

● **TRADE** ●
insight

Financing climate action

Adaptation, Mitigation and
Loss & Damage



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New challenges, unfulfilled promises

Industrial policy has never been dead. It becomes less apparent in certain times, and more apparent in others. In the fight against climate change, the fiscal and trade measures unveiled by developed economies are enough to disabuse anyone of the notion associating protectionism with less wealthy nations. Massive amounts of subsidies contingent on domestic production or sourcing are a hallmark of the United States' Inflation Reduction Act. The European Union's Carbon Border Adjustment Mechanism imposes a carbon price on imports. The US and the EU have criticized each other's policies, while defending their own. The rest of the world, including the developing world, views both as green protectionism. The World Trade Organization could have been an arbiter of these controversial policies, but appointments to the Appellate Body in the dispute settlement mechanism continue to be blocked.

The enthusiasm shown by developed country governments to protect and strengthen domestic industry in the transition to a green economy is not extended to meeting the climate finance pledge of at least US\$100 billion per annum for poorer countries. One and a half decades since the promise was made, the shortfall is not only huge, even without accounting for the fact that climate finance requirements have increased, but the limited funding that has materialized is skewed towards mitigation although adaptation needs are pressing. Adaptation finance flows to developing countries are five to ten times below estimated needs, and they will need over US\$300 billion per year by 2030. This raises genuine concerns over the fate of the newly established Loss and Damage Fund, which aims to provide financial assistance to nations most vulnerable and impacted by the effects of climate change.

Against this backdrop, this issue of Trade Insight features several articles on climate change. The cover article discusses the state of play in climate finance, and argues that even as climate aid falls short of pledges, blended finance could emerge as a crucial financing mechanism for sustainable development. Another article points out that while the action plans on climate finance set in motion by the United Nations are in the right direction, efforts in climate finance are dwarfed by continued investments in business as usual.

Another article argues that addressing the challenges posed by climate change and promoting effective climate actions in Nepal require data-driven decision-making, capacity-building at the local level, and the integration of diverse knowledge systems. Given the initiatives in inland waterways spearheaded by India to deepen subregional connectivity, this issue also features an article on the challenges faced by inland waterways from climate change. It notes that while this mode of transportation is considered a cheaper and environment-friendly option, climate-induced difficulties can reduce its reliability and thereby add to the costs of operation and maintenance.

Zooming in on Nepal's steps in a clean energy transition, an article contends that the country's low electricity consumption level could be a blessing in disguise as it presents an opportunity for a transition strategy to replace the biomass- and fossil-fuel-dominated energy mix with cleaner energy sources. Unpacking recent measures in green protectionism, an article argues that as global superpowers race to become clean energy leaders, initiatives that support developing countries to join should be developed in line with the principle of common but differentiated responsibilities and respective capabilities. ■

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Nepal, India reach slew of agreements



NEPAL and India reached a slew of agreements and launched projects during Nepali PM Pushpa Kamal Dahal's official visit to India from 31 May to 3 June.

The two countries signed the Treaty of Transit and the Project Development Agreement of Lower Arun Hydroelectricity Project and reached a number of MoUs including for the development of infrastructure at Dodhara Chandani check post along India-Nepal Border. Separate MoUs were reached between Sushma Swaraj Institute of Foreign Service (SSIFS) and the Institute of Foreign Affairs, Nepal, National Clearing House Limited Nepal (NCHL) and National Payment Company India Limited (NPCIL) for cross-border payments and NHPC Limited and Vidhyut Utpadan Company Limited (VUCL) Nepal for the development of Phukot- Karnali Hydroelectric Project.

The two prime ministers also virtually laid down the foundation for the construction of Sunauli Bhairahawa Integrated Check Post, a petroleum pipeline from Amlekhganj to Lothar in Chitwan and Gorakhpur-New Butwal 400 KV. (<https://myrepublica.nagariknetwork.com>, 02.06.2023) ■

Nepal govt announces NTIS 2023 to boost exports

THE Nepal government has introduced *Nepal Trade Integration Strategy 2023* allocating a hefty amount to be invested in selected exportable goods although previous two similar programmes had failed to yield positive outcomes on a significant rate.

The new programme aims to increase the country's exports to NPR2 trillion in the next five years. The government has earmarked a budget of NPR463 billion to implement the programme for the stipulated time. The budget for FY 2023/24 has allocated NPR40 million for the programme.

Earlier, the government had implemented two editions of Nepal Integrated Trade Strategy in 2010 and 2016. In NTIS 2023, the government has incorporated large cardamom, ginger, legumes, jute, tea, medicinal herbs and aromatic plants, handmade papers, rosin and turpentine, woolen carpet, jewelry and iron and steel products for the programme. Spices, Himalayan spring water, fruits and processed items, natural fibers, coffee, handicrafts and PPC cement have also been considered for the targeted programs. (<https://myrepublica.nagariknetwork.com>, 09.06.2023) ■

Pakistan strikes US\$3bn IMF bailout deal



CRISIS-HIT Pakistan has reached a staff-level agreement with the International Monetary Fund (IMF) over US\$3 billion of funding.

The deal, which still needs to be approved by the global lender's board, comes after an eight-month delay.

The South Asian nation is facing its worst economic crisis since independence from Britain in 1947.

To help secure the deal, Pakistan's central bank raised its main interest rate to a record high of 22 percent.

Pakistan's economy, which was already struggling after years of

financial mismanagement, has been pushed to the brink by a global energy crisis and devastating floods that hit the country last year.

Pakistan's annual inflation rate hit a fresh record high in May of almost 38 percent.

The US\$3 billion of funding, which will be spread over nine months, is higher than expected.

Pakistan was awaiting the release of the remaining US\$2.5bn from a US\$6.5bn bailout package agreed in 2019. (30.06.2023, <https://www.bbc.com/>) ■

Sri Lanka's output to recover to pre-fertiliser ban levels



SRI LANKA'S rice output is on track to fully recover to the pre-fertiliser import ban levels next year, as the farmers regain access to imported chemical fertilisers with the approval of the International Monetary Fund (IMF) loan, according to the latest report published by the United States Department of Agriculture's (USDA) Foreign Agricultural Service (FAS).

The USDA predicted Sri Lanka's paddy harvest in 2023/2024 market year (October-September) to increase by 23 percent to 4.65 million metric tonnes (MMT) from the estimated 3.77 MMT in the 2022/2023 market year.

Accordingly, rice (milled) production is projected to reach 3.16 MMT in the 2023/2024 market year, coming from a planted area of one million hectares, with yields of 4.26 metric tonnes (MT)/hectare (rough rice).

During the current market year, rice (milled) production is forecasted to reach a partial recovery, with a 47 percent increase in output, due to the incomplete or partial application of the full basket of fertilisers (that also includes muriate of potash - MOP) required for the rice crop to thrive. (<https://www.dailymirror.lk>, 22.04.2023) ■

Massive unemployment in Pakistan

MILLIONS of jobs in formal or informal sectors of the economy across the country have been lost due to a massive decline in industrial production so far this fiscal year.

The ongoing restrictions on the import of raw materials, the foreign exchange crisis and rising costs caused by surging power and gas bills have severely hampered production activities.

In four industrial sectors of Karachi and the countrywide auto vending units, stakeholders claimed that "over 500,000 people have faced joblessness."

According to the Bureau of Statistics's Monthly Industrial Production and Employment Survey (MIPE) of February, the total number of employees in 18 categories of industries in February stood at 202,663 as compared to 221,163 in February 2022. Similarly, production workers in the above categories of industries in February 2023 plunged to 151,194 from 164,791 in February 2022. (<https://www.dawn.com>, 07.05.2023) ■

India loses ICT levy dispute at WTO

THE World Trade Organization (WTO) ruled against the import duty levied by India on a wide range of information and communications technology (ICT) products, including mobile phones.

A WTO dispute panel ruled that India had violated global trade rules, siding with a complaint by the European Union (EU), Japan and Taiwan.

In 2019, EU challenged the import duty of 7.5 percent—later increased to 15 percent—levied by India in 2017 on a wide range of IT products, such as mobile phones and components, as well as integrated circuits, to curb imports and step up domestic production.

Japan and Taiwan filed similar complaints later that year. India later further raised the duty to 20

percent despite opposition from a number of the trade organization's members.

The EU, Japan and Taiwan had claimed that India was applying duty on imports of certain ICT products in excess of the zero-bound duty rate set out in India's WTO Schedule. (<https://economictimes.indiatimes.com>, 18.04.2023) ■

Third of world in recession this year, IMF head warns



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A third of the global economy will be in recession this year, the head of the International Monetary Fund (IMF) has warned.

Kristalina Georgieva said 2023 will be "tougher" than last year as the US, EU and China see their economies slow.

It comes as the war in Ukraine, rising prices, higher interest rates and the spread of Covid in China weigh on the global economy.

In October 2022 the IMF cut its global economic growth outlook for 2023.

"We expect one third of the world economy to be in recession," Ms Georgieva said on the CBS news programme Face the Nation.

"Even countries that are not in recession, it would feel like recession for hundreds of millions of people," she added. (<https://www.bbc.com>, 02.01.2023) ■

Bangladesh, Bhutan sign agreement on transit

BANGLADESH and Bhutan on 22 March signed an agreement on movement of traffic-in-transit and protocol at the Bhutanese capital Thimpu to simplify further bilateral trade between the two countries.

Speaking on the occasion, the Bangladeshi commerce minister said that following the signing of the agreement, trade and commerce between the two countries would be simplified further while trade relations would reach a new height.

Bangladesh wanted to expand trade and commerce among its

neighbouring countries through increasing inter-communication and enriching value chains. Under the agreement, Bangladesh is extending Bhutan the facility for using the country's air, railways, river ports, land ports and sea ports since Bhutan is a landlocked country.

This agreement will make more effective the Preferential Trade Agreement (PTA) signed earlier between the two countries. The agreement will be made effective once both the countries ratify it. (<https://www.newagebd.net>, 22.03.2023) ■

China agrees to resume bilateral trade with Nepal via Tatopani-Khasa customs

THE Chinese government has agreed to resume two-way trade via Tatopani-Khasa route from 1 May this year.

In a bilateral meeting of Nepal-China Coordination Mechanism on Border Trade and Cooperation held in Lhasa on 29 March, the Chinese authorities consented to resume operation of what was once the most used land route of bilateral trade between the two countries.

China time and again has been obstructing bilateral trade via land routes. Since the 2015 earthquake, Nepal's export through the Tatopani-Khasa border has come to a standstill. Prior to the earthquake, the trade volume through land route used to be more than NPR150 billion annually.

Subsequently, China expressed its promptness to trade via Rasuwagadhi-Kerung border to carry out bilateral trade. However, Chinese



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authorities, since the spread of the COVID-19 pandemic, started imposing heavy restrictions on trade through this border point too.

(<https://myrepublica.nagariknetwork.com>, 31.03.2023) ■

National pashmina sector export strategy launched

NEPAL launched the National Pashmina Sector Export Strategy 2022-26 with an aim to boost the export of 'Chyangra pashmina' from NPR 2.82 billion in 2021 to US\$75 million or NPR 10 billion by the end of 2026.

Chyangra pashmina is internationally recognised as cashmere of the highest quality and is one of the world's most desired fibres. It is sourced from native Himalayan mountain goats called Chyangra.

The International Trade Center, a joint trade agency of the World Trade Organization and the United Nations, the Nepal government and the European Union, jointly laid a foundation stone for the construction of the pashmina fibre processing centre at Godavari.

The processing plant is expected to complete in three months. Government officials said that the plant would boost Nepal's Chyangra brand pashmina in the international market.

The total investment to implement the strategy is NPR 588.25 million—33.4 percent or NPR 196.47 million to be made by the private sector and the remaining



NPR 391.77 million from the public sector. Exports of pashmina reached a peak in the late 1990s and early 2000s when demand for goods made of pashmina surged especially in Europe.

In the early 2000s, Nepal's pashmina export revenue reached up to US\$112.7 million a year.

But sales dropped over the past decade as low quality dom-

inated exports, damaging the credibility of Nepali Pashmina. The export revenue dropped to NPR 1.65 billion in 2012-13.

The pashmina industry employs over 20,000 people, of which around 50 percent are women. The majority are small and medium entrepreneurs. (<https://kathmandupost.com>, 07.02.2023) ■

India to continue export ban on wheat

THE Indian Government said the export ban on wheat will continue as long as the country does not feel comfortable with the domestic supplies to meet food security needs.

State-owned Food Corporation of India (FCI) said wheat production has not been impacted due to unseasonal rains. Even after rains,

the total wheat output will be at a record 112 million tonne this year.

India, the world's second-largest wheat producer, banned wheat exports in May 2022, with immediate effect as part of measures to control rising domestic prices.

Estimated higher wheat production this year will ensure

sufficient supplies for both government procurement and general consumption in the Indian market.

The government has projected a record wheat production of 112.18 million tonne in the 2023-24 crop year (July-June), as per the second estimate of the agriculture ministry. (<https://economictimes.indiatimes.com>, 28.03.2023) ■

Innovation support effectiveness

With more than 95 percent of the business enterprises in Nepal categorized as micro, small and medium enterprises (MSMEs), these businesses play a vital role in Nepal's economy. In a country where there are about only 1,100 large industrial enterprises, providing direct employment to about 150,000 people, smaller firms drive the economy. Small businesses are estimated to contribute 22 percent to the GDP and employ around 1.7 million people.

Challenges facing MSMEs have led to a proliferation of innovation support programmes in Nepal. Although innovation is generally understood as the invention of new products or technology closely related to a scientific and technological breakthrough, that is only one dimension. Innovation in businesses is equally about changing production techniques, implementing new product designs, branding, etc., which are mostly driven by the firm's ability to create, seek and manage new ideas. However, small businesses face constraints in terms of sourcing innovative ideas or have limited capacity—in terms of finance, human resources, etc.—to implement those innovations. Moreover, innovation in countries like Nepal often is restricted by weak firm and government capabilities to foster and implement innovative practices and technologies.

