

Proposed Action Plan of SASEC Initiatives, 2021-2023

(as of 20 July 2020)

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I. Background and Overview

1. The South Asia Subregional Economic Program (SASEC) Program brings together Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal and Sri Lanka in a cooperative partnership to promote economic growth and prosperity in the subregion.¹ Since it started in 2001, the SASEC Program has adopted a pragmatic, project-based, results-oriented approach focusing on three priority areas: transport, trade facilitation and energy. Results in these areas have been substantial. Physical connectivity along international corridor segments have helped to expand trade. Trade facilitation was improved through efforts at modernizing and harmonizing customs operations at the border, improving border facilities, and facilitating cross-border movement of goods and people. Improvements in energy trade infrastructure have helped increase energy access, ease supply constraints, promote clean energy, and raise the level of energy security in the subregion overall.

2. Encouraged by the Program's progress and momentum, the SASEC countries set forth a long-term Vision for the subregion in 2017. The SASEC Vision document—*SASEC: Powering Asia in the 21st Century*—was launched in April 2017 by the SASEC Finance Ministers, meeting for the first time in New Delhi, India. The Vision reflected the countries common aspiration to become Asia's economic powerhouse by 2025, propelled by the subregion's economic growth being one of the fastest in the world then, and prospects of a demographic dividend. The ultimate goal is to achieve sustainable and inclusive growth that will lead to a better quality of life for all peoples of the subregion.

3. The key strategy to realize the SASEC Vision would be to leverage the subregion's abundant natural resources and evolving infrastructure to unleash latent industrial potential towards developing regional value chains to enhance the subregion's competitiveness. Seamless transport connectivity, more efficient trade processes, and stronger energy trade infrastructure would serve as the foundation for achieving the SASEC Vision.

4. The SASEC Program's strategic thrusts and operational priorities were defined in the SASEC Operational Plan. The SASEC Operational Plan 2016–2025 (OP) was adopted in May 2016 and was updated and enhanced in 2019 to align more closely with the SASEC Vision.² The OP refocused operational priorities in the three priority sectors and included economic corridor development as an area of focus. Multi-modal transport systems would be more closely aligned with markets, transport and trade facilitation would cut across all transport modes, and energy cooperation would be extended to renewable energy and energy efficiency. Economic corridors in individual countries would tap into the potential synergies that could be realized by developing cross-border links between them. The enhanced SASEC OP in 2019 provided a rolling pipeline of over 100 potential priority projects requiring over \$61.0 billion in investments.

5. The enhanced OP presented, for the first time, a more holistic perspective of where SASEC stands in the three sectors of cooperation. It identified (i) the relative importance of existing and planned projects in relation to transport and energy networks, as well as the

¹ In 1996, Bangladesh, Bhutan, India and Nepal, members of the South Asian Association for Regional Cooperation, formed the South Asian Growth Quadrangle. In 2001, at the request of the Quadrangle countries, the Asian Development Bank launched the SASEC Program. Maldives and Sri Lanka joined in 2014, and Myanmar joined in 2017.

² The updated and enhanced SASEC OP was endorsed by the SASEC Nodal Officials and Working Groups Meeting held in Seoul in March 2019.

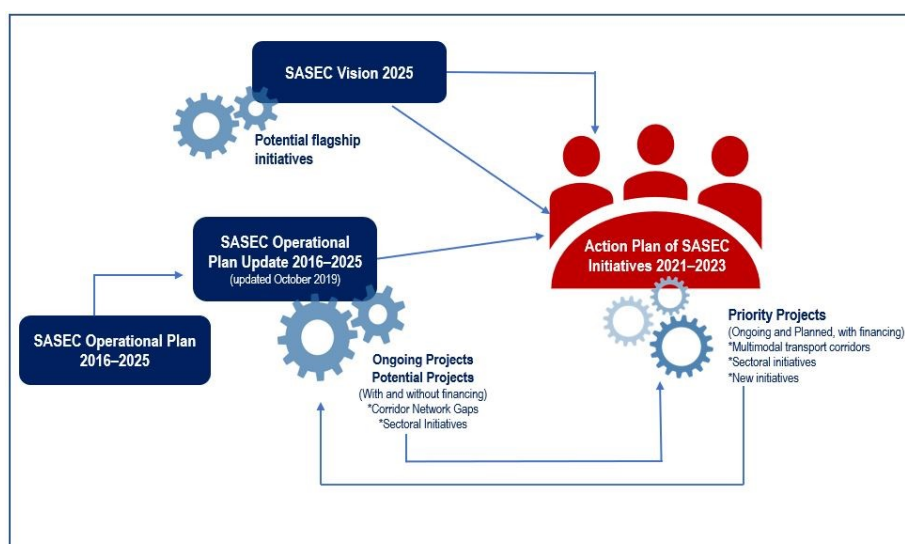
network gaps; (ii) the status of project financing from the governments, ADB and other development partners; and (iii) the extent of preparedness of projects in the pipeline. This provided the basis for identifying the critical set of projects that would need to be prioritized and implemented in the near-term to realize intended outcomes.

6. The identification of critical gaps in the transport and energy networks in the SASEC OP updating exercise inspired the idea of an action plan as a means to generate momentum for the SASEC Program in the next three years. For initiatives which already have projects, the action plan would identify priority projects based on progress and a spatial orientation and accelerate their implementation to realize the full economic benefits of transport corridors. To make this happen, the critical mass of projects in the action plan would need to have identified or secured a funding source and backed by firm commitment from the governments. The action plan would also provide a holistic perspective on sectoral initiatives that responds to the SASEC Vision's strategic thrusts, many of which are critical to enhancing the development of the transport corridors. Some of these initiatives have started, but a number are presently undergoing analytical work to define the modalities of cooperation. The scope of the resulting projects would need to be finalized within the next three years and included in the subsequent updates of the OP. Finally, the action plan would need to address the exigencies resulting for the COVID-19 pandemic to make transport corridors and other connectivity infrastructure more resilient and sustainable over the long-term.

7. **The Action Plan of SASEC Initiatives 2021–2023.** The Action Plan of SASEC Initiatives 2021–2023 (APSI) reviews the progress of SASEC initiatives and identifies priority projects and other actions to push forward each of the initiatives. The initiatives are grouped according to the following three categories - to ensure geographic focus, a holistic approach, and responsiveness to emerging developments, especially COVID-19 and its impact:

- (i) SASEC multi-modal transport corridor initiatives;
- (ii) Sectoral initiatives; and
- (iii) New initiatives

8. The APSI would be updated in three years, with regular updates on its status reported to the SASEC Nodal Officials. The APSI project selection process is discussed in detail in Section V.



II. Regional and Global Developments: Implications of COVID-19³

[Note: This section will be updated as needed based on the latest economic forecasts]

9. **The COVID-19 pandemic.** The world faced an unprecedented crisis in 2020 with the outbreak of the COVID-19 pandemic, which has changed the world economic order in a very short span of time. Its outbreak on a global scale in the first quarter of 2020 saw supply chains collapse, millions of jobs lost, and poverty resurfaced, as countries adopted drastic measures to contain the spread of the disease. Resources were sapped by emergency responses in an unprecedented scale, involving massive reinforcements in health care systems, facilities, personnel and equipment, social amelioration programs and stimulus packages. As recession in the major economies loom, developing countries face the bleak prospects that could further undermine the global financial and monetary systems. In response to this issue, the countries may need to look closely into global supply chain restructuring, pursuing regional balance in production centers and promoting in certain instances, self-reliance for enhanced resiliency to shocks.

10. **Major Economies.** Growth in the major industrial economies of the United States, Europe and Japan reeled from the burden of containing the health emergency. All three economies expect deep contraction in 2020. In aggregate, the three major advanced economies are expected to contract by 5.8% in 2020 before growth resumes at 4.1% in 2021. Economic growth of People's Republic of China (PRC), which has been adversely affected by US-PRC tensions in 2019, is expected to slow down to 1.8% in 2020, resulting, from significant declines in industry value added, retail sales and investments in manufacturing, real estate and infrastructure. The economy is forecast to bounce back from a low base to 7.4% in 2021 although the dismal pace of global economic recovery and the possible reescalation of the trade conflict with the US pose imminent risks.

11. **Developing Asia.** Asia's once robust growth trajectory will suffer a sharp slowdown considering the region's strong economic linkages with the major industrial economies. GDP contraction is now expected in all subregions except in East Asia, where the PRC is still projected to experience positive growth (1.8% and 0.8%, respectively). Developing Asia will barely grow at 0.1% in 2020, the lowest growth rate in six decades. Excluding newly industrialized economies, regional growth is forecast at 0.4% in 2020 and 6.6% in 2021. The extent of recovery in the region however will remain precarious, with countries varying widely in their policy responses and capacity to cope with external dynamics on trade, tourism and remittances. The risks of financial systems breaking down, businesses folding-up, supply chains being disrupted, spiraling unemployment, and more people falling into poverty, are high.

12. **SASEC Subregion.** Growth in SASEC subregion has not been left unscathed by the global health crisis. The overall outlook for South Asia is grim, as economic activities stalled after the lockdowns in late March. For India, the subregion's dominant economy, GDP growth is forecast to contract further by 4.0% in fiscal 2020, then grow by 5.0% the following year as economic activity normalizes gradually.

³ Unless otherwise cited, data mentioned in this section has been sourced from the Asian Development Outlook 2020 Supplement, June 2020. Asian Development Bank. Manila.

13. Most other SASEC countries are looking at bleak prospects for 2020. For Bangladesh, the spillovers from global pandemic are estimated to contract GDP by 4.5% in fiscal 2020, chipping off from its robust growth of 8.2 % in fiscal 2019, before it can recover to 7.5% in 2021. In Bhutan, GDP growth is projected to slow down to 2.4% in fiscal 2020, and slide down further to 1.7% in 2021, with border closings affecting not only tourism but also manufacturing and construction, which partly depend on migrant labor from India. Nepal estimates its GDP growth at 2.3% in 2020, a drop by more than two-thirds from fiscal 2019 due to COVID-19's impact. Growth in fiscal 2021 is projected at 3.1%, still significantly below trend. Maldives is facing a dismal forecast in 2020 as tourism revenues dive with the collapse of the travel industry, bringing the economy to contract by a steep 11.3% in 2020. If the pandemic dissipates and travel restrictions are eased, Maldives can expect a strong recovery of 13.7% in 2021 as most of its high-end tourism clientele are less affected by the pandemic. Myanmar's GDP growth will likely slow significantly to 1.8% in 2020 although the economy can pick-up if the disease is contained quickly. Given stringent lockdown measures and global spillovers from COVID-19 hitting the economy, Sri Lanka forecasts its GDP to contract by 6.1% in 2020, before it can rebound to 4.1% the following year.

III. Opportunities for Regional Cooperation from COVID-19

14. The COVID-19 pandemic has initially raised uncertainties over the role of regional cooperation given the tendency toward protectionism resulting from significant declines in trade and investment and a looming global recession. However, the human-to human transmission of the disease across national boundaries has made countries realize that collective action is necessary to arrest its further spread. SASEC is a potent platform for exploring the wide range of short-, medium- and long-term possibilities to more effectively protect its citizens from COVID-19 and future contagions.

15. **Short-term Opportunities.** Short-term opportunities could focus on containment and mitigation measures until a vaccine is developed for COVID-19. Shortly after the outbreak of the disease, under the SAARC framework, the member countries have immediately initiated discussions on the possibility of exchanging information on health surveillance data, sharing of research results, and sharing online learning platforms for medical personnel and front liners. Some countries have also provided direct assistance to neighbors to show solidarity and support. India, for one, has sent 30,000 masks and protective gear to Bangladesh, shortly after the outbreak of COVID-19. India also offered to provide online training tools for emergency responders and set up an electronic disease surveillance platform to help neighboring countries trace and manage the coronavirus outbreaks

16. **Medium-term opportunities.** In the medium-term, measures could be directed to institutionalizing systems and building capacities for responding effectively to future contagions. Trade facilitation measures can be put in place to ease and expedite the movement, release, and clearance of goods, to minimize supply chain disruptions for critical medicines and medical equipment and supplies for which unimpeded production and distribution is critical during a health crisis. It is equally important for food items, in terms of ensuring adequate supply and building nutrient-defenses, especially among vulnerable groups. The cargo clearance process should move towards a completely automated, end-to-end paperless process, with minimal physical interfaces and manual submissions. Internal and external collaboration among Customs and sanitary/phytosanitary (SPS) agencies are also needed to identify critical products and

design special regimes for their expedited clearance. Protocols for the cross-border movement of people, accompanied by well-functioning regional health surveillance systems, should be put in place as an effective deterrent to mitigate the spread of contagious diseases. Digital regional traveler databases and information systems that operate in real-time could be developed to support contact tracing and predict community spread. Countries can collectively identify critical supply chains and determine possibilities for regional sourcing as many companies are now onshoring or reshoring their productive capacities to circumvent supply chain disruptions caused by long periods of lockdown and quarantine.

17. **Long-term opportunities.** Over the long-term, regional cooperation can focus on the broader issues of health policy, food safety and security, and the resiliency of transport, energy and digital infrastructure. Regional cooperation can promote updating and harmonization of national public health legislation to support safe cross-border travel, including social protection mobility for workers and other vulnerable groups moving within the region. Food security can be promoted by developing regional supply chains in agro-processing industries, accompanied by the removal of non-tariff barriers on agriculture products, and collaboration on food safety standards to protect health. Providing sustainable and resilient connectivity and transport infrastructure systems should remain a priority to keep regions, markets and supply chains going. To achieve energy reliability and security, collaborative planning between countries would be essential to enable the sharing of resources that might be in short supply due to supply chain disruptions, thus helping to secure power reliability for hospitals and other medical facilities in remote areas. As digital connectivity becomes the defining feature of the “new normal”, regional cooperation can promote broad band access among SASEC countries, building resilient digital infrastructure networks, and initiating measures for cyber security.

IV. Strategic Objectives of the APSI, 2021-2023

18. APSI’s implementation in the context of COVID will face many challenges. Well laid-out plans by the government may have to be adjusted to give way to COVID-related priorities. Planning for project implementation will need to visualize possible future scenarios that could see the continuation of social distancing requirements, deployment of skeletal workforces, and prescription of testing requirements prior to work. Possible delays and increase in project costs may be incurred due to transport and logistics systems bottlenecks, supply chain interruptions, and labor-related constraints.

19. APSI’s strategic objectives take these challenges into account. It recognizes the exigencies of the present pandemic, while remaining consistent with SASEC’s long-term vision as the economies recover. APSI recognizes the need to give priority to cross-border transport links to keep markets and supply chains running, initiate innovations in trade facilitation systems that can respond effectively to crisis situations and introduce adjustments in energy demand-supply scenarios as a result of the pandemic. Moreover, APSI establishes more clearly, the need to synchronize trade facilitation measures with infrastructure investments to generate greater synergy and impact. As the blueprint guiding the implementation of SASEC Program in the next three years, APSI, 2021-2023 aims to achieve the following strategic objectives:

- (i) Accelerate the implementation of SASEC transport corridors focusing, in the short-term, on essential cross-border transport links to help minimize disruptions in supply chains; and over the medium- to long-term, on high priority transport connectivity projects that can unleash transformational synergies in trade and

- industry as economies recover and as stronger regional supply chains emerge for more reliant sourcing;
- (ii) Broaden the scope of transport and trade facilitation measures and logistics development to synchronize with infrastructure investments across intermodal transport routes for more efficient and seamless flow of trade; develop innovative arrangements for adaptable trade facilitation systems that can function efficiently under crisis situations; and
 - (iii) Focus on opportunities to realize more integrated energy markets in power, oil and gas, and clean energy technology to ensure adequate energy supply, diversify energy sources, enhance energy security, and promote clean energy practices for climate change mitigation. These will be undertaken with due consideration for adjustments in demand-supply scenarios due to the pandemic.

20. The APSI summarizes the status of ongoing SASEC initiatives with specific projects included in the SASEC OP as well as those which are at an analytical study stage and will generate projects in future. It also proposes new initiatives responding to the requirement of post-COVID-19 world. The proposed priority projects include those for financing by the participating governments, ADB, World Bank, Japan International Cooperation Agency, and other key development partners.

21. For each of the initiatives, it identified actions to be taken with timeframes and priority projects for close monitoring for those initiatives at project implementation stage. The priority projects are essential in realizing synergized impact among projects in different countries, strengthen their sustainability, and helping the SASEC economies through strengthened transport, energy and trade networks and complementary measures and initiatives.

22. In implementing the APSI initiatives, the challenge for SASEC is to look beyond the singular goal of connectivity and address sustainability dimensions, such as safety standards, disaster resilience, and environmental adaptation and mitigation measures in the planning and implementation of transport and energy infrastructure projects. The gender-specific effects of infrastructure are also important as women take on a more central role in promoting growth and prosperity. Exchanging information and good practice criteria for sustainability and safeguards in regional infrastructure investment, including climate proofing, and integrating social and environmental safeguards in the design, construction and operation of transport and energy projects should be part of the implementation processes of APSI projects.

