

ACTION PLAN FOR SASEC INITIATIVES 2025–2027

DECEMBER 2025

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ABBREVIATIONS

ADB	Asian Development Bank
APSI	Action Plan for SASEC Initiatives
ASEAN	Association of Southeast Asian Nations
BBIN	Bangladesh, Bhutan, India, and Nepal
BBIN MVA	Bangladesh–Bhutan–India–Nepal Motor Vehicle Agreement
BGL	broad gauge line
BIWTA	Bangladesh Inland Water Transport Authority
CAREC	Central Asia Regional Economic Cooperation
CNS/ATM	communication, navigation, and surveillance/air traffic management
COVID-19	coronavirus disease
CTGE	comprehensive trade gateway ecosystem
ECD	economic corridor development
ECTS	electronic cargo tracking system
EWG	Energy Working Group
FEA	functional economic area
GIS	geographic information system
GMS	Greater Mekong Subregion
GSM	Global System for Mobile Communications
HDC	Haldia Dock Complex
HFTC	Highly Facilitated Trade Corridor
HPP	hydropower project
IBP	Indo-Bangladesh Protocol
ICP	integrated check post
ICT	inland container terminal
JICA	Japan International Cooperation Agency
KDS	Kolkata Dock System
LCS	land customs station
NH	National Highway
NSDIS	National Spatial Data Infrastructure and Systems
NSW	national single window
SASEC	South Asia Subregional Economic Cooperation
SCS	SASEC Customs Subgroup

SDP	Sector Development Program
SMILE	Strengthening Multimodal Integrated Logistics Ecosystem
SOM	Senior Officials' Meeting
SPS	sanitary and phytosanitary measures
SVCs	supply and value chains
TA	technical assistance
TBT	technical barriers to trade
TFA	Trade Facilitation Agreement

I. INTRODUCTION

1. Since 2001, the South Asia Subregional Economic Cooperation (SASEC) initiative has brought together Bangladesh, Bhutan, India, Nepal (BBIN), Sri Lanka, Maldives, and Myanmar in a collaborative partnership focused on knowledge work, knowledge sharing and investment projects.¹ The initiative aims to promote regional prosperity, expand economic opportunities, and improve the quality of life of people across the subregion. The SASEC program has now entered a new phase of cooperation, marked by the strengthening of its institutional framework, including the relocation of the SASEC Secretariat by the Asian Development Bank (ADB) to the region and its operationalization from ADB's India Resident Mission.

2. In 2016, the SASEC countries adopted the [SASEC Operational Plan 2016–2025](#),² marking the program's first comprehensive, long-term strategy to expand regionally-focused investments. The plan initially focused on (i) upgrading and expanding multimodal transport connectivity to address critical trade route bottlenecks, (ii) facilitating trade to complement multimodal transport networks, (iii) enhancing electricity trade to expand energy supply and secure power reliability, and (iv) promoting synergies between economic corridors in SASEC countries and beyond and optimizing their development impacts through improved cross-border links.

3. In April 2017, the SASEC finance ministers, at their meeting in New Delhi, India, launched the SASEC Vision document, *SASEC: Powering Asia in the 21st Century*.³ The Vision set the goal of positioning the subregion as a key driver of Asia's growth by 2025. Drawing on the subregion's strong economic performance, abundant natural resources, and rapidly evolving infrastructure, SASEC countries identified critical levers to sustain both the pace and quality of growth in a manner that is environmentally sustainable and socially inclusive over the long term. Transport, trade facilitation, energy, and economic corridor development (ECD) were identified as the core operational priorities of the SASEC program. The SASEC Vision focuses on (i) leveraging natural resource-based industries by tapping latent industrial demand within the subregion, (ii) promoting industry-to-industry linkages to develop and strengthen regional value chains, and (iii) expanding trade and commerce through improved access to regional and global markets. To realize these synergies, flagship initiatives—such as promoting cross-border power trade and joint tourism development—were proposed.

4. Myanmar formalized its participation in the SASEC program in 2017, after the SASEC Vision document had already been developed. Consequently, a dedicated study was undertaken to identify opportunities for integrating Myanmar into the SASEC Vision. The study highlighted significant potential in: (i) trade in rice, pulses and beans, fisheries, and textiles and garments; (ii) energy trade; (iii) digital connectivity; (iv) tourism promotion; and (v) the strengthening of coastal shipping linkages.

5. The [SASEC Operational Plan 2016–2025 Update](#) was completed in 2019 to better align with the SASEC Vision and to provide a more comprehensive overview of the program's position across key sectors of cooperation.⁴ The update focused in particular on (i) the roles of existing and planned projects in developing transport and energy networks and identifying remaining project gaps; (ii) the status of financing from governments, ADB, and other development partners; and (iii) the level of project preparedness.

¹ Bangladesh, Bhutan, India, and Nepal are the founding countries of the SASEC program (since 2001). Sri Lanka and Maldives joined SASEC in 2014 and Myanmar joined in 2017.

² Asian Development Bank (ADB). 2016. *South Asia Subregional Economic Cooperation Operational Plan 2016–2025*. Manila. <https://www.adb.org/sites/default/files/institutional-document/193351/sasec-operational-plan2016-2025.pdf>.

³ ADB. 2017. *SASEC: Powering Asia in the 21st Century*. Manila. <https://sasec.asia/uploads/publications/sasec-vision.pdf>.

⁴ ADB. 2020. *South Asia Subregional Economic Cooperation Operational Plan 2016–2025 Update*. Manila. <https://www.adb.org/sites/default/files/institutional-document/551061/sasec-operational-plan-2016-2025-update.pdf>.

6. **Evolution of the Action Plan for SASEC Initiatives.** The Action Plan for SASEC Initiatives (APSI) 2021–2023 was developed to identify key initiatives with cross-border or regional implications for implementation over a 3-year period. In addition to priority investment projects, APSI captured knowledge initiatives under the SASEC program and incorporated initiatives with wider regional relevance led by other agencies or partner countries. Over time, the scope and role of APSI evolved into a comprehensive reference document for projects and knowledge works supporting regional cooperation, consolidating information on ongoing and planned initiatives across sectors and countries irrespective of source of financing.

7. Updates to APSI were made for the period 2022–2024 and later, 2024–2026. Updates to APSI 2024–2026 were informed by the deliberations of the SASEC working groups on transport, trade facilitation, and energy as well as the SASEC Senior Officials Meetings (SOMs) held in New Delhi, India, in November and December 2023. Based on feedback from these meetings, subsequent country consultations, and the SASEC meetings held in Thimphu, Bhutan, in 2024, APSI 2024–2026 was finalized. A new feature of APSI 2024–2026 is the inclusion of a Progress Update Framework, under which ADB plans to report on the progress of APSI projects and knowledge initiatives periodically. In April 2025, APSI 2024–2026 was hosted on the SASEC website.⁵

8. **SASEC Meetings in 2025.** At the SOM held in Kathmandu in November 2025, senior officials endorsed the decisions made by the SASEC working groups on transport, trade facilitation, and energy. These decisions aimed to strengthen the scope, coherence, and areas of engagement of the SASEC program.