SAWTEE, with support from International Development Research Center, has published a report titled 'Mapping Innovation Support Programmes for Micro, Small and Medium Enterprise Development: Findings from Nepal'. This study examines the innovation support landscape in Nepal, describing existing policies and major inno-

vation support programmes for MSMEs, examining the availability of credible empirical evidence on their effectiveness.

The study found that at a glance, there are many innovation support programmes in operation for small businesses in Nepal. However, the scale and kind of support currently available do not meet the needs of the enterprises. While necessary to understand the effectiveness of the support available to firms, there is a dearth of Nepal-specific evidence on the type of interventions and supports that work best as per the need of the enterprises. Government and/or non-government entities that provide support need to evaluate the effectiveness of their interventions.

There are projects such as Micro Enterprise Development for Poverty Alleviation that has done a significant amount of work in poverty alleviation and income generation. However, the number of businesses that have graduated to larger businesses—from micro to small—is less than one percent. While such projects could be useful in poverty alleviation, their role in enterprise development seems limited. Other similar programmes are offered but missing are more specialized support policies directed towards small enterprises that could graduate into medium-sized enterprises with a little push. These enterprises are the ones that can adopt innovative solutions.

At present, local bodies and provincial governments are replicating similar programmes based on little or no evidence. The decisions to scale up or expand programmes should be based on the evidence of how useful the

programmes have been to targeted beneficiaries.

In the innovation landscape of Nepal, the academic and commercial spaces are disconnected. Although science and technology academic institutions have research and innovation centres, they are disconnected with the businesses that could use their outputs commercially.

The private sector in Nepal also fails to seek out innovative solutions to their problems. For example, the private sector or private sector umbrella organizations could seek help from existing engineering institutions and other research facilities to develop customized machines. For example, developing customizing machines for the processing products such as cardamom or all, that have high export potential. There are many areas of interventions where innovation—R&D related—could be a game changer in increasing the productivity of enterprises.

This partly comes down to the absence of a national innovation system in Nepal which would create linkages between people, enterprises and institutions. Since innovation is the result of a complex set of relationships among actors in the system, which includes enterprises, universities and government research institutes, innovation cannot be expected to take place from the attempt of any one of these entities alone. It is necessary to develop a national innovation system that captures both entrepreneurial and science, technology and innovation aspects. ■

Excerpted from 'Mapping Innovation Support Programmes for Micro, Small and Medium Enterprise Development: Findings from Nepal', published by SAWTEE.



India-Bangladesh Inland waterways connectivity Adapting to climate change

Although inland waterways are considered a cheaper and environment-friendly option, climate-induced challenges can afflict this mode of transport, reduce its reliability and thereby add to the costs of operation and maintenance.

Suvayan Neogi and Veena Vidyadharan

Historically, waterways used to play a significant role in transportation in the Indian subcontinent. The wide network of rivers facilitated cargo movement between Kolkata port and East Bengal and northeast India. The movement got stalled after the Indo-Pakistan war of 1965. The trade routes through waterways

were revived in 1972 soon after the independence of Bangladesh from Pakistan by signing the Protocol on Inland Water Trade and Transit (PIWTT) under Article VIII of the Trade Agreement between India and Bangladesh. Even then, the priorities of the subsequent governments in both countries have been to

develop road and railway connectivity, not waterways.

A boost to this sector happened in 2015 when both countries decided to revive the agreement with a provision for auto-renewal every five years. Since then, several developments occurred in India, including the promulgation of the National

Waterways Act (2016) that designated 111 Indian rivers, river stretches, creeks, and estuaries as National Waterways (NW)¹. The NW-1 stretches between Allahabad and Haldia in the Ganges, Bhagirathi and Hooghly river system for about 1620 km. The NW-2 extends for 891 km from Sadiya to Dhubri in Assam. The NW-1 and NW-2 are also part of the India-Bangladesh Protocol Route-1, which connects Kolkata to Silghat in Assam via Bangladesh.

The development of intermodal and multimodal terminals along NW-1 and NW-2 also cater to the connectivity needs of Nepal and Bhutan wherein they can access the riverine routes of India to trade with Bangladesh thereby enabling subregional connectivity. For instance, Bhutan is accessing the inland waterways of India in Dhubri (Assam) as a trade route for its export to Bangladesh. A similar development has materialized between India and Nepal within the framework of Protocol to the Treaty of Transit, wherein India has allowed the country to access three routes, namely, Kolkata-Kalughat, Raxaul; Kolkata-Sahibgunj, Biratnagar and Kolkata-Varanasi-Raxaul².

Climate change and inland navigation

Inland water transport (IWT) is known to be an environment-friendly mode of transportation. At a time when air pollution by vehicle traffic is a growing concern, waterborne goods/freight and passenger transportation, particularly by inland waterways, has great promise for energy-efficient and cheap mode of transportation for bulky goods. IWT also helps reduce stress on the already congested railway and road networks.

IWT is considered to be environment-friendly as it is the most fuel-efficient mode of transportation. As per estimates done by Rail India Technical and Economic Service (RITES), in 2013, one litre of fuel can move 105-tonne km by waterways in comparison to 85-tonne km by railways and 24-tonne km by road; thus making one vessel equivalent to 15 rail wagons and 60

trucks for transportation purposes. The freight rate per tonne-km will be around INR 1.41 by railways, INR 2.58 by road and INR 1.06 by inland waterways to transport the same cargo on the same route.³ An inland transport water vessel emits less than 50 percent of the carbon a truck emits.

However, it is to be noted that NW 1 and 2 are being developed in the glacier-fed Himalayan rivers, namely, the Ganges and the Brahmaputra, which are prone to floods annually. The lean season water flow in these rivers during winter months is low, challenging inland navigation.

Inland waterways could be more vulnerable to the effects of climate change than other means of transportation. Fluctuations in the least available depth (LAD) required for safe navigation and their impact on the overall cost of transportation and its reliability raise questions about the dependability of this mode of transportation. This would hurt the competitiveness of industries that depend on the efficient movement of cargo, particularly bulk and containerized cargo, through waterways.

Climate change impact on inland navigation

Climate change is the ultimate negative externality affecting IWT. Extreme weather events such as floods, droughts and cyclones impact inland navigation through several means.

For IWT, it is impossible to determine whether a severe weather situation is negatively influencing the system by using a single generic meteorological indicator (such as the amount of precipitation during a given period). The intensity and duration of precipitation alter the discharge, water levels, and flow velocities that determine the navigation conditions of inland waterways. Large streams can sustain significant amounts of precipitation without flooding, whereas small waterways are more susceptible to changes in precipitation.

Heavy rains also cause river bank erosion, resulting in the reallocation of ferry terminals. Higher precipitation can affect sediment supply and sedi-

ment transportation, and hence channel maintenance activities, including dredging will be required. Changes in water level and velocity can also impact manoeuvrability. In Bangladesh, heavy siltation in waterways has led to the closure of river routes for longer periods and the stopping of business activities.

Prolonged dry spells exacerbated by high temperatures and evaporation lower water levels and flow rates, leading to poor navigability and increased fuel consumption. IWT may be adversely affected for weeks or even months if water levels remain low. If water levels fall significantly below the LAD, the cargo-carrying capacity of the vessel may be restricted.

Poor visibility caused by fog, rainfall, and haze can lead to speed reduction (to ensure safe navigation) or even navigation interruption, which may cause delays. Poor visibility is not a major constraint for modern vessels equipped with radar even though such conditions make it impossible for other modes of transportation, including road and rail, to function. However, the mechanized boats and barges in the unorganized sector are not equipped with radar technology. Apart from the delay in transportation, collisions with navigational aids (which may be damaged) and fishing gears are likely consequences of decreased visibility.

Heavy storms and cyclones can adversely impact navigation and cause accidents. The incidence of cyclones in Bangladesh has increased in the past few years and has caused accidents and the sinking of ships. Bangladesh experiences such incidents frequently due to the proximity of Bangladeshi waterways to the sea and tidal influence. Heavy storms have destroyed shelters and landing stations, too.⁴ Other than the loss of lives, the sinking of ships causes major safety hazards for ship traffic, escalating the costs.

Strong winds can interrupt navigation affecting a vessel's manoeuvrability, which adds to time and causes delays in operations. Steering forces need to be exerted to maintain the vessel on course, which could result in

higher roll amplitudes than those of a vessel allowed to drift freely.

Sea level rise can lead to an increase in seawater intrusion and consequently a higher salinity in inland waterways. A rise in sea level allows diffusion of wave energy to the coastline and into ports, causing increased coastal erosion in areas with a soft coastline.⁵ Steel structures in waters with high salinity corrode quicker, causing higher maintenance costs. It has been reported that an increase in salinity increases the number of shells growing on ship hulls, which decreases the speed of ships, raising fuel costs.⁶

Steps ahead

While climate change-induced challenges for IWT in India mostly include floods, siltation, bank erosion, lean season navigability and visibility concerns, the intensity of these challenges is higher in Bangladesh where accidents induced by storms/cyclones and seawater intrusion/salinity are also experienced.

The sensitivity of the IWT sector to climate change can be lessened by using multipronged strategies. Robust policy planning, technological interventions, investments and operating measures need to be adopted for safe navigation. The following are some suggestions for better preparedness against the impact of climate change on the IWT sector.

- One of the drawbacks of inland navigation is that it lacks last-mile connectivity. That is why the discussion on multimodal connectivity has been integral to IWT. Not just for the last-mile connectivity, but during unfavourable conditions for inland navigation, other modes like railways and roadways can be resorted to.
- The provision of navigational aids, including updated maps, radar, night navigation aids, electronic charts, signals and other navigational services would enable safe navigation and enhance its reliability.
- Standardization of fleet, vessel and control procedures; adopting

new craft designs suitable for low draft conditions could help IWT operations become more robust in climate extremes.

- Fleet capacity has to be enhanced with newly constructed vessels of different loading capacities.
- Weather forecasting systems need to be strengthened to reduce accidents and proper enforcement of regulations to guard against plying under bad weather conditions is required.
- Before building terminals, river bank stabilization needs to be undertaken.
- Minimum water depths need to be maintained through dredging wherever necessary.
- Nature-based solutions for flood and erosion control, including afforestation in the upper catchment areas to reduce siltation, have to be adopted.
- Long-term hydro-morphological studies need to be undertaken to generate data for better management of water flow and sedimentation.
- Skills and capacities of the pilot and crew have to be enhanced to navigate safely and safeguard human lives, property and environment during extreme weather events.

Conclusion

Out of the 111 NW declared in India, feasibility studies classify 25 as viable for cargo/passenger movement. Of these 25 NW, 13 are operational at present. Year-round navigation is a challenge even in those 13 waterways. However, all of the identified canals need extensive capital and maintenance dredging, which could face opposition due to environmental concerns.

IWT is the most viable means of transport for bulk and over-dimensional cargo. Although it is considered a cheaper and environment-friendly option, climate-induced challenges can delay transportation, reduce its reliability and thereby add to the costs of operation and maintenance. To ensure seamless connectivity, multi-

modal connectivity seems to be ideal but coordinated efforts from various line departments are a prerequisite. Regarding investments in resilient infrastructure development, public-private partnership models can be explored. Technological upgradation concerning fleet vessels, navigational aids and channel maintenance need to be adopted. Standardization of technical and safety requirements of inland navigation along the India-Bangladesh Protocol Routes and constitution of disaster management cells are required to reduce the incidence of accidents and to render immediate action when they occur. ■

Mr. Neogi is Assistant Policy Analyst, CUTS International and Dr. Vidyadharan is Fellow, CUTS International. Views expressed are personal.

Notes

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Climate Finance: An overview

The action plans set in motion by the United Nations are in the right direction. However, the efforts in climate finance are dwarfed by continued investments in business as usual.

Swastik Aryal



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Climate change has affected the entire world. Rising average temperatures, melting of the glaciers and changes in rainfall pattern, among others, are some of the major effects of climate change. The United Nations defines climate change as the long-term shifts in temperature and weather patterns. Since the 1800s, burning fossil fuels like coal and petroleum products for economic activities has been the main driver of climate change.¹ Climate change poses major risks to food security, health, livelihood and the natural ecosystems. In order to minimize the effects of climate change and preserve resources for the future, nations around the world have come together for climate action by signing and vowing to adopt the Paris Accord.

Climate finance has remained one of the major agendas in global negotiation to meet the goals of climate actions between the developing global South and the developed global North. It refers to local, national or transnational financing—drawn from public, private and alternative sources—that seeks to support mitigation and adaptation actions.² The Paris Agreement has recognized that the contribution and capacity to prevent climate change vary from country to country and calls for financial assis-

tance from parties with more financial resources to those that are less endowed and more vulnerable.³ Hence, actions required for climate mitigation and adaptation as well as compensating for the loss and damage caused by climate change impacts require a large volume of finance.