V. Action Plan of SASEC Initiatives

23. This section first describes the SASEC initiatives which are grouped into three categories: (i) SASEC multi-modal transport corridor initiatives; (ii) sectoral initiatives; and (iii) new initiatives. It will then provide progress of each of the initiatives SASEC OP projects and identifies the priority APSI, 2021-2023 projects for focused monitoring for initiatives which have projects, and actions to facilitate the progress for other initiatives.

24. **Multi-Modal Corridor Initiatives.** The multi-modal corridor initiatives are selected on the basis of the identified priority SASEC Road Corridors (SRC) presented in the 2019 SASEC Operational Plan Update, and these are: (i) Nepal- India Trade Corridor (SRC 1); (ii) Bay of Bengal Highway (SRC 2); (iii) India-ASEAN East-West Corridor (SRC 3); (iv) Nepal/ Bhutan-Bangladesh North-South Corridor (SRC 4); (v) North Bangladesh- India Connector (SRC 5); and

(vi) Sri Lanka Port Highway (SRC 6). Since these corridors now consist of various transport modes, including trade facilitation and economic corridor initiatives, they will be called SASEC Corridors (SC) in the APSI. Other multi-modal corridor initiatives identified in completed and ongoing studies are also presented as possible APSI projects.

25. Road transport is the dominant form of surface transport throughout the subregion and is therefore the principal driver in identifying economic corridor potential. The aforementioned corridor routes were recognized as the key SASEC transport corridors whose development will have a major influence in reducing transport and trade costs between member countries. For each corridor, the discussion will then consist of two parts, namely:

- a. First, a quick stock take of key progress in enhancing connectivity in identified SASEC transport corridors across various modes (road, rail, inland waterway, ports and airports) including trade facilitation (TF) and economic corridor development (ECD) initiatives;
- b. Second, a discussion of the gaps and emerging priorities that need to be addressed to realize the full economic benefits of enhanced connectivity, which would then lead to the identification of the proposed APSI projects that address the gaps and priorities (APSI projects are presented in more detail in Appendix 1⁴);

26. **Sectoral Initiatives.** The SASEC Vision document launched in 2017 identified potential flagship initiatives which could unleash new opportunities in various sectors, by tapping synergies that leverage resource-based industries, expand regional value chains and strengthen gateways and hubs for more efficient trade. Many of these sectoral initiatives are found to be critical to enhancing development of several, if not all the transport corridors.

27. **New Initiatives in Response to the COVID-19 Crisis.** In light of the economic disruptions caused by the coronavirus pandemic, additional measures which complement the APSI projects and which will strengthen the subregion's resilience to future pandemics and disasters, are presented in this section.

A. Multi-Modal Corridor Initiatives

- i. **SASEC Corridor (SC) 1: The Nepal–Kolkata Trade Corridor: Kathmandu–Birgunj/Raxaul–Kolkata/Haldia, with extension to Visakhapatnam (spur)**

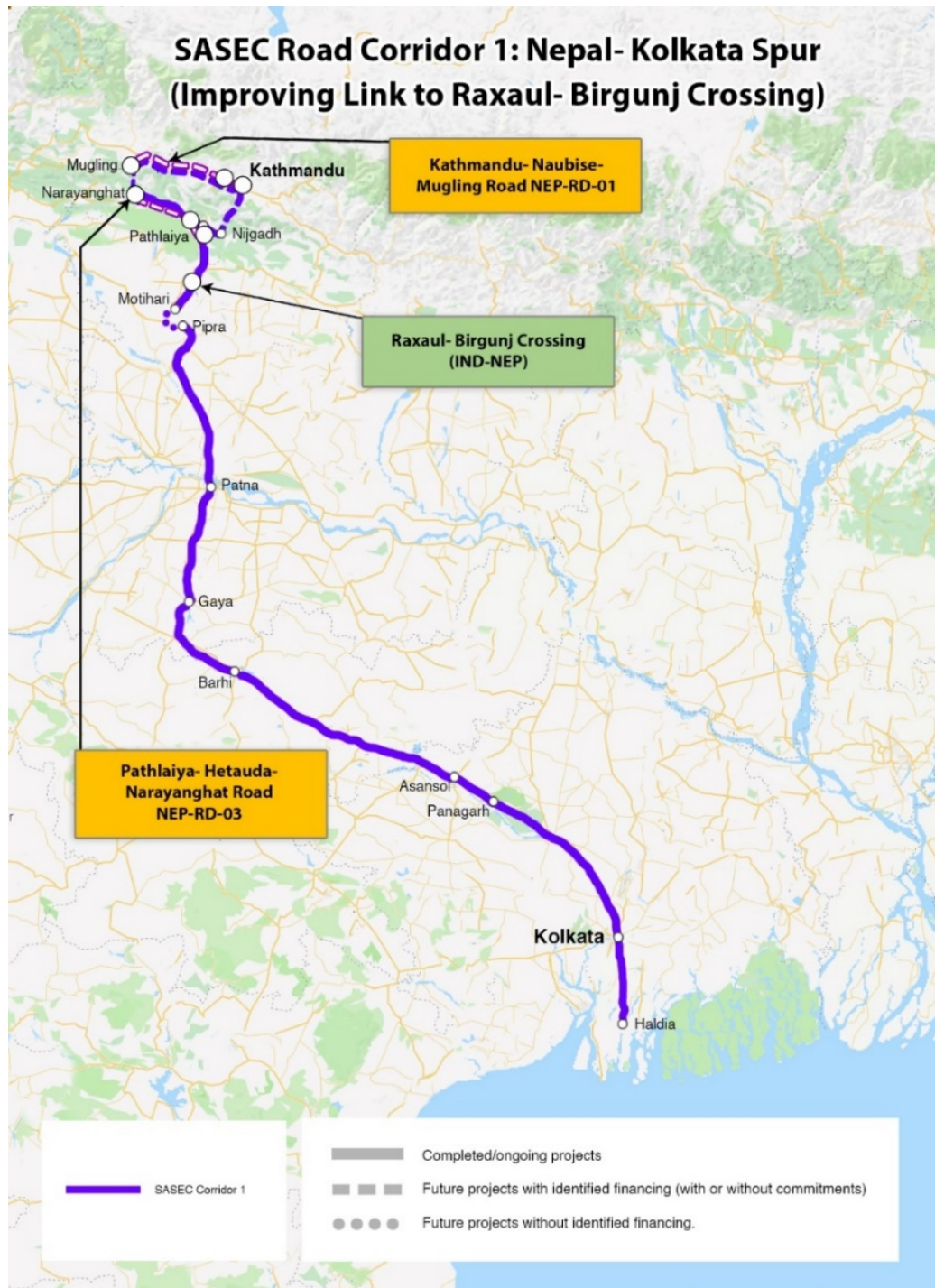
Progress

28. **Road Transport.** The Kathmandu- Kolkata via Birgunj route serves as the key trade route for landlocked Nepal linking it with India (its largest trading partner) as well as with other countries passing through Kolkata. The corridor extends to Visakhapatnam, which handles an increasing share of Nepal's container movement, largely by rail. The priority for **roads** in Nepal

⁴ The high priority projects in the APSI were initially culled from the subset of SASEC OP projects (with identified possible funding source), while allowing for some OP projects (without identified financing) to graduate to high priority treatment in the APSI, 2021-2023, if there are indications of strong support for said projects by governments and development partners. From this subset of SASEC OP projects, the ADB SASEC Secretariat identified possible projects that are likely to obtain funding commitment during 2021-2023 based on information obtained from various sources, including the member governments and development partners.

is to develop the 75 km. “Fast Track Road” to link Kathmandu to the southern Terai region and on to the Indian border at Birgunj, for completion in 2022.⁵ In India, many road sections have been upgraded to four lanes, but in approaching Kolkata, there is increasing congestion, requiring the provision of additional lanes at the outskirts of the city. In the SASEC OP, this corridor has two completed road projects in India with combined length of 400 km. Meanwhile, there are five ongoing/ nearly completed projects in India (length: 390 km.) and two in Nepal (length: 64 km.).

⁵ Phased detailed project report (DPR) is ongoing with initial construction started in some sections. This project would also give access from Kathmandu to the proposed second airport at Nijgadh.



Note: The boundaries, colors, denominations, and any other information shown on the map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.
Source: Asian Development Bank.

29. **Rail.** This corridor is being served by the SASEC Rail Corridor (SRLC) 1: “Nepal–Kolkata Trade Corridor” spanning Birgunj–Raxaul–Muzaffarpur–Patna–Gaya–Asansol–Kolkata–Haldia, which is particularly important for containerized import traffic. In addition, much of the

bilateral bulk traffic between the two countries uses this route, and thus suffers some congestion, particularly near Kolkata. Recently, Visakhapatnam is handling a growing share of Nepal's container trade, with movement largely by rail, posing potential congestion issues in the future⁶. Congestion is also a problem with the eastern half of the corridor which follows the Eastern Dedicated Freight Corridor (between Delhi and Kolkata) with both freight and passenger trains sharing track. The strategy here is to increase corridor capacity to handle additional freight. The Indian side has 740 km. of track in place in this route.

30. **Port.** Ongoing **port** development in the subregion covers expansion of port capacity (especially for container cargo) and improvement of port operations. All the SASEC main ports are located along the SASEC transport corridors, being key transport nodes along at least one of the SASEC road corridors, and in most cases being on one of the two railway corridors. In SC 1, Kolkata is mainly a container and "clean" cargo port, whereas Haldia is principally an industrial port, handling bulk cargoes and some containers. Kolkata is the main container port, which suffers from the usual problems associated with being a "city" port, with congested landside interfaces.

31. **Airport.** To enhance regional **air connectivity**, especially for tourism purposes, Nepal is expanding/ upgrading Gautam Buddha Airport (280 km. west of Kathmandu, part of SASEC Tourism Infrastructure project), along with making improvements in Kathmandu's Tribhuvan International Airport (TIA).

32. **Trade Facilitation.** Efforts to improve cross-border facilities have been integrated in the SASEC Road Connectivity projects for India and Nepal, including last-mile connectivity to complete cross-border connectivity. Integrated Check Posts have been developed at Raxaul and Birgunj by the governments. ADB has been promoting technology driven transit facilitation using electronic cargo tracking system (ECTS) to ensure safe and secure transit, simplify border formalities, reduce transit time and cost, and improve shipment visibility⁷. India and Nepal signed a Memorandum of Intent (MoI) for ECTS piloting in June 2017. Since April 2018, India and Nepal have been piloting ECTS from Indian ports to Nepal. The two countries are discussing the inclusion of the procedure in the bilateral Treaty of Transit. This would enable transit facilitation through both road and rail. Opening of new gateway route for Nepal through Mumbai is also under discussion.

APSI, 2021-2023 Projects

33. The road sector priority is to upgrade sections to AH Class 1 to enhance Nepal's access to global markets. The priority pipeline includes two road projects in Nepal costing \$477 million, with upgrading of Pathlaiya- Hetauda- Narayanghat Road to be covered by ADB firm pipeline project Second SASEC Highway Enhancement I Project with funding of \$200 million. In railway, the Kathmandu-Birgunj Railway (\$400 million) will enhance Nepal's multi-modal links to ports. In air transport, Nepal also plans to upgrade the airport runway and equipment through the Tribhuvan International Airport (TIA) Capacity Enhancement project, included in the ADB pipeline for 2021- 2023.

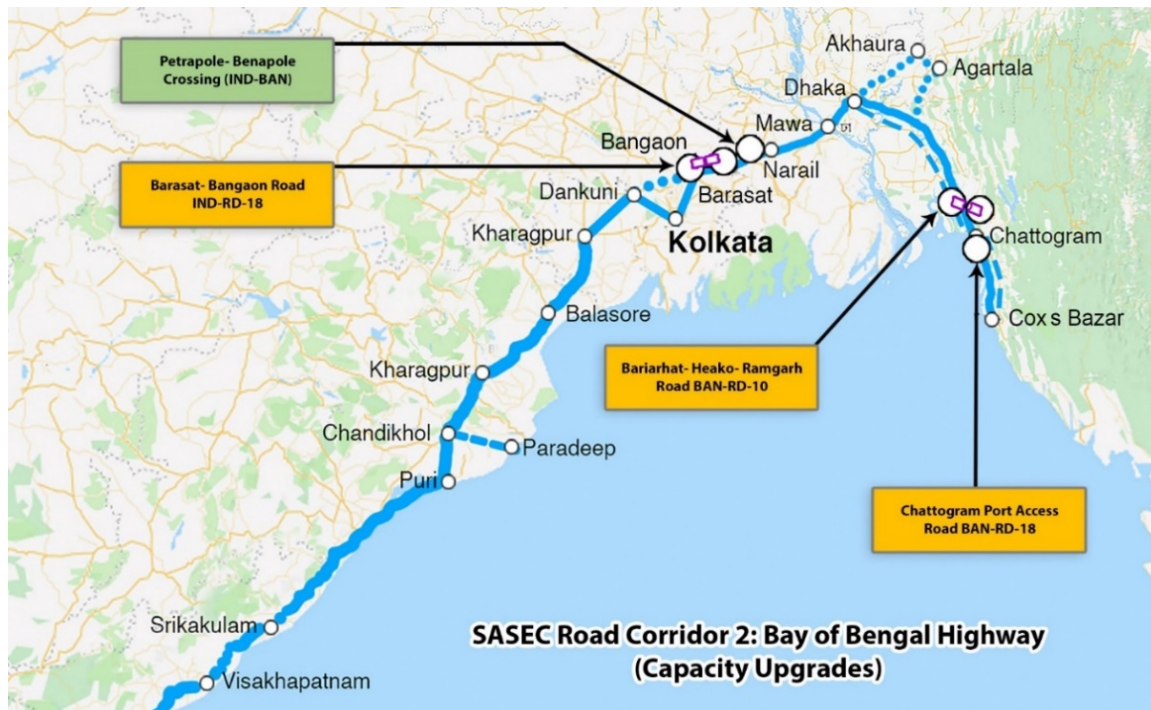
⁶ With the continued implementation of ECTS, a significant share of Nepal's import consignments is coming to Birgunj ICD via Vizag Port. In fact, Vizag port handled more import consignments of Nepal than the Kolkata port in 2019. The mode of transport is via railway from Vizag port to ICD Birgunj. Since the alignment will also be different from Nepal-Kolkata trade corridor, this route can be included as a separate spur of SC 1.

⁷ ECTS involves the use of secure seals aided by satellite positioning systems, cellular communications, radio frequency identification, and other web-based software to ensure the security of cargo.

ii. SASEC Corridor (SC) 2: Bay of Bengal Highway

Progress

34. **Road Transport.** This spans the route from Thoothukudi (Tuticorin)–Chennai–Visakhapatnam–Kolkata–Dhaka–Chattogram (formerly, Chittagong)–Cox’s Bazar, with spurs Akhaura–Agartala and Bariarhat–Ramgarh, and consists initially of the important Indian East Coast Economic Corridor (ECEC), which links all the Indian SASEC ports. For the Indian side, the southern portion from Tuticorin to Chennai is already dual carriageway, while the portion in the mid- to northern sections, many roads are either under implementation or completed with Government of India funding. In Bangladesh, there are many ongoing connectivity initiatives such as Benapole-Jessore road upgrading to 4-lanes, new Padma bridge, new Mawa-Dhaka highway, and Dhaka- Chattogram road upgrading including bridges. Road upgrading to deal with congestion issues are now under project preparation, such as four-laning of NH35 (connecting Kolkata with Bangladesh border), and new Dhaka-Chattogram Expressway. There are five completed SASEC OP road projects (four in India and one in Bangladesh) with total length of 2,038 km. There are 16 ongoing/ nearly completed projects, 10 in Bangladesh (330.3 km.) and six in India (379.0 km.), totaling 709.3 km.

