape of Nepal.

Based on the vision, objectives and strategies mentioned above, the E-commerce National Strategy has further spelled out in detail major tasks and activities to be carried out by the different entities of the government. Furthermore, it has annexed concrete work plan with responsible agencies, expected result and timeline to implement each activity. An inter-agency coordination and facilitation committee under the convenorship of the Secretary (Commerce) of the Ministry of Industry, Commerce and Supplies has been constituted, which comprises major stakeholders, including the private sector, for facilitating and monitoring the implementation of the Strategy in an integrated manner. Regular follow up and monitoring of the implementation status of the Strategy has also been ensured through an effective reporting mechanism.

Way forward

Nepal's E-commerce National Strategy provides the much-needed vision to promote e-commerce in Nepal. Now, substantial groundwork, primarily at the technical level, is needed to make the Strategy fully operational. Substantial investment is required in scaling up and expanding mobile data and its geographical coverage. Likewise, it is also important to make Internet data affordable to all groups of society. Similarly, having a well-defined physical address system, which is mostly lacking in Nepal, is also necessary to enhance e-commerce. Thus, the postal code system, and the system of proper numbering of houses and naming of the streets have to be improved and their use should be made widespread. Likewise, the postal service, which has a nationwide network, needs to be reformed and fully modernized to make it an effective instrument for widespread use of e-commerce.

Furthermore, e-commerce operations require strong legal framework and regulatory instruments. How the different components—quality control, data privacy and security, returns, refunds, and payment solution— are defined and regulated are integral to a properly functioning e-commerce system. Moreover, enhancing digital literacy to make e-commerce widespread, is necessary. This would require technical, financial and knowledge assistance from international development partners.

To conclude, digital technology is evolving at an incredible pace. Therefore, creating a conducive environment for digitalization of the Nepali economy, in a timely and systematic manner, is critically important. Application of sophisticated means of digitalization such as AI, IoT, robotics, etc. may not be immediately viable in Nepal, but e-commerce could be an important instrument to spur the economy's trajectory. The recently introduced E-commerce National Strategy, indicating the government's willingness to promote e-commerce, is of vital importance. However, the Strategy has to be backed by legal and technical developments to ensure that its objectives are met. For instance, a separate E-commerce Act should be enacted and a regulating agency to govern it must be established. This will propel Nepal's economy forward and prepare it for the imminent fourth industrial revolution.

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E-COMMerce Regulations in Pakistan

As transactions move online, the capacity of the competition regulator must evolve to be able to analyze transactions as they could have anti-trust implications.

Ahmed Qadir and Vaqar Ahmed

Developments in e-commerce continue to take place at an accelerated pace. From transactions on a personal computer or laptop, the environment has shifted to smart phones and mobile applications with streamlined payment mechanisms, to 30-minute package delivery using drones and related (AI).

Pakistan's own e-commerce milieu has improved despite impediments. A decisive national e-commerce policy that defines the roles and responsibilities of platforms, financial institutions, regulatory agencies, tax authorities and those working for consumer protection would thus help in providing clarity.

Consumer interest in e-world

The Competition Commission of Pakistan (CCP) has long felt the need to explore how best consumers' interests can be enhanced through the availability of e-commerce platforms. However, today's environment in Pakistan is quite different from the one in 2007, when CCP began working. The technology is different, marketing channels are moving online and business models are changing. Multi-sided markets, platforms, sharing economy, etc. are all becoming part of the business and consumer vocabulary. Pakistan is seeing a shift towards technology-and-algorithm-assisted markets, fuelled by the recent growth of 3G and 4G telecom services. Now, consumers in Pakistan can shop online for books, cars, clothes, electronics, even food from multiple platforms, simultaneously. These technologies have also made it possible for small entrepreneurs to compete against, and unseat, incumbent firms in some instances.

Online-to-offline transactions are rising, thanks to ride-sharing services (such as Careem and Uber) that make it easy to be mobile. A growing e-commerce sector (*e.g.*, daraz. pk, OLX and PakWheels) facilitates



e-commerce regulation

the interaction between buyers and sellers, leading to as perfect a competitive market as there can be, where there are many buyers and sellers and lower information asymmetries.

Pakistan's telecom companies that have acquired, or established, their banking and financial services products are in fierce competition. Pakistani consumers are increasingly using financial services such as Easypaisa, Mobicash, etc., that can be accessed over phones.¹ This is expected to increase along with the rise in the number of broadband subscribers. With all this change occurring, the Government of Pakistan has taken some decisive steps to strengthen the regulatory environment on e-commerce.

In 2016, Pakistan's Commerce Ministry was tasked to develop a national e-commerce policy framework for the country. The policy intends to have a wide-ranging impact in Pakistan as it looks to:

- empower stakeholders in trade and commerce with the underlying infrastructure to improve productivity and positively position the nation for global competition;
- open the way for State Bank of Pakistan (SBP) to establish a national e-commerce gateway in co-ordination with relevant stakeholders;
- promote Internet merchant accounts to facilitate business-to-business (B2B), business-to-consumers (B2C) and other in-bound transactions;
- develop a framework that allows e-banking activities to maximise use of mobile financial services;
- promote active participation of small and medium enterprises (SMEs) and disadvantaged groups in e-commerce activities and expand their market presence; and
- promote a culture of e-commerce that supports electronic business transactions at national, regional and international levels.

As economic transactions move to the online and virtual environment, consumers can either witness welfare or harm. The capacity of the competition regulator must evolve to be able to analyze transactions that happen quickly and virtually, as they could have anti-trust implications. Whatever the form, competition and innovation can lead to gains in productivity and tangible benefits to consumers and to Pakistan's economy as a whole. From the perspective of consumer welfare, such innovations that have a positive impact should be welcomed.

The challenge in all this is to ensure an economic and regulatory environment where new business models and consumer-friendly innovations can emerge and thrive. Protecting competition thus becomes important. Innovation is a fragile process that can be suppressed in many ways. From a competition regulator's perspective, it can be in the form of collusion of cartels to keep consumers for themselves,

A thorough revamp of consumer protection laws is an obvious necessity if e-commerce is to take hold.

or larger companies abusing their size and dominant position to force out smaller challengers.

Of humans and machines

Recent enforcement actions against Google² and Facebook³ by the European Union (EU) and Germany, respectively, point towards the emerging challenges for countries like Pakistan in the general areas of dominance, consumer protection and data privacy. These technology brands are truly global and competition issues in other jurisdictions today will be here tomorrow. In competitive markets, companies generally adjust prices based on prevailing conditions, including the prices charged by their competitors. The effective use of algorithms bears the potential of making companies efficient and reducing their costs. But algorithms also have the potential to 'learn' collusive behaviour and help

execute cartel agreements. They can also be used to monitor, implement and police cartels. In this scenario, humans agree to collude and machines execute the collusion, acting as mere intermediaries and messengers.

Algorithms can be used for collusion in pricing with a much more invisible hand. Or, they may facilitate coordinated interaction. A much better understanding of the role of algorithms and AI is required to develop an enforcement strategy that can monitor and track collusion, price discrimination and other coordinated conduct. Similarly, issues of geo-blocking and developments in data protection will also have implications for emerging economies.

The challenge in all this is to ensure an economic and a regulatory environment in which new business models and consumer-friendly innovations can emerge and thrive. Protecting *competition* remains important.

The consumer does not benefit much from the protection ecosystem in Pakistan in spite of various consumer protection laws. The Islamabad Capital Territory and the four provinces (Punjab, Khyber Pakhtunkhwa, Sindh, and Balochistan) have their consumer protection laws but the process of seeking relief is time consuming and financially unviable. There is also no federal agency designated for consumer protection. A thorough revamp of consumer protection laws is an obvious necessity if e-commerce is to take hold.

Pakistan's lack of data protection laws may make it difficult for international platforms to operate locally and protect its citizens from government surveillance. This is an entry barrier as companies and consumers may hesitate to operate in a weak regulatory regime. And, in general, the feeling of insecurity about one's personal data can also stifle e-commerce.

There is also a need for promoting dispute resolution mechanisms for online transactions, providing accountability and responsibility regarding transactions complaints and for adjusting consumer protection policies to accommodate emerging technologies. As e-commerce activities grow, so do consumer complaints. OLX has filed a complaint with CCP alleging plagiarism by PakWheels regarding its advertisements.⁴ While basic consumer protection laws, including prevention of unfair commercial practices and prohibition of deception, should continue to apply to e-commerce platforms, there is still a lack of clarity with the roles and responsibilities of peer providers such as mobile companies and aggregators like Google and Facebook.

A key challenge for the government will be adaptation to the new collaborative economy through provincial consumer protection regimes. The notion of 'consumer' has become more complex as they both *purchase* and *provide* services. Both consumer protection and competition authorities need to accommodate these different perspectives. Meaning, a consumer could be either a *victim* or a *cause*.

One growing concern is the increase in counterfeit products circulating in the economy. Creating a brand that customers rely on is a major asset for any business, turning it into its premier intellectual property. Many high-quality consumer goods are manufactured and marketed across the country. But, technology has given counterfeiters the ability to sell fake products as original. Websites can be made to look reputable in ways that cannot be replicated in bricks-and-mortar facilities. And, quasi-official websites frequently mislead customers into thinking that they are getting the real deal, even at a fraction of the price.

When a brand's image is compromised or diluted due to counterfeiting, the trust that has been built over the years can be lost quickly and the harm to consumers can be incalculable. CCP has dealt with several cases of intellectual property infringements. A recent example of this is the fake representation by a local company as an official Starbucks franchise.⁵

It is hoped that the present government will move decisively to

finalize the e-commerce framework. Along with this, a proper legal framework must be put in place to protect intellectual property rights and prevent counterfeits and pirated goods from entering the market. It should address issues such as their confiscation and destruction. This would allow leveraging of the role of the original agencies and organisations.⁶

Framework backed by laws

Many useful suggestions were made during a multi-stakeholder event on consumer protection issues in e-commerce arranged by CCP in collaboration with the United States Federal Trade Commission in September 2017, some of which are mentioned here.⁷

Regulators and service providers need to design mehanisms to protect consumers from hackers and cybercrime.

A viable policy must address matters of logistics that result in delivery inefficiencies, payment mechanisms that move away from the safe and popular cash-on-delivery method, lack of trust while making an online transaction, follow-up consumer service and lack of awareness of consumer rights.