Climate finance for mitigation

Mitigation refers to efforts to reduce or prevent the emission of greenhouse gases.⁴ The Intergovernmental Panel on Climate Change (IPCC)'s special report on global warming suggests that an average temperature rise of 1.5°C above pre-industrial levels and related global greenhouse gas emissions would result in irreversible and devastating consequences for human lives and the natural ecosystem. In fact, in many places, land and natural ecosystems have already begun changing with impacts on food security and increasing disasters.⁵ Mitigation pathways in line with the 1.5°C target would require policy interventions along with financing. Mitigation strategies include adopting renewable energy sources like solar, wind, and small hydro; helping cities develop more sustainable transport such as bus rapid transit and electric vehicles; and promoting more sustainable uses of land and forests as well as retrofitting buildings to make them more energy efficient.⁶

Climate finance for adaptation

With the impacts of climate change already becoming real, adaptation is an equally important part of climate action. While doing everything we can to cut emissions and slow the pace of average temperature rise, adaptation is needed to protect ourselves and our communities from extreme events.⁷ The IPCC defines adaptation as the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human interventions may facilitate adjustment to expected climate and its effects. Climate change has already affected different regions

in different ways, such as places experiencing erratic weather pattern, resulting in intense rain and more floods or droughts as well as more frequent and severe heat waves. There are ways in which countries can adapt to the changes to minimize and protect the communities from the impact of climate change. Preservation and plantation of trees, protecting communities from sea level rise by helping them move to higher ground, preparing for extreme weather disasters by investing in early-warning systems, protecting food supplies, switching to drought-resistant crops and being ready for disasters through rescue and relief strategies can be some of the adaptation measures against climate change. Additionally, planned adaptation measures may be more effective. Planned adaptation measures range from developing and/or streamlining policies and development strategies, building the knowledge and capacity of people and local institutions, and designing and developing new infrastructure and services, as a means to intervening in the existing system and practices.⁸

Climate finance for loss and damage

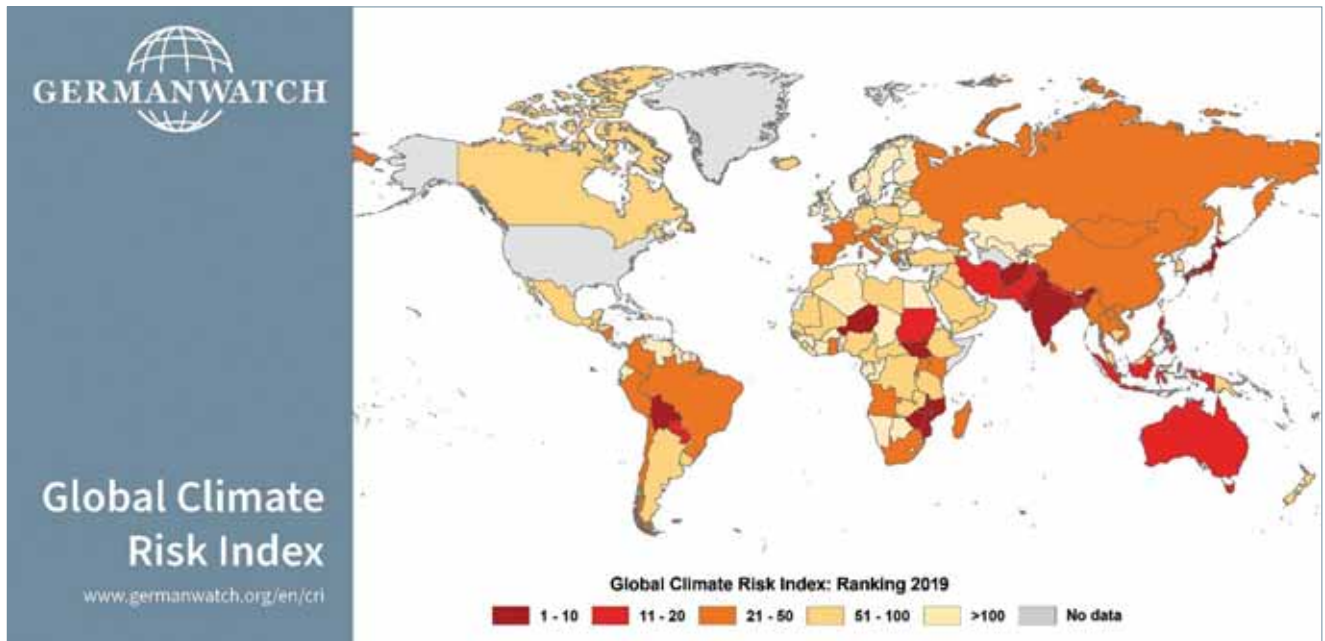
Establishment of a separate loss and damage fund was a major highlight of the 27th United Nations Climate Change Conference (COP27) held in November 2022. Loss and damage

refers to the harm caused by human-generated climate change. Climate change impacts such as floods, changing pattern in rainfall, storms, drought, heatwaves and loss of biodiversity all result in loss and damage. The consequences of climate change that go beyond what people can adapt to, or when options exist but communities do not have the resources to access or utilize them, are referred to as loss and damage.⁹

Loss and damage is the third crucial pillar of climate action—helping people after they have experienced climate related impacts.¹⁰ When mitigation efforts to reduce emissions are not ambitious enough and when adaptation measures fail, loss and damage becomes important. While the importance of loss and damage has been realized such that a separate fund is established, it is equally important to identify and determine the sources of funding that will address loss and damage. The nature of finances for loss and damage can be different to that for mitigation and adaptation. Both short-term assistance and long-term support are required. Humanitarian aid, disaster-risk management and insurance are the sources of finance for loss and damage that developed countries have agreed upon. In order for loss and damage finance to work, funding arrangements, and coordination and alignment of the various types of funding are necessary. This



ADB



Source: GermanWatch.

is what the separate loss and damage fund aims to address.

Support to developing and least developed countries

Developing and least developed countries (LDCs) are more vulnerable to climate change impacts due to their dependence on climate-sensitive sectors, such as agriculture, and due to their low current adaptive capacity. The 2022 floods in Pakistan, extreme climate conditions in India, landslides in Sri Lanka and changes in rainfall patterns in Nepal are some of the impacts that South Asian nations face. The Global Climate Risk Index 2019 shows that countries in Asia and Africa are among the most vulnerable to the impacts of climate change.

Countries such as India, Sri Lanka and Afghanistan from Asia and Zimbabwe, Mozambique, South Sudan and Niger from Africa are among the most vulnerable countries. The global climate risk index clearly indicates that developing and least developed countries need sufficient support for climate action in the form of mitigation measures, adaptation techniques, loss and damage support and climate finance.

Extreme temperatures and weather events risk inflicting lasting economic

and societal damage, particularly in the LDCs, which are ill equipped to guard against climate change and recover from its worst effects.¹¹ In order to support vulnerable countries against climate change impacts, the LDC Fund (LDCF) was established in 2001. The objective of the LDCF is to help vulnerable countries to adapt to new climate realities. While the initiative was a good start, the target of raising funds still has not been met.

In addition, at COP15, developed countries pledged to mobilize US\$100 billion per year by 2020 to support developing countries to mitigate and adapt to the impacts of climate change. This was later reaffirmed in the 2015 Paris Agreement, where countries agreed to set a new collective goal by 2025, using US\$100 billion.¹² While climate finance for LDCs has significantly increased over the years, the target of US\$100 billion has still not been met.

Climate finance action

The United Nation’s Climate Action Pathway for Finance has set a vision that by 2050, financial markets, institutions and systems are put in place to support and fund a resilient zero-carbon economy and society, ensuring

that temperature rise remains limited to 1.5°C. In order to meet this vision, certain action have been formulated.¹³ They are discussed below.

Closing the ‘valuation gap’

This aims at correcting market failures and externalities through carbon pricing, ending fossil fuel subsidy, transition and liability risks and addressing standard assets and advancing a circular economy. In order for these measures to effectively take place, enabling policies need to send powerful signals to the market in support of the requisite investment.

Tackling the ‘tragedy of the horizon’ and short-termism

This aims at achieving transition plans, net-zero-emission and resilience goals built on science-based, measurable interim targets to shift finance and investment onto a long-term path aligned with the Paris Agreement and beyond.

Creating systemic transformation tools and building capacity

In order to create systemic transformation tools and build capacity, there is a need to create: new market norms, shared taxonomies, scenarios

and other tools for net-zero alignment, investment in climate adaptation, and resilience. Coordination among government agencies, oversight mechanism, harmonization and accountability of standards across financial systems is necessary to achieve this. Capacity can be built through education, training, tools and engagement to fully integrate climate-related risks and climate solutions in finance and investment decision making.

Improving incentives and risk management

Adopting appropriate financial, fiscal and institutional incentives is necessary to drive change. Similarly, innovation is required to scale finance and deploy capital in emerging markets and developing countries, and for adaptation/resilience as well as breakthrough technologies.

Zero-carbon, resilient infrastructure and real assets

Adoption mechanisms are necessary to ensure capital flows. The mechanisms include: fostering an equitable and just transition away from high-carbon resources, infrastructure, products and services, and unlocking finance for zero-carbon and resilient infrastructure, access to clean energy, and climate solution for all, with a focus on the most vulnerable communities, while respecting rights of workers and communities throughout value chains and operations through social dialogue.

The action plans set in motion by the UN are in the right direction and more is being spent on mitigation and adaptation and now the loss and damage fund will also be contributing largely towards climate action. However, the efforts of climate finance are dwarfed by continued investments in business as usual.¹⁴

Way forward

To mitigate climate change and adapt so that the impacts are minimum and to ensure effective loss and damage measures through climate finance, some further actions could prove to be fruitful. A holistic approach that

ensures synergy between policies, business communities and climate action is necessary. Some actions to enhance the impacts of climate finance on climate change are:

- Continue to raise awareness among civil society organizations, policy makers, business communities, of developed, developing and least developed countries.
- Stop subsidies on fossil fuels and scale back investment in usual business that contribute towards emissions and climate change.
- Increase investment in adaptation with a focus on vulnerable countries.
- Clarify the climate finance options and scaling up for developed countries to raise more funds.
- Strengthen policies such that climate finance is effectively utilized for adaptation and mitigation.
- Finance should be directed towards long-term value investments that ensure low-carbon and resilient and sustainable development.
- Collaborative efforts from all sectors to both raise and mobilize funds for climate action.
- Ensure government, development partners and other relevant organizations' strategies are aligned with that of the Paris Agreement so that role of climate finance is impactful.
- Adopt and implement the actions drawn by the UN's climate action pathway for finance outlined in the preceding chapter.

To ensure a clean, resilient and sustainable future, all actors need to come together in the fight against its impacts. The international community along with policy makers, civil society and business communities need to realize the dangerous potential of climate change so that it can be fought with all the available resources at hand. Raising sufficient finances for climate action is one important factor that can help to achieve mitigation and adaptation goals. ■

Mr. Aryal is Research Officer at SAWTEE. This article was prepared as part of a project supported by The Asia Foundation. Views expressed are personal.

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Climate finance for green growth

Even as climate aid falls short of pledges, blended finance has emerged as a crucial financing mechanism for sustainable development.

Fahmida Khatun and
Foqoruddin Al Kabir

Given the increasing concern around climate change and environmental degradation, green growth policies have taken centre stage.¹ These policies stress the importance of transitioning away from traditional manufacturing methods and consumer behaviour towards sustainable practices that prioritize environmental conservation. To achieve this goal, it is critical to leverage technological

advancements that can facilitate the shift towards cleaner manufacturing processes, especially in developing countries.²

As societies strive for technological advancement, the costs of research and development escalate, putting pressure on a nation's fiscal resources. In response to mounting concerns about climate change and environmental degradation, the pop-



ularity of green growth policies has surged. However, the transition from carbon-heavy industrial practices to cleaner alternatives demands a substantial amount of funding.

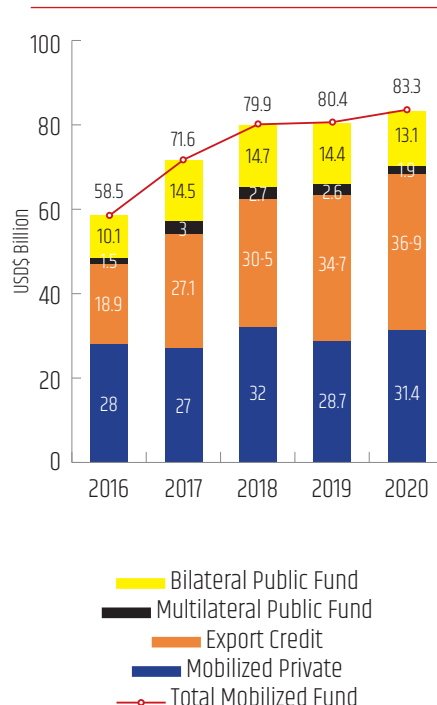
Developing countries often rely on aid from developed nations to support their growth, but this aid is often limited and comes with strict conditions. Despite the pressing need for climate financing in developing countries, the mobilization of funds has fallen short of the targeted goal of US\$100 billion per year. In 2020, US\$83.3 billion was mobilized by developed countries for developing countries, which marked a 4 percent increase from 2019. However, this still fell short of the target of US\$100 billion per year by US\$16.7 billion.³ Unfortunately, financing for adaptation, which is critical for developing countries, has taken a backseat to mitigation finance. In fact, mitigation finance accounted for 58 percent of total climate finance in 2020.

Global climate finance

Currently, the total pledged climate fund (only project basis fund) is US\$46.74 billion in the world from 2003 to 2022. Around US\$40.96 billion was deposited in the fund, which is 87 percent of total fund pledged. The disbursement of climate fund is quite low (37.84 percent) compared to approved climate fund of US\$30.31 billion in the world till February 2023.⁴ However, considering bilateral public funds, multilateral public funds, export credits, and mobilized private funds, US\$83.3 billion was provided and mobilised by developed countries for climate action in developing countries in 2020 (Figure 1).⁵

Considering the thematic areas of climate fund in the total pledged climate fund (only project basis fund), the multiple foci theme (covering both adaptation and mitigation) holds the largest share of total climate fund—57.83 percent of total pledged climate fund. Only 11.78 percent of total climate fund is pledged for adaptation theme and 30.38 percent of total climate fund is pledged for mitigation theme.

Figure 1 Total climate finance provided and mobilized (US\$ Billion)



Source: Climate Finance Provided and Mobilized by Developed Countries in 2016-2020: Insights from Disaggregated Analysis by OECD.

Climate change adaptation refers to taking appropriate action to prevent or minimize the damage it can cause, or taking advantage of opportunities that may arise from the anticipated adverse effects of climate change. Mitigation means making the impacts of climate change less severe by preventing or reducing the emission of greenhouse gases (GHG) into the atmosphere. Among the total disbursed climate fund, the share of multiple foci theme is 45.40 percent, the share of mitigation theme is 34.13 percent and the share of adaptation theme is 20.47 percent. Considering the number of projects approved, 26.54 percent was for adaptation and 19.75 percent was for mitigation. Although a larger share of projects was for adaptation, the share of adaptation fund was less than that of mitigation fund.