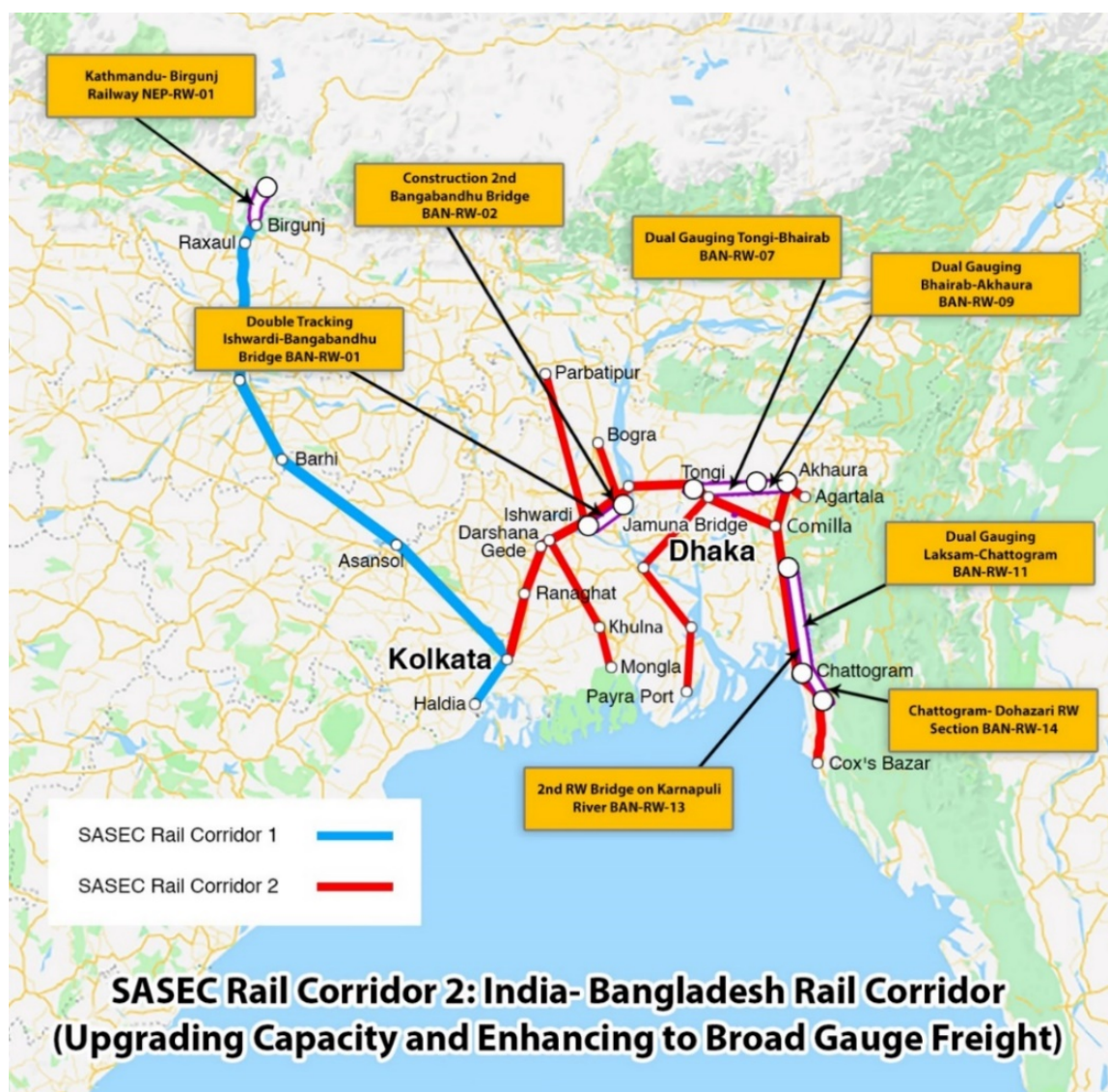


Note: The boundaries, colors, denominations, and any other information shown on the map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.

Source: Asian Development Bank.

35. **Rail.** This corridor is being served by the SASEC Rail Corridor (SRLC) 2: “India–Bangladesh Rail Corridor”: Kolkata–Ranaghat–Gede–Tangail–Dhaka–Comilla–Chattogram (Chittagong)–Cox’s Bazar, including spur line 2A: Comilla–Akhaura–Agartala; 2B: Sirajganj–Bogra; 2C: Darshana–Khulna–Mongla; and 2D: connections to Payra Port (spur lines 2C and

2D are in SC 4, however). At this corridor's western half is the major route for bilateral movement of bulk traffic between India and Bangladesh (Gede–Darshana), while the eastern half is important in both (i) linking Dhaka with its main port (e.g., Chattogram) and extension to Cox's Bazar, and (ii) bilateral connection through the Agartala–Akhaura link under development. In Bangladesh, ADB is supporting several ongoing projects that are augmenting capacity of the network (adding/ upgrading 313 km. of track) and ensuring gauge compatibility⁸.



Note: The boundaries, colors, denominations, and any other information shown on the map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.

Source: Asian Development Bank.

⁸ Includes: (i) Dual Gauging of Line between Akhaura and Laksam (for completion in 2020); (ii) New Railway Link Akhaura–Agartala (for completion in 2020); (iii) Chattogram–Ramu–Cox's Bazar for completion in 2023; (iv) Bangladesh SASEC Chittagong–Cox's Bazar Railway Project Phase 1, Tranche 1 (committed June 2017, ADB funding \$300 million); and (v) Bangladesh SASEC Chittagong–Cox's Bazar Railway Project Phase 1, Tranche 2 (committed May 2019, ADB funding \$400 million). The last two are improving the 102 km Dohazari- Cox's Bazar section.

36. **Ports.** The key Bangladesh port in this corridor is Chattogram Port (formerly, Chittagong), which handles 98% of Bangladesh's maritime trade, but is congested. Nearly completed is the upgrading of the port (Patenga Container Terminal). In India, port development (new and upgrade) will provide needed capacity for larger vessels and container trade, to support port-led industrialization under the Sagarmala Initiative, capitalizing on India's strategic location in maritime routes and global production networks⁹. Chennai is the largest port in terms of container handling. Visakhapatnam is the largest port on the east coast in terms of tonnage throughput due to its substantial bulk cargoes but is also growing as a container port. Similarly, Paradip is mainly a bulk cargo port.

37. **Airports.** Two ongoing airport projects in Bangladesh are developing the passenger terminal and upgrading facilities at Dhaka international airport; the third project is developing Cox's Bazar airport. In India, the Chennai Airport Expansion project covers both domestic and terminal facilities.

38. **Economic Corridor Development (ECD).** The economic corridor development strategy is to support multi-modal and cross-country connectivity in identified corridor areas through development of high-quality infrastructure and policy and institutional reforms to boost industry competitiveness. ADB-supported economic corridor studies are identifying opportunities for growth centers and investment needs, with some examples of identified opportunities from ECD studies done for NER India (in SC 3) and Bangladesh.

39. India's East Coast Economic Corridor (ECEC), which is along SC 2, is the focus of India's current ECD efforts, through its Visakhapatnam-Chennai Industrial Corridor (VCIC program)¹⁰. This involves enhancing economic linkages across industries and sectors through critical interventions comprising policy reforms and institutional development (at state level) and developing high-quality infrastructure to boost industry growth.

40. **Trade Facilitation.** Under the India-Nepal MoU to facilitate in-transit traffic using ECTS, a pilot with simplified modalities commenced from Vishakhapatnam (Vizag). Under this pilot, the shipping line undertakes the responsibility of discharging the cargo at the BCP in Nepal, obviating the need for the Nepal trade to undertake formalities in India. The pilot has been extended to Kolkata/Haldia ports in February 2019 and is expected to continue until the Treaty of Transit is suitably revised. Meanwhile, ADB has supported the Coordinated Development of Border Infrastructure and Management which aims to identify issues affecting trade along a given border point/route and to design solutions to resolve them. The initial phase covered the Kolkata—Dhaka trade facilitation route, with three border crossing pairs: Gede—Darshana, Petrapole—Benapole, and Ghojadanga—Bhomra and the report has been completed.

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41. The road sector priority in India is to upgrade road links between Kolkata and the crossing at Benapole- Petrapole (e.g. Improving Barasat- Bangaon road). In Bangladesh, the priorities are to address the congestion in the Dhaka-Chattogram route, and to develop spur

⁹ This also reinforces ADB's commitment to economic corridor development especially the ECEC, which aims to invigorate the eastern region's manufacturing activity and integrate it with the vibrant production networks in Asia.

¹⁰ ADB committed funding to the VCIC in February 2017 comprising: (i) \$125 million policy-based loan for policy reforms and institutional development in the state of Andhra Pradesh; and (ii) \$245 million for developing high-quality internal infrastructure for identified industrial areas.

roads (Akhaura- Agartala, Bariarhat- Ramgarh) to enhance NER India's access to Chattogram port. India is proposing a few road projects for enhanced connectivity between NER of India and Bangladesh. ADB may finance Chattogram Port Access Improvement for \$150 million. In rail, there are numerous projects with advanced preparation for financing by various partners (Governments of India, Japan, and Republic of Korea); ADB has included in its pipeline, the financing of several rail projects in Bangladesh¹¹. A number of port projects in this corridor have been proposed in India (under the Sagarmala Initiative) and Bangladesh, with identified financing and advanced preparation, but were not included in the APSI, 2021-2023¹². India will continue promoting the ECEC through state-based policy/institutional reforms and development of high-quality infrastructure, with two economic corridor projects in the APSI, 2021-2023¹³. ADB is discussing a Sector Development Program (SDP) with Government of Bangladesh under which select border crossing points would be developed in a holistic manner, which include Akhaura. Under the SDP, trade facilitation environment would also be improved at the BCP, by modernizing the business processes and enhancing use of technology. Bangladesh is also reviewing the port restrictions applicable at the BCP for further liberalization.

iii. **SASEC Corridor (SC) 3: India- ASEAN East- West Corridor**

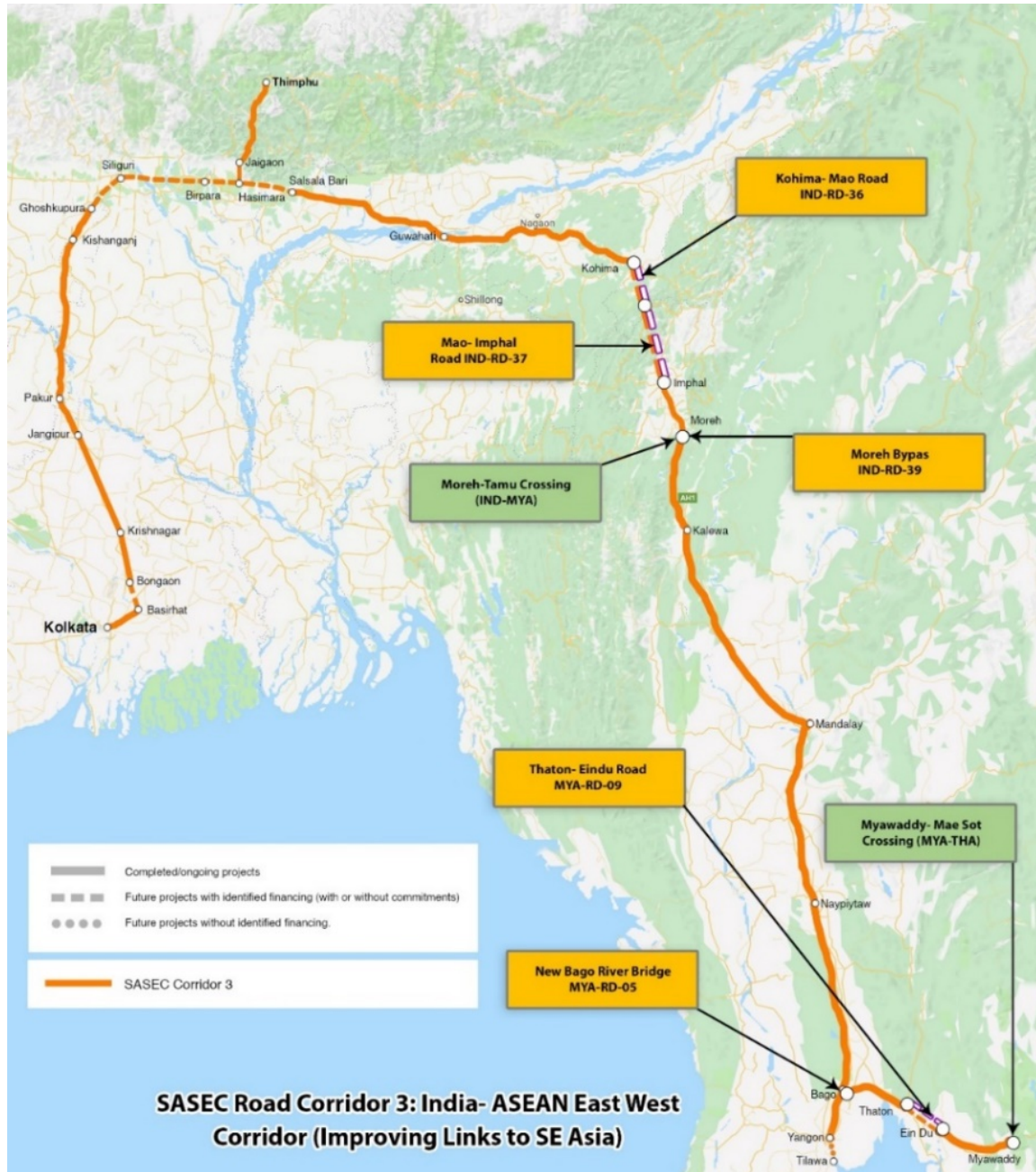
Progress

42. Road Transport. This covers the route Kolkata–Siliguri–Guwahati–Imphal–Moreh/Tamu–Mandalay–Bago–Myawaddy, with spurs Hasimara –Phuentsholing –Thimphu and Bago–Yangon. This connects Bhutan and eastern Nepal with “India’s East–West Corridor”, and in connecting with the Trilateral Highway (linking India, Myanmar, and Thailand), this corridor therefore serves as the main gateway for greater economic integration between SASEC countries and Southeast and East Asia. This also enables Bhutan to use the Indian ports for third country trade. For the Indian side, ADB assistance heavily supported the important “Chicken’s Neck” Siliguri corridor likely to be used for land-based trade between India and Myanmar. Upgrading of many sections from Guwahati to Nagaon are ongoing or have been completed with Indian Government financing. ADB is supporting upgrading of Imphal to Myanmar border (Moreh-Tamu). In Bhutan, a new border facility with connecting road at Pasakha is ongoing with ADB funding. In Myanmar, the road southwards from Tamu to Kalewa has been developed, and is being rehabilitated with Indian Government support, with some bridge works remaining. ADB is funding the reconstruction of the 66.4 km. road between Eindu and Kawkareik in Kayin State for \$100.0 million. There are eight completed SASEC OP road projects (three in India and five in Myanmar) with total length of 719.0 km. There are 24 ongoing/ nearly completed projects, three in Bhutan (5.2 km.), 17 in India (1,233.0 km.) and four in Myanmar (854.0 km.), totaling 2,092.2 km.

¹¹ These include: (i) SASEC Tongi-Akhaura Dual Gauge Project Phase 1; (ii) SASEC Railway Connectivity Dhaka-Comilla Highspeed Train Project (tranche 1); (iii) SASEC Laxam- Chittagong Double Track Project; and (iv) SASEC Chittagong- Cox’s Bazar Railway Project Phase 1 (tranche 3).

¹² In India, under the Sagarmala Initiative, port projects with identified financing and advanced project preparation include Expansion of Inner Harbor and Development of Outer Harbor (both at Paradip). Similarly, in Bangladesh, port projects include: Upgrading of Chattogram Port (Karnaphully Container Terminal and multipurpose terminals); and Matabari Port near Cox’s Bazar primarily for bulk coal cargo for a power plant.

¹³ These are: (i) IND: Visakhapatnam- Chennai Industrial Corridor Development Program Tranche 2 (ADB funding of \$255 million); and (ii) IND: Tamil- Nadu Industrial Connectivity Project (ADB funding of \$484 million).



Note: The boundaries, colors, denominations, and any other information shown on the map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.

Source: Asian Development Bank.

43. **Airports.** As this corridor covers mainly landlocked territory (except around Yangon), airports serve a key connectivity function. The development focus for airports is mainly on upgrading passenger terminals (to address traffic growth) and additional runways, taxiways, and aprons to handle larger aircrafts. Completed works at Bhutan's Paro airport involve upgrading taxiway and departure terminal. In India, construction of new passenger terminal at Guwahati airport is due for completion in 2020/21. This is part of the UDAN regional airport development and "regional connectivity scheme" which involves development of new airports and upgrading

of existing ones, and promoting service to underserved/ unserved regional airports through viability gap funding. Myanmar recently completed renovation of Yangon International Airport and has started development of new cargo terminal at Mandalay.

44. **Trade Facilitation.** ADB committed \$19.61 million in August 2016 for the Bhutan SASEC Transport, Trade Facilitation and Logistics project, which is building road connectivity with India and providing infrastructure and equipment support for border crossing points. Piloting the ECTS to facilitate transit cargo clearance was first applied to the Kolkata-Jaigaon-Phuentsholing corridor, which yielded lessons in streamlining regulations and improving cargo tracking control. ICP has been developed at Moreh by Government of India and improvement of border infrastructure at Tamu is contemplated. Post Clearance Audit, an important measure to facilitate trade and improve compliance is being piloted at Phuentsholing and Thimphu.