- i. **Transport.** The meeting endorsed the SASEC Strategy 2035 for Transport Operational Priority, and reviewed and endorsed APSI 2025–2027. It supported the publication of the BBIN rail-based cargo movement study and advanced several digital and planning initiatives, including the Digital Dynamic Data Stack and digital multimodal national master planning as a use case of National Spatial Data Infrastructure and Systems.
- ii. **Trade facilitation.** The meeting endorsed the SASEC Customs Development Framework 2035 and the SASEC Strategy 2035 for Trade Facilitation Operational Priority. It agreed to advance subregional initiatives such as pre-arrival data exchange, a regional electronic cargo tracking system (ECTS), and phased cross-border coordinated border management. Delegates also agreed to expand and update Sanitary and Phytosanitary and Technical Barriers to Trade (SPS–TBT) infrastructure inventorization studies and adopt an ecosystem approach to strengthening food safety and regulatory systems. The delegates also agreed to pursue additional analytical studies on boosting intra-SASEC trade and improving regional food trade and food security.
- iii. **Energy.** The meeting endorsed the SASEC Strategy 2035 for Energy Operational Priority as the long-term framework. It supported a memorandum of intent on power sector capacity building, and advanced initiatives on utility digitalization and cybersecurity, improved transmission project development, emerging technologies, the establishment of a SASEC Green Finance Facility, and a regional study on electrical grid equipment supply and value chains (SVCs). Countries also agreed to regularly update regional planning tools, including the resource complementarity study and interconnection master plan, and reaffirmed APSI as the central mechanism for tracking and coordinating regional energy projects and knowledge work.
- iv. **Economic Corridor Development.** The meeting discussed the ECD Strategic Framework 2035 and its building blocks comprising highly facilitated trade corridors, comprehensive

⁵ ADB. 2024. *Action Plan for SASEC Initiatives, 2024–2026*. New Delhi. [https://www.sasec.asia/uploads/apsi/Action_Plan_for_SASEC_Initiatives_\(APSI\)%202024-2026_%20For%20uploading%20-%20SASEC_Website.pdf](https://www.sasec.asia/uploads/apsi/Action_Plan_for_SASEC_Initiatives_(APSI)%202024-2026_%20For%20uploading%20-%20SASEC_Website.pdf).

trade gateway ecosystem development, tourism development, food systems development, and comprehensive digital transformation for the SASEC program. The framework sets out a coordinated, multisector roadmap for deepening regional integration and competitiveness in the SASEC subregion by 2035, centered on transforming connectivity into productive, inclusive, and resilient economic corridors supported by appropriate spatial development of production and service clusters. The ECD Strategic Framework 2035 is built on national corridor development, stronger cross-border linkages, and institutionalized regional learning, supported by cross-cutting enablers such as digital public infrastructure, private sector participation, sustainability, and skills development. Priority actions focus on operationalizing highly facilitated trade corridors; developing comprehensive trade gateway ecosystems; advancing cross-border coordinated border management and regional ECTS; strengthening clean energy interconnections and utility digitalization; promoting tourism, including integrated multi-country tourism circuits; accelerating digital transformation for logistics, planning, and services; and building resilient food systems to support food safety and food security through harmonized standards, upgraded laboratories, traceability, and cold-chain logistics.

9. The list of projects and knowledge works for the period 2025–2027 is based on discussions held with, and endorsements received from, the SASEC partner countries during the SASEC meetings convened in Kathmandu in November–December 2025. The APSI 2025–2027 also includes the list of projects and knowledge works completed during the 2024–2026 period, primarily for reporting purposes, and to highlight linkages with the 2025–2027 period. These completed activities will be removed from the list of projects in the subsequent APSI 2026–2028.

10. Based on the stage of maturity, projects, programs, and knowledge works have been categorized as (1) Completed, (2) Under Implementation, (3) Planning and Preparation, and (4) Worthy of Consideration. The Progress Update Framework has been developed to capture more detailed information at each of these stages.

11. The SASEC partner countries further recommended that the forthcoming APSI 2026–2028 be aligned with the SASEC Strategies 2035, as approved by the SASEC partner countries.

12. **ADB's cumulative commitment to regional cooperation.** As of 31 December 2025, a total of 99 loan and grant projects, valued at \$26.31 billion, are ongoing or have been completed in six partner countries, with ADB financing amounting to \$16.09 billion. ADB investments have been highest in the transport sector, at \$10.38 billion across 59 projects, followed by the energy sector with \$2.06 billion across 18 projects, and ECD with \$2.68 billion across 12 projects. In addition, during this period, ADB provided \$231.49 million through 163 technical assistance (TA) grants to support project preparation, strategic planning, and capacity building.

II. TRANSPORT AND LOGISTICS

13. Transport connectivity is one of the four operational priorities of the SASEC program. As trade within the region primarily takes place along defined corridors, transport networks are analyzed in the context of these corridors. At the same time, feeder networks connecting to the corridors are also critical and have therefore been included in the pipeline of projects and knowledge work. In addition, border points remain a key focus, both with respect to infrastructure capacity to manage trade volumes and trade facilitation measures to streamline trade processes.

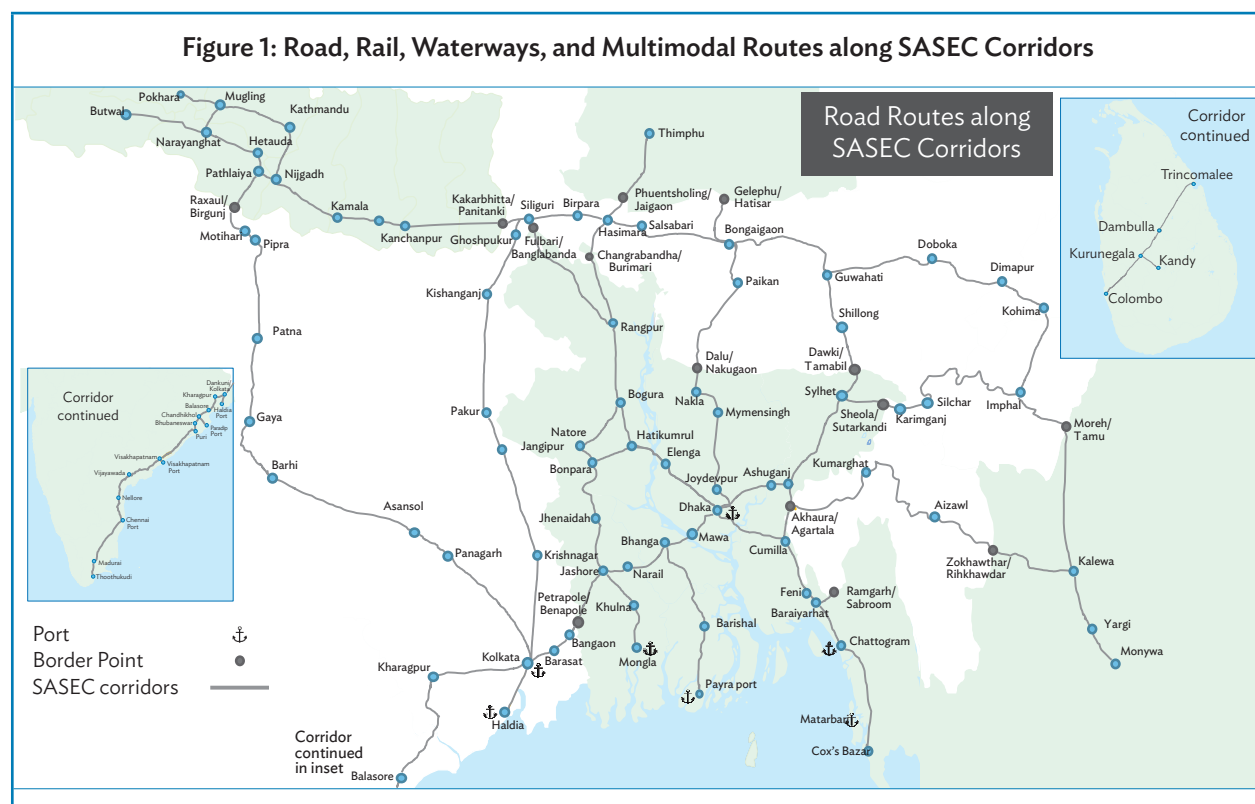
14. For SASEC countries, strengthening connectivity along regional corridors continues to be a key priority. Improved access to global and subregional markets is essential for poverty reduction, economic development, and job creation. The primary geographic focus under the program's operational