A youth bulge, rural to urban migration, an increased number of new public sector universities, incubators and accelerator initiatives have all contributed to a significant rise in the number of young entrepreneurs. What is important now is to see how policy to facilitate e-commerce can help start-ups.⁸ Also important is ensuring that emerging challenges pertaining to big data and its management are addressed. Likewise, regulators and service providers need to design mechanisms to protect consumers from hackers and cybercrime. The legal framework must be strengthened by promulgating a data protection law,⁹ strengthening the Trade Dispute Resolution Organisation and amending *Competition Act* 2010 to enhance CCP's powers to act as a federal-level consumer protection agency.

Mr. Qadir is Director General at Competition Commission of Pakistan and Dr. Ahmed is Joint Executive Director at Sustainable Development Policy Institute (SDPI), Pakistan.

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SMES' challenges with rise of e-commerce platforms

Dikshya Singh

he rise of digital technology since L the last decade of the twentieth century has transformed the way the world communicates, entertains, travels and, most importantly, runs businesses. Electronic commerce and digital platforms have disrupted the traditional business landscape. Thanks to the Internet, collecting information, marketing products and coordinating logistics and delivery services have become more efficient, and convenient and cheaper, thus blurring the lines between domestic and international markets. E-commerce and Internet-enabled services have opened opportunities for smaller firms, which are usually constrained by limited capacity and resources.

Opportunity for SMEs

Small and medium enterprises (SMEs) are constrained by low productivity and lack of resources (information, labour, finance and technology) to scale up and venture into new markets. These limitations are more pronounced in the SMEs in the least-developed countries (LDCs). LDCs are characterized by limited physical and institutional infrastructure that makes accessing markets and catering to the demands of the markets effectively a difficult task for the firms operating in these countries. However, digital platforms have emerged as a tool to make markets a bit more accessible to the smaller firms in less developed parts of the world.

E-commerce platforms have become the launch pad for smaller firms on the global market, although last-mile digital and physical connectivity remains a challenge for the ones operating in LDCs.

The Internet has simplified information gathering while e-commerce has reduced costs associated with physical distance between buyers and sellers, helping SMEs expand their markets. Digital platforms, social media and online markets, have removed the necessity of subscribing to expensive advertising services and, in many cases, even doing away the need to have a functioning website. Via these platforms, firms can swap their traditional human intermediaries with digital ones at a fraction of the cost.

Aided by cheaper computing power and enterprise software, information and communications technology (ICT) has equipped SMEs to become more productive. It has transformed the traditional way of collaborating with suppliers, intermediaries and buyers. Web-enabled SMEs have been found to be doing better as they have reported higher profits and enhanced their customer reach. A KPMG survey in India showed that SMEs using webbased services for their operations grew by 19 percent in comparison to 13 percent reported by those using less web-based services.¹

Similarly, McKinsey Institute's survey also found that web-savvy SMEs' export revenue was twice that of firms that used the Internet sparingly.² E-commerce platforms have become the launch pad for smaller firms in the global market. On an average, 97 percent of Internet-enabled small businesses is engaged in export, according to the World Trade Report 2016. Internet-enabled SMEs export at a high rate and also reach greater numbers of foreign destinations.

Online platforms provide smaller firms with opportunities to access far-flung markets, gather information about new opportunities and showcase their products, all at minimal costs. As e-commerce is evolving more into a marketplace from the inventory-based model, digital market platforms have become ubiquitous. Platforms, such as Shopify, Amazon and Alibaba (and its numerous affiliates), offer the digital real estate to showcase the products being supplied by the sellers, who may not necessarily be the producers of the products, from all over the world.

Some platforms, such as Amazon and Alibaba, also provide an option to the sellers to handle shipping and delivery on their own or to use their fulfillment services that process packaging, shipping and delivery of the ordered goods. Not all sellers have to get affiliated to these e-commerce platforms to avail such third-party order fulfillment services. Rakuten Super Logistics, FedEx Fulfillment, etc. take products, pack them and ship them to customers for a fee. Some even handle payment processing, maintain inventory, and handle returns. Since SMEs cannot afford to set up a separate department to handle these logistics,

third-party fulfillment services have emerged as the cheaper and more convenient alternatives.

Complex logistics have always been one of the deterrents for SMEs to venture into cross-border trade. There are platforms that are transforming logistics intermediation. Platforms such as Flexe match SMEs in need of flexible warehousing, ShipWire has emerged as marketplace for logistics services, while Flexport aggregates a number of courier service providers on one platform and allows shippers to find the one that best suits their needs. Most of these service providers operate in developed countries, leaving SMEs in LDCs to function in a traditional set-up. However, the absence of such platforms operating in LDCs also provides opportunities for the businesses to fill the space. For example, Nigeria's Kobo360 is pro-

> Digital platforms have become ubiquitous as e-commerce is evolving into a marketplace model.

viding a tech-enabled digital logistics platform that aggregates end-to-end haulage operations, calling itself the 'Uber of logistics'.

Not only have the platforms changed the way products are bought, sold and delivered, there is also a significant shift in advertising and market outreach. Besides e-commerce platforms, social media marketing has rapidly made global advertising affordable for SMEs all over the world. According to Social Axcess Consulting, the average cost per 1,000 impressions (a standard metric in advertising) on social media averages around US\$2.5 while the same on print media costs about US\$17 and television advertising US\$28.3 No doubt, the online advertising market is estimated to account for half of the global advertising expenditure by 2021.4

Social media platforms, such as Facebook and Instagram, have also emerged as marketplaces on their own. Even without subscribing to advertisement services offered by these platforms, businesses can engage in online sales simply by setting up a Facebook page or an Instagram account. Instagram recently even launched its Check Out service in the United States. The service allows users to purchase the products showcased in Instagram posts directly, without having to go to any other shopping platforms.

The Internet and emerging technologies are contributing to levelling the information asymmetries that prevented smaller firms from across the world from venturing into foreign markets. Besides reaching retail customers through e-commerce, firms are finding it easier to undertake high value business-to-business (B2B) transactions online. This has helped them get integrated into global supply chains.

Besides having the right information on the need of buyers and the regulations, such as standards and certifications, integrating into global supply chains would require SMEs to be able to deliver goods on time. Trade information portals, operated by governments or the private sector, are quite useful with regard to accessing information. Similarly, digitalization in logistics, trucking, freight forwarding, services such as the electronic single window, Artificial Intelligence (AI)-operated warehouse management and electronic consignment tracking have reduced uncertainties in cross-border supply chains. Such efficient transaction management enhances SMEs' capacity to respond to transactions faster and increase their capability to handle larger quantities.

Challenges: new and old

E-commerce is touted as the great leveller between large and small firms and between developed and developing countries. But the prevalent digital divide—uneven access to the Internet and Internet-enabled infrastructure—translates into heterogeneous capability of small firms in utilizing

sme integration

existing e-commerce and allied services. Traditional infrastructure-related issues, such as road and transport and regulatory shortcomings, play out against SMEs operating from LDCs. As in the traditional marketplace, business ecosystem matters while accessing digital platforms, more so for SMEs because their limited capacity and lack of diversification leave them more vulnerable.

One of the obvious constraints for LDCs could be the quality and affordability of digital connectivity. According to International Telecommunications Union's statistics, there is significant disparity between developed and developing countries. In 2018, 80.9 percent of the people in developed countries had Internet access, while only 45.3 percent had access in developing countries.5 The ubiquity of mobile broadband Internet has made progress in bringing down the prices of the Internet service as well as the devices that the Internet can be accessed with. Still, for developing countries, the cost of Internet access remains a barrier. According to Internet Affordability Report, published by Facebook's Internet.org, the average cost of an entry-level 500 MB pre-paid plan was 15 percent of per capita income in LDCs, while the same package cost about six percent of the per capita income in developing countries. The report also cites the high cost of the infrastructure set-up needed to bridge the last-mile connectivity issues -electric power, masts, local Internet exchange points-as one of the reasons for costly Internet connectivity.

Though Internet access may be expensive for LDC consumers, it is safe to assume that SMEs can afford to set-up an e-commerce business targetted at foreign consumers. However, unsupportive regulatory mechanisms, such as regulations that do not support integration with international payments systems, could be a bigger problem. For example, in Nepal, anti-money laundering regulations and domestic regulations on foreign exchange do not permit firms to accept foreign exchange payments in their bank accounts without prior approval.

For smaller transactions, SMEs can seek services from platforms such as PayPal, 2CheckOut and Payoneer that offer payment solutions. Still, these services may not be available in every country. For example, PayPal does not operate in 28 countries, most of them being LDCs. For larger payments, especially if it involves B2B transaction, SMEs may have to seek the traditional payment channels through banks, making engaging in e-commerce equally bothersome. In the absence of proper regulatory and institutional support, international e-commerce platforms do not venture into LDCs.

In addition, an absence of physical infrastructure, such as roads, transport systems, and inefficient border crossing management, makes cross-border and domestic movement of goods ex-

Complementary physical services need to be improved to generate benefits from e-commerce platforms.

pensive. To maximize benefit from the digital access offered by e-commerce platforms, the complementary physical services also need to be improved.

Rules to fight monopoly

Digital platforms have become the driving force of e-commerce development. However, dominant platforms have brought with them a set of issues heretofore absent. Notwithstanding their impact on bricks-and-mortar establishments, platform operators enjoy unprecedented control over their suppliers. Moreover, SMEs lack the expertise to understand the algorithms and systems that determine visibility on these platforms. The sellers that have already generated or started to generate online impressions will be unwilling to shift platforms, thus handing these platforms monopoly powers. SMEs are more vulnerable to the abuses of market power.

Recognizing such unfair practices, the European Commission has proposed a regulation for fairness and transparency in platform trading. Under the new rules, sudden and unexpected account suspensions will be banned and there must also be advance notice of change, among other conditions. Besides unfair competition practices, many artisanal SMEs fear to venture into e-commerce, due to threats of intellectual property theft and ambiguity of jurisdictions for redressal.⁶

Notwithstanding the ICT revolution, SMEs in LDCs may not have the advantage of a conducive business ecosystem to complement the technological advances. High quality digital and transport infrastructure and a conducive regulatory environment are prerequisites to getting onto the digital bandwagon, or rather the digital platform. SMEs also need to understand that platforms provide them a digital real estate, where they compete with other similar manufacturers from all over the world. This market could be more competitive than the traditional markets that they have been catering to. This means that addressing the need to make their product stand out among hundreds of similar products is an urgent imperative.