45. **Economic Corridor Development (ECD).** ADB has prepared a Vision Study to develop Assam state as India's expressway to ASEAN, which laid down an outward looking growth strategy up to 2025. ADB submitted the report to the state government in December 2018, which then requested ADB to scale up the study to a Northeast Region Corridor study which will span from Dawki (on the India-Bangladesh border) to Shillong via Guwahati to Nagaon, and from Golaghat via Dimapur and Imphal to Moreh (on the India- Myanmar Border).

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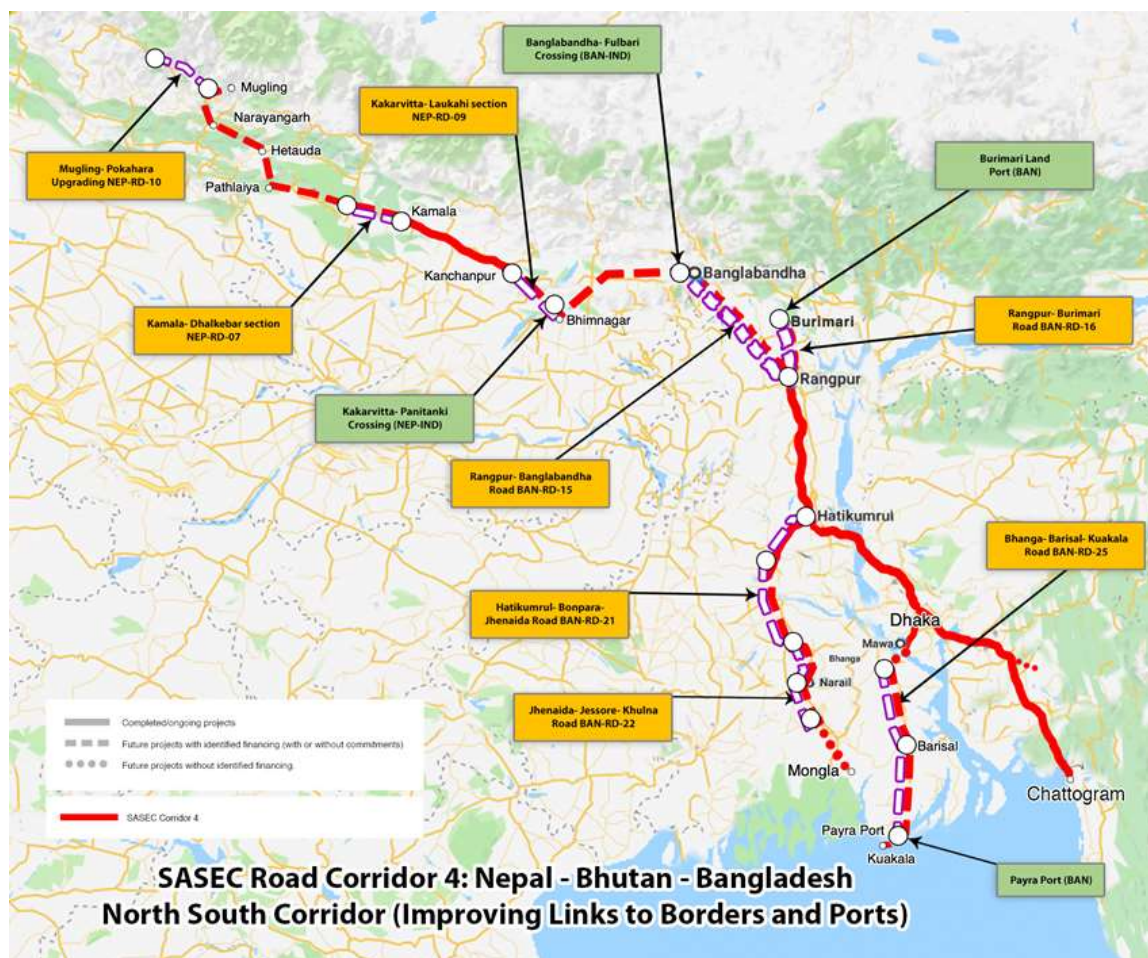
46. Since many previous ADB projects have sufficiently upgraded road links around the "Chicken Neck" area (between Bhutan, India and Nepal), the APSI, 2021-2023 priority has shifted to enhancing connectivity between key points in the northeast region of India, and toward the border with Myanmar. Government of India will support needed improvements in the Kohima-Mao, Mao-Imphal, Assam-Nagaland links, as well as links from Guwahati to main routes of SC 3 and SC 5. In the area of ECD, ADB will support the feasibility study for the NER corridor to catalyze India's Act East Policy, which entails drawing up a comprehensive scope and terms of reference for the study in consultation with Indian Government agencies and states concerned. Priority airport projects in the APSI, 2021-2023 include upgrading of Paro airport in Bhutan (to be covered by ADB's SASEC Air Connectivity project in the 2021-2023 pipeline), expansion of Gelephu airport in Bhutan, and development of greenfield airport in Bago, Myanmar to ease congestion at Yangon airport. The possible signing of IMT Motor Vehicle Agreement and the conclusion and operationalization of its operating protocol would help in facilitating passenger, personal, and cargo vehicular traffic between India, Myanmar and Thailand. Once implemented, the MVA is envisaged to reduce costly and time-consuming transshipment of people and goods at border crossings, creating opportunities for greater trade and economic exchanges along the corridor as well as people to people exchanges.

iv. SASEC Corridor (SC) 4: The Nepal/Bhutan–Bangladesh North–South Corridor

Progress

47. **Road Transport.** Spanning Kathmandu–Kakarvitta/Panitanki–Rangpur–Bogra–Dhaka–Chattogram, with spurs Rangpur–Burimari/Chengrabandha–Phuentsholing, Bogra–Mongla, and Dhaka–Payra Port, this corridor links landlocked Bhutan and Nepal with Bangladesh and enhances both their potential links to Bangladeshi ports, as well as better trade access from the northwest of Bangladesh to these ports. In Nepal, expansion of a section of the East–West Highway between Dhalkebar and Pathlaiya is being financed by the Nepal Government with World Bank support for bridges. ADB is financing the upgrading of Kanchanpur–Kamala section

(87 km) to 4-lanes. In India, construction commenced on the Mechi Bridge on the India–Nepal border including its approach roads, which will improve links between Kakarvitta and Panitanki (with ADB financing). In Bangladesh, the sections from Rangpur southeastwards to Dhaka are all under various stages of construction under ADB-supported SASEC road connectivity projects.¹⁴ There are eight ongoing/ nearly completed projects, three in Bangladesh (275.0 km.), three in India (128.6 km.) and two in Myanmar (179.0 km.) totaling 582.6 km.



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Source: Asian Development Bank.

48. **Ports.** There are two Bangladeshi ports in this corridor. Nearly completed is the upgrading of Payra port, covering multipurpose terminal facilities, dredging of channel and coal/ bulk terminal. Mongla port, another key port, has been proposed for upgrading to address the congestion at Chattogram and to serve the hinterland in Bangladesh's western section.

¹⁴ Among the more recent is the Bangladesh SASEC Dhaka-Northwest Corridor Road Project Phase 2, Tranche 1 (Nov. 2017, ADB funding \$250 million): This is improving the road connectivity and efficiency of the Dhaka-Northwest international trade corridor, with Burimari at its northwestern end, which is Bhutan's gateway through India.

49. **Inland Water Transport.** SASEC countries also aim to better utilize natural waterway connectivity between India and Bangladesh, Nepal, Bhutan and Myanmar, and promoting multi-modal integration of road, rail and waterway transport for more efficient value chain logistics. India is implementing projects to augment navigation capacity of its waterways through sustainable IWT infrastructure.

50. **Trade Facilitation.** The route supports the movement of cargo between Nepal and Bhutan and Bangladesh, along with the bilateral trade between Bangladesh and India and India and Nepal.¹⁵ ADB is supporting a Coordinated Development of Border Infrastructure and Management SASEC Cross Border Routes Initiative which aims to identify issues affecting trade along a given border point/route and to design solutions to resolve them. The SASEC Routes Initiative-Phase 2 study will cover the Kakarvita-Panitanki-Fulbari-Banglabandha-Chattogram/Mongla route. An Inland Container Depot (ICD) has been developed at Siliguri.

51. **Economic Corridor Development (ECD).** ADB supported preparation of the Southwest Bangladesh Economic Corridor Comprehensive Development Plan, which proposed developing multi-modal transport spine running through key urban and economic centers connecting to key gateways, such as: (i) Jessore-Khulna-Bagerhat-Gopalganj-Teknaf-Bhanga-Dhaka, (ii) Jessore-Magura- Faridpur- Dhaka via Paturia, and (iii) Jessore- Narail- Kasiani- Bhanga via Padma bridge. The corridor will include two industrial nodes like Khulna and Dhaka covering six districts and identified potential sectors that will drive industrialization. The study findings were presented to Bangladesh government officials in a seminar held in Dhaka in December 2017.

APSI, 2021-2023 Projects

52. The priority for roads in Nepal is to upgrade links to the eastern border with India and Bangladesh. These include three road projects in Nepal costing a total of \$475 million, involving upgrading of Kamala-Dhalkebar, Kakarvitta-Laukahi, and Mugling-Pokhara, with ADB supporting the last two sections¹⁶. In Bangladesh, the focus is on upgrading northern links from border with India (near Nepal) to Rangpur, and upgrading links from Bogra to southern ports (e.g. Mongla and Payra), both for boosting trade traffic¹⁷. These include three northwest corridor link projects costing \$3.95 billion, and two southern port link projects costing \$1.57 billion.¹⁸ To reduce congestion at border crossings and enhance off-border cargo clearance, a dry port

¹⁵ This corridor will be impacted by the Bangladesh, Bhutan, India and Nepal (BBIN) Motor Vehicles Agreement (MVA) designed to facilitate passenger, personal and cargo vehicular traffic between the BBIN countries. The BBIN MVA was signed in Thimphu, Bhutan in June 2015 and once fully implemented, it is envisaged to reduce costly and time-consuming transshipment of people and goods at border crossings, and creating greater opportunities for economic exchanges in key trade routes. Pending full ratification of the MVA and adoption of protocols on passenger and cargo vehicles, its test implementation can be done through piloting of ECTS along various BBIN trial routes.

¹⁶ The Kakarvitta- Laukahi section will be covered by ADB SASEC Highway Enhancement I Project (2021), while the Mugling-Pokhara section is being supported by ADB SASEC Mugling- Pokhara Highway Improvement Project Phase 1 committed in 2019 with funding of \$195 million.

¹⁷ In many sections, traffic is light and seasonal road upgrading over a longer time frame is eyed, especially for links to ports. In Bangladesh, the link between Natore-Jessore-Khulna-Mongla has been subject to preparatory studies under the SASEC program, but no firm funding proposals for implementing upgrades has been agreed at this stage.

¹⁸ These will be supported by the following ADB projects in the 2021- 2023 Bangladesh pipeline: (i) BAN: SASEC Dhaka- Northwest Corridor Road Project Phase 3 (tranche 1); BAN: SASEC Dhaka Northwest Corridor Road Project Phase 2 (tranche 3); (iii) BAN: SASEC Dhaka- Northwest Corridor Road Project Phase 4 (tranche 1); and (iv) BAN: SASEC Dhaka- South Corridor Road Project Phase 1 (tranche 1).

would be developed at Tongi/Joydevpur, with ADB support.¹⁹ The Eastern Waterways Connectivity Transport Grid project will develop seamless connectivity between the waterways of India's eastern region with its SASEC neighbors. In addition, the corridor has potential for application of ECTS to ensure safe and secure transit, simplify border formalities, reduce transit time, and cost, and improve shipment visibility. The route can also support the use of gateways for import/export of Nepal cargo. The inland facility near Siliguri that falls proximate to the corridor can enable off-border clearances, obviating the need for development of elaborate infrastructure at the border crossing points. The clearance-related formalities could be completed at the inland facility, with the BCPs acting as gateways. This would offer more convenience to trade, development of quality supporting facilities (such as laboratories, certification facilities), and decongestion of border points.

v. SASEC Corridor (SC) 5: The North Bangladesh–India Connector

Progress

53. **Road Transport.** This spans Dhaka–Sylhet–Tamabil–Dawki–Shillong–Guwahati, with spur Sylhet–Sheola–Karimganj–Silchar, and serves as an important link connecting the northeast region of India to Bangladesh (Dhaka) and on to the “Chicken’s Neck” region. This corridor links central and northeastern Bangladesh with the northeastern states of India to promote bilateral trade. In Bangladesh, the Dhaka-Sylhet section is a busy two-lane road, and from Sylhet to border with India, there are plans for upgrading, but constrained by low weight limit of Dawki bridge. In India, 4-laning of the section from Shillong to Guwahati (82 km, NH40) has been completed with Indian Government financing. Development of this corridor will hinge on two integrated check posts (ICPs) (i.e., Dawki and Sutarkandi). There is one completed SASEC OP road project in India with 82.0 km. length.

54. **Trade Facilitation.** Government of India is developing an ICP at Dawki, a key border crossing points that services trade between Bangladesh and northeastern region (NER) of India.

APSI, 2021-2023 Projects

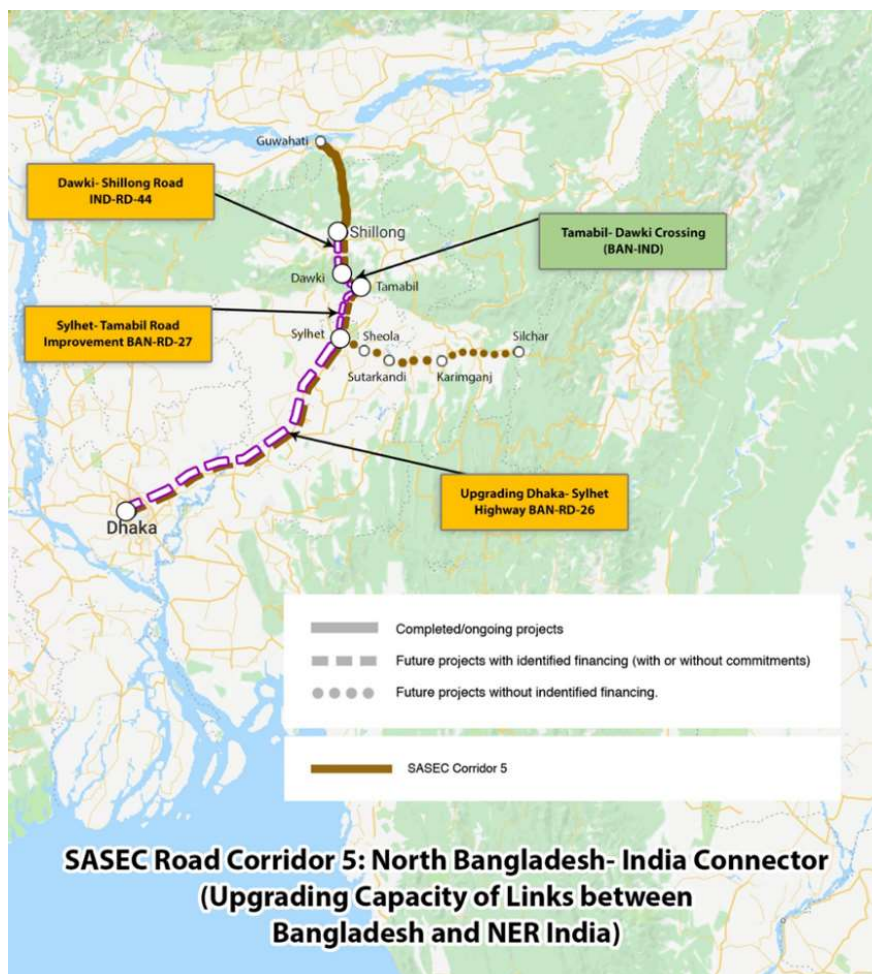
55. The priority for roads in this corridor is to enhance connectivity of Dhaka with towns bordering the NER of India in order to address congestion issues and to spur additional trade traffic. These include road projects in Bangladesh, which will involve upgrading of road links near Tamabil, with total cost of \$1.78 billion.²⁰ A few projects in India will upgrade roads and bridges near the borders with Bangladesh, with cost of over \$2.34 billion.²¹ ADB is discussing a Sector Development Program (SDP) with Government of Bangladesh under which select border crossing points would be developed in a holistic manner, which include Tamabil and Sheola. Under the SDP, trade facilitation environment would also be improved at the BCP, by modernizing the business processes, enhancing use of technology and improving compliance management. The Northeastern Economic Corridor (NEEC) study of India has recommended an

¹⁹ The Development of Inland Container Depot is being developed for possible inclusion in ADB’s pipeline for Bangladesh for \$100 million.