priorities remains along the six SASEC corridors:⁶ (i) Nepal/Bhutan–India Corridor; (ii) Sri Lanka–India–Bangladesh–India–Myanmar Corridor (aligned with economic corridors); (iii) Nepal–India–Bangladesh Corridor; (iv) Bhutan–India–Bangladesh Corridor; (v) Nepal/Bhutan–India–Myanmar Corridor; and (vi) Myanmar–Bangladesh–India–Sri Lanka–Maldives (Maritime) Corridor.

15. During the SASEC Transport Working Group meetings in 2025, partner countries consistently emphasized transport investments and knowledge work aimed at enhancing cross-border connectivity along these corridors. Discussions also underscored the growing importance of digitalization in the transport sector, including the use of National Spatial Data Infrastructure for infrastructure planning and a Digital Dynamic Data Stack for cargo to improve operational efficiency across corridors. Key knowledge initiatives—such as the BBIN rail-based cargo movement study and the study on decarbonization of cargo transport through modal shift from road to rail—were presented and discussed. ADB has also continued to support dialogue on the BBIN Motor Vehicle Agreement (BBIN MVA) and its associated protocols, which have significant potential to transform regional trade dynamics.

A. South Asia Subregional Economic Cooperation Corridors

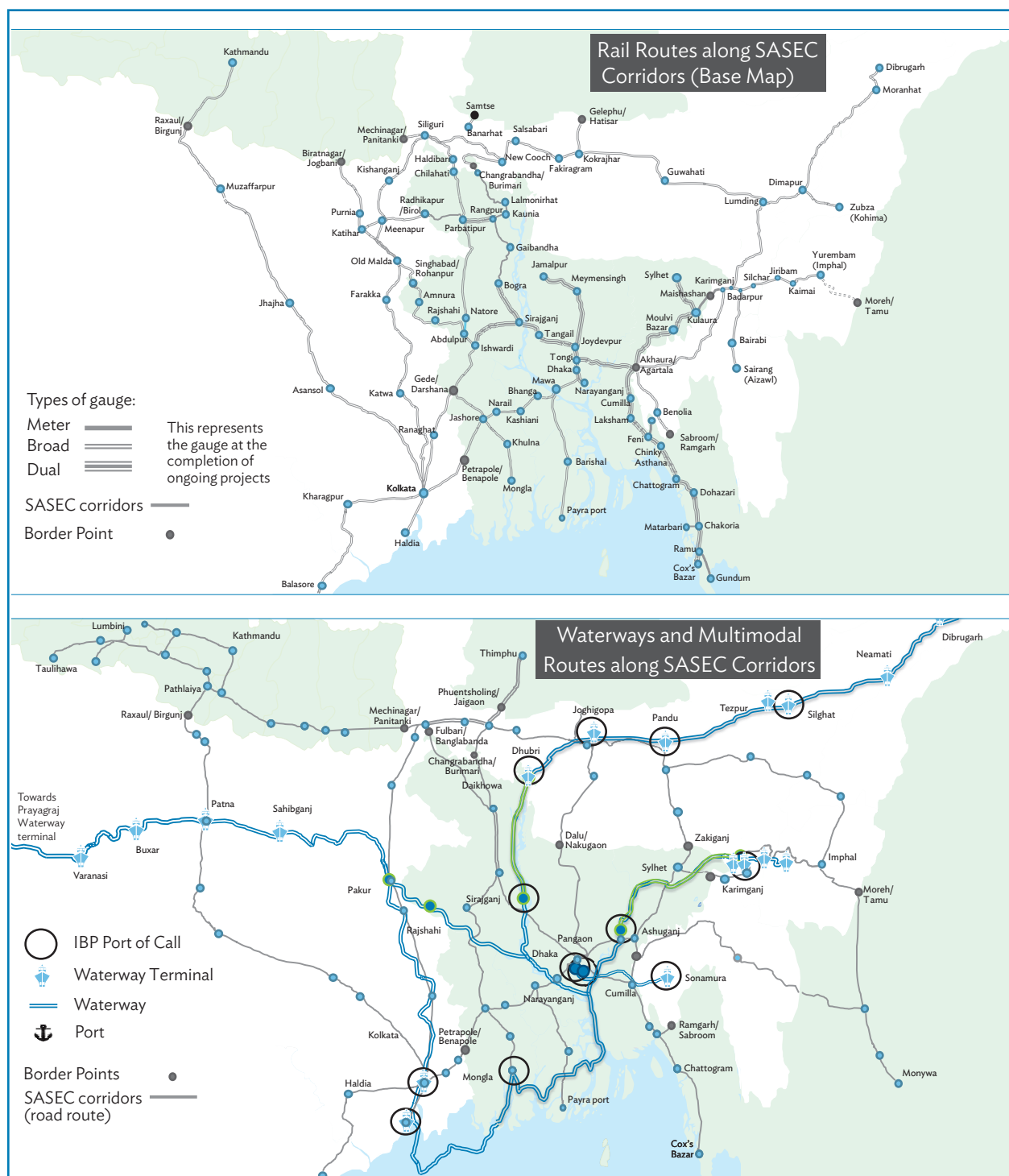
16. The SASEC corridors have been designed to advance regional cooperation objectives by facilitating multi-country trade and improving access to gateways for landlocked countries. These corridors are served by multiple transport modes, including road, rail, and waterways, and are complemented by trade facilitation and economic corridor initiatives. The associated road, rail, waterways and multimodal routes for the SASEC corridors are presented ahead (Figure 1).



Continued on next page

⁶ A new SASEC corridor linking Kathmandu with western Nepal, with onward connectivity to the Lucknow–Delhi–Mumbai/Mundra corridor, may be proposed as the opportunity matures.

Figure 1: continued



IBP = Indo-Bangladesh Protocol, SASEC = South Asia Subregional Economic Cooperation.

Notes: i. Nepal has access to three inland waterway routes through India: Kolkata–Kalughat–Raxaul (India)/Birgunj (Nepal), Kolkata–Varanasi–Raxaul (India)/Birgunj (Nepal), and Kolkata–Sahibganj–Jogbani (India)/Biratnagar (Nepal).

ii. The maps are not to scale and are intended solely as schematic representations.

iii. The maps, corridors, transport networks, or other aspects depicted are for illustrative purposes only and do not necessarily represent precise geographical locations, political boundaries, or other features.

iv. The boundaries, colors, labels, and other information displayed on the map do not imply, in any way, the Asian Development Bank's judgment on the legal status of any territory, nor do they constitute an endorsement or acceptance of the boundaries, colors, labels, or information shown.