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SAARC investment agreement Long and winding ROAD

Although the SAARC investment agreement's history and the current deadlock in SAARC present a bleak picture, all hope is not lost.

Bharatendu Agarwal

A recent World Bank study reveals that "In South Asia, on average, overall foreign direct investment (FDI) is well below potential, and intraregional FDI is even more so. Intraregional FDI stocks account for only 1.1 percent of total outward FDI in South Asia."¹ The study presents detailed statistical analysis to show that trade and investment among South Asian countries are less than that with distant countries.

This unpleasant reality has never been a secret. For this precise reason, and with the intention of gradually resolving several similar issues, the South Asian Association of Regional Cooperation (SAARC) was established in 1985. Integration efforts have often fallen short either due to lack of consensus, limited political will or other extenuating circumstances. The non-finalization of the SAARC Agreement on Promotion and Protection of Investment (SAPPI) is a prime example.

Dated journey

SAPPI's journey dates back to 1997. It was during the Ninth SAARC Summit (12-14 May 1997, Male) that discussion on the promotion and protection of investment was first proposed. The heads of states agreed that regional trade and economic cooperation would be strengthened by initiating specific steps to promote and protect investment. The inaugural meeting to take this forward happened on 29-30 September 1997 in New Delhi. However, between 1997 and 2002, SAPPI took a backseat the discussion on investment promotion and protection did not feature in SAARC documents, at least in those available in the public domain.

Then, at the Eleventh SAARC Summit (4-6 January 2002, Kathmandu), the heads of states decided to instruct the SAARC secretary general to facilitate the early finalization of a regionally agreed investment framework to meet the investment needs of SAARC Member States. Subsequently, at the Twelfth SAARC Summit (4-6 January 2004, Islamabad), an inter-governmental expert group (IGEG) was constituted to primarily consider three agreements *viz.* Agreement on Promotion and Protection of Invest-



regional integration

ment, Agreement for Establishment of SAARC Arbitration Council and Multilateral Tax Treaty for Avoidance of Double Taxation. IGEG had its first meeting in New Delhi. Here, it formed two sub-groups, one to deal with investment and arbitration and the other to deal with avoidance of double taxation. At the IGEG meeting, the executive director of the Indian Council of Arbitration had, at the request of India's Ministry of Commerce, presented a concept paper on the need and importance of constituting the SAARC Arbitration Council.

After the first IGEG meeting and the creation of the subgroups, the Subgroup on Investment and Arbitration met at regular intervals. Reasonable progress was made and it led to the king of Nepal stating at the Thirteenth SAARC Summit (12-13 November 2005, Dhaka),"We believe that the signing of the four agreements on Promotion and Protection of Investments, Mutual Administrative Assistance in Customs Matters, SAARC International Commercial Arbitration Centre and Avoidance of Double Taxation will further strengthen the SAFTA regime with a positive bearing on the growth of intra-regional trade and investment."3 By its sixth meeting (19-20 September 2006, Kathmandu), the Sub-group on Investment and Arbitration had already finalized the text for the agreement on the establishment of the SAARC Arbitration Council. It was working on SAPPI vigorously. In the Fourteenth SAARC Summit (3-4 April 2007, New Delhi), the initiative got a push when SAARC heads of states directed that the Agreement on Promotion and Protection of Investment be finalized. All these events cumulatively led to the Sub-group on Investment and Arbitration's seventh meeting (29 November 2007, Kathmandu), where the draft text of SAPPI was finalized, except for one particular clause.4 This clause would turn out to be SAAPI's Achilles' heel and has been obstructing SAPPI's finalization since then.

Secret problem

A note prepared by the SAARC Secretariat in 2014 reveals the problematic clause to be Sub-Article 4(3)(c), which is about any other bilateral or multilateral agreement relating to investment signed prior to SAPPI. As the draft text of SAPPI is not available in the public domain, it is difficult to assess the coverage and implications of the clause in the overall context. There is, however, a possibility that this clause implies that, upon signing SAPPI, all other investment-related agreements signed between SAARC nations prior to SAPPI would become ineffective. If this is indeed the case, the apprehensions would be justified as it would create complexities for the agreements which are already in force among the SAARC nations. The clause, on the other hand, could be making reference to something completely different. Unfortunately, there is no way to be certain in the absence of the completed draft text.

> As the draft text of SAPPI is not available in the public domain, it is difficult to assess its implications and coverage.

Nevertheless, efforts were made to break the deadlock. In its 39th Session (7-8 November 2011, Addu City), SAARC Standing Committee expressed hope that a consensus on SAPPI would be arrived at expeditiously and that the overall text would be finalized by the eighth meeting of the Sub-group on Investment and Arbitration. The 2014 SAARC Secretariat note states that efforts to organize the meeting were met with challenges as "there was a difference of opinion among Member States as to whether a Meeting was necessary, if the question of position of a Member State with regard to deletion of a minor article was only required."5 In subsequent gatherings, the finance ministers and finance secretaries underlined the importance of early finalization of SAP-

PI's draft text. This led to Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka recommending the deletion of Sub-Article 4(3) (c) with a view to finalizing the draft text. The note further states that at the 40th Standing Committee session (19 February 2014, Male), the delegation of Pakistan informed that the SAPPI text was under consideration and views would be shared shortly. This prompted the Standing Committee to recommend that a meeting of the sub-group be convened to re-negotiate the existing draft text. Subsequently, the Sub-group on Investment and Arbitration held its eighth meeting (7-8 August 2014) at the SAARC Secretariat. The meeting agreed that the draft should be reworked taking into account the national interests of each SAARC country.

Subsequently, in the eighth IGEG meeting on financial issues (20-21 July 2016, Islamabad), India shared a model text. It was observed that if the text was reformulated and made multilateral instead of bilateral, it could serve as a broad template text for SAPPI's negotiation.6 The meeting also urged SAARC Member States to host the ninth meeting of Sub-group on Investment and Arbitration and finalize SAPPI's draft text. Accordingly, India conveyed the revised draft text, on a multilateral basis, for SAARC Regional Investment Treaty. It was circulated by the SAARC secretariat to all Member States for views/ comments on 4 April 2017, along with a request to host the ninth sub-group meeting. Thereafter, there has been no news indicating SAPPI's status or the stage at which negotiations stand.

A closer observation of SAPPI's timelines indicates that negotiations have been irregular, rife with phases of swift progress followed by phases of impasse. While SAPPI was first conceptualized in 1997, it was only in 2004 that a dedicated group of experts began working on its text. Then, between 2004 and 2007, the expert group held as many as seven meetings and was able to reach consensus on the entire draft text, barring only a single clause. After that, discussions went downhill, and the next meeting of the sub-group happened only in 2014.7 In the meeting, unfortunately, previous discussions could not be furthered. Instead, the scale was reset and it was decided that the draft be reworked in light of recent developments. Since then, almost five years have passed, but the ninth meeting of the Sub-group on Investment and Arbitration has, as of May 2019, yet to be convened. Effectively, the only development that has happened since 2007 is India's sharing of a draft multilateral text, which was circulated to SAARC Member States. It is unknown what stand, if any, has been taken by the respective countries on the issue.

A study of SAAPI's lifecycle makes one wonder when, or even whether, SAAPI will see the light of day. In multilateral treaty negotiations, finalization of the draft text, in other words, reaching consensus on the clauses and sub-clauses of the treaty, is only half the process. Once the text is signed, the treaty comes into force only after ratification by each negotiating state. A state may want to opt for reservations and avoid the applicability of certain provisions. In this entire process, SAPPI, it appears, has not even reached the halfway mark.

There is unanimous consensus that an investment arrangement among the SAARC nations would greatly benefit their economies. Several studies have been conducted and all indicate that increased investment fosters trade, creates a ripple effect and eventually uplifts the overall ecosystem. A recent study prepared to assess the next steps for the South Asian Economic Union (SAEU) reiterates the same.8 Other regional inter-governmental organizations, such as Arab League, Organization of Islamic Cooperation (OIC), South African Development Community (SADC) and Association of Southeast Asian Nations (ASEAN) have been reaping the benefits of similar investment arrangements.9

Silver lining

The impending necessity marred by the long and fruitless journey begs the

question about whether any hope is left for SAPPI. SAPPI's history, coupled with the current deadlock in SAARC, presents an unpromising picture. However, all hope is not lost. Despite all its limitations, the internal mechanism of SAARC keeps functioning. The pace at which initiatives move has been reduced, but the wheels go on rotating. SAPPI is certainly on SAARC's agenda list. A study of statements made by the SAARC secretary general in recent events, across the globe, indicate that the finalization of SAPPI is high on the priority list. In 2018 and 2019, the point of finalization of Agreement on Promotion and Protection of Investment is mentioned in as many as six public statements viz. Sixth SAARC Business Leader's Conclave (16-18 March 2018, Kathmandu), Twelfth SAARC Finance Ministers'

The repeated reference by the secretary general indicates that efforts are being made to push SAPPI negotiations to its logical conclusion.

Informal Meeting (4 May 2018, Manila), SAARCFINANCE Governor's Symposium (27 June 2018, Kathmandu), Round Table on Asian Regional Cooperation Organizations (28 March 2019, Hainan), Sixth South Asian Region Public Procurement Conference (22-24 April 2019, Thimphu) and Thirteenth SAARC Finance Ministers' Informal Meeting (2 May 2019, Nani).

The repeated reference by the secretary general indicates that there is indeed a silver lining and efforts are being made at the highest level to push SAPPI negotiations to its logical conclusion. While the process may still take a while, the resumption of regular discussions on the subject would be a minor success and a step in the right direction. Accord-ingly, it seems that all hope is not lost and SAPPI may indeed become a reality in the future. Better late than never!

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World of cryptocurrency

Cryptocurrencies' pioneering technology is believed to have a variety of applications with the potential to transform many sectors.