On the other hand, from bilateral public fund, multilateral public fund, export credits, and private fund mo-

bilized by developed countries for developing countries from 2016 to 2020, a large amount of fund (67 percent) was mobilized for mitigation and only 24 percent was mobilized for adaptation. From the export credit for climate change-related fund, 98 percent of the fund was mobilized for mitigation and from the mobilized private fund, 86 percent was mobilized for mitigation theme by developed countries for developing countries. Such numbers also indicate that the mitigation fund has more business opportunity than the adaptation fund.⁶

The least developed countries (LDCs) receive 21 percent of total climate fund. Considering the thematic areas, LDCs' share of total approved global adaptation fund is 48.77 percent. LDCs' share of multiple foci fund and mitigation fund is 16.43 percent and 12.80 percent respectively. Figure 2 presents the LDCs' share of approved global climate fund in different thematic areas.

LDCs in Sub Saharan Africa receive the highest share (14.06 percent) of global climate fund among all LDCs. South Asia stands second as LDCs in this region receive 3.87 percent of total climate fund, while LDCs in East Asia and Pacific receive 3.13 percent of total climate fund (Figure 3). The overall trend of climate fund in the world reveals a substantial financing gap in the world. Moreover, developing countries, particularly LDCs, require a large amount of financing towards adaptation efforts than mitigation efforts since LDCs are less responsible for global emissions but these countries are suffering the most from climate change.⁷

Closing the climate finance gap through blended finance

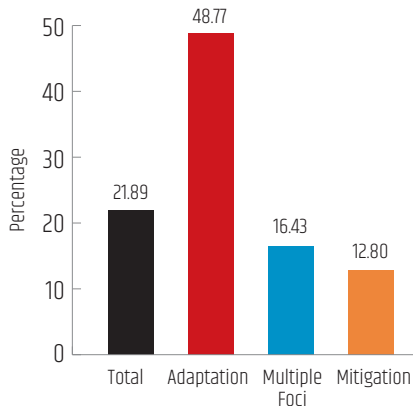
Blended finance has emerged as a promising source of funds to bridge the climate finance gap, given the significant amount required for climate mitigation and adaptation. Blended finance is defined as the strategic use of development finance for the mobilization of commercial capital towards sustainable development in developing countries.⁸ Over the last

decade, the blended finance market has experienced robust growth due to its socio-economic benefits, particularly in developing countries. From 2010 to 2021, the global blended finance market reached US\$109.6 billion, with a majority of closed transactions in developing countries, primarily in Sub-Saharan Africa and South Asia.⁹

Blended finance has played a crucial role in promoting socio-economic development in these regions, as seen in the case of green growth in three Sub-Saharan African nations. The energy and agriculture sectors have been the primary recipients of blended financing, accounting for 35 percent and 28 percent of all transactions, respectively.¹⁰ These sectors are essential for green growth in developing countries, especially the LDCs. Financial services and infrastructure industries have also received significant blended financing, contributing to the seamless transition to greener production and consumption and attracting foreign investment flow.

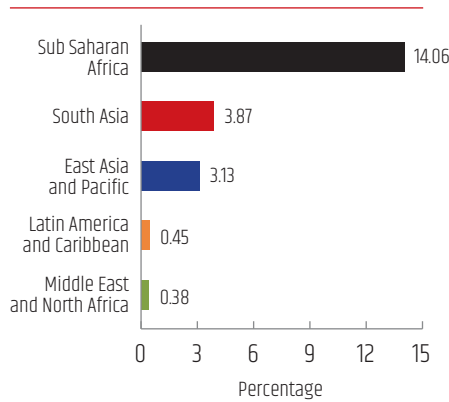
The blended finance mechanism has mobilized approximately US\$105 billion in aggregate financing, with almost half of the transactions focusing on climate-related issues.¹¹ In LDCs, blended finance can be used in agribusiness, clean energy financing, climate adaptation, and waste

Figure 2 LDCs' share of approved global climate finance receipts in different thematic areas



Source: Climate Funds Update (February 2023).

Figure 3 LDCs' share of total climate fund in various regions (World Bank classification)



Source: Climate Funds Update (February 2023).

management. The agriculture sector, in particular, requires both innovation and financing to expand, and blended finance can mobilize additional financing from both public and private sources. Similarly, the promotion of renewable energy can be achieved through blended financing, which can create new jobs in LDCs and help achieve the SDG 7 goal on access to affordable, reliable, sustainable and modern energy for all.

Blended finance can also play a crucial role in bridging the gaps for climate adaptation in LDCs, strengthening partnerships for development goals, and preparing for bankable projects for climate adaptation and mitigation. Therefore, blended finance has emerged as a crucial financing mechanism for sustainable development, with significant potential to contribute to socio-economic development in developing countries while addressing the challenges of climate change. ■

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Green protectionism: New trade norm?

As global superpowers race to become clean energy leaders, initiatives that support developing countries to join should be developed in line with the principle of common but differentiated responsibilities and respective capabilities.

Aayush Poudel and Sukrita Karkee

As developed nations scramble to cut their greenhouse gas (GHG) emissions and limit global warming to below two degrees Celsius according to the Paris Agreement¹, protectionist green subsidies seem to be emerging as a popular solution. Within the past year, both the European Union (EU) and the United States (US) have come up with their own tax and subsidy regulations for clean energy and carbon pricing. These policies also appear to be reactionary to other countries'

green policies, and have signaled a possible competition between them to revise their interventions in clean energy.

In July 2021, the EU decided to integrate its trade policy with climate policy by proposing the Carbon Border Adjustment Mechanism (CBAM)² which aims to keep in check carbon leakage by imposing a carbon price on importers in a way that aligns with what would have been applicable if the imported goods had been pro-

duced in accordance with the EU's carbon pricing regulations. Similarly, the US introduced the Inflation Reduction Act (IRA)³ in August 2022. It is aimed at tackling climate change and controlling inflation in the long run by promoting clean energy technologies through subsidies and tax credits aimed at both producers and consumers. Both the US and the EU aim to reach net-zero emissions by 2050. Canada is also exploring its own version of Border Carbon Adjustments

(BCA) as a part of its transition to a low-carbon economy.⁴ Likewise, other developed countries around the world are exploring options and ways to control carbon emissions and considering different strategies for easy transition towards a green economy.

EU's carbon border tax

The EU's CBAM is planned to be fully implemented by January 2026 and will initially apply to imports of certain goods whose production is carbon intensive and at the most significant risk of carbon leakage, such as cement, iron and steel, aluminum, fertilizers, electricity and hydrogen. Carbon leakage occurs when companies move carbon-intensive production abroad to countries where less stringent climate policies are in place, or when domestic products get replaced by more carbon-intensive imports. By 2023, importers will be required to report emissions embedded in the goods they import and purchase carbon import permits for each metric ton of carbon dioxide (CO₂) emissions produced by the carbon-intensive products brought into the EU. Goods imported from countries that have domestic carbon-pricing regimes similar to the EU's will be exempt from the levy, subject to an agreement between those countries and the EU.

American subsidies

On the other hand, the IRA promulgated in the US in August 2022 aims to control climate change by allocating hundreds of billions of funds as investment tax credits and production tax credits for energy security and climate change adaptation activities. The act also extends loans and credit subsidies for innovative clean energy technologies, which include renewable energy systems, nuclear energy and carbon capture, along with critical minerals processing, manufacturing, and recycling. Similarly, consumers are also provided income tax credits for opting for cleaner energy alternatives.

Green protectionism

Countries across the world, especially developing countries, have called

these policies a new and disguised form of green protectionism that is aimed to protect local industries in the EU and the US from foreign competition. Countries like Brazil, South Africa, India and China (BASIC), have opposed the CBAM, calling it 'discriminatory' and against the principles of equity and 'common but differentiated responsibilities and respective capabilities'.⁵ These principles acknowledge that richer countries have a responsibility of providing financial and technological assistance to developing and vulnerable countries to fight climate change. These countries argue that any measures to address climate change must be consistent with multilateral trade rules and must not impose arbitrary restrictions on international trade. There are also concerns about high substantial costs that non-EU partners are likely to face due to increased tariffs on CBAM goods imported into the EU. Countries such as Russia, China, and India export significant amounts of goods covered by the CBAM and hence are most likely to be affected.⁶

Similarly, the IRA provides tax credits for domestic manufacturing of components for wind turbines, solar modules, battery modules and cells, as well as critical minerals processing and, to qualify for the tax credits, these components and minerals have to be extracted and produced in the US itself or otherwise in a country with which the US has an explicit free trade agreement (this qualifies Mexico and Canada). This provision is an explicit attempt at strengthening domestic supply chains in these segments by making outputs from other countries less price competitive. Globally, the IRA has raised concerns about it being too protectionist and has been criticized for onshoring and 'friendshoring'. The EU has also heavily criticized the US for its new unfair trade practices and has rushed to come up with its own Green Deal Industrial Plan⁷ to counter the IRA, and has revised the EU state aid laws⁸ in order to support such subsidies.

Exclusionary policy

As for Asian competitors, media speculations hold that the IRA is largely

aimed at excluding China from the global clean energy supply chain and that this might lead to cooperation between China and the EU.⁸ South Korea received the IRA as an act of betrayal as companies like Hyundai had revealed investment plans in the US earlier that year. China is currently the largest manufacturer of EV batteries, and South Korea is one of the biggest exporters of EV batteries to the world market. However, South Korea imports about 85 percent of anodes and 73 percent of cathodes that go into manufacturing EV batteries from China.⁹ Similarly, Australia mines 50 percent of the global supply of lithium, but China processes about 60 percent of their material.

The IRA has also pushed India to ramp up investments in its own green energy. The Indian budget for FY 2023-24 includes provisions like customs duty exemptions on capital goods and machinery for manufacturing of li-ion cells used in batteries for EVs.¹⁰ The National Green Hydrogen Mission has been allocated INR 197 billion with the aim of transitioning into a low-carbon-intensity economy. The budget speech also mentioned a Green Credit Program to encourage behavioral changes in companies and consumers but does not elaborate on it.

Questions about legality

Critics of both the EU's CBAM and the US's IRA have raised questions about the legality of these policies. Under the WTO Agreement on Subsidies and Countervailing Measures (SCM), subsidies excluding agricultural subsidies are prohibited if they have the potential by law or by fact to influence export performance or the preference of domestic products over imported ones.¹¹ Import substitution subsidies are also viewed as harmful by the US law.

The CBAM proposal on the other hand, has faced severe scrutiny from many EU partners, who are skeptical about its effectiveness in achieving its stated objectives, and concerned about its effect on the WTO, and its consistency with the Paris Agree-

ment. There are chances that different countries and economies may opt for different carbon tax mechanisms. There might not be uniformity in tariff calculations and valuation of products between the countries of origin and destination. The CBAM also fails to answer key issues like how to fairly account for emissions related to the production of imported goods and how to duly consider the costs that companies already face in complying with climate regulations in exporting countries.

Early impacts

Clean energy and manufacturing supply chains have already seen shifts following the announcement of the IRA. The US has attracted investments from manufacturing giants like BMW, Tesla, Freyr and Enel to either expand their projects or build additional battery and manufacturing plants in the country.¹² The EU on the other hand, has set up two important funding programmes, namely The Innovation Fund and The Modernization Fund, which are aimed to help businesses to invest in clean energy and support lower-income EU member states in their transition. This shows that there is a threat of investments concentrating in developed nations, creating a new divide between them and the developing world which could result in a bipolar world of rich and green economies on the one side and poorer economies on the other.

The protectionist clauses in the clean energy acts around the world could pose a challenge to developing and rising economies like India. With their investment in EV manufacturing and innovation, European and American companies could soon introduce EVs and EV batteries that are cheaper and of better build and performance, in comparison to both EVs produced elsewhere, and non-electric vehicles and components in general.

The clean energy race could have severe implications for least developed countries (LDCs). The carbon tax can impose a significant technical and administrative burden on LDCs,

which already have difficulty navigating the myriad non-tariff barriers in international trade. Rich economies have long exported their emissions to least developed and developing countries while enjoying goods at cheaper rates and not doing much towards reducing their own domestic emissions. The CBAM also does not comply with the Paris Agreement. There is no exception for LDCs, and no provision for using revenue from the CBAM to support decarbonization in LDCs. Currently, a few African LDCs like Mozambique, Mauritania, Sierra Leone, and Senegal seem to be the most exposed countries, whose GDP growth could be impacted because of CBAM.¹³ However, the impact of CBAM would have to be borne by other LDCs as well, which are the least responsible for emitting carbon¹⁹. Similarly, the IRA bill does not contain any clauses regarding support to LDCs or developing countries. These economies have fewer investments, lower financial means and very limited incentives and support from the developed world, and hence their transition towards clean energy and green economy could be a distant dream.

The EU has mentioned plans to integrate its Global Gateway initiative under its Green Deal Industrial Plan to bridge the global investment gap, specifically with Africa and the Mediterranean through policy dialogue for cooperation in renewable energy and green hydrogen, although details have not been outlined regarding how such initiatives would be implemented within the plan or the specific activities that would be undertaken.

While these clean energy acts are welcome through an environmental perspective, they pose the risk of excluding developing countries for which technical and financial support would be crucial to keep up with the billion-dollar green energy transition. As the global superpowers race to become clean energy leaders, initiatives that support developing countries to join in should be developed in detail and in line with the principle of

common and differentiated responsibilities. ■

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Climate change and public policy challenges for adaptation

Addressing the challenges posed by climate change and promoting effective climate actions in Nepal require data-driven decision-making, capacity- building at the local level, and the integration of diverse knowledge systems.