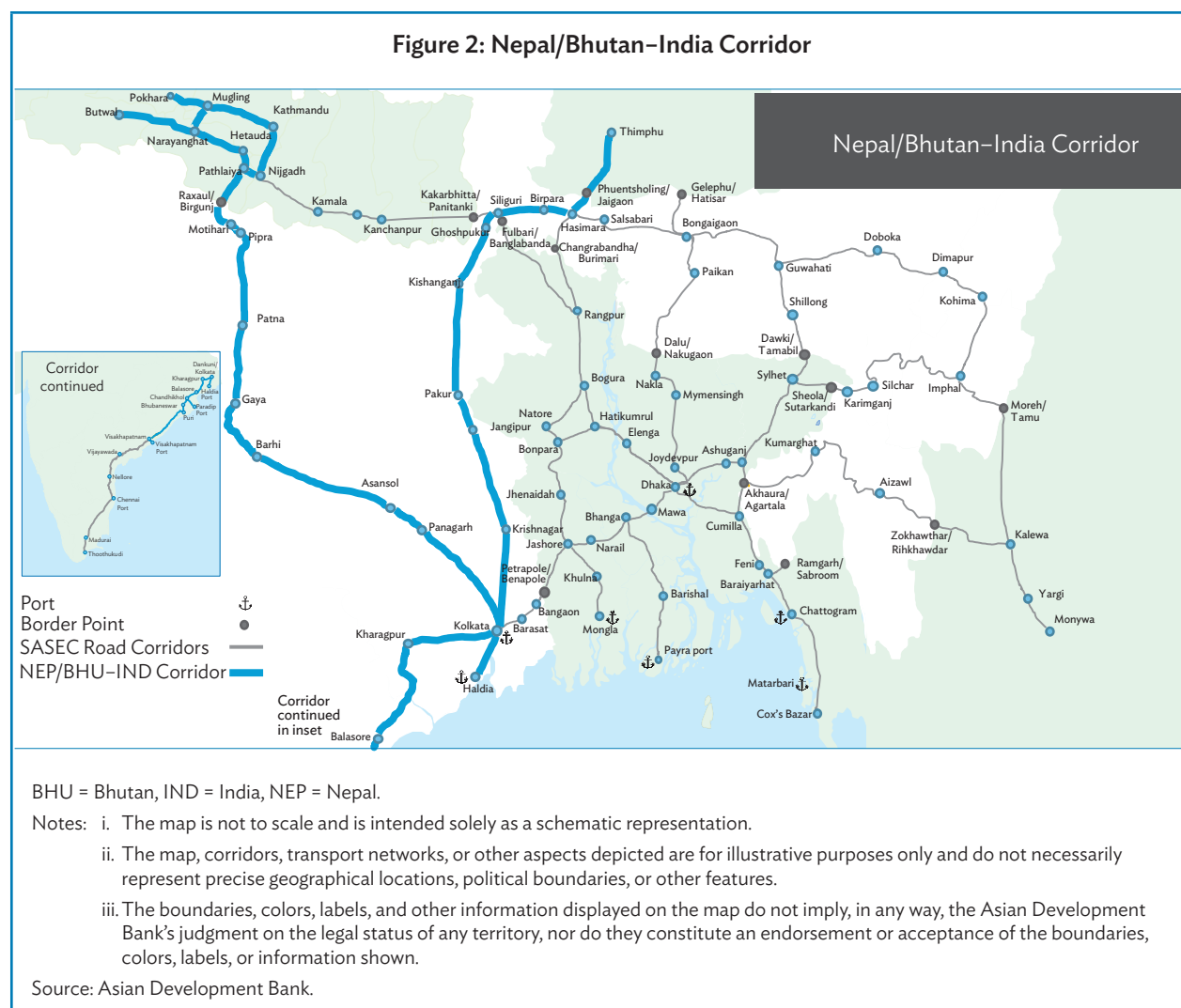
Source: Asian Development Bank.

17. The development of the multimodal routes identified for the SASEC transport corridors is expected to substantially reduce transport and trade costs among partner countries. For each corridor, recent progress was assessed, together with an analysis of gaps and challenges across the various transport modes. Based on this analysis, the APSI identified priority projects to address these gaps and respond to emerging needs, with the objective of unlocking the full economic benefits of enhanced connectivity in each corridor.

1. *Nepal/Bhutan–India Corridor*

a) Nepal–India: Modes and Routes

18. **Rationale.** Facilitating Nepal–India trade and providing access to gateway ports in India for Nepal’s trade with other countries (Figure 2).



19. **Road route.** The Kathmandu (Nepal)–Kolkata (India) route via the Birgunj (Nepal)/Raxaul (India)⁷ border point is a crucial trade route connecting Nepal (which is landlocked) to India (its largest trading partner) and facilitating access to other countries through Indian ports such as the Kolkata Dock System (KDS), Haldia Dock Complex (HDC), and the Visakhapatnam port.⁸ An alternative route is also

⁷ Country names are provided either in parentheses or in the narrative at first mention of each location (e.g., Raxaul (India)/Birgunj (Nepal)); subsequent references use place names only for ease of reading.

⁸ The Kolkata/Haldia port system is referred to as the KDS–HDC.

available through the Jogbani (India)/Biratnagar (Nepal) border point. Both the primary and alternative road routes are operational in a 4–6 lane configuration.

20. **Rail route.** The corridor is being served by two key rail routes, which are particularly important for containerized import traffic:

- i Birgunj/Raxaul or Biratnagar/Jogbani–Muzaffarpur (India)–Asansol (India)–KDS–HDC; and
- ii Birgunj/Raxaul or Biratnagar/Jogbani–Muzaffarpur–Asansol–Kharagpur–Cuttack–Visakhapatnam.

21. More recently, Visakhapatnam has been handling an increasing share of Nepal's container trade, with most of the movement occurring by rail. Both rail routes are operational with broad gauge lines (BGLs).

22. **Waterways and multimodal route.** Inland waterway terminals at Varanasi, Patna (Kalughat), and Sahibganj in India, accessible by road from Nepal,⁹ connect to National Waterway 1 (NW 1) in India, providing access to the Kolkata–Haldia port system (KDS–HDC). These terminals were developed under the World Bank-supported project for NW 1 in India.

23. **Border points.** The Birgunj/Raxaul and Biratnagar/Jogbani border points are currently operational,¹⁰ with road traffic handled through integrated check posts (ICPs) and rail cargo handled through rail-linked land customs stations (LCSs).¹¹ In addition, Nepalgunj (Nepal)/Nepalganj Road (India) is an upcoming alternative road border point as is the rail border point of Bhairahawa (also called Siddharthanagar) (Nepal)/Sonauli (India).

b) Bhutan–India: Modes and Routes

24. **Road route.** Given that Bhutan is landlocked, the Thimphu (Bhutan)–Kolkata route via the Phuentsholing (Bhutan)/Jaigaon (India) border point is the main route connecting Bhutan to India and facilitating access to other countries through the KDS–HDC system (and potentially other ports). Jaigaon serves as the major LCS and a key gateway to Bhutan. This route also provides primary access to the railhead at Siliguri (India). This road route is operational, with most sections in a 4-lane configuration.¹²

25. **Rail route.** Currently, there is no rail connection to Bhutan. However, two rail links are being developed (i) Kokrajhar (India)–Gelephu (Bhutan) and (ii) Banarhat (India)–Samtse (Bhutan). These lines will connect to the Kokrajhar–Siliguri–Kishanganj–Kolkata rail route in India, which offers access not only to the KDS–HDC but also potentially to other Indian ports, such as Visakhapatnam. In addition, four more rail links are in the preparatory stage: (i) Hasimara (India)–Phuentsholing (Bhutan), (ii) Rangia (India)–Samdrup Jongkhar (Bhutan) via Darranga (India), (iii) Pathsala (India)–Nganglam (Bhutan), and (iv) Mujnai (India)–Nyoenpaling (Pugli). Although the rail route is currently not in use for Bhutan's trade, it presents a sustainable alternative for transporting Bhutanese cargo to Indian gateways. The BGL route between Guwahati (India) and the KDS–HDC via the Siliguri Corridor is operational and accessible to Bhutan by road through Bongaigaon (India), Dalgan (India), and Banarhat.