Kshitiz Dahal

Only in a few years after its conception, Bitcoin has gone from anonymity to widespread popularity. Bitcoin's underlying technology has given rise to numerous decentralized payment systems—the cryptocurrencies. Coinmarketcap, a digital platform that tracks the capitalization as well as trades of cryptocurrencies, puts the number of active cryptocurrencies at 2,302.¹

While there are divergent views as to whether cryptocurrencies will provide credible alternatives to modern fiat currencies, its pioneering technology is believed to have a variety of applications with the potential to transform many sectors and, hence, warrants at least a basic understanding. The article attempts to do that, focusing significantly on Bitcoin as it provides the blueprint for cryptocurrencies that have come out since.

Bitcoin and cryptocurrencies

Bitcoin is both an idea and a technology. It embodies the idea of money without the government, or any central authority for that matter. It is also an idea of borderless money. No special regulations to move money across borders apply. Furthermore, it represents an idea that one should be able to use the money privately without the intrusion of a third party, much like cash or gold rather than credit cards and other centrally supervised digital money such as PayPal, AliPay, WeChat Pay or M-Pesa.

Bitcoin intends to redefine electronic payments by replacing the current trust-based model of payment. Its technology allows decentralized creation of money and its electronic transfer without the need for a trusted third party. Bitcoin is created through mathematical rule rather than through central authority like central banks. Its transaction is facilitated by cryptographic proof rather than trust accorded to some trusted third party.

Cryptocurrencies, which derive their fundamental idea and technology from Bitcoin, could thus be defined as electronic payment systems that use cryptographic algorithms to secure transactions.

The history of attempts to develop decentralized electronic money, much like the cryptocurrencies, is as old as the Internet. David Chaum's 1983 paper on untraceable electronic money was an early attempt to create cryptocurrency.² Attempts to create cash-like electronic payment systems gained new heights after a libertarian movement of cryptographers—cypherpunks— started in the late 1980s that treated privacy as a fundamental right.

Cypherpunks developed a keen interest in anonymous electronic payment systems. Seminal ideas such as Adam Beck's 'Hashcash' in 1997, Wei Dai's 'b-money' in 1998, Hal Finney's 'Reusable Proofs of Work' in 2004 and Nick Szabo's 'Bit Gold' in 2005, followed.

For one reason or another, these ideas had not transformed into a functional technology. This all changed after Satoshi Nakamoto's whitepaper, 'Bitcoin: A Peer-to-Peer Electronic Cash System', made an entry in the cypherpunks' mailing list in 2008.³ Nakamoto's idea in the whitepaper was transformed into an open-source software giving birth to Bitcoin in 2009. This ultimately paved the way for cryptocurrencies that have come out in numbers.

Bitcoin technology⁴

A digital payment system that could act as decentralized money has to solve a couple of fundamental challenges. The first challenge is what is known as double-spending.⁵ Since copies of digital objects could be made easily and without cost, what is to prevent someone from spending the same digital token in multiple places? Cash involves a physical transfer and, hence, there is no issue of double-spending. With electronic payments, the payee cannot guarantee that the owners did not make multiple payments with the same digital currency. There is a need for a trusted third party to prevent the possible double-spending. For instance, in case of electronic payment systems, such as the credit card, an intermediary such as Visa or Mastercard mediates the transactions to ensure that double spending does not occur.

Since Bitcoin's ultimate aspiration was to get rid of the trustbased model, it responded to the double-spending problem with a peer-to-peer distributed timestamp server-an open, distributed ledger, managed by a peer-to-peer network, now popularly known as the blockchain. Since this blockchain would contain records of all the transactions that would ever happen in the Bitcoin network, anyone's capacity to spend the said amount of Bitcoin could be verified. Hence, no double-spending. Technically, if an owner spends a valid amount of Bitcoin, the transaction would be added to the blockchain, forever stamping it to the chain of valid transactions.6 However, if the owner tries to double spend, rummaging through the blockchain would indicate so. The transaction would be rejected. In other words, that invalid transaction would not be added to the blockchain.

Maintaining a public-distributed timestamp server, however, comes with challenges. For this system to function, the protocol has to ensure that there is only one, global ledger, accepted by the 'nodes' in the peer-to-peer network. However, this requirement of distributed consensus is a difficult challenge for any peer-topeer network. Without a trusted central authority monitoring the records, who updates this global ledger? It has to be done by the nodes in the peer-to-peer network. But if different nodes start updating the ledger, the result will be multiple blockchains instead of a single, global ledger that is required.

Furthermore, any peer-to-peer network can be assumed to have 'honest' nodes and 'malicious' nodes. If the malicious nodes get to update the ledger, the system could be subverted. Hence, a single global ledger of transactions—a single blockchain accepted by all the participating 'nodes'— is required, which necessitates consensus on which transactions happened as well as the order of valid transactions. To solve this challenge, Bitcoin adopted what is known as the 'Proof-of-Work' system.

Proof-of-Work is akin to solving a mathematical puzzle. Whoever solves the puzzle first gets to broadcast its block of transactions to the nodes in the network. If the transactions in the proposed block are verified, the block gets added to the global ledger.

Cryptographic hash

To understand proof-of-work, one needs to first understand what a cryptographic hash function is. A cryptographic hash function is a mathematical algorithm that converts an input (texts and numbers) of any size into a fixed-size output, referred to as the 'hash value', or simply 'hash'. For example, SHA-256, the hash function that Bitcoin uses, produces a 256-bit (32-byte) hash (a hexadecimal string with 64 characters) for any input fed into the system. For example, the hash for 'transfer 5 dollars' is

cf309e1ab8ed3b57878f9ea-55b06991a267728282efcd17c047e-823de0c7a5b2

Any other input passed to this SHA-256 algorithm produces a different hash of the same size (256-bit). One valuable property of the hash function is that it is simple to compute a hash for any input but almost impossible to work back from the hash to the input.

Any transaction requested in the Bitcoin system contains the sender's public address, receiver's public address, and the total amount of Bitcoins to be transferred. This information is represented by a hash, similar to the one described above. The transactions are broadcast to the network. The nodes start collecting these transactions into a block. All the transactions in a block have their unique hashes and upon becoming part of a block, they are collectively represented by a single hash, known as the 'merkle root'.

Any number of nodes will be involved in receiving the broadcasted transactions, verifying their validity, and compiling them into a block. But, only one block will make it to the official blockchain at any given time to ensure the singularity of the ledger. To determine which block will be added to the current blockchain, proof-ofwork is employed.

What this entails is finding a random number, a 'nonce', such that the resulting hash of the block header-hash of concatenation of block contents that include block version number, hash of previous block, merkle root hash, time, bits (target hash value), and the nonce chosenwill be below a target hash value set by the system. This is equivalent to saying that the hash of the block header has to start with a specified number of zeros. This is a computationally difficult task in terms of CPU time required as the range of nonce that could be tried is very large.⁷ The target hash value is periodically revised (every 2,016 blocks to be precise) to maintain the desired rate of one block every 10 minutes.

To come up with a block that could be added to the official blockchain, there is no alternative to trying random nonces until one finds that magical nonce, which results in the hash of the block header starting with a specified number of zeroes. For example, one starts with 0 and keeps on increasing it until his block satisfies the criteria. As soon as this occurs, the node broadcasts his block to the network, which undergoes verifications for the validity of transactions from other nodes. If the block gets confirmations from other participants, it gets added to the blockchain and other nodes start adding a new block to this block. If two nodes find a solution simultaneously and broadcast their blocks, there is a little bit of luck involved as to which block makes it to the correct blockchain. Whichever

cryptocurrency

block gets linked to the next correct block becomes part of the official ledger as it is always the longest chain that is the correct blockchain (see Figure 1 for a simplified structure of a block).

The competition to add a block to the blockchain, which is known as Bitcoin mining, that we described here, is what incentivizes the nodes to participate in maintaining a singular, global ledger. When a node succeeds in finding a block that gets added to the correct blockchain, the miner gets rewarded with a fixed amount of Bitcoins (currently it is 12.5 Bitcoins).⁸ This is also how money is created in the Bitcoin system as every successful addition of block adds a fixed amount of Bitcoins (Bitcoins rewarded to the successful miner) into circulation.⁹

Wallet full of Bitcoin

There are three ways of owning Bitcoins. The first is when one receives them as a result of mining. The second is through an electronic transfer, for example, as a payment for goods and/or services provided. The third is when one uses fiat currency (bank transfer or credit cards) or other cryptocurrencies to buy Bitcoins through cryptocurrency exchanges, which are available on the Internet. Now suppose Alice transfers 10 dollars' worth of Bitcoin, stored in her electronic cryptocurrency wallet, to Bob.¹⁰ This is how the transaction would be executed:

- Alice will initiate the transaction by digitally signing her Bitcoin address (private key and public key), a hash of the previous transaction and the public key of Bob.
- Alice's transaction to Bob, along with all the other transactions taking place at the time, will be broadcast to the peer-to-peer network.
- 3) The nodes group these transactions into a block.
- Each node uses its computing resources to find the difficult proof-of-work for the block it has compiled.
- 5) When a node succeeds with the proof-of-work, it broadcasts the block to the network. The nodes verify that the transactions are valid. This involves verifying that the public keys of the senders and receivers match and that the transferred amount was previously unspent.
- The block, once confirmed by nodes, gets added to the blockchain and the miner, who proposed the block, gets rewarded



Source: 'Blockchain: Developer's Guide & Use Cases' by Techquark

(currently the reward is 2.5 Bitcoins).The payment from Alice to Bob, along with other transactions in the block, is now confirmed.

 The longest chain obtained from the addition of the previous block is now the correct blockchain and nodes will start working on this chain to add new blocks.

Figure 2 provides a diagrammatical representation of how bitcoin transactions are executed.

From Bitcoins to Altcoins

The first 50 Bitcoins, the genesis block, came into circulation on 3 January 2009. The initial journey of Bitcoin was nothing spectacular as its use was only limited among a few cryptographers. Its value was virtually nothing for a while. Slowly, it started gaining participants as well as value. Its increasing popularity also resulted in the creation of many alternative cryptocurrencies—the altcoins.

The altcoins derive their fundamental technology from Bitcoin, but aspire to improve on what they perceive as Bitcoin's limitations. For example, Litecoin, created in 2011, increased the maximum limit for the number of coins possible–84 million for Litecoin compared to 21 million for Bitcoin. Litecoin is also believed to process transactions faster. The desired block generation rate in Litecoin is 2.5 minutes compared to 10 minutes in Bitcoin. Similarly, some altcoins, for instance, Dogecoin, do not have limits on the number of coins in circulation.