Ajaya Dixit

The third decade of the third millennium has been characterized by significant challenges and crises, with several devastating climate disasters including the COVID-19 pandemic. For over two years, the COVID-19 pandemic resulted in widespread shutdowns and disruptions of social and economic activities which had devastating impacts on individuals, households, and businesses. Even as countries struggled to manage the pandemic, many were hit by natural hazards: mega droughts in the United States; floods in South Asia; wildfires in Europe, North America, and Australia; and extreme heatwaves across the world. Copernicus Climate Change Service (C3S), NASA and NOAA all confirm that July 2023 was the hottest month on record globally. In the month of July, the Nepal Tarai region experienced its all-time highest temperature on record.¹

Scientific studies suggest that climate change was a major contributor to the intensity and severity of these extreme weather events. The



changing climate has resulted in shifts in weather patterns, increased the intensity and frequency of events, and made local weather systems more extreme. That said, these disasters are not solely the result of climate change. In 1997, Duryog Nivaran characterized disasters as the "unfinished business of development," encapsulating the idea that the vulnerabilities and risks leading to disasters are often rooted in broader developmental challenges, including poverty, inequality, and the lack of access to resources and opportunities. Disasters, it is suggested are the outcomes of the following factors:

- **Increased exposure:** Growing rural-urban migration, urbanization and poorly planned infrastructure have resulted in more people living in vulnerable areas, such as floodplains or in low-lying urban areas, thereby, increasing their exposure to hazards.
- **Degradation of natural ecosystems:** The loss of natural ecosystems, deforestation, and unsustainable land-use practices have reduced nature's ability to serve as a buffer against the impacts of climate hazards.
- **Infrastructure vulnerability:** Poor infrastructure design and maintenance render communities more susceptible to damage from climate-related events.
- **Institutional rigidity and policy dysfunction:** Inflexible institutions and ineffective policies hinder the deployment of timely and coordinated responses to climate disasters.
- **Marginalization of users:** Individuals, households, communities, businesses, and government organizations with limited capacity cannot adapt or respond to increasing or changing exposure associated with environmental changes, economic shifts, technological advancements, or other factors.

Importantly, for each of the five elements mentioned above, governments have formulated public policies, each with the aim of addressing or even overcoming barriers to respond-

ing to and mitigating adverse impacts. The policy question is important, because it determines the regular responses of government and its agencies, the primary agents mandated for the governance of development and mitigation of the impacts. The processes, which public agencies use to address societal problems through policy, are based on a framework for problem-solving involving the following steps²:

- i. **Identifying a problem:** Clearly defining the problem at hand is the first step. Such identification involves understanding the nature and scope of the issue, determining whether or not it is a disaster, and identifying environmental, economic developmental challenges, or any other societal concern.
- ii. **Analyzing its causes:** Identifying the underlying causes of the problem is crucial to understand the root factors contributing to the issue. It also informs the identification of effective solutions.
- iii. **Assessing its impact:** Analyzing who is affected by the problem and, how and to what degree they are impacted provides insights into the scale of the challenge and helps prioritize response efforts.
- iv. **Determine resources needed:** Determining financial, human resources and knowledge for making the response is important.
- v. **Allocating responsibility:** Determining which individuals, and organizations are responsible for implementing chosen solution/s is important for accountability, supervision and coordination
- vi. **Implementing and monitoring:** Implementing the selected option/s and closely monitoring progress is essential to ensure that the objectives of the recommended methods are met.
- vii. **Evaluating and adjusting:** Regularly assessing whether or not the chosen approach is achieving the desired outcomes and making necessary adjustments based on new information or changing circumstances are equally important.

The seven-step approach mentioned above can also serve as a broad guideline in relation to policy framing designed to respond to the challenges posed by climate change. It is true, however, that the complexity and scale of the challenges of climate change amplify the uncertainties in each step of the above process. Thus, predicting future climate impacts and developing and implementing contextual policy are particularly hard given that fact that the Earth's systems are linked, constantly evolving and dynamic and the time frame involved is long term, and measuring climate parameters and representing them in models have limitations.

The continued emission of greenhouse gases into the atmosphere is having increasingly adverse impacts across many countries, including Nepal, through the changes it triggers in the water cycle. Mitigating these impacts requires recourse to adaptive policy processes, defined as the use of grounded evidence supported by interdisciplinary research, the promulgation of appropriate policies, knowledge-sharing, innovation, and regular review. Commitment by governments, industries, local and international communities to work together is also imperative. While the global scale of climate change introduces uncertainties, adopting a precautionary approach, promoting sustainable practices, investing in resilience-building, and continuously learning and adjusting are hallmarks of the sort of adaptive policymaking which will lead to a future with fewer risks. That there are uncertainties do not mean that there are no vulnerabilities.

Adopting goals

The Intergovernmental Panel on Climate Change's *The Climate Change 2023: Synthesis Report Summary for Policymakers* states with high confidence 'clear goals, coordination across multiple policy domains, and inclusive governance processes facilitate effective climate action'. This recognition is particularly relevant

for all South Asian countries, including Nepal, which are vulnerable to the impacts of climate change due to their seasonal monsoon climate, geographic location, topography, socio-economic conditions, and rigid institutions.

Clear objectives

Nepal should establish clear and well-defined climate goals and targets that address its specific vulnerabilities and sustainable development priorities. These goals must encompass various sectors such as agriculture, water resources, energy, and infrastructure. Having clear goals provides a roadmap for climate action and helps align climate change and development objectives.

Coordination across policy domains

Climate change has cross-cutting impacts that require integration into various policy domains. Nepal should work towards coordinating climate-related policies across sectors to ensure that actions taken in one area do not inadvertently exacerbate vulnerabilities in another. For example, integrating climate considerations into land-use planning can help minimize the impact of landslides and floods.

Inclusive governance processes

Involving diverse stakeholders, including local communities, indigenous groups, NGOs, and the private sector, in decision-making processes is crucial. Nepal should enhance its inclusive governance by promoting participatory approaches, conducting regular consultations, fostering partnerships, and placing the interests of those at the margins at the core of its policies.

Climate-resilient infrastructure and natural ecosystems

Given Nepal's susceptibility to hazards like landslides, floods, and glacial lake outburst floods (GLOFs), drought, and increasing heat, investing in climate-resilient infrastructure and natural ecosystem management is essential. Climate-resilient infrastructure is not an abstract concept. On the contrary, it can be thought of

in terms of the technical, institutional and human resources domains.³ Its technical attributes are diversity and flexibility, modularity and redundancy, and fail-safe considerations. The institutional attributes of resilience involve clarity of rights and entitlements, transparent decision-making processes, access to information, and the ability to apply new knowledge. At a practical level, some actions may involve developing people-friendly climate-resilient shelters and settlements, conserving, natural buffers like forests and wetlands, balanced use of groundwater, providing rooms for rivers to flow

Holistic approach that responds to the immediate impacts of climate disasters and addresses the underlying social and political factors that contribute to their severity is an imperative.

without interruption, and ensuring that wastewater treatment systems exist and are functional.

Renewable energy transition

Nepal should prioritize the transition to renewable energy sources like sustainable hydropower and solar plants to reduce reliance on imported fossil fuels and function as one of the cornerstones of green, resilient and inclusive development.⁴

Disaster preparedness and early warning systems

Strengthening climate disaster preparedness efforts through the use of early warning systems can help Nepal respond effectively to climate-related hazards. Nepal should scale up and further improve its weather event-forecasting capacity, make

community-based disaster response plans more effective, and enhance communication networks with systemic redundancies.

Capacity-building and knowledge-sharing

Investing in capacity-building programmes, and awareness-building activities can empower local communities and institutions to understand and offer more effective climate solutions. Sharing knowledge, experiences and best practices among different regions within Nepal, sectors, and groups can facilitate learning and identify innovative solutions.

Global collaboration

Collaborating with neighboring countries and international partners is key to provide opportunities to learn new knowledge, access resources, technologies, and expertise for addressing shared climate challenges.

Overcoming hurdles

In order to make the transition to the future of effective policymaking, Nepal must focus on overcoming the following hurdles⁵:

Ineffectiveness of public policies

While Nepal has numerous public policies, their implementation is ad hoc and ineffective. Compliance with these policies is also poor. The policies lack grounded evidence, participation from a diverse range of stakeholders, and representation of marginalized groups, indigenous knowledge holders, and affected individuals

Fragmented policy implementation

Policy implementation is characterized by a sectoral and siloed approach and weak coordination. Such fragmentation hampers Nepal's ability to address ongoing challenges. The 'business as usual' approach will likely fail to handle the added development challenges posed by climate change.

Constraining institutions

Inertial institutional processes stifle inter- and intra-organizational coor-

dination and partnership among different actors, agencies, and the public.

Efforts to overcome limitations

Overcoming the above limitations needs consistent efforts by all levels of government in the following areas:

Systematically integrated data collection mechanism

The first priority is to create a comprehensive and integrated data collection mechanism and a repository platform that consolidates all information related to damages caused by climate-related hazards. This platform must bring all data, now scattered and unsystematic, under one cohesive framework. Nepal's National Planning Commission (NPC) should lead this initiative with support from various entities. The National Disaster Risk Reduction and Management Authority (NDRR-MA) must provide input on various aspects of disaster risk management.

Capacity-building

The second priority is to enhance the capacity of local governments to effectively collect data on disaster damages. Supporting local governments in systematically developing their data collection capabilities is important for building more robust and localized efforts that make contextually relevant and responsive policies that address the needs of communities to deal with climate-related impacts.

Investments in scientific knowledge and education

The third priority area is increasing investments in expanding scientific knowledge, particularly in acquiring more granular data related to various climate and environmental parameters. They include localized data on rainfall, temperature, humidity, river discharge, sediment flow, groundwater levels, water quality, and soil moisture content. The aim should be to develop a more comprehensive and integrated understanding of how changes in each of these natural factors interact with social and environmental contexts. Such an understanding would support the synthe-

sizing and assimilating of knowledge from both natural and social sciences as well as incorporating local and traditional insights. A System of Integrated Knowledge (SiNK)⁶ can inform decision-makers so they can engage in more effective environmental governance and help guide climate-resilient development initiatives supported by interdisciplinary climate resilience focused education.

Final observations

This paper emphasizes the importance of data-driven decision-making and capacity-building at the local level, and the integration of diverse knowledge systems to address the challenges posed by climate change and promote effective climate actions in Nepal. Such understanding is the foundation of a holistic approach that should not only respond to the immediate impacts of climate disasters but also address the underlying social and political factors that contribute to their severity. A holistic approach involves integrating climate resilience into development planning, promoting sustainable practices, enhancing disaster preparedness and response mechanisms, and fostering collaboration among actors at the local, national, and global levels. By recognizing and addressing the interconnectedness of these challenges, Nepal can systematically work towards a sustainable future.

A major challenge introduced by the current structure of public policy making and implementation regime under the domain of civil service and government bureaucracy needs to be recognized. The structure has an innate inflexibility and struggles to adapt policies to rapidly changing contexts, such as the impacts of climate change. One example is the rigid nature of the existing procedures. In 2021, heavy post-monsoon rains resulted in massive damages of standing paddy ready to be harvested in the Nepal Tarai, parts of Bihar and Uttar Pradesh.⁷ Bihar's district administration did not, however, declare the flood a disaster and the government did not provide affected people with

relief material as the government's standard flood calendar mandates that after Durga Puja (generally in September or October) the Koshi River recedes and there is no flooding.⁸ This example suggest the widespread rigidity of prevalent disaster management frameworks, few of which recognize surprises brought about by climate change.

Adaptive policymaking involves the ability to adjust as circumstances change, unexpected events occur, or new information is made available. It is necessary to engender a paradigmatic shift in the way responses are made and overcome the sort of inertia, which deters the making of policies to effectively address the challenges posed by a rapidly evolving socio-political and global climate. ■

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Clean energy transition in Nepal

Nepal's low electricity consumption level could be a blessing in disguise as an effective energy transition strategy can succeed in replacing the biomass- and fossil-fuel-dominated energy mix with cleaner energy sources.

Dikshya Singh



Energy plays a crucial role in economic growth, as it is a key input in the production process and a driving force behind many economic activities. Increased access to clean and affordable energy can unlock Nepal's economic potential. With about 15 percent of the population living in extreme poverty¹ and more than one-fourth facing different kinds of extreme deprivation², achieving rapid and equitable economic growth is a critical priority for Nepal. To meet these objectives, Nepal has been attempting structural transformation to transition from a low-productivity economy to a higher value-added and higher-productivity one. Such structural transformation—from an agrarian to an industrialized economy—is going to be energy intensive.

While economic growth is a significant agenda for Nepal, sustainable development is equally important given its social and ecological vulnerabilities, more so when the world is facing disastrous impacts of climate change. Any policy interventions targeted at economic growth need to consider

their environmental costs. Hence, reconciling their industrial ambitions while minimizing greenhouse gases emissions is a tough challenge faced by developing countries. India and China have committed to go net-zero by 2070 and 2060, respectively. However, their dependence on fossil fuel to power homes, commercial centres, industries and transport, and their rate of industrial and urbanization expansion mean transitioning to renewable and cleaner sources of energy would require a policy overhaul and large-scale economic readjustments. Trade-offs between economic and net-zero ambitions are an actual concern.³

However, Nepal may not face such a predicament. A low level of industrialization and an energy mix dominated by traditional fuel sources (e.g., firewood) coupled with good prospects of domestic clean energy sources may in fact make a clean energy transition desirable in an economic sense as well. At present, the industrial sector (including construction) makes up about 11 percent of Nepal's GDP (while Bangladesh and Bhutan—also least developed countries—have more than 33 percent of their GDP coming from industry).⁴ Low levels of industrial activities have limited Nepal's per capita energy consumption as well as emissions. Unlike more industrialized countries, Nepal has the advantage of not having to decouple its economic growth from energy consumption. Moreover, the challenge in Nepal's case is to improve the existing energy infrastructure—institutional and physical—so that the country's energy mix will be dominated by hydroelectricity offering cleaner and more affordable energy.