26. **Waterways and multimodal route.** Inland waterway terminals at Dhubri and Jogighopa in India, accessible by road from Bhutan under existing Bhutan–India–Bangladesh transit trade arrangements, connect to NW 2 in India and onward to the inland waterways of Bangladesh through the Indo–Bangladesh Protocol (IBP) routes, providing access to KDS–HDC.

⁹ Nepal has access to three inland waterway routes: (i) Kolkata–Kalughat, Raxaul; (ii) Kolkata–Sahibganj, Biratnagar; and (iii) Kolkata–Varanasi–Raxaul.

¹⁰ The Biratnagar/Jogbani border point is less developed and not fully equivalent to Birgunj/Raxaul in terms of operations.

¹¹ Container train operators authorized by the Indian Railways are permitted to transport Nepal-bound cargo between Visakhapatnam and Kolkata ports and Raxaul/Birgunj for third-country trade.

¹² This is part of the East–West Corridor of the National Highway Authority of India.

27. **Border points.** The Jaigaon/Phuentsholing road border point is currently operational as an LCS, with a proposed ICP under consideration. While no rail border point is currently operational between India and Bhutan, the road border points at Hatisar (India)/Gelephu, Chamurchi (India)/Samtse, and Darranga/Samdrup Jongkhar are operational as LCSs.

28. **Status of projects under APSI 2024–2026.**

i. **Air transport.**

- The Tribhuvan International Airport (Nepal) modernization project and the Technical Assistance for Air Navigation Services, supported by the Japan International Cooperation Agency (JICA), have been completed.
- The Tribhuvan International Airport (Nepal) Capacity Expansion Project (International Terminal Building), supported by ADB, is under construction.

ii. **Roads.**

- The Kathmandu–Naubise–Mugling Road (Nepal), part of the Nepal Strategic Road Connectivity and Trade Improvement Project and supported by the World Bank, is under construction.
- The Nagdhunga Tunnel (Nepal), supported by JICA, is under construction.
- The Pathlaiya–Hetauda–Narayanghat Road (Nepal), supported by ADB, is at the detailed project report (DPR) stage.
- The Pathlaiya–Birgunj section of Nepal’s East–West Highway, supported by ADB, has been completed.
- The Narayanghat–Butwal and Mugling–Pokhara highway sections (Nepal), supported by ADB, are under construction.

iii. **Rail.**

- The Jainagar (India)–Janakpur (Nepal)–Bijalpura (Nepal) BGL, supported by the Government of India, has been completed.
- The Bijalpura–Bardibas (Nepal) BGL, supported by the Government of India, is under construction.
- The Raxaul–Kathmandu Broad Gauge Electrified Railway Project, supported by the Government of India, is in the project preparation stage.

iv. **Waterways.** The Jal Marg Vikas Project on NW 1 in India, supported by the World Bank, which provides waterway access to Nepal, is under construction.

29. **New projects added to APSI 2025–2027.**

i. **Projects under construction** in Nepal/Bhutan–India Corridor.

- Gelephu International Airport at Mindfulness City (Bhutan), supported by the Royal Government of Bhutan.
- Jogighopa Bridge, supported by JICA.
- Dewathang–Nganglam highway in Bhutan, supported by the Government of India.

ii. **Projects under planning and preparation** in Nepal/Bhutan–India Corridor

- **Rail lines.** Hasimara–Phuentsholing; Rangia–Samdrup Jongkhar via Darranga; Pathsala–Nganglam; and Mujnai–Nyoenpaling (Pugli), supported by the Government of India;

- Bharwa Kalan (Nautanwa, India)–Bhairahawa (Nepal) rail line, supported by the Government of India;
- upgrading of the East–West Highway (Chanauta–Kohalpur–Gaddachauki section) (Nepal); and
- improvement of air traffic control facilities at Tribhuvan International Airport (Nepal), supported by JICA.

2. *Sri Lanka–India–Bangladesh–India–Myanmar Corridor*

30. **Rationale.** This corridor integrates several key economic corridors in the region, including (i) Sri Lanka Economic Corridor (Colombo–Trincomalee), (ii) India East Coast Economic Corridor (Thoothukudi [earlier Tuticorin]–Chennai–Visakhapatnam–Bhubaneswar–Kolkata–Petrapole), (iii) Bangladesh Economic Corridor (Benapole–Jashore/Khulna–Dhaka–Sylhet–Tamabil/Sheola), and (iv) India North East Economic Corridor (Dawki–Guwahati/Sutarkandi–Silchar), with spurs extending to Imphal–Moreh/Tamu, Agartala, and Aizawl–Zokhawthar/Rikhawthar. The corridor also includes access to key gateway ports of Visakhapatnam, Paradip, and KDS (or HDC) in India; and Mongla, Payra, Chattogram, and Matarbari (upcoming) in Bangladesh. While the road and rail routes form the spine of these economic corridors, the Sri Lanka and India Economic Corridors are connected by Thoothukudi–Colombo and Chennai–Trincomalee maritime routes (Figure 3). Additionally, a future land connection between the Sri Lanka and India Economic Corridors is being explored through a road or rail bridge over the sea between Dhanushkodi in India and Thalaimannar in Sri Lanka.

31. **Road route.** The economic corridor spines form the primary road route for this corridor: Colombo–Trincomalee–Thoothukudi–Kolkata–Dhaka–Sylhet–Guwahati,¹³ with spurs extending to Imphal–Moreh/Tamu–Kalewa–Mandalay, Agartala, and Aizawl–Zokhawthar/Rikhawthar–Kalewa. Additionally, the corridor includes port access routes: Visakhapatnam–Visakhapatnam Port, Chandikhol–Paradip Port, Kolkata–Haldia Port, Jashore–Khulna–Mongla Port, Bhanga–Barishal–Payra Port, Dhaka–Cumilla–Chattogram Port–Matarbari Port.

32. The road route is operational with 2–6 lane configurations, with upgrades planned or being implemented in several sections. Ongoing projects include the SASEC Dhaka–Sylhet Corridor Road Investment Project, SASEC South Corridor Improvement Project (Daulatdia to Kuakata), SASEC Chattogram Port Access Road Improvement Project, and the SASEC Dhaka–Chattogram Public–Private Partnership (PPP) Highway Project (Tranche 1 under the multitranchise financing facility) in Bangladesh. In India, upgrades are underway for the Dawki–Shillong section, various sections between Silchar and Imphal, and those between Agartala and Zokhawthar via Aizawl.

33. **Rail route.** This corridor is served by the rail route Colombo–Trincomalee–Thoothukudi–Kolkata–Gede–Darshana–Ishurdi–Dhaka–Akhaura–Agartala–Lumding–Dibrugarh,¹⁴ with spurs connecting Kolkata–Petrapole–Benapole–Dhaka, Agartala–Belonia–Sabroom, Silchar–Sairang, Silchar–Yurembam (Manipur)–Moreh, and Dimapur–Zuzba. It also includes port access routes: Visakhapatnam–Visakhapatnam Port, Chandikhol–Paradip Port, Kolkata–Haldia Port, Jashore–Khulna–Mongla Port, Bhanga–Barishal–Payra Port, Cumilla–Chattogram Port–Matarbari Port.