Some altcoins provide functions beyond that of monetary mediums. For example, Ethereum, launched in 2015, could act as a digital medium of exchange, much like Bitcoin, through its decentralized digital currency, Ether. But it is also programmable, allowing it to execute what is known as smart contracts, which entails automatic release of payments once the conditions in the contracts are met.

Cryptocurrencies: the good, the bad, and the ugly

Cryptocurrencies' primary allure comes from getting away with the trusted third party in electronic transactions. Since the payments are also completely irreversible, transaction costs are significantly reduced. These reductions could make even small transactions, that were previously impractical, possible, as the Bitcoin protocol can process it. Similarly, using cryptocurrency to transfer remittance across borders can tackle the issue of high transaction fees.

Cryptocurrencies are also fraught with flaws that weaken their credibility and acceptance. They fail to meet the requirements of a currency in their current forms. A currency has to be a medium of exchange, a store of value and a unit of account. The fact that cryptocurrensies are rarely accepted by merchants as money, that they exhibit high volatility in their prices and that the goods are rarely priced in their units mean that they do not fully satisfy any of the criteria.

The irreversibility of payments made through cryptocurrencies such as Bitcoin, while believed to be their strength by some, is considered a serious design flaw by others. This feature is more favourable to merchants or con artists than to customers, as there is no undoing a transaction once the customer hits the transfer button.

Cryptocurrency wallets are susceptible to hacks and thefts. For example, Mt. Gox, a cryptocurrency exchange that handled around 70 percent of the Bitcoin transactions at the time, had to shut down after hackers stole 850,000 Bitcoins from their wallets in 2014. Crypto hacks and thefts haven't abated and continue to grow.

Cryptocurrencies could be a major threat to the government as they could ultimately erode its power. Cryptocurrency could contribute significantly to tax evasions. Anonymous cross border transactions could mean evasion of government capital controls or money laundering. And, since governments and financial institutions have no role in their creation, monetary policies could have little effect, resulting in monetary instability.

Lastly, cryptocurrencies could be outright dangerous—they could be an efficient tool to purchase illicit items such as weapons and drugs. Crypto-

Figure 2

A Bitcoin transaction



Source: Financial Times in World Economic Forum 2016

currency transactions and the creation of darknet markets have allowed the sale of a wide array of illicit items.

Thus, the conflicting qualities in cryptocurrencies make it difficult to predict whether they will remain limited in their scope or whether they will provide a credible alternative to fiat currency. Some believe that Bitcoin and cryptocurrencies will slowly take over, while others believe that they are fraught with insurmountable flaws. But, most agree that the blockchain technology introduced by Bitcoin and other altcoins shows immense potential to transform various sectors, both financial and non-financial, including the likes of healthcare and music industry.

Notes

- 1 https://coinmarketcap.com/
- ² Chaum, D. 1983. Blind Signatures for Untraceable Payments. In Advances in Cryptology Edited by D. Chaum, R.L. Rivest and A.T. Sherman. Boston, MA: Springer.
- ³ Nakamoto, S. 2008. Bitcoin: A Peer-to-Peer Electronic Cash System. https:// bitcoin.org/bitcoin.pdf.

- See Satoshi's original whitepaper (Nakamoto 2008) for details of Bitcoin technology.
- Double-spending does occur with cash, on a small scale, through counterfeiting of banknotes. However, it is a minuscule component of cash in circulation, and increasing security features makes double-spending harder.
- ⁶ A description of the transactions a block — gets added to the previous block, which is already chained with the preceding block, thus forming a chain of blocks, and hence the name Blockchain.
- ⁷ Since a nonce is a 32-bit integer, a nonce could range from 0 to 2^{32} =4,294,967,295.
- ⁸ The rewards are halved every 210,000 blocks mined, which roughly takes four years.
- ⁹ Since the maximum amount of Bitcoins that could ever exist is fixed at 21 million to make the system inflation-free, the rewards of mining will be replaced by transaction fees after the maximum amount of Bitcoins is exhausted.
- ¹⁰ Alice and Bob have become somewhat of a default in cryptography literature after they were first used in R. L. Rivest, A. Shamir, and L. Adleman. 1983. "A method for obtaining digital signatures and public-key cryptosystems." *Commun. ACM* 26(1):96-99.

Connectivity **2.0** for South Asia **Economic Union**

Transformation of transport corridors into economic corridors depends on the volume and pattern of trade and how it encourages development in the surrounding areas.

Prabir De

rade has always been at the L forefront of South Asia's economic policies. However, progress has been undermined by excessive costs and lengthy time associated with the export and import of goods and services. Connectivity, therefore, emerges as central to South Asia's regional economic integration, especially while dealing with the barriers hampering progress in trading. There is no doubt that South Asia can achieve substantial productivity gains and cost reductions through improvements in transport connectivity. International experiences reveal that success in transport connectivity depends on two broad measures: first, development of cross-border transport infrastructure; and second, reduction of non-tariff trade costs, particularly at the border. These important measures are also seen as a way to stimulate regional integration of South Asia.1

A deepening of the regional integration process under the South Asian Association for Regional Cooperation (SAARC) would take it towards the formation of a common market with a customs union. This means having a common external trade policy, *ceteris paribus*. Thereafter, an economic union may emerge as a natural consequence. In other words, an efficient, secure and integrated transport network is essential to support the realization of a South Asia Economic Union.

While South Asian regional trade has grown with the support of the Agreement on South Asian Free Trade Area (SAFTA), the required attention to regional transportation has been missing. South Asia connectivity has moved from a trans-Asian architecture, such as Asian Highway and Trans-Asian Railway, in the first two decades of SAARC. Instead, the focus is now on sectoral and region-specific connectivity, such as development of corridors, border development, customs cooperation, coastal shipping, digital connectivity and the like. South Asian countries have been taking measures to improve their transport connectivity at the national level. However, the region as a whole is yet to make substantial progress in the field of collective transport connectivity. Nevertheless, the benefits to be derived from comprehensive connectivity measures towards a common market are significant.

The purpose of this article is to define the broad perspective and ap-

proach that South Asia should adopt as it works to enhance its intraregional transport connectivity. South Asia Connectivity 2.0, therefore, presents the basic principles that should guide South Asia's transport connectivity over the next decade. This article outlines the connectivity needed to facilitate the next phase of the South Asian integration process. It also provides the rationale for moving towards an economic union, and highlights the key policy issues thereof.

Transport/economic corridors

Transport corridors are a set of routes that connect the economic centres within and across countries. They encompass several centres of economic activity. Subregional corridors connect to a regional transport system. Transport and energy infrastructure bring in investment into sectors with the potential to develop projects. Subsequently, connectivity and growth attract investments in related sectors. Thus, a transport corridor grows into an economic corridor. The economic corridor approach emphasizes the integration of infrastructure improvement with economic opportunities, such as trade and investment. It



includes efforts to address social and other outcomes of increased connectivity.

An economic corridor is a public capital—a sum of transportation networks, human resources, communication facilities, energy grids and institutional infrastructure. An economic corridor can be national or international. Trade facilitation and logistics services are the main catalysts in its development.

There are five stages in the transformation of a transport corridor into an economic corridor—Stage 1: transport corridor; Stage 2: transport and trade facilitation corridor; Stage 3: logistics corridor; Stage 4: urban development corridor; and Stage 5: economic corridor.² A framework for regional corridor development is based on the extent of regionality of corridors and their area of influence or width. On this basis, four zones are demarcated with inter-zone sequencing-Zone 1: narrow national corridor; Zone 2: broad national corridor, including area development and railroads; Zone 3: narrow regional corridor, including trade facilitation and logistics; and Zone 4: broad regional corridor, including cross-border economic zones.

The development of a national corridor to a regional one, that is, the movement from Zone 2 to 3, may involve the linking of national corridors. It includes reducing barriers at national boundaries to enable moving people and goods at least cost. The growth of logistics companies has to be supported while procedures are standardized.

The private sector has a critical role in corridor development in Zone 3. And, for movement to Zone 4, regional plans for seamless integration are required and national plans have to remain well-coordinated.

There are large opportunities for trade, investment and economic growth in the region, particularly due to low regional integration. Each country in the region has national plans and priorities for corridor development, which include developing rural roads and rural growth centres. Transforming this into Zone 3 requires the linking of national plans and corridors, a process that may not have a high priority in national plans.

India is uniquely placed in South Asia, connecting most of the countries of the region that do not have contiguous borders. It also serves as a vital link between East and West Asia. There are various studies that have identified the important transport corridors in the region. They include the ADB-supported SAARC Regional Multimodal Transport Study (SRMTS), the BIMSTEC Transport Logistics Study and the Asian Land Transport Infrastructure Development project, endorsed by UNESCAP in 1992. The latter includes plans for an Asian Highway. Developing the road corridors identified by SRMTS could be a first step towards creating economic corridors in the region.

Regional connectivity

A common set of region-wide facilitation measures are yet to be undertaken targeting connectivity and compliance with a single standard. Progress in this area has been limited to individual-country initiatives undertaken mainly as a part of the national agenda (e.g, electronic customs). Moving towards a South Asia Economic Union warrants a common template of trade transactions in the region for the eventuality that the region will apply common external tariffs to non-members. Therefore, South Asian countries must unite to implement a regional trade facilitation and connectivity agenda which consists of regional corridors, a regional single window, regional transit and coordinated border management. These are prerequisites for a customs union and an economic union.

On the hardware side, South Asia needs an economic corridor involving a regional transport network. Since an economic union cannot be achieved without a monetary union, a currency arrangement is another requisite. Thus, the three pillars of an economic union in South Asia are a customs union, a monetary union and an economic corridor.

South Asia has already identified 10 regional road corridors, five regional rail corridors, two regional inland waterways corridors, 10 maritime gateways and 16 aviation gateways for implementation in Phase I.³ Besides, building regional infrastructure through economic corridors has been planned to help facilitate

regional integration

international and national transportation and promote industrialization in the hinterland. The Delhi-Mumbai Industrial Corridor, a national economic corridor with regional implications, the Mekong-Ganga Economic Corridor and the India-Myanmar-Thailand Trilateral Highway are examples. The latter two are cross-border corridors linking South Asia and Southeast Asia. Transformation of transport corridors into economic corridors in South Asia will depend on the volume, types and pattern of corridor trade and how it encourages a certain level of development in the areas surrounding the corridors.