²⁰ Upgrading of Dhaka–Sylhet Highway will be financed by the SASEC Dhaka- Sylhet Corridor Road project Phase 1 tranche 1 for \$300 million included in the ADB pipeline for 2021- 2023. Improvement of Sylhet–Tamabil road to 4-lanes will be financed by Asian Infrastructure Investment Bank (AIIB).

²¹ Of this, India is preparing upgrading of Dawki to Shillong road (NH40, 95 km), to include Dawki suspension bridge rehabilitation for \$186.0 million; financing is by Japan International Cooperation Agency (JICA) and Indian Government under the Bharatmala project, with DPR completed.

Inland Customs/Container Depot at Silchar, which is on the corridor. The ICD would facilitate off-border clearance of goods moving from the proximate border crossing points (e.g., Sutarkandi, Karimganj) as well as other border centers. Silchar could serve as a hub or a consolidation point for conducting the cargo clearance regulatory processes, with the BCPs acting as gateways.



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Source: Asian Development Bank.

vi. SASEC Corridor (SC 6): The Sri Lanka Port Highway

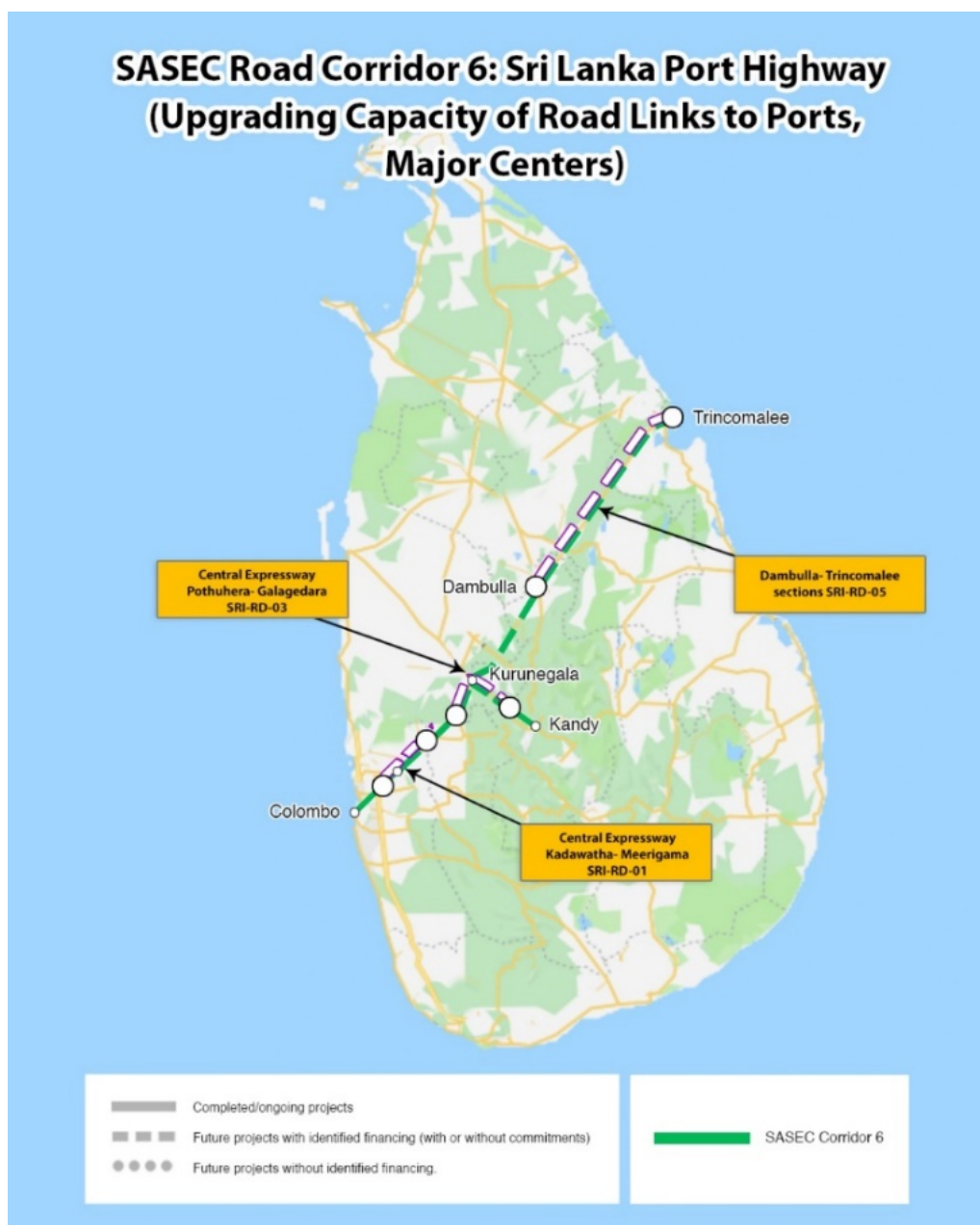
Progress

56. **Road Transport.** This corridor spans Colombo–Dambulla–Trincomalee with spur Kurunegala–Kandy. This aims to enhance connectivity between the main port in Colombo with its northern hinterland, as well as with its main port in the northeast (e.g., Trincomalee) facing India. The construction of Central Expressway Stage II (Meerigama–Kurunegala–Ambepussa link), with financing from the People's Republic of China (PRC), is due for completion in 2019. Upgrade to 2-lanes of another section (Galewela–Dambulla section of Kurunegala–Trincomalee

road) has been completed with Sri Lankan Government financing. There are two projects in Colombo city related to improving access to the port and separating this traffic stream from city traffic being funded by JICA and ADB.²² Preparation of projects to improve Colombo-Trincomalee links via Central Expressway is ongoing.²³ There is one completed SASEC OP road project in Sri Lanka with length of 16.5 km. There are three ongoing/ nearly completed projects, totaling 71.3 km.

²² Sri Lanka SASEC Port Access Elevated Highway Project, committed by ADB in January 2019 for \$300.0 million, will provide a direct link to the city center and the port from the Colombo- Katunayake Expressway, alleviate traffic congestion in Colombo and its port.

²³ Stage I (37 km) Kadawatha to Meerigama has been suspended (PRC and SLG); Stage III (Pothuhera to Galagedara [Kandy]) feasibility study has been completed (possibly PRC funding); Stage IV remains unfunded. ADB is studying the proposed Expressway Connectivity Investment Program Facility (ADB loan of \$500 million) will improve the efficiency of the road network in the country's southern region.



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Source: Asian Development Bank.

57. **Ports.** Colombo is the largest port in Sri Lanka and is a major international container hub handling approximately 7 million TEU per annum. New investments are helping meet demand for container transshipment and related logistics businesses for the international market. Hambantota is a new deep port in the south, currently handling RoRo vessels. Trincomalee is a developing port located in a large natural harbor, with planned new facilities to be on PPP basis. Kankesanthurai port is located in the north and proposed to be developed to handle cement export shipments. This regional port development approach is supportive of district-based industrial development through lower transport costs.

58. **Economic Corridor Development (ECD).** ADB has prepared the comprehensive development plan for the Colombo-Trincomalee Economic Corridor (CTEC), which aims to address regional imbalances by extending the economic strengths of the Western Region/ Colombo area to the eastern end (Trincomalee area) via the 280 km. Central Expressway acting as corridor spine. Trincomalee's proximity to potential transport gateways and position as a key tourist attraction can be leveraged to establish it as a complementary location to Colombo on the eastern end of CTEC. The CTEC can also be developed for light manufacturing. The findings of the study were presented to the Government of Sri Lanka in October 2017.

59. **Airport.** Ongoing project is the Bandaranaike International Airport Phase II Stage II, which covers among others, construction of multilevel terminal building, new parking apron, taxiways, among others. Its two packages are scheduled for completion in 2019- 2020, barring more delays in works.

60. **Trade Facilitation.** The ADB is supporting the Port Access Elevated Highway (PAEH) in Sri Lanka for (i) alleviating traffic congestion in Colombo; (ii) addressing the increasing traffic to/ from the port; and (iii) providing a direct link to the expressway network. To complement the proposed infrastructural developments, enhancements to the trade facilitation environment were included in the project, and these included: (i) design preparation for new customs terminal; (ii) improvement of risk management framework and the system; (iii) concept design, requirement definition, and system design for port community system (PCS) and going forward, interface with the National Single Window (to be developed); and (iv) procurement of electronic cargo tracking system.

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61. The priority for roads in this corridor is to enhance connectivity between Colombo city and its main port, and with Trincomalee port (facing India) and with Kandy (tourist center). There are three APSI projects for this corridor with total cost of \$2.04 billion.

vii. Other Multi-modal Corridor Initiatives Providing Potential SASEC OP Projects

a. Enhancing Multi-modal Links between Port Gateways and Landlocked Bhutan, Nepal and India's northeast region

62. SASEC countries are taking efforts to improve multi-modal connectivity to achieve better and efficient trade among themselves, and to enhance connectivity to gateway ports in Bangladesh, Bhutan, Nepal and India's northeast region (NER).

63. India and Bangladesh have signed several agreements for enhancing rail links, inland and coastal waterways and multi-modal connectivity to facilitate easier movement of passengers and to reduce distance, time, and logistics cost for transport of goods. For instance, India and Bangladesh have signed a Standard Operating Procedure (SOP) in October 2019 to use Chattogram and Mongla Ports in Bangladesh for movement of goods to and from India's northeast region. An addendum to 'The Protocol on Inland Water Transit and Trade' (PIWTT)²⁴

²⁴ The Protocol on Inland Water Transit and Trade (PIWTT) between India and Bangladesh was signed in 1972. The protocol is an agreement between the two governments for the transportation of goods and keeping their

between India and Bangladesh has also been signed for the inclusion of Dhubri (India) and Pangaon (Bangladesh) as new Ports of Call and decisions taken to operationalize new routes. The two countries are exploring greater use of each other's seaports for transshipment of their respective export cargos.

64. India is exploring the increasing use of its waterways to transport cargo, as a cheaper means of transport. In a first-ever development in July 2019, a shipment was transported from Bhutan to Bangladesh, partly by road and then through the waterways of India to Bangladesh. To this effect, Standard Operating Procedures (SoP) for the Memorandum of Understanding (MoU) on use of Inland waterway for transportation of Bilateral Trade and Transit Cargoes was signed between Bangladesh and Bhutan on 13 April 2019.

65. India and Bangladesh are also pursuing (a) the development of operationally and commercially feasible short-sea shipping routes between the eastern Indian seaboard and Chattogram Port to address congestion and improve trade; and (b) the development of logistical hubs in NER that will provide maximum multi-modal connectivity possibilities to the rest of NER, between NER and Bangladesh and NER and Bhutan.

66. India and Nepal are pursuing the development of inland waterways for the movement of cargo within the framework of their bilateral trade and transit arrangements, which would provide additional access to maritime gateways for Nepal and effectively reduce dependence on land transit facilities. A new multi-modal terminal (MMT) built at Sahibganj in Jharkhand opened in September 2019 will develop better connectivity between Nepal, and Kolkata and Haldia ports, as well as through Bangladesh by the river-sea route. India also consented to grant access to Nepal to move cargo through Kolkata-Kalughat (inland water transport), Raxaul (road), Kolkata-Sahebganj, Biratnagar and Kolkata-Varanasi-Raxaul routes²⁵.

67. Nepal is pursuing an access to the ports on India's west coast at Mumbai and Kandla and to connect to the production centers of Delhi National Capital Region (NCR). Cargo can move from Kathmandu (Nepal) to Nautanwa (India) border and then to Delhi NCR and Mumbai following a road (Asian Highway 1) or combination of road and rail routes. An alternate route following Asian Highway 2 via Banbasa (India) border to Delhi by road and onward to the ports in India's west coast of Mumbai/Kandla by rail can also be developed for movement of Nepal cargo. During recent discussions between officials of India and Nepal, the latter reportedly is seeking port access to two additional Indian ports to facilitate its trade with other nations, namely Mundra in Gujarat on the west coast, and Dhamra in Odisha on the east coast. A concrete agreement between the two sides has yet to be reached.

68. Taking note of the developments in this area, the SASEC program will complement the efforts of the countries in integrated development of multi-modal routes for enhancing the logistics efficiency in trade and transit among the SASEC countries, and the development and implementation of facilitative regulatory framework and procedures.

b. Maritime connectivity

respective waterways navigable, while providing infrastructure facilities. In June 2015, during Prime Minister Modi's visit to Bangladesh, the Protocol was renewed to further strengthen bilateral ties between the two governments.

²⁵ This is part of SC 1: Nepal- Kolkata Trade Corridor

69. SASEC's intraregional trade is less than 5% of its total trade, with most of its trade taking place with distant markets. In recent years, SASEC has started to orient its strategies to improving connectivity with markets outside the region by focusing on maritime connectivity as the dominant mode of transport for international trade logistics. Ports in the Bay of Bengal, however, face several constraints, such as draft restrictions, capacity limitations, and poor performance; vessel-related conditions; and weaknesses in port interfaces (i.e., road, rail, inland waterways and coastal shipping links to ports). In terms of connectivity and availability of shipping services, the Bay of Bengal is primarily served by feeder vessels on account of draft restrictions that constrain the handling of larger vessels. The trend toward increased containerization of non-bulk trade will likely exacerbate these limitations in port capacities. Enhancing maritime connectivity will also serve as a means for improving economic linkages between SASEC and Southeast Asian countries.

70. SASEC cooperation in maritime transport will focus on common issues impacting on the subregion's ports such as port performance; the use of information and communications technology (ICT); the updating of legal and regulatory frameworks; inland logistics; and environmental sustainability. Maritime transport initiatives will involve²⁶:

- (i) Identification of critical port infrastructure and facilities required to help ports become more competitive in responding to the needs of major container shipping lines and improving port performance;
- (ii) establishment of port community systems that connect the ICT systems of different port actors into an integrated ICT platform, thereby reducing the need for individual electronic data entries, facilitating faster cargo clearances, and improving the planning of cargo handling operations;
- (iii) review of national laws and regulations to take into account changes in the maritime environment; and
- (iv) promotion of green technologies for port operations by developing an environmental management system for the greening of SASEC ports in the context of a rapidly changing commercial market environment, including capacity building and training on specific methodologies and tools towards developing green port status.

Table 1. Summary of APSI Projects for Multi-Modal Corridor Initiatives

Sector	No. of Projects/ Activities	Length (in Km)	Total Cost (\$ Million)
○ SC 1: Nepal- Kolkata Trade Corridor	4		1,153.00
▪ Roads	2	202.0	477.00
▪ Railways	1		400.00
▪ Airports	1		276.00
○ SC 2: The Bay of Bengal Highway	10		9,487.00
▪ Roads	6	143.0	1774.00

²⁶ With numerous ports, SC 1 (Bay of Bengal Highway) will benefit the most from enhancing maritime connectivity. SC 6 (Sri Lanka Port Highway) will also benefit immensely from SASEC maritime transport cooperation, which will help Sri Lanka address issues relating to port performance, use of ICT in port operation, and enhancing inland logistics.

Sector	No. of Projects/ Activities	Length (in Km)	Total Cost (\$ Million)
▪ Railways	6		5,474.00
▪ Ports	1		1,500.00
▪ ECD	2		739.00
○ SC 3: The India- ASEAN East West Corridor	9		3,187.40
▪ Roads	7	228.0	1,120.40
▪ Airports	3		2,067.00
▪ ECD	1		TBD
○ SC 4: Nepal- Bhutan- Bangladesh North South Corridor	9	1,044.6	6,065.00
▪ Roads	8	1,044.6	5,995.00
▪ Inland Water Transport	1		70.00
○ SC 5: North Bangladesh- India Connector	8	368.0	4,131.00
▪ Roads	8	368.0	4,131.00
○ SC 6: Sri Lanka Port Highway	3	171.0	2,040.00
▪ Roads	3	171.0	2,040.00
Total (Multi-Modal Corridor Initiatives)	46		24,202.40

Source: ADB

B. Sectoral Initiatives

71. Since the launch of the SASEC Vision in 2017, sectoral initiatives in energy and trade facilitation have achieved good progress, with proposed projects. The APSI, 2021-2023 recommends measures to further their advance (e.g., power trade, oil/ gas trade, multi-modal port links for landlocked countries). For some initiatives, studies have been undertaken to chart the way forward in their implementation (e.g., tourism), recognizing that the dynamism of the subregion offers immense opportunities for expanding cooperation and reap their synergistic benefits.

i. Energy

72. The discussion on progress and high priority initiatives in energy will proceed on the basis of promoting SASEC-wide network integration efforts in: (i) power trade, and (ii) oil/ gas cooperation.

Progress

73. **SASEC Energy Cooperation.** To meet the energy requirements of the subregion's growing economies, the SASEC Vision proposed flagship initiatives in two areas: (i) power trade development and (ii) cooperation in oil and gas.