¹³ Bangladesh has proposed an alternative connectivity route to India through the Hatikamrul–Bonpara–Rajshahi–Nawabganj–Sona Masjid Land Port Road.

¹⁴ Shahbazpur (Bangladesh)/Mahisashan (India) is an additional border point between Bangladesh and India.

Figure 3: Sri Lanka–India–Bangladesh–India–Myanmar Corridor



BAN = Bangladesh, IND = India, MYA = Myanmar, SRI = Sri Lanka.

- Notes:
- i. The maps are not to scale and are intended solely as schematic representations.
 - ii. The maps, corridors, transport networks, or other aspects depicted are for illustrative purposes only and do not necessarily represent precise geographical locations, political boundaries, or other features.
 - iii. The boundaries, colors, labels, and other information displayed on the map do not imply, in any way, the Asian Development Bank's judgment on the legal status of any territory, nor do they constitute an endorsement or acceptance of the boundaries, colors, labels, or information shown.

Source: Asian Development Bank.

34. The rail route is largely operational but faces challenges due to gauge variation, with broad gauge tracks in India and western Bangladesh and meter gauge in eastern Bangladesh. Several projects are ongoing in Bangladesh, including the SASEC Chattogram–Cox’s Bazar dual gauge rail line project (with the Dohazari–Cox’s Bazar section completed), the development of a dual gauge double line for the Joydebpur–Ishurdi route, the Khulna–Mongla Port Rail Line, and the rehabilitation of the Kulaura–Shahbazpur rail line. Projects under consideration by Bangladesh include the SASEC Tongi–Akhaura dual gauge project, the SASEC Laksam–Chattogram dual gauge (double line) project, the SASEC Railway Connectivity Dhaka–Cumilla Chord-line project and the dual gauge line between Cox’s Bazar and Gundum.

35. **Waterways or multimodal route.** This corridor is accessible via both inland waterways and maritime routes. The inland waterway route connects Kolkata, Dhaka, Dhubri, and Dibrugarh, with a spur extending to Ashuganj–Karimganj, near Silchar. Additionally, the Thoothukudi–Colombo and Chennai–Trincomalee maritime routes serve this corridor.

36. **Border points.** Several border points are located along this corridor between

- i. India and Bangladesh including
 - Petrapole (operational ICP)/Benapole (operational land port, with development under World Bank’s ACCESS program);
 - Dawki (operational ICP)/Tamabil (operational land port, with development under SASEC Sector Development Program [SDP]);
 - Sheola (operational land port)/Sutarkandi (operational ICP);
 - Akhaura (operational land port, with development under SASEC SDP)/Agartala (operational ICP);
 - Sabroom (ICP under development)/Ramgarh (operational land port); and
 - rail interchange points such as Petrapole–Benapole, Gede–Darshana, Agartala–Akhaura;
- ii. India and Myanmar including
 - Moreh (operational ICP)/Tamu; and
 - Zokhawthar (operational LCS)/Rikhawdar.

37. **Status of projects under APSI 2024–2026.**

- i. **Projects under construction** across Bangladesh, India, and Sri Lanka include upgrading of
 - Dhaka–Sylhet road section (supported by ADB);
 - Sylhet–Tamabil road section (supported by the Asian Infrastructure Investment Bank [AIIB]);
 - Sylhet–Sheola road section (supported by the World Bank);
 - Dawki–Shillong road (including the Dawki Bridge) (supported by JICA);
 - Elenga–Hatikamrul–Rangpur Highway into 4 lanes (supported by ADB);
 - Jhenaidah–Jashore road (supported by World Bank);
 - Baraiyarhat–Heako–Ramgarh road (supported by Government of India);
 - Chattogram–Cox’s Bazar highway (supported by JICA);
 - Padma Bridge Rail Link (Dhaka–Jashore); and
 - Jiribam–Imphal new BGL.

- ii. **Projects under planning and preparation** include upgrading of
 - Shillong–Badarpur, Chattogram–Cox’s Bazar, Daulatdia–Faridpur–Barishal–Kuakata roads;
 - access roads to Chattogram Port;
 - SASEC Dhaka–Chattogram PPP Highway Project (Tranche 1) (supported by ADB);
 - Tongi–Akhaury dual gauge and Laksam–Chattogram–Dohazari dual gauge (supported by ADB);
 - Joydebpur–Ishurdi dual gauge double line (supported by JICA); and
 - dual gauge from Akhaury to Sylhet (meter gauge to dual gauge and parallel dual gauge line) under consideration.
- iii. **Projects completed** include upgrading of
 - rail line projects such as Akhaury–Laksam, Dohazari–Cox’s Bazar, Khulna–Mongla Port, and Akhaury–Agartala;
 - the Central Expressway Stage 1 (Mirigama to Kurunegala) in Sri Lanka; and
 - the Tamenglong–Imphal section of the Silchar–Tousem–Tamenglong–Imphal road (supported by ADB).

38. **New projects added to APSI 2025–2027.**

- i. **Projects under construction** in the Sri Lanka–India–Bangladesh–India–Myanmar Corridor include
 - SASEC Chattogram–Cox’s Bazar dual gauge rail line project (Chattogram–Dohazari) (supported by ADB);
 - Matarbari Port Project (760-meter [m] quay) (supported by JICA);
 - Hazrat Shahjalal International Airport Expansion Project (Phase I) (supported by JICA and the Government of Bangladesh);
 - Cox’s Bazar Airport international terminal construction (supported by the Civil Aviation Authority of Bangladesh);
 - Cox’s Bazar Airport runway expansion project (supported by the Government of Bangladesh);
 - Sylhet Osmani International Airport Expansion Project (Phase I) (supported by the Government of Bangladesh and the Civil Aviation Authority of Bangladesh);
 - Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) system installation, including radar, at Hazrat Shahjalal International Airport (supported by the Civil Aviation Authority of Bangladesh);
 - Bandaranaike International Airport Expansion Project (Phase 2) (supported by JICA); and
 - upgrading of Tousem–Tamenglong section of the Silchar–Tousem–Tamenglong–Imphal Road (supported by the Government of India).
- ii. **Projects under planning and preparation** in Sri Lanka–India–Bangladesh–India–Myanmar Corridor include
 - operationalization of IBP routes 9 and 10 through dredging and other measures (supported by the Governments of India and Bangladesh);
 - Chattogram–Cox’s Bazar Highway Improvement Project (Phase II) (supported by JICA);

- procurement and installation of digital gauges for collecting water level data on Bangladesh Inland Water Transport Authority (BIWTA)–classified waterways through the Global System for Mobile Communications (GSM) network (supported by the Government of Bangladesh);
 - construction of an inland container terminal (ICT) at Shimulia in Munshiganj District (supported by the Government of Bangladesh);
 - installation of solar systems, reverse osmosis plants, and marine sanitation devices in inland water transport vessels and houseboats to reduce carbon dioxide emissions and ensure availability of clean water and sewage treatment (supported by the Government of Bangladesh);
 - construction of a passenger terminal, including a boarding bridge, at Shah Amanat International Airport, Chattogram;
 - extension of the cargo building at Shah Amanat International Airport, Chattogram; and
 - construction of a parallel taxiway at Shah Amanat International Airport, Chattogram.
- iii. **Projects completed** in Sri Lanka–India–Bangladesh–India–Myanmar Corridor include
- Projects for Security Improvement of International Airports (supported by JICA and the Civil Aviation Authority of Bangladesh);
 - development of the Cox’s Bazar Airport (Phase I) (supported by the Government of Bangladesh and the Civil Aviation Authority of Bangladesh);
 - development of the Mahishasan Zero Point–Shahbazpur Rail Line (supported by the Government of India); and
 - construction of a new bridge over the Kelani River.