Spatial planning that goes beyond national policies is needed to support the development of corridors in South Asia. At the same time, the development of one area of the corridor is conditional upon the trading conditions along the entire area of the corridor across countries. Building corridor

nodes and gateways and linking the nodes along the corridor would help the region move towards an economic corridor.

The sequencing of transformation of transport corridors into economic corridors would require the following tasks: (i) developing a transport corridor, (ii) building corridor nodes, and (iii) linking corridor nodes and gateways.

Key policy priorities

South Asian regional cooperation programmes have to be much stronger than they are now to address regional infrastructure needs and to cultivate enabling institutions and policies. The region has to undertake certain policies to support the regional trade facilitation agenda while aiming for an economic union.

South Asian countries should continue to implement trade facilitation projects in the region. This will help them to streamline border transactions and improve competitiveness.

Develop interior infrastructure and a project development facility All efforts at South Asian connectivity and trade facilitation will be incomplete if the backend linkages into South Asia's interior are not strengthened. Joint feasibility studies for connectivity projects may be encouraged. A project development facility (PDF) may be set up to facilitate planning and implementation of cross-border connectivity projects. Among others, this new PDF vehicle should aim at mobilizing finance to accelerate the speed of project delivery. It should focus on high-impact regional projects in energy, transport, information and communications technology (ICT), small and medium-sized enterprises, special economic zones, education, health and water. Some of its major activities would be (i) advisory services; (ii) identification of projects through technical studies; (iii) mobilization of funding, etc. Innovative financing

actors in the transaction chain. Single-window facilities include enabling not only submission of information to regulatory and control agencies, but also making available relevant transaction information to both public and private actors along the transaction chain.

Increased use of ICT and development of paperless trade should therefore be pursued more vigorously in South Asia. Electronic acceptance of cross-border bill of lading, or customs transit document (CTD), will certainly lead to paperless trade and effective implementation of the single window in the region. Bhutan has decided to accede to the Revised Kyoto Convention to modernize its customs.

Remove regulatory burden, streamline NTMs

South Asian countries must remove the regulatory burden they impose on exports and imports and stream-

> line their non-tariff measures (NTMs) on a priority basis. For example, Bhutan can simplify, merge and automate its Integrated Human Requirement certificate and other processes. The process requiring a Bhutanese customs inspector to travel to Burimari/ Changrabanda to clear imports, which often

vith greater causes delays, should also be removed. Similarly, the documentation requirements imposed by the ports of Kolkata and Haldia and customs in India on Nepal-bound cargo must

Minimum physical inspections

become automated.

Inspection and testing procedures often account for a significant amount of the average transaction time. Inspections were actually found to affect the timeliness and predictability of the trade transaction process, a key factor in enabling firms to participate in international productions networks. Inspection may be required at various times, typically at the border or port



should be explored along with greater financial cooperation for cross-border projects.

Paperless trade, national

and regional single windows Preparation of documents and exchange of information among various parties involved account for the largest share of the import or export process time. There are documents before the goods start moving from the factory, or before they even arrive at the port as in the case of imports. Hence, single-window facilities for submission and processing of information and documents are essential, given the importance of private sector for imports, but also often during the preparation of documents for exports. Inspections may be minimized through the use of appropriate risk management techniques.

Setting up certification programmes where the quality and other characteristics of goods can be ensured through the control of the production process at the factory, rather than for every shipment, may also be promoted as a way to reduce the need for inspections.

Harmonize documentary requirements

Different documentation is needed for exporting to different destinations along the South Asian corridors. This means confusion and delays. Besides simplification of documentary requirements, a continuous effort to align national procedures and documents with international standards and conventions is required. It is worth noting that differences in documentation stem not only from differing regulations across importing countries, but also from different requirements by individual buyers. The buyer may ask for different types of quality certificates, or require relevant information to be sent in different formats. Thus, the involvement of international private sector associations in the harmonization efforts is needed.

Synchronize cross-border customs

Customs must operate round the clock to facilitate South Asian trade. At present, there are differences even in the working hours between customs of two neighbouring countries. For example, Birgunj Customs in Nepal opens at 8 AM, whereas Raxual Customs in India opens only at 10 am. A full automation and link-up between customs will reduce transaction time and cost.

Accession to

international conventions

International conventions related to transport facilitate the movement of goods, especially at border crossings, by reducing procedures and formalities, and saving time. South Asian transport networks require appropriate legal frameworks to define the rights of passage for goods, people and vehicles, and to decide on permits, licences and other measures, as well as mechanisms for consultation, and dispute settlement. Transport facilitation at the national and international levels is a prerequisite for enhancing international trade. South Asian countries must accede to international conventions on land transportation networks—road and rail.

Multimodal transport, transit and logistics

Transit and trade facilitation are pivotal to economic corridors. South Asia's lack of transit agreements is a major reason for the low level of economic exchanges. South Asia must revive transportation networks and establish region-wide multimodal transport

> South Asian transport networks require appropriate legal frameworks to define the rights of passage and other measures.

and transit to reduce transportation costs. The region should have its own regional transit arrangement. BBIN countries (Bangladesh, Bhutan, India and Nepal) have signed a Motor Vehicles Agreement. This is a step in the right direction for cross-border transport and transit. South Asia should do the same for its economic corridor development. A door-to-door logistics approach should be pursued. There should be no distinction between transnational and domestic connections.

Harmonize rules,

regulations and standards For the infrastructure of a South Asiawide transport network to function effectively, the necessary soft infrastructure, such as relevant rules, regulations and standards, has to be in place. Rules, regulations and standards must meet a common regional benchmark or, more preferably, an international one. Trade facilitation initiatives in the area of standards and conformance focus on addressing the differences between national laws, standards and conformity assessment procedures. These aim for a broader horizontal approach at the regional level.

At the same time, the capacity of national institutions has to be enhanced for effective implementation of these agreements. There is also a need for a uniform or compatible standard for developing cross-border transport networks that is beneficial for all stakeholders.

Engage SAARC Observers

SAARC has to constructively engage its Observers in the trade facilitation project. ASEAN has set up a Connectivity Coordinating Committee to coordinate with its dialogue partners in connectivity projects. For eventualities when resources are scarce, SAARC should constitute a committee at the Secretariat to coordinate with its Observers. This will help the region to source valuable technology and capital to finance connectivity projects, technical assistance, training and capacity building, among others.

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Notes

- Refer to, for example, ADB, JICA, UKAID, & World Bank. 2018. The WEB of transport corridors in South Asia. Washington, D.C.: The World Bank.
- ² Srivastava, P. 2012. "Regional corridors development in regional cooperation". *ADB Economics Working Paper No. 258*. Manila: Asian Development Bank.
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Fourth Industrial Revolution

The Fourth Industrial Revolution, fuelled by the Internet, is bringing together numerous new technologies and new business models, thus disrupting the old ones.

Pragati Koirala

The world is currently undergoing a technological shift of massive proportions and at a speed not witnessed previously. This technological shift has been so far reaching that it is being called the Fourth Industrial Revolution, also known as 4IR, or Industry 4.0. It has been changing the way individuals, societies, governments and economies interact with each other bringing huge changes in the existing systems. Although a definition of 4IR is lacking, it has often been referred to as the fusion of the digital, physical and biological worlds.¹

Sheer scope

The First Industrial Revolution that began in 1760 was a result of the invention of steam power that helped mechanize production and the development of railroads that improved communication and transportation. The advent of electrical power followed by a new way of production, known as the assembly line, beginning in the nineteenth century defined the Second Industrial Revolution. The Third Industrial Revolution, also known as the digital or computer revolution, was ushered in with the invention of mainframe computers, semi-conductor and personal computer in the 1960s. The Fourth Industrial Revolution is said to have begun in the first decade of the twenty-first century, fuelled by the Internet, bringing together numerous new technologies and new business models, thus disrupting the old ones. There are contesting views about whether this phase is an extension of the digital revolution or an entirely distinct one. The Fourth Revolution is characterised by, but is not limited to, technologies like, Artificial Intelligence (AI), machine learning, 3D printing, robotics and automation, Internet of Things (IoT), gene editing, quantum computing and nanotechnology, among others.

We are only at the beginning of this massive technological change and have only experienced some aspect of it. Nevertheless, its impacts on our daily lives have been visible. A very prominent 4IR by-product has been the rise of platform-based economy. The platform-based economy provides a digital platform that matches the buyers and sellers of a product or service.

Internet of Things

IoT has built a complex web of communication among inanimate objects like household appliances, smart phones and home assistance devices that we use in our daily lives. Robotics are intelligent robots used in manufacturing for precision and increased productivity. IoT has the potential of creating smart cities with systems communicating with each other for the efficient use of energy and reduction of waste. The ability to electronically monitor and manage objects in the physical world makes it possible to bring data-driven decision making to new realms of human activity to optimize the performance of systems and processes, save time for people and businesses and improve quality of life.²

Artificial Intelligence

AI is an attempt by the computer systems and processes to simulate human intelligence. Machine learning and deep learning are forms of AI and have had numerous applications ranging from virtual personal assistants like Siri, Alexa and Google Now, real-time traffic prediction, search engine optimization, facial recognition to real-time language translation. Machine learning has been extensively used by social media and e-commerce platforms for product and service placement based on user data.

AI has been used so far in autonomous vehicles, in space and ocean exploration and in healthcare and other sectors. Autonomous vehicles are self-driving vehicles that use Artificial Intelligence and data from IoT, among others, to drive autonomously. Large 4IR companies like Google, Uber and Tesla have invested heavily, indicating the take off of autonomous vehicles in the near future. However, for now these vehicles still require a vigilant driver to take control if things go wrong.

Figure

How industrial revolutions affect the business ecosystem



Source: SME Competitiveness Outlook 2018 by International Trade Centre

3D Printing

3D printing uses additive technology, creating objects by adding layers upon layers of materials. 3D technology sits in contrast to the traditional subtractive manufacturing that cuts layers until the desired object is created. 3D printing can be used to produce customized goods at the comfort of one's home. It has the potential to reduce wastes created by the traditional manufacturing process. The use of 3D printing has been limited for now, but with the advancement in technology and increased accessibility and affordability, its use could be limitless. One of the most exciting uses of 3D printing so far has been the production of prosthetic limbs for amputees.