74. **Power Trade.** The SASEC countries envision power trade to provide cheaper renewable power (mainly hydropower) from countries like Bhutan and Nepal, to power consuming countries like Bangladesh, India, and Sri Lanka. Power trade can also enable power swap arrangements to meet seasonal variations in power demand and supply. The SASEC power trade flagship initiative essentially comprises development of interconnections that will enable

cross-border evacuation of hydropower resources, allowing the countries to share the costs and benefits of huge hydropower and transmission investments, and helping them balance the needs of national markets, given differences in demand and supply patterns.

75. SASEC power exchange is currently taking place with India in bilateral trade arrangement individually with Bangladesh, Bhutan, Nepal, and Myanmar. India is a natural center for SASEC power exchange, given its central geographic location, large generation capacity and huge demand. India has released its revised Cross-Border Electricity Trade (CBET) guidelines in December 2018 that covers (i) tripartite trading of electricity through agreements for transmission corridor access (ii) trading through power exchanges after clearances from designated authorities, and (iii) easing of restrictions on ownership for export/import of power. Subsequently India issued the Central Electricity Regulatory Commission (CBET) Regulations last March 2019, which is also applicable to tripartite agreements under the bilateral CBET framework between India and its neighbors. This covers transmission planning, connectivity and access issues, system operation, tariffs, and payment mechanisms, among others. Hopefully these developments will help graduate SASEC power trade from largely bilateral to multi-country trade, eventually involving countries outside the subregion.

76. **Oil and Gas Cooperation.** Two of the identified flagship initiatives under the SASEC Vision involve trade in oil and gas, namely:²⁷ (i) Pipeline corridor between Bangladesh and India for crude oil imports and product supply; and (ii) Sri Lanka as LPG transshipment and storage hub. The first is premised on Bangladesh's growing demand for imported refined petroleum products, while the northeast region of India has planned refinery capacity expansion way in excess of its requirements by 2025. Bilateral discussions between Bangladesh and India have taken place regarding development of the SASEC Vision proposals for (i) the development of crude oil pipeline connectivity between Payra (Bangladesh) and refineries in Assam (India), and (ii) the development of petroleum product connectivity between the two countries.

77. The second is premised on Sri Lanka's strategic location, which may be leveraged to promote it as an LPG transshipment and logistics hub for the region. The proposed hub can not only cater to domestic demand, but also supply to other countries in the SASEC subregion where LPG demand is fast growing. A stakeholders' workshop in Sri Lanka held in December 2017, confirmed the economic rationale for the hub, and agreed on the proposed scope of related studies, such as (i) needed regulatory reforms in Sri Lanka to enable private sector investment in the LPG hub, and (ii) development of small-scale LNG.

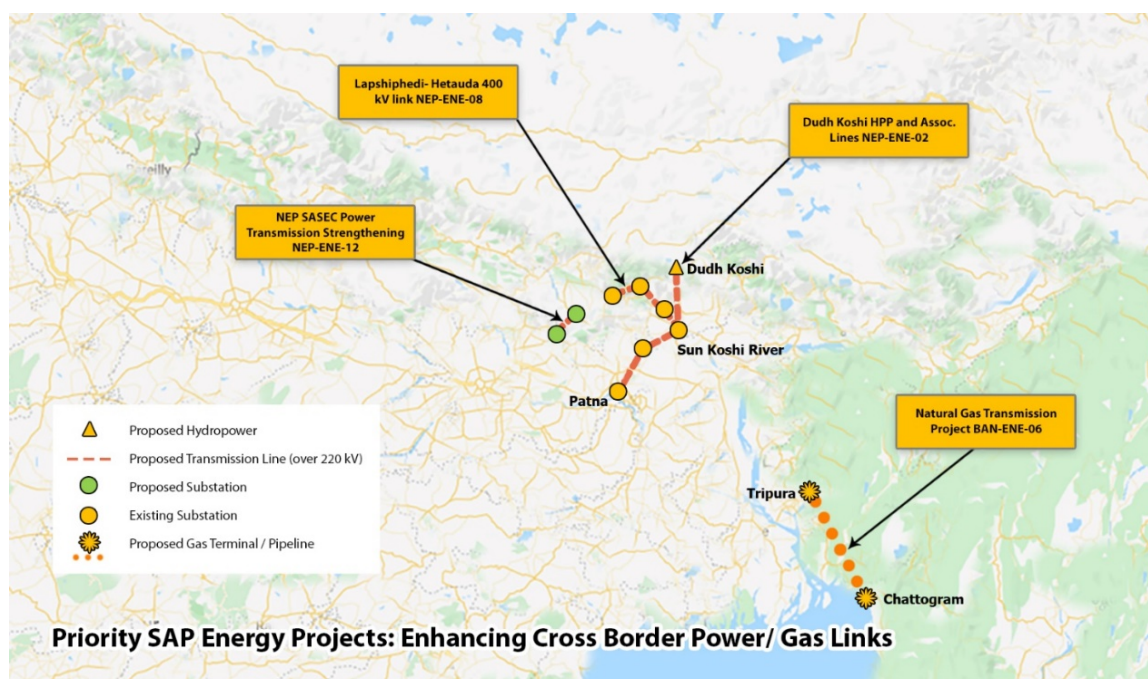
APSI, 2021-2023 Projects

78. A key hydropower project (DudhKoshi) will be developed with prospective ADB funding of \$550.0 million. Two transmission projects in Nepal costing \$598.20 million will strengthen the country's capacity to evacuate power from its hydropower corridor under development. The SASEC Vision has proposed oil pipeline corridors between Bangladesh and India for crude oil imports and petroleum product supply²⁸. There is also a proposed bilateral gas pipeline from India's east coast to Bangladesh. Another potential APSI, 2021-2023 project is the Bangladesh

²⁷ One of the key outputs of the ADB-supported SASEC energy regional technical assistance approved in September 2018, is support for regional gas value chain, through workshops and master plan development. Another TA output is knowledge sharing on advanced energy technologies which can include operations of LNG/LPG terminals and storage facilities, and renewable energy and its battery substation facilities.

²⁸ There is an existing pipeline that carries diesel from Assam to Siliguri to Parbatipur in Bangladesh.

Natural Gas Transmission project (with estimated ADB financing of \$202.40 million), which will address the gas shortfall in the southwest region and handle gas supply from imports and offshore discoveries. Oversight and coordination in sharing knowledge in regional power, oil/ gas trade and renewable energy and energy efficiency measures will be performed by the SASEC Cross-Border Power Trade Working Group (SPT-WG) and SASEC Regional Gas and Petroleum Working Group (RGP-WG). Technical assistance funding will be provided for the conduct of these WG activities. In late 2019, the SPT-WG reviewed the draft of the proposed intergovernmental SASEC Regional Power Trade Framework Agreement (RPTFA), to provide a broad framework for enhanced cooperation in power trade and interconnections.



Note: The boundaries, colors, denominations, and any other information shown on the map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.

Source: Asian Development Bank.

ii. Trade Facilitation

Progress

79. Since 2012, ADB has provided policy-based loans and grants totaling \$69 million for a regional (Bangladesh, Bhutan, Nepal) and a national (Nepal) trade facilitation programs. Guided by the SASEC Trade Facilitation Strategic Framework 2014–2018 (STFSF), and the Operational Priorities under the SASEC Operational Plan, trade facilitation program loans, grants, and technical assistance have been implemented. In May 2019, ADB approved ADF loan/ grant of \$10 million to develop Maldives' National Single Window (NSW), a single electronic platform to improve the speed and efficiency of cross-border control procedures employing the latest in high-tech systems. This section gives an overview of progress of TF activities in SASEC.

80. The STFSF was adopted by the SASEC countries in March 2014 and continues to demonstrate progress since 2017 across five priority areas: (i) Customs modernization and

harmonization, (ii) standards and conformity assessment, (iii) cross-border facilities improvement, (iv) through transport facilitation, and (v) institution and capacity building.

81. While trade facilitation has always focused on expediting cargo clearance, reducing transaction costs and efficient compliance management, the COVID pandemic has highlighted the need to clear cargo expeditiously with least physical interface and maintain efficient supply chains. Prioritizing trade facilitation reforms and evolving new initiatives that help sustain trade, particularly in critical goods, with due regard to public health and safety has become vital. Some of the sectoral initiatives to achieve the above objectives through trade facilitation are:

- (i) Helping the countries in modernizing their legislative frameworks and operating procedures in line with international conventions and standards (RKC of WCO, TFA of WTO).
- (ii) Enhancing the use of automation, digitization of business processes and connectivity among the stakeholders in the cross-border supply chain. This will include establishing National Single Window, as a single electronic platform for all regulatory filings and conducting processes for international cargo.
- (iii) Operationalizing effective risk management, post clearance audit and compliance management programs (such as Authorized Economic Operator programs) as means of facilitating trade, reducing intrusive processes, and improving tax administration.
- (iv) Rehabilitating Border Crossing Points by developing facilities and connectivity. This would be complemented by setting up of inland clearance facilities that would help in conducting the regulatory processes at inland hub locations that would house quality infrastructure and manpower, with the borders acting as efficient gateways (also included in the multi-modal corridor initiatives as appropriate).
- (v) Strengthening national conformance bodies, develop infrastructure and facilities in SPS-related and other border agencies and display the information for convenience of trade.
- (vi) Facilitating movement of cargo in transit to the land-locked regions and through multi-modal corridors leveraging modern technology to enhance both monitoring and facilitation.
- (vii) Promoting coordinated border management between and among cross border regulatory agencies and other stakeholders (behind the border and cross-border) and better Institutional coordination.
- (viii) Engendering sustainable trade facilitation and building capacity to design and implement new reforms through capacity development.

82. Trade Facilitation initiatives that could help facilitate trade through pandemics will be accelerated. These include initiatives to ease the tariff and non-tariff measures affecting the imports of medical equipment and related supplies, expedite shipments of medical supplies through suitable risk management criteria, ensure the flow of essential goods to landlocked countries (Nepal and Bhutan), and enhance coordination at the borders among government agencies through more flexible administrative arrangements and processes for clearing essential goods and supplies. To support these measures, trade facilitation initiatives could draw on existing multilateral instruments, such as those from the World Custom Organization (WCO) relating to COVID-19 emergency supplies indicative list, and guidelines on relief consignments.

APSI, 2021-2023 Projects

83. There are 15 high priority trade facilitation projects with a total cost of \$416.36 million that target systemic improvements in business processes, leveraging Information Communication Technologies (ICT); strengthening trade infrastructure and institutional coordination; and capacity building. They focus on trade and transport facilitation measures spread across land- and sea-based operations, border as well as inland facilities, improved logistics, and improvements in the operations of all key border agencies. International standards and best practices will form the basis of the reforms, promoting greater harmonization among SASEC countries

iii. Other Sectoral Initiatives Providing Potential SASEC OP Projects

a. Trade Facilitation Measures for e-commerce

84. E-commerce provides a significant opportunity for the economic growth and competitiveness of nations, developing new channels of trade, connecting businesses with consumers more efficiently and presenting new growth avenues to entrepreneurs. At the same time, it poses challenges to governments, in terms of trade facilitation, safety and security, society protection, and accurate and efficient collection of duties and taxes.

85. As part of the SASEC trade facilitation agenda, measures will be initiated to help micro-, small- and medium-sized enterprises (MSMEs) connect to global markets using modern platforms, such as e-commerce to sell their goods. This will be done by streamlining the legal framework, customs processes and documentation associated with e-commerce, use of ICT and leveraging the postal network and authorized courier services in the SASEC countries.

86. The present architecture in SASEC countries for exports through post requires the exporter to come to any of the specified Post Offices to file the documentation and hand over his/her consignment for shipment. However, this may require the exporter to travel long distance to reach the nearest specified Post Office for exporting an e-commerce shipment.

87. To help MSMEs overcome this constraint, a regulatory architecture may be devised to allow the exporters to deposit an e-commerce shipment at the nearest convenient Post Office. The initiative will potentially increase exports, particularly by MSMEs, who find it difficult to access wider markets, and integrate them into supply chains. It will also help gainful deployment of postal services.

88. Given its potential to promote inclusive growth in the subregion, the SASEC program will work to address common issues affecting cross-border e-commerce and modernize and advance cross-border e-commerce for MSMEs.

b. Coordinated Development of Border Infrastructure and Management

89. Land Customs Stations (LCSs) play a vital role in facilitating economic and social exchanges in the SASEC subregion, by acting as gateways to movement of goods and people. The efficiency of these gateways impacts the extent of trade and integration between countries. LCSs with vital trade facilities lacking can adversely affect the ease of trade and make it difficult for regulatory agencies to exercise effective controls. The development of border infrastructure is one of the pillars of the SASEC Trade Facilitation Strategic Framework.

90. LCSs belonging to neighboring countries generally operate as a pair, handling the same commodities. In such a scenario, a mismatch in development of facilities at the border causes delays in cargo clearance, adversely affecting the entire logistics chain. Similarly, poor road

conditions on one side of the border or inadequate 'last mile' approaches can cause congestion at the border impacting the functioning of both LCSs. This underscores the need for coordinated development of border infrastructure, right from the stage of establishment of LCSs and throughout their operation.

91. At present, many of the border crossing points in SASEC region are in poor condition, with vital trade facilities lacking. There is also the need for improved coordination as there are significant mismatches in capacity and connectivity.

92. SASEC will facilitate a coordinated approach for development of complementary and quality border infrastructure, making the cross-border trade in the region cheaper, faster and well regulated. This could evolve into joint customs controls, one stop border posts, and/or other similar modalities in future for better regulatory effectiveness and resource optimization. The institutional structures at the SASEC level as well as at bilateral level will be leveraged for coordination²⁹.

c. Multi-country tourism circuits

93. The SASEC Vision document launched in 2017 identified as one of its flagship initiatives, the promotion of SASEC as a tourist destination to tap into the industry's huge potential to contribute to inclusive and sustainable economic growth. The strategy underpinning the SASEC Tourism Initiative (STI) is to position SASEC as a tourist destination through joint development of tourism products, joint marketing, standardization of services and facilities, and seamless accessibility. The focus would be on theme-based tourist circuits—religious, ecotourism, and river and sea cruises— where interventions could be more targeted to specific destinations in two or more participating SASEC countries. From among these circuits, the Buddhist circuit has been identified to be a promising route³⁰, considering that Buddhism is the third largest religious group in Asia (11.9% of the region's population).

94. SASEC's key challenge would be to pursue an integrated development strategy for the development of multi-country circuits that are economically viable, environmentally and culturally sustainable, and socially inclusive that would catalyze economic growth and alleviate poverty in the subregion. The initial focus would be on Buddhist circuits based on destination connectivity as an organizing principle for planning infrastructure and facilities improvement, travel facilitation, marketing, heritage conservation and management and sustainable tourism practices. This spatial framework would indicate interlinked priority sites to be developed based on key criteria, such as levels of market demand, contribution to national and regional tourism growth, and poverty reduction. The framework can build on earlier work supported by ADB technical assistance, namely, the South Asiatourism development strategy (2004) and the

²⁹ ADB earlier supported a study on Coordinated Development of Border Infrastructure, covering nine Land Customs Stations (LCSs) pairings and looked into issues to be addressed in each case (e.g., the infrastructural, institutional, procedural, ICT, and others). The initial phase of the study looked into the coordination needs for establishing and operating land customs stations (LCSs) that function as pairs on both sides of a border. Of the nine border crossing pairs selected for this initial phase, four are along the India- Nepal border generally affecting SC 1 (e.g., Mahendranagar- Banbasa, Krishnanagar- Barhni, Jaleswar- Bithamore, Thadi- Laukaha). The first pair is along the prospective Nepal- Delhi- Mumbai spur of this corridor. The other border crossing pairs selected are in SC 2 (e.g., Akhaura- Agartala), SC 4 (e.g., Burimari- Changrabandha and Banglabandha- Fulbari) and SC 5, (e.g., Tamabil- Dawki).

³⁰ ADB. 2019. Study on the SASEC Vision Flagship Initiative: SASEC as a Tourist Destination. Unpublished Consultant's Report, p.90; ADB.2004. SASEC Tourism Development Plan. p 101

South Asia Tourism Circuit and Infrastructure Vision³¹ (2006), which provided the framework for the joint development of infrastructure along defined multi-country circuits, and a study on improving connectivity and destination management of cultural and natural resources in the South Asia subregion.

95. In addition, tourism strategies in a COVID-19 scenario should also introduce innovations in packaging tourism destinations (e.g. promoting inter-regional tourism, travel bubbles); developing new health-related products (e.g. medical tourism); travel facilitation (e.g. flexibility in airline routes and landing rights); managing tourist mobility taking into account social distancing and quarantine measures; and adopting common standards for health measures for tourism. There is also scope for using the SASEC platform in knowledge sharing and information exchanges on good practices of reopening tourism in particular locales.