Energy for economy

Nepal's latest development plan (The Fifteenth Plan, FY2019/20 – 2023/24) aims for an annual average GDP growth of 9.6 percent in the five-year period. The average growth in the agriculture, industry and service sectors is projected to be 5.4, 14.6, and 9.9 percent, respectively.⁵ This target is in line with the government's aim to push Nepal to upper-middle-income

country status by 2030 from its current lower-middle-income country status. Moreover, the Long-Term Vision for development aims for an annual economic growth of 10.5 percent over a 25-year period from 2018 to 2043.⁶ This high growth is expected to come from a 5.5 percent average annual growth in agriculture, 13 percent in industry and 10.9 percent in the service sector. The plan is to increase the share of industry in the economy to 30 percent (which has remained less than 15 percent for the last 10 years) and the share of the service sector to 61 percent in order to transfer a large proportion of the workforce from agriculture to industry and services by 2043. Likewise, targets under Sustainable Development Goal 9 set by Nepal include increasing industry's share of GDP to 25 percent and manufacturing's share of GDP to 15 percent by 2030.⁷ Over the past two decades, Nepal has been undergoing premature deindustrialization as the share of industry in GDP has been in a steady decline, driven by a falling share of manufacturing in GDP.⁸

The ambitious growth and industrialization targets require enhanced energy consumption in order to power the expansion of economic activities. Construction of physical infrastructure, powering industrial activities and an overall increase in the production of goods and services would require increased use of energy. Moreover, as the economy grows and more jobs are created resulting in increased incomes for households, there will be higher consumption demand at the household level, and to meet increased household demand for goods and services, there will be more production at the firm level, creating a multiplier effect on energy consumption. Additionally, in Nepal's case, electrical energy is not only the catalyst of economic growth but a conduit too. Increased energy generation—harnessed from the countries' significant hydroelectricity generation potential—could power industries in a cost-effective manner, enhancing industrial competitiveness. Although the cost of hydroelectricity

is highly project specific, depending on the installed capacity and other geographical (and political) factors, hydroelectricity is considered the most cost-effective dispatchable low-carbon electricity. The globally weighted average of levelized cost of electricity (lcoe) from hydropower in 2019 was US\$0.047 per kWh while fossil-fired power generation lcoe was between US\$0.05/kWh and 0.177/kWh.⁹

Existing consumption

According to the World Bank, in 2019, Nepal's total primary energy consumption was around 6.9 million tons of oil equivalent (MTOE), relatively low compared to India (707 MTOE) and China (3,170 MTOE). Among South Asian countries, Nepal ranks second lowest in terms of per capita energy consumption. Nepal's energy mix is heavily reliant on burning firewood, petroleum products and coal, the worst emitters of greenhouse gases (GHGs). Use of firewood, agriculture residue and animal waste account for around two-thirds of the country's total energy consumption.¹⁰ Similarly, 27 percent of the energy consumption includes coal and petroleum products while relatively clean energy sources such as electricity and renewables account for less than 7 percent.

Electricity makes up a tiny part of Nepal's overall energy mix. Between 2009 and 2021, Nepal's installed hydroelectricity capacity increased from 636 MW to 2,023 MW (including from the state-owned Nepal Electricity Authority's power plants and from independent power producers).¹¹ Despite a more than three-fold increase in installed hydropower capacity, the share of electricity in Nepal's energy mix increased from 2 percent to 4 percent during 2009-2021. Meanwhile, firewood consumption declined to 66 percent from 78 percent in the same period. This reduction in firewood is due to a growing use of LPG and a rising electrification rate. Moreover, LPG use is increasing at a rate of more than 25 percent annually, replacing kerosene, firewood and electricity.¹²

In terms of the sectoral composition of energy consumption, the



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residential sector still dominates consumption, followed by the industrial and transport sectors. As Nepal's economy expanded, the share of the residential sector in consumption declined while that of the industrial sector rose. In 2009, residential consumption accounted for 89 percent of total consumption while the industrial sector accounted for only 3.3 percent. By 2021, the share of residential consumption had dropped to 63 percent while that of industrial consumption had increased to 18 percent.

By 2021, 93 percent of Nepal's population had access to electricity. While most households use electricity for lighting, residential energy consumption is still heavily concentrated in firewood as 85 percent of household energy needs are met by firewood.¹³ The industrial sector consumes coal, firewood, diesel and electricity while the transport sector is predominantly diesel and petrol dependent. Nearly half of the industrial sector's fuel consumption is in the form of coal, followed by firewood at 17 percent, which is used for furnaces and boilers. Agriculture residues and diesel are used for thermal purposes

while electricity use makes up less than 9 percent of total consumption by the industrial sector. These figures indicate that there is enough space for transitioning energy use from GHG-emitting sources to cleaner resources such as hydroelectricity and renewables. Moreover, dependence on coal and petroleum products is also contributing to increased pressure on foreign exchange reserves as 29 percent of Nepal's energy mix is made up of imported fuel sources.¹⁴

As the Nepali economy industrializes and grows, energy demand for industrial and commercial use will also grow. To achieve rapid economic growth, Nepal needs to make efficient and optimum use of the energy sources that are least damaging to the environment, and add to mitigation co-benefits while being affordable. According to the government-prepared Vision 2050 for the energy sector,¹⁵ if Nepal's economy grew by 4.4 percent, the share of total energy consumed by the industrial and commercial sectors is expected to increase to 19 percent and 11 percent, respectively, in a business-as-usual scenario without major policy and technological shifts. In the

case of a medium growth scenario, of 5.6 percent, average growth in total energy consumption will be 3 percent with the share of industrial and commercial sectors increasing to 23.2 percent and 14 percent, respectively. These projections indicate that if Nepal does not adopt major policy shifts in shuffling the energy mix in favour of renewable/clean energy resources, the country will still be dependent on inefficient and polluting sources. Policy interventions promoting the use of electric boilers in factories, an impetus to the use of electric vehicles, promotion of electricity for groundwater pumping and electrification of cooking can lead to a significant reduction in the use of firewood and petroleum products. Thus, the share of electricity would grow to 32 percent of the total consumption even in a low-growth scenario without any change in the energy mix. Moreover, if domestic energy security-related policies were to be implemented as envisioned, per capita CO₂ equivalent emission in 2030 would be 50 percent less than in the business-as-usual scenario. This makes a case for making concerted efforts

towards transitioning to a higher degree of use of hydroelectricity.

Climate commitment

The role of clean sources energy is important in propelling a country's economic growth, making the lives of people comfortable, and in mitigating GHG emissions. The Agenda 2030 for Sustainable Development (SDG) has dedicated Goal 7 to enhancing access to clean and affordable energy. In 2020, Nepal submitted its second Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC). The Second NDC has proposed to reduce GHG emissions from both energy and non-energy sectors to meet the net-zero emission target by 2045. To achieve that, Nepal needs to transition from its dependence on traditional energy sources to clean energy sources.

Although Nepal is not one of the biggest polluters, its geographical location, monsoon-dependent climate, high social vulnerability and limited capacity make the country susceptible to weather disasters made extreme by climate change, particularly through unpredictable heavy rains causing secondary hazards like flooding, landslides, and other disasters that cause significant losses of life and damage to infrastructure. The rising global average temperature due to increasing GHG is leading to the melting of glaciers. The country's agriculture-dependent economy gets adversely affected by changes in temperature and precipitation patterns.

Interventions are also required to promote electrification and shift to clean energy uses in the residential, transportation, industrial and commercial sectors. The expansion in electricity capacity will require substantial investment. For hydropower alone, according to some estimates, the required investment would be as much as US\$5.34 billion in 2030, US\$6.69 billion in 2040 and US\$15.05 billion in 2050.¹⁶ At the same time, the replacement of petroleum products such as petrol and diesel is one of the major co-benefits that could save as

much as 6.7 percent of the national GDP in 2030, 11.5 percent in 2040, and 19.6 percent in 2050.¹⁷

Pathways to green structural transformation

For Nepal, the low electricity consumption level at present is a blessing in disguise as an effective energy transition strategy can succeed in replacing the biomass- and fossil-fuel-dominated energy mix with cleaner energy sources.

Generation alone, however, cannot magically support the transition to cleaner energy sources. Data show that a more than three-fold increase in hydropower generation barely helped double the share of electricity in Nepal's energy mix in the past decade. Not only should power be available, but the connection also needs to be reliable, accessible and affordable. Replacing firewood and animal waste as the main fuel source is imperative and attempts are being made towards that end. However, a better understanding of the socio-economic dimensions of fuel preferences is required to encourage replacement. According to an estimate, electricity is the most efficient and cost-effective cooking fuel in Nepal while firewood is the least efficient and petrol the most expensive.¹⁸ Besides environmental benefits, the clean energy transition will accrue social benefits as clean sources will improve the health of those doing the cooking (mostly women) and the family. It will free up time for family members (mostly women) responsible for collecting firewood.

In the industrial sector, the use of coal and diesel dominates manufacturing as the production process requires high-intensity and reliable energy sources with a steady supply. Since the electricity supply in Nepal is unreliable, coal and diesel remain the main energy source in the industry. In some production processes, coal and firewood are better suited due to their thermal characteristics, and switching to electricity would require better technology adoption. Not all firms are open to or capable of making such investments. In these scenarios,

incentivizing the adoption of electricity through a subsidy on the purchase of cooking stoves or reducing electricity tariffs for household consumption may work. Similarly, subsidizing electricity-efficient technology purchases through customs duty reduction or providing tax credits to industries adopting cleaner technology could be beneficial. Moreover, a detailed analysis of the cost of energy source switching needs to be undertaken to make a case for clean energy transition for industries. ■

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Trade Policy Mainstreaming in Federal Nepal



Through a clear articulation of roles and necessary capacity building, subnational governments must be encouraged to mainstream trade in their plans and policies.

Neelu Thapa and Kshitiz Dahal

Nepal underwent a major change in its governance structure through the adoption of the new constitution in 2015—its unitary governance structure was transformed into a three-tier governance structure made up of the federal government, provincial governments, and local governments. Hence, many of the trade policies and strategies, which were formulated before this important transition, now require actions from subnational governments in order for them to be successfully implemented. Furthermore, while the most prominent instruments and activities under trade policy such as tariffs, customs clearance, and trade negotiations still fall under the purview of the federal government, the subnational governments, through their policies, laws, and regulations, play an important role in shaping the environment that affects production as well as international trade.

Against this background, a SAW-TEE study, “Trade Policy Mainstreaming in Federal Nepal”¹ (the study henceforth), investigates the roles that the federal trade policies provide or envision for subnational governments, the current level of mainstreaming of trade in subnational governments’ plans, policies, and strategies, and coherence and complementarity in the trade-related policies and strategies of federal and subnational governments. This article provides a concise synopsis of the discussions and findings of the study.

Roles of subnational governments

Engagement of subnational units in trade-related areas, while showing significant variation, has been a widespread phenomenon in a number of developed countries. In the case of Nepal, the distribution of the state’s

powers between the central unit of authority (the federal government) and subnational units is done in a way that each tier of the government has exclusive powers in some areas and concurrent powers (powers shared with the other tier of government) in other areas. In this distribution of the state’s powers, the Constitution of Nepal commissions international trade as an exclusive domain of the federal government. However, given that international trade is a sophisticated undertaking, all three levels of government interact at certain points in its administration. Consequently, it is through cooperation, coordination, and coherence in policymaking that trade’s role as an engine of growth and employment creation can be maximized. Furthermore, the Constitution defines Nepal’s federalism model—the interrelations between the different tiers of government—as based on the



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principles of “cooperation, coexistence, and coordination” (Article 232 of the Constitution), which provides further justification for cooperation and coordination in policymaking, including in the area of trade.

The Constitution does not list any exclusive or concurrent powers to subnational governments in the matter of international trade, although provinces do have exclusive powers in the area of intra-province trade. However, that should not stop provincial and local-level governments from implementing policies that aspire to manage trade or promote export, except for taxation on exports and imports, and direct participation in trade negotiations. Firstly, trade (import management and export promotion) is an important component of areas that are under the jurisdiction of subnational governments, such as production, industrialization, employment, and

broad economic development of the province. Most often, international trade could contribute to these areas that are under the jurisdictions of subnational governments or in some cases, such as industrialization, trade—the ability to source high-quality raw material at a cheaper price, and the ability to sell products to international markets—is an important component.

Furthermore, subnational policies to promote trade could be designed in a way that complements the efforts of the federal government rather than contradicting them—this could be done by simply steering away from direct roles in taxation and negotiations related to cross-border trade, and supplementing the federal government’s efforts through cooperation, coordination, and advice.

Engagement of provinces in trade, or more precisely in export promotion, could be in the form of interventions

that directly target trade—programmes exclusively geared towards export promotion (e.g., providing trade information, providing training related to trade capacity, etc.); coordination and cooperation with the federal government to address trade bottlenecks; and lobby the federal government for a better trade policy. Or the interventions could indirectly impact trade—policies regarding increasing production, industrialization, production-linked subsidies and concessional loans, trade infrastructure (e.g., testing laboratories, warehouses, cold storage units, etc.). These are all under the powers or functions of provincial governments, while some large-scale projects may require cooperation from the federal government. Hence, the identification of priority products for exports and formulation of clear policies for interventions discussed here could constitute a trade policy for the provinces.

Thus, there are several areas where subnational governments, in their sole authority, or in coordination with each other and the federal government, have important roles to play. The roles could be in the form of their rights granted by the Constitution and relevant laws (autonomous roles) or consultative roles (support the federal government in policymaking through formal mechanisms) or pressuring roles (pressuring the federal government to support certain policies or to amend certain policies).

The proactive engagement of subnational governments in trade policymaking and export promotion activities, however, requires a clear vision, plans, institutional set-ups, and capacity. Hence, it is useful to assess what the federal government expects from the subnational governments in the area of trade, especially with regard to export promotion. There seems to be a lack of government document which clearly articulates what the federal government envisions are the roles and powers of subnational governments in promoting exports and what kind of support the federal government can provide to subnational governments in that regard. This

is particularly the case because the important trade policies and strategies are from the period before the implementation of federalism in Nepal. The current review of the ‘Nepal Trade Integration Strategy’ can be expected to fill the gap.

Nonetheless, some documents provide some hints to the federal government’s vision regarding the subnational government’s space in the arena of international trade. For instance, ‘National Action Plan on Trade Deficit Reduction, 2019’² lists mainstreaming of trade at all levels of government as one of the expected outcomes and

their proactive participation in export promotion, import management, support in increasing production, and commercialization of products. However, important trade policy documents, primarily Commerce Policy, 2015, and Nepal Trade Integration Strategy, 2016, which were formulated before federalism was implemented in Nepal, have to be updated or revised to reflect the roles of subnational governments in implementing trade policy and trade promotion activities. Likewise, the trade policy also needs revision “to reflect mechanisms/ channels of translating national level

ordination Committee. Furthermore, the Constitution (Article 234) has also created an institutional structure—the Inter-Province Council—for settling political differences between provinces and the federal government or among provinces. While these structures are indispensable to the proper coordination and consultations among the three tiers of government, there are other structures, primarily created by the ‘Federation, Province and Local Level (Coordination and Inter-relation) Act, 2020’ (the Act henceforth), that could play important roles in managing ‘inter-relations’ in the area of international trade.