Robotics

The use of robotics in manufacturing is not new. In the age of 4IR robotics has only become more advanced and flexible. For better or for worse, progress in this technology is bound to automate routine tasks, eliminating a large number of human jobs. Sewbots, robotics used in manufacturing textile and garments, have already been introduced in South Asian countries like Bangladesh.

Platform economy

The advent of smart phones and mobile application (app) ecosystems built the foundation for the app economy and ultimately the platform-based economy. The gig-economy has been notorious for disrupting the old way of doing business and blurring the lines between tech companies and other industries. Platform-based tech companies like Uber and Airbnb have become some of the biggest disruptors of traditional business. Uber has become a ride-hailing service without owning a fleet of cabs, Airbnb has become a vacation rental company without owing its own rental properties. Amazon, a digital marketplace, has disrupted the traditional retail business and become one of the first companies to hit the trillion-dollar market value in 2018.3

Adapt, adapt

No doubt, 4IR has the potential to change the lives of people, for better and for worse. The nature of impact, however, will depend on how well and fast we can adapt to these changes. The pace and adaptation may differ on the development and income status of a country. Developed countries may be able to make the transition easily as they are at the forefront of this technological transformation and they can shape the transformation to suit their own specific needs. On the other hand, developing countries and, moreover, least-developed countries are lagging far behind in adapting these disruptive technologies. This makes them vulnerable to the incoming changes. The perils of 4IR might ultimately fall on those who are less endowed with the resource and technology required to adapt. ■

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Notes

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- ² McKinsey Global Institute. 2015. The Internet of Things: Mapping the Value Beyond the Hype. New York: McKinsey &Company.
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book review



Autopsy of Nepal's apparel industry

Title: Death of an Industry Author: Mallika Shakya Publisher: Cambridge University Press ISBN: 9781108123310

Avinash Chandra Gupta

// ...I am concerned... for developing countries whose economic

doctrines come to them mainly from England and in English. Is this helpful for their advancement?..." - Joan Robinson (1960)¹

This highlights Robinson's fears of foreign students being taught economics that advocates free markets, a policy which obviously favoured colonial Britain but not those colonized like India, which was then a 'free market' (mostly, for British goods). More crucially, foreign investment protection for British investment was more than assured. While these are recipes for economic growth in mainstream economic theory, India, between 1900 and 1947, grew at well below 1 percent, in contrast to such theorization.

In her book *Death of an Industry*: The Cultural Politics of Garment Manufacturing during the Maoist Revolution in Nepal, Mallika Shakya's analysis of industrial development and its societal embeddedness-essentially, how the domestic politics of both class and culture against the backdrop of the neoliberal revolution were central to garment sector performance-echoes similar, if not greater, scepticism on the analytical utility of the dominant development discourse. Shakya's scepticism and other findings from her research on Nepal's apparel sector both are the key dimensions on which this review focuses.

Firm heterogeneity

The context for Shakya's analysis is set in Chapter 1 where the author

recounts how, upon announcing her return to Nepal to resume research on the apparel sector, she was told that 'the sector was already dead' with not much to learn from, and to which she would respond that the aim was to understand what this 'death' meant.

Shakya observes how Nepali policymakers have pieced together certain fragments to define development as a de-socialized, largely technocratic and an apolitical concept while letting go of even the most fundamental public governance responsibilities such as tempering corporatism and neoliberalism given their attendant vices and disregard to societal goals. Little wonder, upon the crash, the workers were pushed into precarity, having to take up jobs as porters and tea-sellers. Indeed, while struggles and contests for rents and political power are principal fault-lines in shaping Nepal's economic performance and governance, the same remains a neglected line of analysis. Illustrious thinkers like Keynes would observe that distributional contestations are central to economic relations. The book links the current ideological malaise to the 1980s when the neoclassical counter-revolution rendered planning hierarchies mere rent-seeking devices, and theorized markets as holy. Is this a credible theory? Shakya deploys Coase's theory of firm to argue that hierarchies serve critical functions in completing transactions like search, implementation and monitoring.

Shakya's critique of mainstream economic theory draws, in part, from

empirical data generated in her indepth ethnography of apparel producers. For the author, neither was mass production the only production mode, nor were firms homogeneous. Of the three firms she studies, two produced craft apparel while the third was a conventional mass-production firm producing everyday apparel. Craft signifies ethnocontemporary wear with a mix of both western and local cultural heritage in fabrics, design and embroidery. While ignored in policy and research, the findings pertaining to craft producers bear significance and are important contributions to development theory. Produced by less than a dozen of the over 1,000 apparel firms operating in the mid-1990s, craft apparel obtained relatively higher unit-prices (hence, profits), apparently entailed greater value addition, and went to non-quota buyers. The Newar and Madhesi craft producers, groups perceiving themselves as politically marginalized, deployed their rich cultural endowments, the source of which were specific ethnic and geographic ties, and these endowments got translated into tangible gains . Embedded in the owners' lives and their social networks, the author details these aspects that are neglected in the industrialization scholarship. On the other hand, in mass-production units, which were considered modern, their learnings—from design and fabric specification to markets-came from abroad. Performance differences aside, both groups of producers met the same fate; craft a little later than mass.

Contextualizing apparel

Chapter 2 contextualizes Nepal's industrialization in general and its brief apparel production phase. The discussion divides Nepal's industrialization into two waves. The first began when the Ranas invited Indian Marwari capital in the mid-19th century to produce items like matches. The second wave was when King Mahendra usurped power to devise a more 'soil-suited' order. While development plans between 1956 and 1970 attempted economic development via, for instance, state-led industrialization, outcomes were extremely modest. Is this because policy rents got captured by specific groups? This hypothesis is left open, but the lopsidedness of resource distribution is highlighted. The author observes that the scrapping of the licence regime during the rhetoric-laced liberalization contributed to a rapid rise of apparel output, with exports peaking at roughly US\$200 million in the late 1990s, or a fourth of the total merchandise exports.

While the termination of the Multifibre Arrangement (MFA) in 2004 rang the end of a booming apparel sector in Nepal (as in many developing countries), the industry had, in fact, started experiencing difficulties well before that. It was affected by obstructions in economic activity posed by an insurgency that peaked in the early 2000s. Apparel was particularly affected by militant labour activism emanating from massive membership drives of the Maoist labour union where workers were not merely seeking work-place improvements but mobilizing for class action and regime change. By 2011, the bulk of the factories had closed, but the chapter reminds us that apparel continues to be produced, resembling production in the 1970s. In this sense, the sector has 'taken a full-circle back'.

Chapter 2 traces the history of MFA-induced apparel production in Nepal—technology, regulations, spatiality or geography and, more crucially, the craft producers and their capabilities. Craft producers, numbering less than a dozen, looked markedly different from mass producers in the apparel ecosystem. Besides generating greater value added and profits, craft, despite being knowledge-intensive, had low capital intensity. The most crucial marker was that being based on intricate cultural endowments, craft was nearly impossible to replicate by those producing mass products. While mass producers crashed by 2004, craft producers lasted well beyond the MFA termination. It is somewhat intriguing that scholarship (much of it commissioned by aid agencies and financial institutions) would fail to observe such heterogeneities despite an 'economic rationale'. Indeed, the 'problems' in apparel were almost always traced to 'productivity issues' and supply-side challenges. Although industrialization was the issue at hand, it is rather unusual that more suitable frameworks like global value chain or industrial policy literature are not deployed in apparel research. More crucially, the depoliticized accounts deprive the scholarship of considering everyday behaviour and struggles in apparel, within or outside the firms. To address the methodological concerns, the author introduces the industrial ecosystem (IE) framework in Chapter 3.

Industrial ecosystem lens

The author posits that IE, drawn from Porter's industrial cluster approach and placed in the Polanyian tradition of societal embeddedness. addresses the depoliticized notions as well as the routine compartmentalization of workers, work, owners and capital into the social, the economic and the human (in anthropology, for instance). IE enables credible mapping of actors, networks and spatiality of activities, and hence acknowledges human-agency in industrialization. Consider the labour inspection network and its farcical functioning that the chapter brings to light: contrary to ethics and the social responsibility claims of global buyers, the Nepali apparel units were almost always tipped off about 'surprise-audits'.

The chapter ends with a rich analysis of spatiality of textile-sourcing which are suggestive of value addition and knowledge intensity in craft. For example, the nature of craft took the owner to rich textiles clusters in India (like Benaras) where the producer would contract directly with weavers (meaning costs savings and fabrics of custom specification). Mass producers, on the contrary, had minimal discretion to, for instance, enhance value addition. Cultural networks across borders-in the southern plains as well as the mountainous north-were central to craft production. Yet, industrialization, in much of the existing analysis that is based on the dominant theory is faceless; the lives of those involved, anonymous. Chapters 5 and 6 analyze how on the one hand, scholarship kept identifying nothing beyond constraints and, on the other, elite bureaucrats would label the sector as being low-value added and backward, and conclude that garment was to die anyway. The author observes that the relevant bureaucracy (from industry and finance, for instance) never took the pains to visit production floors, suggesting its inability to make sense of production.

Conclusion

Against this backdrop, the MFA-driven Nepalese apparel ecosystem-for that matter, any industrial ecosystem-hardly fits the reductionist but dominant demand-supply-MFA-led boom-bust-lack-of-endowments line of theorizing, posits the concluding chapter. Instead, the sector has been a macro-social assemblage of, *inter alia*, class struggles, heterogeneous firms, cultural endowments and contests for rents as well as power.

The author is Research Officer at South Asia Watch on Trade, Economics and Environment (SAWTEE), Kathmandu.

Notes

¹ Robinson, J. 1960. "Teaching Economics". *The Economic Weekly Annual* January.

'India-US trade could reach US\$500 billion'

THE US\$126 billion India-US bilateral trade can go up to US\$500 billion in the next decade, experts said at a meeting in New Delhi. They were speaking at a conference 'Advancing United States and India Relations: Mission US\$500 billion Bilateral Trade', organized by CUTS International on 26 February.

Mr. Frank Islam, Founder of FI Investment Group, said that the bilateral trade target of US\$500 billion was 'realistic and achievable' in the next decade. However, he also said that not much progress could be expected in the next two years.