Table 2. Summary of APSI Projects for Sectoral Initiatives

Sector/Area	No. of Projects/ Activities	Total Cost (\$ million)
Energy	9	3,110.60
Trade Facilitation	15	416.36
Grand Total	24	3,526.96

Source: ADB

C. New Initiatives in Response to the COVID-19 Crisis

96. The following are initiatives that also do not lend themselves to strict corridor-specific classification but are found to be complementary to the identified APSI, 2021-2023 projects, especially in light of the COVID-19 pandemic. These new initiatives could be further developed for inclusion in the SASEC OP.

i. Supply Chain Mapping and Analysis for Resiliency and Security

97. Supply chain mapping will help national governments address not only the disruptions caused by mobility restrictions under COVID-19, but also the long-term objective of making supply chains more resilient. Supply chain mapping will enhance the visibility of import sources and product markets to help inform both national and enterprise level decisions. Through the mapping exercise, SASEC countries can determine their dependence on supply chains in the region, or elsewhere outside.

98. At the level of the enterprise, supply chain maps could bring greater visibility of import sources and export destinations. This is essential for planning business strategy and product sourcing, not only in times of uncertainty, but also for enhancing cost efficiency and competitiveness. Supply chain maps can be beneficial especially for MSMEs in improving their knowledge of supply chain players beyond immediate buyers and sellers. The COVID-19 pandemic has revealed vulnerabilities in global supply chains with businesses realizing the dangers of over-relying on a single manufacturing hub.

³¹ As part of that Vision, ADB provided project loans³¹ to Bangladesh, India and Nepal in 2009 to improve infrastructure and public services in key tourism sites, including Buddhist circuits, and capacity building for sector agencies.

99. At the strategic level, supply chain maps could help governments identify the country's degree of dependence on specific supply/logistics chains for imports and exports. As the benefits of globalization comes into intense scrutiny in the aftermath of COVID-19, governments are now mulling whether supply chains should be shorter to become stronger, fostering local production with manufacturers moving to produce essential goods for particular regions, rather than regions shipping production overseas for global suppliers. This could imply changes in regulatory policy to limit or manage the degree of offshoring, especially for commodities essential to national security. This opens up further opportunities for regional cooperation that could trigger significant increases in intra-regional trade with its attendant implications on transport connectivity and trade facilitation.

100. Supply chain mapping can initially be undertaken for essential commodities related to COVID-19-related measures. This could be a basis for guiding procurement, and in easing border measures for essential commodities. For instance, tariffs and non-tariff measures affecting imports of essential medicines, medical equipment and related inputs could be relaxed to facilitate their cross-border movement. A further extension of the exercise is to evaluate whether the supply requirements for the identified goods can be met from within the sub-region, in case the goods are being imported by a SASEC country from outside the subregion, but the supply can be sourced from within the subregion. This would also require analysis of the barriers that are not hindering the supply chain from being operated from within the subregion and the development opportunities that could be tapped by making the supply chain intra-subregional.

ii. Leveraging digital technology under the “New Normal”

101. Under the world with COVID-19, it is necessary to prevent the spread of epidemics. For the purpose, it would be useful to know people's movement. Call detail records (CDRs) of mobile phones have a potential to generate up-to-date statistics of large population. It enables capturing dynamic changes in population distribution and mobility. CDR is a record generated at every use of mobile phone network by mobile phone subscribers. It indicates the timestamp and base station location of the network use and enables us to trace the footprint of mobile phone users. It has an advantage of availability (though subject to mobile phone operators' cooperation), high population coverage, and real-time update. At the same time, it suffers from varying time interval, not uniform spatial resolution, demographic attributes, and biased population representativeness. It is therefore necessary to develop a methodology to develop a readily available database addressing the problems. Such database would be a strong tool to visualize real-time movement of people such as origins and destination of people who made transboundary movement, including cross-border travels. The database will provide basic information used for transport demand analysis and origin and destination data for logistics analysis. For the purpose to control the disease, the database can trace people who passed hazard areas.

VI. Next Steps

102. The additional measures and new initiatives that have been identified in the APSI, 2021-2023 will be developed further through the required analytical work or studies in order to determine the scope of potential regional projects which the SASEC countries can endorse and agree to implement. ADB will provide technical assistance to support this process. The regional projects to be developed, once endorsed, will be included in the SASEC OP in the course of its

regular update, as financing for these projects are identified and secured. The projects will subsequently be included in the subsequent APSI.

103. Regular updates on the implementation status of projects in APSI, 2021-2023 will be reported to the SASEC Nodal Officials Meeting to keep track of progress and adjustments, and address implementation issues. The process will be coordinated by the SASEC Secretariat, with inputs from the relevant working groups. The SASEC Geographic Information System maps will serve as a complementary tool in monitoring the status of projects by providing a visual snapshot of interlinked projects in a given transport or energy network. In addition, the possibility of establishing a digital platform for updating the APSI will be explored where updated project information can be inputted directly, summarized and discussed. The SASEC Secretariat will take the lead in developing a results-monitoring framework to set targeted outcomes for projects or project clusters (i.e. as part of a corridor or network) and identify the indicators for measuring these outcomes.

Appendix 1: Priority Strategies, Projects and Activities in the Action Plan of SASEC Projects, 2021- 2023

Goals, Objectives and Strategies		Activities/ Projects	
A	Multi-Modal Corridor Initiatives: Accelerate implementation of transport corridors and their links to gateways, to unleash transformational synergies in trade and industry, and leverage anchor resources in corridor spaces to translate investments into wider development outcomes.		
	Road Transport: Enhancing road connectivity along major trade routes, through upgrading of key routes to Asian Highway Class 1 standards, upgrading links to primary routes and key borders and addressing “last mile” connectivity.		
	Railway: Improving connectivity through better rail connections between Bangladesh and India, improved connectivity between landlocked countries and NER of India, and enhanced connectivity between ports and their hinterlands.		
	Maritime Transport (ports): Developing deeper water ports for larger, deeper drafted vessels and reducing port dwell times by augmenting port operating efficiency and enhancing container handling equipment.		
	Inland Water Transport: Utilizing natural waterway connectivity between India and Bangladesh, Nepal, Bhutan and Myanmar, and promoting multi-modal integration of road, rail and waterway transport for more efficient value chain logistics.		
	Airports: Expanding capacity to handle both passenger and freight traffic, as a result of growth in tourism and global value chains.		
	Economic Corridor Development (ECD): Expand current efforts in linking in-country economic corridors beyond transport connectivity to focus on identifying economic potentials and links across industries and sectors and the critical interventions needed to enable markets to develop in these economic spaces.		
i. SASEC Road Corridor 1: Nepal- India Trade Corridor			
	Road Thrusts - Completing upgrades of road sections to AH Class 1 for enhanced internal connectivity within Nepal and India and to facilitate Nepal’s access to global markets.	Road Projects:	Est. Cost
		<u>Nepal:</u> Upgrading to AH Class 1 for routes where terrain allows, and for approaches to Nepal- India border.	
		- NEP-RD-01: Upgrading of Kathmandu- Naubise- Mugling road - World Bank approved the Nepal Strategic Road Connectivity and Trade Improvement Project (SRCTIP) in June 2020 for \$450 M; includes upgrading of 95 km Nagdhunga- Naubise- Mugling section.	257.00
		- NEP-RD-03: Upgrading of Pathlaiya- Hetauda- Narayanghat Road - To be covered in sections by project in ADB pipeline Second SASEC Highway Enhancement Project with COL funding of \$132.23million.	220.00
		<u>India:</u> Nepal- Kolkata spur- Completing upgrades to AH Class 1 for various sections and providing additional roads/ lanes to address congestion around Kolkata.	-
		<u>India:</u> Nepal- Delhi- Mumbai spur- Improving capacity of road sections linking Delhito three (3) identified entry points in Nepal, e.g., Sonauli, Nepalqunj and Mahendra Nagar (Bhimdatta).	-

Goals, Objectives and Strategies		Activities/ Projects	
Railway (SASEC Railway Corridor 1: Nepal- Kolkata Trade Corridor) Thrusts: - Increasing the corridor's capacity to handle additional freight train paths. - Enhancing Nepal's multi-modal connectivity to trade gateways.	Rail Projects:		
	Various investments by Indian Railways to improve operational efficiency of SRW-1.		
	NEP-RW-01: Kathmandu-Birgunj Railway - This will be complemented by the proposed East West electric railway line passing through major cities along the east-west corridor of Nepal. This is a national priority project with environmental impact assessment (EIA) for some sections completed and under approval process. - Construction has already begun in Bardibas-Nijgadh (70.0 km) section of this line; construction from Kakkarbhitta to Inaruwa (126.7 km) will begin fiscal year 2021.		400.00
AirportThrust: - Extending the runway to accommodate larger aircraft; providing modern equipment to improve safety record; upgrading the terminal capacity.	- NEP-AP-01: SASEC Airport Capacity Enhancement Project - To be covered by ADB pipeline project for \$150 million COL funding. - The proposed Nijgadh International Airport (Bara district, southern part of Nepal), which will be Nepal's largest airport, is a national priority project. This will link with the ongoing construction of fast track road, connecting Kathmandu to the southern Terai region in the shortest distance.		276.00
	- Subtotal SC 1		1,153.00
ii. SASEC Road Corridor 2: Bay of Bengal Highway			
Road Thrusts include: - Completing upgrades of road sections for better internal connectivity within the corridor; - Upgrading road sections (e.g., road widening, tollways) to address congestion around main gateways (e.g., Chennai, Kolkata, Chattogram); and - Developing new roads to spur	Road Projects:		Est. Cost
	India: Upgrading roads (6-laning) around Chennai and around Kolkata to address congestion problems; upgrade road links between Kolkata and the Petrapole- Benapole crossing.		
	- IND-RD-18: Improvement of Barasat- Bongaon road connecting Kolkata to Bangladesh border		130.00
	- New projects for enhanced connectivity between Bangladesh and NER India, and between key points in NER India ³² - Shillong-Badarpur Section of NH06 (\$733.00 M) - Churaibari-Agartala Section of NH-08(\$633.00 M)		1,394.00

³² The 3 projects will provide further extension of the Akhaura-Agartala spur of SASEC Corridor-2 from Agartala to Shillong in Meghalaya (4 laning of 220 Kms of NH-06 sections in Assam and Meghalaya, improvement of 14 kms of 2-lane section of NH-37 in Assam and 4 laning of 190 Kms of NH-08 in Tripura). Project-3 forms part of SASEC Corridor-5 spur to Silchar. The extension will establish additional connectivity to Bangladesh through the Sutarkandi land port and Sylhet-Sheola-Karimganj-Silchar spur of SASEC Corridor-5 through Sylhet in Bangladesh on to Dhaka.

	Goals, Objectives and Strategies	Activities/ Projects	
	traffic and new development activities.	<ul style="list-style-type: none"> - Karimganj-Sutrakhandi Section of NH37 (\$28.00 M) Bangladesh: Developing alternate Dhaka- Chattogram road to address congestion in this route; upgrade the Chattogram- Cox's Bazar route; developing spur roads (Akhaura- Agartala and Bariarhat- Ramgarh) to enhance NER India's access to Chattogram port. - BAN-RD-10: Rehabilitation of ofBariarhat- Heako- Ramgarh roads - BAN-RD-11: Chattogram Port Access Road Improvement - To be covered by project in ADB pipeline BAN: SASEC Chattogram Port Link Road Project for \$150 million 	<ul style="list-style-type: none"> 100.00 150.00
	Railway (SASEC Railway Corridor 2): India- Bangladesh Rail Corridor Thrusts: <ul style="list-style-type: none"> - Increasing capacity of the railway network and enhancing ability to handle broad gauge freight trains. 	Rail Projects Bangladesh: Undertaking double tracking/ dual gauging of certain sections of the rail network and constructing additional rail lines/ rail bridge to meet traffic demand. <ul style="list-style-type: none"> - BAN-RW-01: Double Tracking Ishwardi- Bangabandhu Bridge section - BAN-RW-02: Construction of a 2nd Bangabandhu Bridge - BAN-RW-07: Conversion of existing meter gauge double line to dual gauge between Tongi and Bhairab (\$530 M) - BAN-RW-09: Conversion of meter gauge double line to dual gauge between Bhairab Bazar and Akhaura and rebuilding of the existing Bhairab and Titas old bridge (\$270 M) - To be covered by ADB pipeline project- SASEC Tongi- Akhaura Dual Gauge Project (for \$200 million) - BAN-RW-11: Conversion of existing meter gauge double line to dual gauge between Laksam and Chattogram - To be covered by ADB pipeline project SASEC Laksam- Chattogram Dual Gauge project for \$200 million - BAN-RW-13: Construction of second rail- road bridge on Karnapuli river - BAN: SASEC Chittagong- Cox's Bazar Railway Project Phase 1 (tranche 3)- ADB pipeline project for \$500 million (OCR)- This is an unfunded part of ongoing BAN-RW-14 Chattogram- Cox's Bazar- Gundum Rail Line Construction, which is from Chattogram to Dohazari 	<ul style="list-style-type: none"> 1,701.00 1,173.00 800.00 600.00 700.00 500.00
	Port Thrusts: <ul style="list-style-type: none"> - Developing additional capacity in 	<ul style="list-style-type: none"> - Projects 	Est. Cost

Goals, Objectives and Strategies		Activities/ Projects	
	the main port (Chattogram) and developing new ports to: handle deeper drafted vessels and bulk/ container cargo; and serve the hinterland in the western part of the country (Mongla).	- BAN-PT-04: Matabari Port Project	1,500.00
	India East Coast Economic Corridor Program ECD Thrusts:	Project	Est. Cost
	- Supporting policy reforms and institutional development at state level to boost industry and economic activities in defined geographic spaces.	- IND-ECD-01: IND: Visakhapatnam- Chennai Industrial Corridor Development Program Tranche 2 (ADB pipeline with funding of \$255 million)	255.00
	- Developing high-quality infrastructure to boost industry growth and competitiveness of identified corridor areas.	- IND-ECD-02: IND: Tamil- Nadu Industrial Connectivity Project (ADB pipeline with funding of \$484 million)	484.00
		- Subtotal SC 2	9,487.00
iii. SASEC Road Corridor 3: India- ASEAN East West Corridor			
	Road Thrusts:	Projects:	Est. Cost
	- Enhancing Bhutan's links with Indian ports for third country trade; and	India: Upgrading road links between Kolkata and the Petrapole- Benapole crossing; upgrading route from "Chicken Neck" area to Bhutan and NER India (Ghoshpukur- Salsalabari India); enhancing connectivity between key points of NER India, and on toward the border of India with Myanmar.	
	- Improving connectivity between India and Myanmar (and eventually Thailand) to boost land - based trade between SASEC and Southeast Asia.	- IND-RD-35: Assam- Nagaland connectivity 2	56.00
		- IND-RD-36: Improvement to Kohima- Mao road section	64.00
		- IND-RD-37: Improvement to Mao- Imphal road section	189.00
		- IND-RD-39: Construction of Moreh Bypass	4.40
		- IND-RD-35,36, and 37 may be funded by GOI. - For IND: SASEC Road Transport Corridor Project (in ADB pipeline for \$300 M funding)- New projects are likely to be posed to ADB for financing in this next phase of SASEC Road Connectivity Program.	

	Goals, Objectives and Strategies	Activities/ Projects	
		New project to develop a spur or feeder line to SASEC Corridors 3 & 5 from Guwahati: - Krishnai-Guwahati Section of NH17 and Guwahati to Jorabat Section of NH27(\$467.00 M)	467.00
		Myanmar: Enhancing capacity of heavily trafficked Mandalay- Yangon route, including access to Thilawa port; upgrading road from Bago to the border with Thailand at Myawaddy ³³	
		- MYA-RD-05: Construction of new bridge across Bago river	289.00
		- MYA-RD-09: Upgrading of Thaton- Eindu road	51.00
	Airport Bhutan Thrusts: Widening airport runway and building parallel runway for more efficient use during limited operating hours; improving the terminal building; building a dedicated cargo facility. Myanmar Thrust: Building a greenfield airport (in Bago) to address the overcapacity operation at Yangon Airport.	- Project	Est. Cost
		- BHU-AP-01: Upgrading Paro Airport: a. Runway widening - Construction of modern cargo terminal	55.00
		- BHU-AP-03: Expansion of Gelephu Airport - To be covered by ADB pipeline project BHU SASEC Air Connectivity Project (Gelephu) for ADB COL funding of \$30 million	200.00
		- MYA-AP-02: Hanthawaddy International Airport	1,812.00
	India Northeast Region (NER) Development Program ECD Thrust: - Developing overall multi-modal connectivity between Indian NER with the rest of India, Bangladesh, and Myanmar using multi-sector and multi-agency approaches.	- Project	Est. Cost
		- IND-ECD-03: Feasibility Study for Developing an Industrial Corridor in the Northeast Region of India - This corridor will consist of a core transport network, which will act as the spine that will be complemented by industrial and urban clusters and energy network.	TBD
		- Subtotal SC 3	3,187.40
iv. SASEC Road Corridor 4: Nepal- Bhutan- Bangladesh North South Corridor			

³³ Ongoing/ planned road projects to develop Tamu- Kalewa- Yargyi Road and bridges in Myanmar on the IMT Trilateral Highway will be added to the SASEC OP.