The Act identifies several spheres for coordination and consultations. The areas for coordination and consultation indicate that coordination and consultation between the federal government and subnational governments are mandated in several areas including enactment of laws, formulation of development projects, infrastructure development, the conclusion of treaty or agreement by the federal government, and sharing of natural resources, among others. Hence, as per the Act, we can claim that coordination and consultation between the federal government and subnational governments would constitute an important aspect of the implementation of the federal government’s trade policy as well as the formulation and implementation of subnational government’s trade (promotion) policy (without encroaching upon the exclusive powers of the federal government). Furthermore, coordination and consultation could occur in any area of importance, especially if the federal government desires to do so—any matter deemed important for coordination and consultation by the federation is in the sphere of coordination and consultation.

The institutional structures created by the Act could play an important role in bringing about robust coordination among the different government levels, which is crucial for the effective implementation of trade policy. The primary among these institutional



Dikshya Singh

mentions having directed all levels of government to prioritize the topics of export promotion, import management, production growth, and commercialization.

The government report ‘Assessment of the state of Nepal’s exports and future strategies’³, in its strategy for export promotion, mentions the need for the identification of export-oriented products in each province and the promotion of these products. While the report does not make it clear that the provincial governments should be in charge of product identification within the province and their promotion, one can assume that provinces will have important roles to play in this.

Hence, judging from the available documents, we assess that the government has envisioned important roles for subnational governments in the area of trade through anticipating

export promotion plan into actions at sub-national levels”⁴.

Mechanism for consultations and coordination

Nepal’s Constitution envisages strong interlinkages and coordination among the different tiers of government. The lead role for ensuring effective coordination has been envisioned for the federal government—Article 235 (1) of the Constitution specifies that the federal parliament may make necessary laws to bring about effective coordination between the federation, provinces, and local levels. The Constitution also envisions a role for the provincial assembly in ensuring coordination between provinces and local governments—Article 235 (2) specifies that the provincial assembly may coordinate with municipalities, or settle political disputes, in coordination with the municipality and the District Co-

structures for coordination is the 'National Coordination Council', led by the Prime Minister and comprising major government stakeholders from subnational governments, which is entrusted with managing the coordination and inter-relations between the federal government, provinces, and local governments. The functions, duties, and powers of the National Coordination Council indicate that the Council could be the platform for the federal government to seek input from the subnational governments regarding trade policy as well as the platform for subnational governments to raise concerns and grievances about provisions in the trade policy.

The Act also creates a 'Thematic Committee' to establish a liaison among the concerned ministries of the Federation and Province and the Local Level. Hence, the 'Thematic Committee' could be an apt platform for coordination regarding themes, including policy formulation, that are specific and neatly fall under the jurisdiction of a ministry, with the 'National Coordination Council' acting as a coordination platform for broad issues (such as the formulation and implementation of holistic trade policy and plans by provinces).

Likewise, the Act institutes a 'Provincial Coordination Council' in each Province, headed by the Chief Minister of the Province, to carry out coordination between Province and Local Level or between Local Levels within a Province. The Provincial Coordination Council, entrusted with managing "inter-relations between Province and Local Level or more than one Local Levels in development projects", has the power to form necessary committees, and is envisioned to coordinate with the National Coordination Committee. The Provincial Coordination Council could be an effective collaboration tool for seeking the inputs of Local Levels in the province's plans and policies, including in the area of trade. Likewise, it could also play a coordination role in the case of the Local Level's formulation and implementation of plans and policies.

In addition to these institutional structures, the Act institutes a 'District Coordination Committee' in each district, which acts as the coordinating institution among different levels of government for development works and any other businesses of the different levels of government in the district.

While robust coordination among the different levels of government in wide areas is envisioned, with different institutional structures constituted to achieve the coordination, the results so far, in terms of the effectiveness of the coordinating institutions and the achievement of robust inter-relations, are disappointing. This will be a significant barrier to subnational units' engagement in trade policymaking as well as in the implementation of the national trade policy formulated by the federation.

Mainstreaming international trade at the subnational level

The study assesses the mainstreaming of trade in subnational governments in Province 1, primarily the provincial government, by examining the extent of integration of trade into provincial policies and budgets, along with how the policies envision dealing with coordination issues and using trade as an engine for growth, enhancing productivity, and economic transformation. The findings of the assessment are as follows.

The Province does not have an integrated trade (promotion) policy or export promotion strategy/policy that articulates its vision, plans, and strategies for trade and exports. The province does not currently have programmes in place that exclusively seek to promote trade/export.

Trade does not occupy an important role in the Province's periodic plan. While the Province's first periodic plan (FY 2019/20–2023/24) includes many strategies and action plans, including at the sectoral level, that impact trade such as increasing production and productivity, enhancing private sector capacity, branding and commercialization, logistics development, etc., a separate

plan for promoting international trade is absent and trade gets only a passing reference in the overall economic strategy as well as the sectoral strategy. The strategies and action plans are mostly oriented toward domestic trade and do not specifically mention exports or imports.

An assessment of the Province's 'policy and programmes' and fiscal policies (budget speeches) indicates an inadequate mainstreaming of trade. While the agriculture sector is accorded the highest priority in the province's 'policy and programme 2022/2023', it is silent on the trade aspects of agriculture, primarily the export of agricultural produce. Similarly, the focus of the budget seems to be on import-substituting industrialization but not on export-led industrialization. For example, high-value crops with export importance such as ginger, large cardamom (alaichi), and tea get budget allocation for value addition and market promotion, but there has not been budget allocation for export promotion.

Weak coordination and cooperation between the Province and the Federation impede mainstreaming of trade. The institutional platforms for coordination and cooperation between the two levels of government are not functioning well and the level of mutual cooperation and coordination remains weak.

The Province does not have a separate ministry, or, according to the available information, a department within the Ministry, or any agency, that looks into the issues of cross-border trade. In the absence of a policy-making entity that overlooks trade, it will be hard to mainstream trade in provincial policies.

The level of trust and dialogue between the private sector and the provincial government is inadequate to contribute to mainstreaming of trade. There is no robust platform for private-public dialogue at the provincial level, which does not bode well for the mainstreaming of trade.

This shows that the mainstreaming of trade in Province 1 is only happening at a superficial level without any

specific policies/strategies, and with poor coordination to support trade-related activities.

Coherence between subnational and federal policies

Policy coherence is a crucial element of effective trade policy framework. In the case of Nepal, some legislative provisions and prevalent practices promote coherence between the federal policies and the subnational policies. The legislative framework that defines inter-relations between the federation, province, and the local level—the Federation, Province and Local Level (Coordination and Inter-relation) Act, 2020—has a chapter on formulation of law, policy and plans (Chapter 3), which has provisions to ensure coherence in laws, policies, and plans of the federation, province, and local level.

First, the Act (Section 4) directs the federation, province, and local level not to encroach upon the exclusive powers of entities other than itself. Provinces should frame their laws and policies in a way that they are not inconsistent with the federal law and are consistent with the national policies and priorities. Local levels should frame their laws and policies through avoiding inconsistencies with federal and provincial laws.

Regarding the execution of exclusive powers, the Act (Section 5) directs the provinces and local levels to enact laws and implement them in a manner that they are not contrary to the federal law (and the provincial law as well in the case of local levels). In the case of the execution of concurrent powers, the Act (Section 6 and Section 7) specifies areas where federal laws have to be in accordance with the provincial law or the local laws, and matters that are to be governed by federal laws. Furthermore, the Act (Section 11) requires the province to coordinate and consult with the thematic ministry or body of the federal government, and the local level with the thematic ministry or federal government body and the provincial government during the enactment of laws and formulation of

policies on matters that fall under the concurrent powers of the federation and province.

In addition, the National Planning Commission (NPC)—the apex policy-making authority of the country—has prepared a guideline that aspires to ensure coherence in development planning of the different government tiers. Accordingly, provinces' periodic plans, along with the medium-term expenditure frameworks (MTEFs) prepared by province planning commissions, which mostly guide the plans, policies and strategies of provincial governments, have to take into account the visions, goals, targets, and strategies of the national periodic plan, along with the medium-term expenditure framework (MTEF) prepared by the NPC; the local governments have to do the same by taking into account the national and provincial development frameworks. It is perhaps for this reason that the study did not observe any major incoherence between the national periodic plan and Province 1's periodic plan, although it is the study's assessment that more could have been done to promote trade as an engine of growth and employment creation by mainstreaming trade in Province 1's plan.

Recommendations

Against the identification of the roles that subnational governments could play in enhancing trade (particularly in export promotion), the assessment of the mechanisms for coordination and consultations among the different government tiers, and an assessment of the current level of mainstreaming of trade at the provincial level (Province 1), the study proposes the following broad measures.

- Given that international trade falls under the exclusive jurisdiction of the federal government, it has to play the lead role in effecting a meaningful role of subnational governments in trade policymaking, trade promotion, and implementation of federal trade policies and programmes.
- The coordination and consultations among the different tiers of gov-

ernment need to be enhanced. This could be achieved, for instance, through a more robust inter-province council that meets regularly to discuss major disputes, and through the strengthening of other institutions set up for coordination such as the National Coordination Council and Thematic Committee.

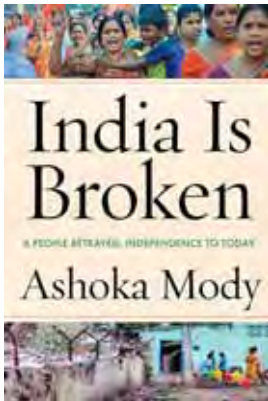
- Provinces could prepare a trade/export policy (or export promotion policy), which identifies priority export products in the province, and action plans for their promotion.
- The Board of Trade, an instrumental body for the implementation of the federal trade policy, can form sub-committees to oversee the implementation of trade policies in subnational governments.
- There is an urgent need to revise the trade policy and National Trade Integration Strategy (NTIS) to reflect the roles of subnational governments in the implementation of trade policy, including in export promotion.
- Through the clear articulation of the roles that the federal government envisions for the subnational governments regarding trade policy formulation and implementation and through necessary capacity building, the subnational governments must be encouraged to mainstream trade in their plans and policies. ■

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Notes

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Where India went wrong

Title: India Is Broken: A People Betrayed, Independence to Today

Author: Ashoka Mody

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Paras Kharel

This book might be a rude awakening to anyone hooked to the dominant narrative promoted by an influential section of the international media that India is growing, shining and wooed at the global high table, and its democracy, flawed yet ram-bunctious, will in time give it a decisive edge over its neighbour up north, China, in terms of sustained economic wellbeing and global clout.

Ashoka Mody's *India is Broken* is not about Sino-Indian rivalry, although the author does not hide his disdain for predictions that the "democratic tortoise" will eventually prevail over the "totalitarian hare". It is about the humungous challenges India faces to becoming a truly prosperous nation and how the country is handicapped in overcoming them. India's enemies lie within: criminalization of politics, endemic corruption, a policy penchant for ignoring the commonweal.

The book packs a punch, presenting evidence and arguments in support of the title. Writing engagingly, the former World Banker intersperses his narrative with themes and storylines of Bollywood movies as a mirror to the evolution of hopes, aspirations and disappointments of Indian society in various periods since the country's independence.

From independent India's first prime minister to the incumbent, none is spared. What went wrong? The author traces the origins of the malaise to Jawaharlal Nehru's predilection for the grandiose over the humdrum yet

immensely critical aspects of national building. Many writings have created a halo around Nehru, prime minister for 17 years. Mody sheds light on what he considers to be Nehru's mistakes that cast a lasting shadow over India's development prospects. Nehru was obsessed with heavy industrialization rather than turning attention to the imperative of improving agricultural productivity and promoting labour-intensive manufacturing. He ploughed resources into setting up scientific institutes and seats of higher, specialized education, overlooking primary education and basic healthcare.

By the book's reckoning, Nehru's emphasis on IITs and the like as "temples" of modern India failed spectacularly on the job creation front, a failure whose repercussions are observed to this day. As if anticipating the inevitable rejoinder about India's oft-celebrated success story in the information technology sector, Mody remarks that "for every IIT graduate who shines brightly in California's Silicon Valley, thousands of poorly educated Indians with graduation certificates stand in the tortuously long queue for government jobs". Famine may be a distant memory in modern India, but chronic hunger is a way of life for many.

India failed to create the basic conditions for emulating "East Asian-style employment creation through labor-intensive manufactured exports". The reader cannot be blamed for noticing that India's pressing needs—notably, decent jobs for its teeming hundreds of millions—are

a far cry from a fixation, which has acquired a frenzy in recent years, with its putatively rightful place in the global pecking order.

While Nehru did not seek personal financial gain, the author argues, a corrupt bureaucracy flourished on his watch. Mody avers that Nehru's successors who were in the top seat of power for a decent amount of time made matters worse. Nehru's daughter, who ruled for about 15 years spread over two stints, institutionalized reliance on criminals for electoral success. The author contends that the provision of public goods remained a low priority and decent jobs scarce under the "market mantra" embraced by various governments over the last three decades. If the import controls and other protectionist measures that characterized the pre-1990 decades in the guise of socialism had anti-socialist effects and fostered inefficiency, the period since 1990 has seen "cozy business-politics relationships" riding roughshod over broader societal interests, from labour rights to environment protection. As for the incumbent prime minister, the following sentence should give you an inkling of the author's views: "The Gujarat model was marauding development on steroids."

While the book does not evaluate all major evidences and arguments that run counter to the author's thesis, its core strength lies in offering a fresh, realistic perspective on the trajectory and state of India's economic development, uncoloured by geopolitical and jingoistic considerations. ■

European Union carbon pricing and carbon emission mitigation strategies

Carbon border tax is aimed at curbing 'carbon leakage', which occurs when companies based in the EU move carbon-intensive production abroad to countries where less stringent climate policies.