He justified his optimism by highlighting the ever-growing trade in goods between the two countries, which reached US\$73 billion in 2017, compared to US\$5 billion in 1991.

Mr. Santosh Kumar Sarangi, Joint Secretary, Department of Commerce, said that protectionist measures on both sides would undermine trade and economic potential and that they needed to be resolved amicably.

Indian managing director of the US-India Business Council, Ms. Ambika Sharma, stressed a five-point agenda to identify tariff and non-tariff issues, which were posing as barriers to merchandise and services trade.

Belt and Road Initiative: Nepal's perspective

PREOCCUPATION with avoiding debt-trap has dominated the discourse on China's Belt and Road Initiative preventing Nepal from developing concrete plans, experts pointed out during a roundtable discussion organized by SAWTEE-Centre for Sustainable Development, on 17 April.

The event was organized to add to the discourse on how to align Nepal's development plans with the China's multi-regional connectivity initiative—the Belt and Road Initiative (BRI).

Making a presentation on the BRI and its implication for Nepal, Dr. Shankar Prasad Sharma, former Vice-Chairperson of the National Planning Commission (NPC), called attention to the ambiguities present in the project financing modality for the projects to be included in the BRI. He added that onus was on Nepal to negotiate terms that are beneficial to us. Mr. Gyan Chandra Acharya, former Under-Secretary General, United Nations and head of SAWTEE-CSD, pointed out that it is evident that Nepal, to date, does not have a clear vision on how best to proceed with the BRI, hence, discussions like these could be instrumental in shaping future courses.

Dr. Posh Raj Pandey, Chairperson, South Asia Watch on Trade, Economics and Environment (SAWTEE), said that much of the BRI discourse is only dominated by infrastructure issues, but there should also be focus on being integrated into Chinese value chain through investment.

The participants present in the discussion programme had a consensus view that Nepal should have a clear agenda for its national interest so as not to be swayed by peripheral issues. The round table brought together a cross-section of stakeholders, including policy makers, diplomats, scholars, and the private sector.

'CPEC ties should be diversified for maximum benefit'

EXPERTS have called on Pakistan to diversify its economic relations instead of relying too much on a single partner. They made the call at a seminar titled 'Corridors in South Asia: A Bumpy Road to Strategic Stability' held in Islamabad on 18 March. The programme was organized by Sustainable Development Policy Institute (SDPI).

According to participants, Pakistan should open its doors to expand the China-Pakistan Economic Corridor (CPEC) to central

Nepal seeks greater trade with Bangladesh

PARTICIPANTS at an interaction held in Nepal said that there was a need to revise Nepal's trade- and transit-related agreements with Bangladesh to stimulate trade between the two countries. They said that better access to the Bangladeshi market would benefit Nepali exporters more.

A discussion titled 'Nepal-Bangladesh Trade: Opportunities and Challenges' was organized jointly by South Asia Watch on Trade, Economics and Environment (SAWTEE), Ministry of Industry, Commerce and Supplies (MoICS), Government of Nepal and Morang Merchant Association (MMA) in Biratnagar, on 21 February.

Participants stressed the need to improve border customs on both sides and to shorten the documentation process while exporting to Bangladesh.

Mr. Jagadish Prasad Kusiyat, Minister for Industry, Tourism, Forest and Environment of Province 1, Nepal said that Bangladesh was an important trade partner of Nepal due to its prox-



imity, but that the trade potential was underexploited. He said that the provincial government was committed to improve the state of Nepali exports to Bangladesh.

MMA President, Mr. Pawan Kumar Sarda, said that Nepali products faced a number of non-tariff barriers in Bangladesh "due to which our export to Bangladesh is in decline while Bangladesh's export to Nepal is increasing". MoICS Joint Secretary, Mr. Rabi Shankar Sainju, said that the government was working towards a renewal of the trade treaties with SAARC countries, including Bangladesh. He said that Nepal and Bangladesh had agreed to provide preferential market access to some identified products. "Nepal is in the process of identifying such products," he said.

About 70 participants from participated in the interaction. ■



Asia, Middle East and the world to reap the maximum economic dividends, which in turn would help achieve strategic stability in the region. They also pointed out the need to ensure internal political and economic stability through improved governance to counter external threats and achieve the goals of strategic stability in the region.

Mr. Zahid Hussain, senior journalist, author and analyst, said that the concept of national security had changed and Pakistan needed to address its economic, food and environment securities first to achieve its strategic security.

"If we ensure peace, this South Asia region would transform as the fastest growing economic zone of the world," he said.

Access to affordable, quality medicine discussed

THERE is a need to ensure access to safe, quality and efficacious medicines at affordable prices in Pakistan. Speakers at a seminar, 'Drug Prices in Pakistan: Myth and Reality', stressed this need in Islamabad on 15 April. The event was organized by Sustainable Development Policy Institute (SDPI).

Senate Standing Committee on National Health Services Regulations and Coordination Chairperson, Mr. Mian Muhammad Ateeq Shaikh, said concrete measures should be adopted to ensure supply of quality medicines at appropriate prices.

Parliamentary Secretary for National Health Services, Regulations and Coordination, Dr. Nausheen Hamid, said that the federal government had taken steps for strict action against pharmaceutical companies for unauthorized increase in the prices of medicines.

She said that clear directions had been issued to Drug Regulatory Authority of Pakistan to do so against companies selling medicines at exorbitant prices.

Mr. Chaudhry Ansar Farooq, Chairperson, Pakistan Pharmaceutical Manufacturers Association-North, said Pakistan's pharma industry was providing medicines at affordable prices compared to other countries such as India and Bangladesh.

'Nepal must shun fickle foreign policy'

NEPAL must strengthen its fickle foreign policy, according to participants at a discussion programme organized by South Asia Watch on Trade, Economics and Environment-Centre for Sustainable Development (SAW-TEE-CSD) on 5 February.

Speaking at the programme titled 'Changing Strategic Landscapes: Nepal's External Engagements', foreign policy experts and stakeholders agreed that Nepal needed to frame a pragmatic foreign policy by addressing the country's long-term national interests. They discussed the ways Nepal could use her external engagements to promote her interests and aspirations in the changing global scenario. The common view was that having a fickle foreign policy had proven to be counterproductive for Nepal and its foreign relations.

Former ambassadors Mr. Suresh Acharya and Mr. Vijay Karna; former Minister for Foreign Affairs Dr. Prakash Sharan Mahat; Chairperson of Parliamentary Committee on International Affairs Ms. Pabitra Niroula (Kharel); MP Ms. Sarala Yadav; Retd. Major General Dr. Purna Silwal; Joint Secretary Mr. Mani P Bhattarai; senior journalists and reporters covering foreign affairs participated in the seminar.

'Trade treaty with India needs overhaul to tackle Nepal's deficit'

THE trade treaty with India requires substantial revision for Nepal to be able to arrest its ballooning trade deficit with its biggest trade partner, according to trade experts, industrialists and former policymakers.

They were speaking at an interaction programme titled 'Nepa-India Trade Treaty: Opportunities and Challenges' organized by the Ministry of Industry, Commerce and Supplies (MoICS), Government of Nepal, and South Asia Watch on Trade, Economics and Environment (SAWTEE) in Kathmandu on 5 February. The revised trade treaty of 2009 was renewed without any changes in 2016. The two countries are undertaking negotiations to amend the treaty. The interaction took place right before the parties were to hold a round of talks in Pokhara.

Dr. Posh Raj Pandey, Chairperson, SAWTEE, suggested exempting Nepal from the requirement to provide duty-free access to primary agriculture imports from India by revising the provision for reciprocal duty free market access for such products in the Protocol with reference to Article IV.

He also suggested simplification of the rules of origin that

Sri Lanka works to create digital map

A lack of coordination, focus, and support among ministries and other government agencies in Sri Lanka is an issue that needs to be addressed while creating a digital roadmap for the country, according to Minister of Telecommunications, Foreign Employment and Sports, Mr. Harin Fernando.

Minister Fernando said this during a panel discussion at a New Thinkers' Symposium organized by Institute of Policy Studies of Sri Lanka (IPS), in Colombo, on 21 March. Apart from the panel discussion, the Symposium hosted a research hub, where think-tanks presented findings from their latest studies; an innovations hub, which showcased



the latest advancements in digital technology in Sri Lanka; and a policy hub, where representatives from the Ministry of Finance, Ministry of Foreign Affairs and the Ministry of Development Strategies and International Trade presented their efforts to develop digital infrastructure and e-governance mechanisms in Sri Lanka.



Nepali manufactured goods have to abide by to gain duty-free access to the Indian market by moving towards an option between a 20 percent value addition and a change in tariff heading. The current treaty requires Nepal to extend to India any preferential treatment it accords to any product exported by any other country. This provision should be revised so that Nepal can effectively and freely enter into trade agreements with other trade partners, he said.

He further added that the government needs to put forward the proposal to remove the provision of tariff rate quotas on vegetable fats, acrylic yarn, copper and zinc oxide; waive Integrated Goods and Services Tax (IGST) for products produced by small units; and allow Nepal to import third country goods from India for specific purposes.

Mr Hari Bhakta Sharma, President, the Confederation of Nepalese Industries, said that the treaty needs a strategic revision as it has only benefited India.

He expressed frustration at the barriers faced by existing and potential Nepali exporters to India and at the inability of Nepali authorities to stop substandard goods that flood into Nepali markets from India.



Nepal's Post-Disaster Reconstruction Current Status and Lessons Learnt



Policy Brief: Nepal's post-disaster reconstruction: current status and lessons learnt Author: Dr. Jagadish Chandra Pokharel Publisher: SAWTEE





Policy Brief: Post-earthquake urban reconstruction in Nepal Author: Kishore Thapa Publisher: SAWTEE



Research Brief: Nepal-India informal trade in agricultural inputs: evidence from a smallscale survey Author: Dikshya Singh

Publisher: SAWTEE



South Asia Watch on Trade, Economics and Environment (SAWTEE) is a regional network that operates through its secretariat in Kathmandu and member institutions from five South Asian countries, namely Bangladesh, India, Nepal, Pakistan and Sri Lanka. The overall objective of SAWTEE is to build the capacity of concerned stakeholders in South Asia in the context of liberalization and globalization.

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