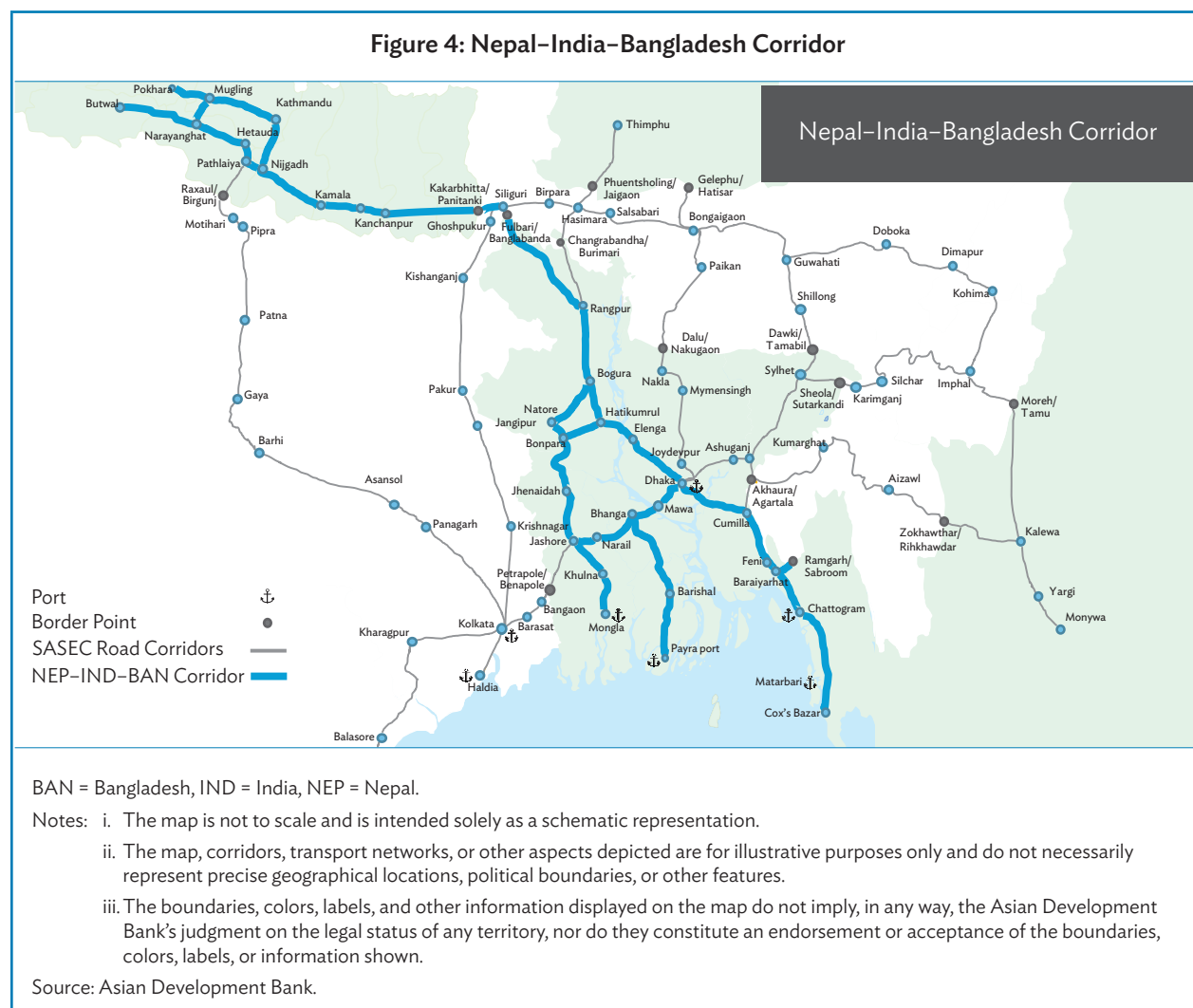
3. *Nepal–India–Bangladesh Corridor*

39. **Rationale.** Enhancing Nepal–Bangladesh trade and improving access to gateway ports in Bangladesh for facilitating Nepal’s trade with other countries (Figure 4).

40. **Road route.** The Kathmandu–Dhaka/Jashore route via Mechinagar/Panitanki at the Nepal–India border and Fulbari (West Bengal)/Banglabandha at the India–Bangladesh border, connects further to Mongla, Payra, Chattogram, and Matarbari ports. This route is operational with a 2–6-lane configuration. Ongoing projects along this route include the SASEC Highway Improvement Project (Kanchanpur to Kamala) and the upgrade of the Kakarbhitta–Laukahi road in Nepal, as well as the SASEC Dhaka–Northwest Corridor Road Project in Bangladesh.

41. **Rail route.** The corridor is served by the rail routes Biratnagar/Jogbani–Katihar–Singhabad/Rohanpur–Rajshahi–Ishurdi and Mechinagar/Panitanki–Haldibari–Chilahati–Parbatipur–Ishurdi,¹⁵ with further connectivity to Mongla, Payra, and Chattogram/Matarbari ports, as well as Dhaka. An additional rail link between Katihar in India and Rangpur in Bangladesh, via the Radhikapur/Birol border point, provides essential east–west connectivity. This route is operational, with broad gauge in part and dual gauge in the remaining sections. The Yamuna Railway Bridge is operational, while the dual gauge line from Parbatipur to Kaunia is under implementation.

¹⁵ This route is not currently a notified transit trade route between Nepal and Bangladesh through India, but it holds the potential to be developed as a future transit trade route.



42. **Waterways or multimodal route.** Inland waterway terminals at Patna (Kalughat) or Sahibganj¹⁶ (developed under the World Bank-supported NW 1 project) connect to NW 1 in India and onward to the inland waterways of Bangladesh through the IBP route, providing access to Bangladesh ports.

43. **Border points.** The road border points at Mechinagar (inland container depot)/Panitanki (proposed ICP) between Nepal and India, and Fulbari (proposed ICP)/Banglabandha (operational land port) between India and Bangladesh, are designated LCSs. There are three rail interchange points along this corridor, all between India and Bangladesh: Haldibari–Chilahati, Singhabad–Rohanpur, and Radhikapur–Birol.

44. **Status of projects under the APSI 2024–2026.**

i. **Projects under construction** in the Nepal–India–Bangladesh Corridor include

- **Nepal.**

- o construction of a 4-lane expressway between Kathmandu and Nijgadh (supported by the Government of Nepal);
- o upgrading of the Kanchanpur–Kamala section of the East–West Highway under the SASEC Highway Improvement Project (supported by ADB); and

¹⁶ The primary potential of this route lies in facilitating Nepal–Bangladesh trade. The Kolkata Dock System is already operational for transit trade. However, Chattogram Port is not accessible under the Indo–Bangladesh Protocol on Inland Water Transport.