Goals, Objectives and Strategies		Activities/ Projects	
<p>Road Thrust:</p> <ul style="list-style-type: none"> - Enhancing connectivity of Bhutan and Nepal with Bangladesh, and facilitating these landlocked countries' access to Bangladeshi ports for trade with third parties. 	Projects:		
	<u>Nepal</u> : Improving internal connectivity to the eastern border with India and Bangladesh through upgrading of existing roads or development of new roads.		
	- NEP-RD-07: Upgrading of Kamala- Dhalkebar section		50.00
	- The World Bank's SCTIP (approved in June 2020 for \$450 M) covers upgrading of 130 km. Kamala- Dhalkebar- Pathlaiya section.		
	- NEP-RD-09: Upgrading of Kakarvitta- Laukahi section		250.00
	- NEP-RD-10: Upgrading of national highway between Mugling and Pokhara		175.00
	- NEP-RD-09 and NEP-RD-10 to be covered in sections by project in ADB pipeline SASEC Highway Enhancement Project (with COL funding of \$152.23 M)		
	<u>Bangladesh</u> : Upgrading northern links from border with India (near Nepal) to Rangpur and upgrading links from Bogra to southern ports (e.g. Mongla and Payra), both for boosting trade traffic.		
	- BAN-RD-15: Improvement of Rangpur- Banglabandha road		1,500.00
	- BAN-RD-16: Improvement of Burimari- Rangpur road		1,450.00
	- BAN-RD-15 and 16 will be covered in sections by the following projects in the ADB pipeline: <ul style="list-style-type: none"> o BAN: SASEC Dhaka- Northwest Corridor Road Project Phase 2 (tranche 3) for \$330 million o BAN: SASEC Dhaka Northwest Corridor Road Project Phase 3 (tranche 1) for \$400 million 		
	- BAN-RD-21: Improvement of Hatikamrul- Bonpara- Jhenaida road sections		1,000.00
	- BAN-RD-22: Upgrading of Jhenaida- Jessore- Khulna road		270.00
	- BAN-RD-25: Bhanga- Barisal- Kuakala with connection to Payra port		1,300.00
	- The World Bank approved the Western Economic Corridor and Regional Enhancement Program Phase I in June 2020 for \$500 M covering 48 km. Jashore- Jhenaidah section (BAN-RD-22); the Asian Infrastructure Investment Bank (AIIB) will finance the 57 km. Jhenaidah- Hatikumrul section for \$330 M (BAN-RD-21).		
Inland Water Transport	Project		Est. Cost
India IWTThrust:			

Goals, Objectives and Strategies		Activities/ Projects	
	- Promoting sustainability of IWT infrastructure, reduce overall logistics cost and promote cost efficiency, thereby achieving unrealized trade potential, promoting greener mode of transport and boosting economic development of hinterlands (e.g., Northeastern Region of India and its neighbors).	IND-IWT-01: Eastern Waterway Grid Connectivity (World Bank funding)	70.00
		Subtotal SC 4	6,065.00
v. SASEC Road Corridor 5: North Bangladesh- India Connector			
	Road thrusts:	Projects	Est. Cost
	- Enhancing connectivity of Dhaka with Bangladeshi borders with the NER of India in order to address congestion issues and to spur additional trade traffic.	<u>Bangladesh</u> : Upgrading roads connecting to the border with NER India near Tamabil, Bangladesh.	
		- BAN-RD-26: Upgrading of Dhaka–Sylhet Highway - Included in ADB pipeline as SASEC Dhaka- Sylhet Corridor Road project Phase 1 tranche 1 for \$400 million and tranche 2 for \$500 million.	1,349.00
		- BAN-RD-27: Improvement of Sylhet- Tamabil road	435.00
		<u>India</u> : Upgrading roads/ bridge connecting to the border with Bangladesh near Dawki.	
		- IND-RD-44: Upgrading of Dawki to Shillong road including rehabilitation of Dawki bridge at the border (JICA funding)	186.00
		- New projects for enhanced connectivity between Bangladesh and NER India, and between key points in NER India - Shillong-Badarpur Section of NH06 (\$733.00 M) - Churaibari-Agartala Section of NH-08(\$633.00 M) - Karimganj-Sutrakhandi Section of NH37 (\$28.00 M)	1,394.00
		New project to develop a spur or feeder line to SASEC Corridors 3 & 5 from Guwahati: - Krishnai-Guwahati Section of NH17 and Guwahati to Jorabat Section of NH27(\$467.00 M)	467.00

Goals, Objectives and Strategies		Activities/ Projects	
		To provide additional India- Bangladesh connectivity. - Tura Dalu section of NH217 ³⁴	300.00
		Subtotal SC 5	4,131.00
vi. SASEC Road Corridor 6: Sri Lanka Port Highway			
A.1.6	Road Thrust:	Projects	Est. Cost
	- Enhancing connectivity between Sri Lanka's main port in Colombo and its main port facing India (Trincomalee), and its important tourist center (Kandy).	Sri Lanka: Upgrading roads from Colombo to its central (e.g., Dambulla and Kandy) and northern areas (e.g. Trincomalee); providing additional roads to separate Colombo city traffic and its port traffic.	
		- SL-RD-01: Construction of Central Expressway Stage 1	1,000.00
		- SL-RD-03: Construction of Central Expressway Stage 3	500.00
		- SL-RD-05: Construction of road sections from Dambulla to Trincomalee	540.00
		Subtotal SC 6	2,040.00
		GRAND TOTAL Multi-Modal Corridors (46 projects)	24,202.40³⁵
B	Cross- Cutting Initiatives		
	i. Energy: Focus on opportunities to realize more integrated energy markets in power, oil and gas, and clean energy technology to ensure adequate energy supply, diversify energy sources, enhance energy security and promote clean energy practices for climate change mitigation		
	Promoting cross- border power trade between SASEC countries (Energy)		
	Hydropower Generation Priority thrust	Projects	Est. Cost
	Harnessing unused regional indigenous hydropower potential which will bring the subregion to a lower carbon development path.	- NEP-EN-02: DudhKoshi HPP 300 MW To be covered by ADB pipeline project "DudhKoshi Hydropower Project" for \$530 million ADB funding (\$350 M OCR, \$180 M COL)	2,200.00
		Subtotal Hydropower (1 project)	2,200.00
	Cross-Border Transmission Priority thrust	Projects	Est. Cost
	Improving energy trade infrastructure by developing cross-border	- NEP-EN-12: SASEC Power Transmission and Distribution System Strengthening Project The project, in ADB firm pipeline for COL financing of \$200 M, will upgrade 220/132 kilovolt (kV) substations to 400/220/132 kV substations	200.00

³⁴ Four laning of 90 Kms of NH-217 from Tura to Dalu (near Bangladesh border) in Meghalaya.

³⁵ Total for the six SASEC corridors removes double counting of three India projects appearing in both SC 2 and SC 5, and one project in both SC 3 and SC 5.

Goals, Objectives and Strategies		Activities/ Projects	
	interconnections leading to enhanced regional power trade which balances the needs of individual national grids. This will in turn lead to cleaner energy, more diverse power supply sources and improved supply security and affordability.	to strengthen transmission lines for evacuation of hydropower outputs to the main load center, Kathmandu, and other load centers, while enabling trade of excess power with neighboring countries.	
		- NEP-EN-08: Lapshiedi- Hetauda 400 kV Transmission Line For building transmission line and associated substation between Lapshiedi and Hetauda. For financing by the Millennium Challenge Corporation (MCC).	398.20
		Subtotal Interconnections (2 projects)	598.20
Promoting trade in oil and gas between SASEC countries (Energy)			
	Cooperation in Gas Priority thrusts - Developing energy trade infrastructure, enabling more efficient handling of gas resources. - Developing Sri Lanka as LPG/ LNG transshipment and logistics hub of the subregion (without prejudice to setting up smaller scale LPG/ LNG logistics hubs in other SASEC countries).	Projects	Est. Cost
		- BAN-EN-06: Natural Gas Transmission Project (to address gas shortfall in Southwest region, and accommodate gas supply from imports or potential offshore discoveries). - For possible inclusion in ADB's pipeline for Bangladesh as SASEC Gas Transmission and National Grid Expansion Project (Formerly LNG and Gas Transmission Pipeline).	202.40
		- Subtotal Oil and Gas (1 project)	202.40
Cooperation in Renewable Energy and Energy Efficiency Promotion			
	Cooperation in Renewable Energy Development Priority thrust - Cooperating in the development of renewable energy resources abundant in the subregion (e.g., solar, wind, small-scale hydropower). - Supporting initiatives to develop renewable energy on a commercial scale in SASEC.	Project	Est. Cost
		Sharing and transferring knowledge on suitable renewable energy development practices and technology through regional technical assistance.	TBD
		MLD: Greater Male Energy Sector Project included in ADB pipeline with ADB funding of \$49.46 M (\$26.12 M OCR, \$23.34 M COL).	110.00
	Cooperation in Energy Efficiency Promotion Priority thrust - Cooperating in the propagation of energy efficiency measures in	Project	Est. Cost
		Sharing and transferring knowledge on suitable energy conservation and savings policies through regional technical assistance. Includes the following activities:	TBD

Goals, Objectives and Strategies		Activities/ Projects	
	SASEC	<ul style="list-style-type: none"> - Analysis of industry energy audits, methods for enhancement - Study of energy labelling practices and effectiveness - Study of operations of energy service companies, growth prospects. 	
		Subtotal RE and EE (3 projects)	110.00
	Facilitate bilateral and regional coordination mechanisms and knowledge sharing such as technology transfer toward the regional power and oil/ gas trading market		
	SASEC Cross-Border Power Trade Working Group (SPT-WG) Priority thrust	Project	Est. Cost
	<ul style="list-style-type: none"> - Supporting regional institutional mechanism to promote regional power interconnection and trade, and development of the regional power market. 	Overseeing SASEC efforts at promoting regional power trade through regional technical assistance covering: identification/ updating of potential power projects; overseeing priority studies (e.g., economic/ financial FS, commercial/ institutional aspects of trade, etc.); and sharing knowledge on power trade practices and technologies.	TBD
	SASEC Regional Gas and Petroleum Working Group (RGP-WG) Priority thrust	Project	Est. Cost
	<ul style="list-style-type: none"> - Supporting regional institutional mechanism to promote oil and gas logistics in the subregion, to identify prospects for oil and gas cooperation and to promote viable activities. 	Overseeing efforts at promoting SASEC oil and gas logistics through regional technical assistance covering: review of prospects for oil and gas cooperation; and sharing knowledge on regulatory/ institutional frameworks, other regions' approaches and practices, and technological advances in the sector.	TBD
		Subtotal Coordination Mechanisms (2 projects/ activities)	TBD
		TOTAL ENERGY (9 projects/ activities)	3,110.60
	ii. Trade Facilitation: Broaden the scope of transport and trade facilitation measures and logistics development to synchronize with infrastructure investments across intermodal transport routes based on geographic specificity for more efficient and seamless flow of trade.		
	Helping the countries in modernizing their legislative frameworks and operating procedures in line with international conventions and standards		
	Helping the countries in modernizing their legislative frameworks and operating procedures in line with international conventions and	Projects	Est. Cost
		<ul style="list-style-type: none"> - Customs Reform Modernization for Trade Facilitation in Bangladesh (policy-based loan to align customs/ regulatory framework with international standards and making cargo clearance processes more 	48.00

	standards (such as Revised Kyoto Convention of WCO, Trade Facilitation Agreement of WTO)	efficient)	
		- Business re-engineering of trade documentation at select BCPs in Bangladesh	1.00
	Operationalize effective risk management, post clearance audit and compliance management programs (such as Authorized Economic Operator programs) as means of facilitating trade, reducing intrusive processes, and improving tax administration	- Implementing Post Clearance Audit (Bangladesh, Bhutan, Sri Lanka)	1.00
		- Introduce compliance management programs (Bhutan, Maldives, Sri Lanka)	1.00
		- Subtotal Modern legal framework and procedures (4 projects)	51.00
	Automation: Promote automation in border agencies and facilitate the development national single windows (NSW).		
	Enhance the use of automation, digitization of business processes and connectivity among the stakeholders in the cross-border supply chain	Project	Est. Cost
		- SASEC Trade Facilitation National Single Window (NSW) project IN Bhutan	14.40
		- To be covered by ADB pipeline project BHU NSW/ SASEC Customs Modernization and Trade Facilitation Program for COL funding of \$15 million.	
		- Subtotal Automation (1 project)	14.40
	Standards and conformance: Strengthen national conformance bodies and develop infrastructure and facilities in SPS-related and other border agencies.		
	Maldives Priority thrust	Project	Est. Cost
	- Establishing mechanism to ensure the safety and quality of products before these reach final consumers.	- Strengthen national quality infrastructure	16.96
		- Subtotal Standards (1 project)	16.96
	Develop and implement transport facilitation arrangements across SASEC corridors		

	Transport Facilitation Priority thrust	Activities	Est. Cost
	<ul style="list-style-type: none">- Promoting efficient transnational movement of vehicles, goods and people across multi-modal and multi-country corridors, in order to realize industry- infrastructure synergies advocated by the SASEC Vision, and utilizing investments made in the transport sector.	<ul style="list-style-type: none">- Using Electronic Cargo Tracking System (ECTS) for cargo under transit and cargo moving across multi-modal corridors:<ul style="list-style-type: none">o Bangladesh transit: use of Chattogram and Mongla ports for movement of goods to and from India; use of gateways in Bangladesh for 3rd country exports of India and use of multi-modal routes for trade of Nepal and Bhutan with third countries through India and Bangladesh.	1.00
		<ul style="list-style-type: none">o Exploring other potential ECTS applications in Nepal, Sri Lanka and Maldives.	0.50
		<ul style="list-style-type: none">- Pursuing SASEC Cross-Border Trade Facilitation Routes Initiative: Undertaking initial phase to study Kolkata- Dhaka route involving three border crossing point (BCP) pairs.	1.00
		<ul style="list-style-type: none">- Subtotal Transport Facilitation (3 Activities)	2.50
Infrastructure: Develop trade- related infrastructure in SASEC ports, land border crossings, and major trade centers.			
	Bangladesh Priority thrust:	Projects	Est. Cost
	<ul style="list-style-type: none">- Rehabilitating BCPs by developing facilities and connectivity (road and rail).	<ul style="list-style-type: none">- Development of infrastructure at land customs stations (LCSs)- To be covered by BAN SASEC Integrated Trade Facilitation Sector Development Program (ADB pipeline project with \$250 million funding; \$100 M OCR, \$150 M COL)	150.00
		<ul style="list-style-type: none">- Development of Inland Container Depot (ICD) in Tongi and Joydevpur- The project Development of Inland Container Depot (\$100.00 million OCR) is being developed for possible inclusion in ADB pipeline.	100.00
	India Priority thrust	Project	Est. Cost

	- Developing integrated check posts (ICPs) at selected land borders for more efficient trade flow.	- IND-TF-01: Development of ICPs at selected land borders with Bangladesh, Bhutan and Nepal	70.00
	Nepal Priority thrust:	Project	Est. Cost
	- Developing multi-modal access (e.g., rail) of inland container depots (ICDs).	- NEP-TF-02: Development of Inland Container Depot in Krishnanagar	9.00
		- Subtotal TF Infrastructure (4 projects)	329.00
Capacity building: Build capacity and enhance cooperation and coordination mechanisms among stakeholders in trade facilitation.			
	Regional (SASEC) Priority thrust:	Projects	Est. Cost
	- Continuing support to capacity building initiatives being reported to SASEC Customs Subgroup (SCS) and Transport and Trade Facilitation Working Group (TFTWG).	- Bangladesh- Building Capacity in TF	1.00*
	- Promoting development partnerships in capacity building in Customs.	- India- Building awareness of global standards and best practices in trade facilitation	0.50
		Myanmar- Building capacity and awareness in Trade Facilitation	0.50*
		- Nepal: Building capacity and awareness in TF	2.00
		* Projects and cost estimates are already reflected in item B.1 Subtotal Capacity Building (4 projects)	4.00
Coordinated border management			
	Coordinated border management between and among cross border regulatory agencies and other stakeholders (behind the border and cross-border) and better Institutional coordination	Improving border management through better inter-agency coordination and cross-border coordination, progressing to better resource utilization, and sharing and more efficient flow of trade	2.00
		Subtotal Coordinated Border Management (1 project)	2.00
		TOTAL TRADE FACILITATION (15 projects)	416.36
		GRAND TOTAL Sectoral Initiatives (24 projects)	3,526.96