Aayush Poudel

The European Union (EU) has been actively incorporating policies in their fight against global warming. Since 2005, the European Union's Emissions Trading System (EU ETS)¹ is the world's first and one of the largest carbon trading mechanisms, based on the principle of "cap and trade" for reducing greenhouse gas (GHG) emissions. The cap or the maximum limit is set on the total GHG emissions that industries or operators covered under the scheme can cumulatively emit. The cap is reduced over time so that total emissions fall.

The European Union Allowances (EUAs) are climate or carbon credits used in the ETS mechanism. Article 3(a) of the EU ETS Directive² defines the emission allowance as "an allowance to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of this directive and shall be transferable in accordance with the provisions of this directive". In simple words, one EUA entitles the holder

to emit one tonne of carbon dioxide or carbon-equivalent greenhouse gas. Companies regulated by the EU ETS must acquire carbon allowances which can be bought from the carbon market or through the EU ETS auctions.

Every year on April 30, these companies must surrender (pay) an EUA for each tonne of CO₂ emitted in the previous year out of their Union Registry accounts which keeps record for their greenhouse gas emissions.³ If these companies fail to surrender the allowances, they are liable to an emission penalty of €100 per tonne of CO₂ emitted, excluding the EUA they must submit.

If a company reduces its emissions, this reduces the amount of carbon allowances the company must surrender every year which allows the company to keep the spare carbon allowances for use in the future. Alternatively, it can sell the spare carbon allowances to another company that is short of allowances. When companies trade like this, it creates a market price for the carbon allowances. As the limit or

cap decreases each year, the market price increases. This 'cap and trade' approach makes it more economically attractive for companies to invest in emissions reduction technologies – and thus to reduce their greenhouse gas emissions.

Current system

The ETS has gone through different reforms and phases starting with the first phase in 2005. The current system is a part of the fourth phase which commenced on 1 January 2021 and will end on 31 December 2030. One of the significant aspects of the current phase is an introduction of the European climate law which is a part of the European Green Deal⁴, that sets a target of reducing net greenhouse gas emissions by at least 55 percent by 2030, compared to 1990 levels through "Fit for 55" regulation which is expected to ultimately pave the way to achieve net zero greenhouse gas emissions by 2050.

The carbon border adjustment mechanism (CBAM)⁵, is one of the

initiatives under Fit for 55 programme and its gradual introduction is aligned with the phase-out of the allocation of free allowances under the EU ETS to support the decarbonization of the EU industry. The CBAM will enter into force in its transitional phase as of 1 October 2023 and is planned to be fully implemented by January 2026. The CBAM will initially apply to imports of certain goods whose production is carbon intensive and at the most significant risk of carbon leakage, such as cement, iron and steel, aluminum, fertilisers, electricity and hydrogen. According to the EU, this move is aimed at curbing what it has called ‘carbon leakage’, which occurs when companies based in the EU move carbon-intensive production abroad to countries where less stringent climate policies are in place than in the EU, or when the EU products get replaced by more carbon-intensive imports. By 2023, importers will be required to report emissions embedded in the goods they import and purchase carbon import permits for each metric tonne of carbon dioxide (CO₂) emissions produced by carbon-intensive products brought into the EU.

In addition to CBAM, the EU has set up two important funding programmes⁶ – the Innovation Fund and the Modernization Fund. The Innovation Fund will provide around EU€38 billion of support from 2020 to 2030 (at EU€75/tCO₂), depending on the carbon price, for the commercial demonstration of innovative low-carbon technologies, and help businesses invest in clean energy and industry to boost economic growth. Similarly, the Modernization Fund is a dedicated funding programme to support lower-income EU member states in their transition to climate neutrality by helping to modernize their energy systems and improve energy efficiency. Also, in the market stability reserve (MSR), 24 percent of all ETS allowances will continue to be placed to address possible imbalances between the supply of and demand for allowances in the market and to improve the system’s resilience to major shocks like COVID-19.

Furthermore, the European Commission is also proposing a new EU-wide emissions trading system (ETS II)⁷, which is expected to be introduced in 2027 but could be postponed until 2028 to protect citizens, if energy prices are exceptionally high. ETS II will put a price on emissions from the building and road transport sectors, which will also work on the cap-and-trade system. This system will regulate fuel suppliers rather than households and car drivers and the suppliers will be responsible for monitoring and reporting the quantity of fuels they place on the market and for surrendering emission allowances each calendar year depending on the carbon intensity of the fuels. The commission has further proposed to set up a new Social Climate Fund⁸ to address social impacts of the extension of emissions trading to road transport and buildings on vulnerable households, micro-enterprises and transport users. The social climate fund will be financed by the EU budget, using an amount equivalent to 25 percent of the expected revenues of emissions trading for building and road transport fuels. It will provide €72.2 billion of funding to member states, for the period 2025-2032, to support European citizens most exposed to energy or mobility poverty.

In the aviation sector, the EU institutions have agreed⁸ to phase-out free allocation to aircraft operators and to move to full auctioning of allowances by 2026 to create a stronger price signal and, to handle the extra-European flights to and from third countries, the global Carbon Offsetting and Reduction Scheme for International Aviation (COR-SIA)⁹ will be integrated into the ETS. Similarly, in the maritime and shipping sector¹⁰, the EU is proposing to extend the scope of ETS to cover CO₂ emissions from large ships (above 5000 gross tonnage). The system will cover 100 percent of emissions from intra-European routes and 50 percent of emissions from extra-European routes to and from the EU. Shipping companies

have to surrender allowances that cover 40 percent of their verified emissions in 2024, 70 percent in 2025 and 100 percent in 2026. ■

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Notes

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Improved connectivity an imperative to realize intra-regional trade potential in BBIN

IMPROVED transport connectivity is an imperative to realize intra-regional trade potential in the BBIN subregion, opined experts at a regional meeting titled 'Multimodal Connectivity in the BBIN Subregion' organized by CUTS International in New Delhi on 2 March.

Mr. Didar Singh, Former Secretary of Overseas Affairs, Government of India and Distinguished Fellow, CUTS International, mentioned that political economy is the most important aspect that enables policy making process and its proper understanding is the way forward for multimodal connectivity in the BBIN sub-region.

In agreement with other experts, Mr. Rabi Shanker Sainju, Former Joint Secretary, Ministry of Industry, Commerce and Supplies, Government of Nepal, opined that since seamless movement of passenger, personal and cargo vehicles is becoming a necessity for this subregion to grow, multimodal connectivity could be very useful.

Several political economy issues and challenges were highlighted in the presentation made by Indranil Bose, Consultant, CUTS International. ■

Multimodal connectivity benefits for Bangladesh

ON 2 May, in a seminar of Unnayan Shamannay, experts met to address the importance of trade connectivity among South Asian countries, and how multimodal connectivity can support overall economic growth in all neighboring countries.

Dr. Atiur Rahman, Chairperson of Unnayan Shamannay, opined that multimodal connectivity to carry goods can reduce time required for trade, and it serves the same purpose as reducing tariff barriers. He added that efficient multimodal connection can bring climate benefits through avoiding unnecessary motorized travels, shifting to cleaner transport solutions, improving efficiency of transport infrastructure, and services and strengthening transport system to enhance resilience. It is critical to undertake measures to improve connectivity and logistics between India and Bangladesh. There is a potential of

19 percent increase in Bangladesh's exports through ongoing initiatives to enhance multimodal connectivity, including port infrastructure, railways, and waterways.

The paper presented also highlighted the issue of low integration in the regional context where India and Bangladesh reside. Sub-regional economic integration enables connectivity initiatives and greater trade with neighbouring nations. International investment commitments aim to improve trade and transport connectivity in Bangladesh. In the connectivity context of Bangladesh, India, Nepal and Bhutan, multi-modal routes are more viable and resource-saving.

Participants of the seminar raised some key points like benefits for Bangladesh through Ashuganj connectivity, financial sector integration and export through Nakugaon landport. ■

Workshop for economic journalists



SOUTH Asia Watch on Trade, Economics and Environment (SAWTEE) in collaboration with the Society of Economic Journalists (SEJON) organized a workshop for economic journalists to build their capacity in covering issues related to balance of payments, Nepal-India trade and transit treaty, examining trade through gender lens,

Nepal-Bangladesh trade, and LDC graduation. The residential workshop was held at Godavari Village Resort on 30 June -1 July 2023.

Twenty media professionals from different media organizations of Nepal participated in the workshop. The workshop was supported by The Asia Foundation (TAF). ■

Sustainable Policies for circular economy

SUSTAINABLE Development Policy Institute (SDPI) organized the theme day of Earth Day 2023, titled "Developing Sustainable Policies for a Circular Economy" on 20 April.

Delivering a special lecture on the theme day, Dr Walter Stahel, Founder and Director, Product-Life Institute, Geneva and Member of the Strategic Foresight board of Circular Economy Alliance said new records for coal production and global carbon emissions were set in 2022 which paints a picture completely opposite to the concept of circular economy, said a press release.

The sustainability and circular economy are two sides of the same coin with the objective of managing capitals, he said and added that humans neglected that nature itself was circular by evolution with no waste, but nature cannot deal

with man-made waste, which resulted in contemporary environmental issues.

He stressed that with our current lifestyles, we may run out of resources which establishes the need for sustainability by making conscious consumption decisions. He said that the circular economy can effectively resolve the challenges of waste, carbon emissions, the increasing anthropogenic mass by transitioning consumers to users through responsible consumption, improving the utility of existing structures and to prevent losses by internalizing risks.

He said that decarbonization or degrowth would not be applicable to Pakistan, owing to the country's geo-political and economic situation. However, he maintained that small steps like introducing green skills for promoting green jobs can expedite the transition. ■

Steering Meeting of IPS Study

THE Institute of Policy Studies of Sri Lanka (IPS), in partnership with the University of Ottawa and the Department of National Planning of Sri Lanka, is conducting research on the impact of the pandemic on female workers in the ready-made garment industry of Sri Lanka on 25 April.

To achieve this, a steering committee has been established, consisting of representatives from various groups, including trade unions, women's rights groups, government ministries, and employer groups. The first meeting of the steering committee was held in a hybrid mode, with various stakeholders in attendance to initiate collaboration between the research team and the committee members. ■

Roundtable discussion on Nepal-India treaty of trade

SOUTH Asia Watch on Trade, Economics and Environment (SAWTEE) organized a roundtable discussion on 6 April to seek inputs from relevant stakeholders regarding the required amendments and revisions to the Nepal-India Trade treaty in order to further develop trade between Nepal and India for mutual benefit.

Mr. Madhu Kumar Marasini, Secretary, Ministry of Industry, Commerce and Supplies (MoICS), stated that three rounds of negotiations with India have already taken place in connection with revising the trade treaty and he is hopeful of reaching an agreement, taking into account as many suggestions of stakeholders, as possible. He added that without



increasing productive capacity and production, changes in the treaty alone will not help boost exports.

While pushing for an amendment that allows Nepal to protect its agriculture sector through tariffs, Nepal government should prepare a strategy for protecting vulnerable groups from

a rise in food prices due to an increase in import prices that could result from tariff hikes, said Dr. Paras Kharel, Executive Director, SAWTEE. He noted that possible measures include targeted subsidies and checking anti-competitive practices.

Since testing and certification issues are considered to be major barriers to Nepali exports of agricultural and food products, provisions in the treaty that aim to address them must be strengthened and effectively implemented, suggested Mr. Kshitiz Dahal, Senior Research Officer, SAWTEE.

Trade experts, policymakers, exporters, importers and freight forwarders were among about three dozen participants in the event. ■

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BIMSTEC
Master Plan for Transport Connectivity
An Undertaking in Enhancing Regional Integration

Kshitz Dahal

Background
The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional organization of seven countries—Bangladesh, Bhutan, India, Nepal, and Sri Lanka from South Asia, and Myanmar and Thailand from Southeast Asia. Established in 1997 as Bangladesh-India-Sri Lanka-Thailand Economic Cooperation (BITEC), the organization evolved into BIMSTEC when joined by Myanmar in 2002 and Bhutan and Nepal in 2003. The Bangkok Declaration of 6 June 1997 that established BITEC, the precursor to BIMSTEC, identified cooperation in several major areas. The current areas of cooperation include the following: (1) trade, investment, and development; (2) environment and climate change; (3) security, law, agriculture and food security; and people-to-people contacts; (4) science, technology and innovation; and (5) connectivity.¹

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Enhancing intraregional investment in South Asia

Kshitz Dahal

South Asia is home to about 1.8 billion people representing about a quarter of the world population. Furthermore, it is one of the fastest-growing regional economies. However, the region is one of the least integrated regions in the world. Economic liberalization and regional integration took place around 40 years ago in 1965, with the establishment of the South Asian Association for Regional Cooperation (SAARC). However, this has not been able to foster regional economic integration. One telling sign of poor regional integration is the low and stagnant investment rates in the region. This is evident from the low level of the potential versus the reasons for low intraregional trade. One reason for this is that trade policy restrictions, the use of non-tariff barriers, and geographical connectivity. A recent World Bank publication Regional Investment Promoters in South Asia¹ drawing its insights from a bilateral investment dataset and a survey of 124 firms operating eight countries in South Asia, sheds new light on the issue. It identifies how intraregional investment is a significant contributor to low intraregional trade, and argues that poor knowledge

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Economic Diplomacy for Better Export Performance of Nepal

Swastik Aryal

Nepal's trade share of GDP is low. It is not commensurate with its economic size. To improve its export performance, Nepal needs to focus on economic diplomacy. Economic diplomacy is the use of diplomatic tools to promote trade and investment. It is a key component of a country's foreign policy. Nepal's economic diplomacy has been weak. This is due to several reasons. First, there is a lack of coordination between the government and the private sector. Second, there is a lack of resources and expertise. Third, there is a lack of information and intelligence. To improve its export performance, Nepal needs to focus on economic diplomacy. This involves several key areas: (1) trade policy, (2) trade facilitation, (3) trade promotion, and (4) trade dispute resolution. Nepal needs to develop a clear trade strategy and focus on building relationships with key trading partners. It also needs to invest in trade infrastructure and improve its trade governance. Finally, Nepal needs to build a strong trade diplomacy team and provide them with the necessary resources and support.

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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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