- o upgrading of the Kakarbhitta–Laukahi section of the East–West Highway (supported by ADB);
 - **Bangladesh.**
 - o development of SASEC Dhaka–Northwest Corridor Road (supported by ADB);
 - o construction of the Jamuna Railway Bridge over River Jamuna (supported by JICA);
 - o dredging of parts of the inland waterways network, namely, the Mongla–Chandpur waterway (southwestern waterways system) and the Chandpur–Mawa–Goalanda–Paksey waterway (Padma–Meghna system).
 - ii. **Projects under planning and preparation** include
 - Kamala–Pathlaiya section of the East–West Highway in Nepal, at procurement stage (supported by World Bank);
 - rail projects in Bangladesh along Parbatipur–Kaunia, Abdulpur–Rajshahi, Abdulpur–Santahar–Parbatipur, and Narayanganj–Dhaka–Chattogram routes, at feasibility stage;
 - Rangpur–Banglabandha Road Improvement project, at project preparation stage (supported by ADB); and
 - Hatikamrul–Bonpara–Kushtia–Jhenaidah Road in Bangladesh, at project preparation stage (supported by AIIB).
 - iii. **Projects completed** in the Nepal–India–Bangladesh Corridor include
 - Projects for Security Improvement of International Airports (supported by JICA and the Civil Aviation Authority of Bangladesh);
 - development of Cox’s Bazar Airport (Phase I) (supported by the Government of Bangladesh and the Civil Aviation Authority of Bangladesh); and
 - Bathnaha–Biratnagar rail link (supported by the Government of India).
45. **New projects added to the APSI 2025–2027.**
- i. **Projects under construction** in the Nepal–India–Bangladesh Corridor include
 - SASEC Chattogram–Cox’s Bazar dual gauge rail line project (Chattogram–Dohazari) (supported by ADB);
 - Matarbari Port Project (760-m quay) (supported by JICA);
 - Hazrat Shahjalal International Airport Expansion Project (Phase I) (supported by JICA and the Government of Bangladesh);
 - construction of the international terminal building at Cox’s Bazar Airport (supported by the Civil Aviation Authority of Bangladesh);
 - Cox’s Bazar Airport runway expansion project (supported by the Government of Bangladesh);
 - Sylhet Osmani International Airport Expansion Project (Phase I) (supported by the Government of Bangladesh and the Civil Aviation Authority of Bangladesh);
 - Hazrat Shahjalal International Airport CNS/ATM system installation, including radar (supported by the Civil Aviation Authority of Bangladesh);
 - Balughat–Hili rail line (supported by the Government of India).
 - ii. **Projects under planning and preparation** in the Nepal–India–Bangladesh Corridor include
 - operationalization of IBP routes 9 and 10 through dredging and other measures (supported by the Governments of India and Bangladesh);
 - implementation of the Chattogram–Cox’s Bazar Highway Improvement Project (Phase II) (supported by JICA);

- procurement and installation of digital gauges for collecting water level data on BIWTA-classified waterways through the GSM network (supported by the Government of Bangladesh);
- construction of an ICT at Shimulia in Munshiganj District (supported by the Government of Bangladesh);
- installation of solar systems, reverse osmosis plants, and marine sanitation devices in inland water transport vessels and houseboats to reduce carbon dioxide emissions and ensure availability of clean water and sewage treatment (supported by the Government of Bangladesh);
- construction of a passenger terminal, including a boarding bridge, at Shah Amanat International Airport, Chattogram;
- extension of the cargo building at Shah Amanat International Airport, Chattogram;
- construction of a parallel taxiway at Shah Amanat International Airport, Chattogram;
- construction of a new bridge parallel to the existing Hardinge Bridge in the western zone of Bangladesh Railway (supported by ADB);
- modernization of Baghabari River Port (supported by the Government of Bangladesh);
- construction of the New Jalpaiguri–Kakrabhatta rail line (supported by the Government of India); and
- operationalization of the Arun River to connect to NW 58 (supported by the Government of Nepal).

4. *Bhutan–India–Bangladesh Corridor*

46. **Rationale.** The corridor supports Bhutan–Bangladesh trade and provides access to gateway ports in Bangladesh for facilitating Bhutan’s trade with other countries (Figure 5).

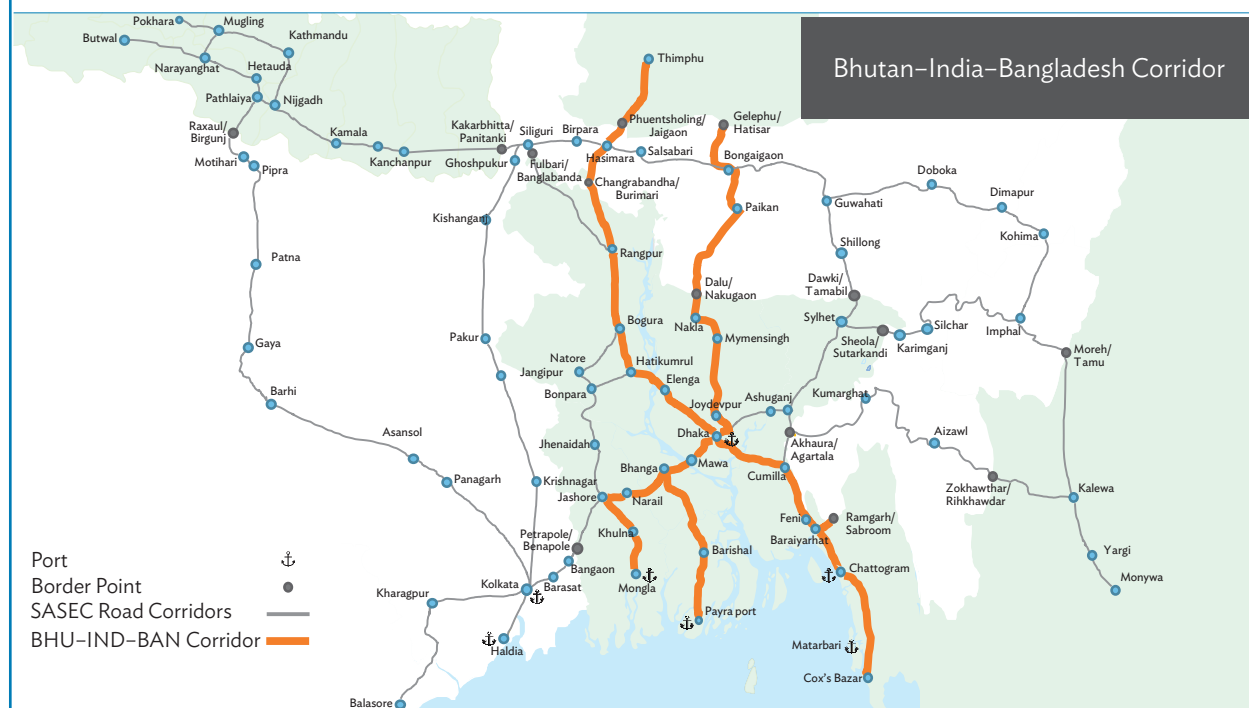
47. **Road route.** The two alternate routes connecting Thimphu and Dhaka on this corridor are

- i. the route via the Phuentsholing/Jaigaon border point between Bhutan and India, and the Changrabandha/Burimari border point between India and Bangladesh; and
- ii. the route via the Gelephu/Hatisar border point between Bhutan and India, and the Dalu/Nakugaon border point between India and Bangladesh, connecting further to Mongla, Payra, Chattogram, and Matarbari ports;¹⁷ this route is operational in a 2–4 lane configuration, with the section between Tura and Dalu in India currently under implementation.

48. **Rail route.** There is currently no rail connection with Bhutan. However, Kokrajhar–Gelephu rail connectivity via the Hatisar/Gelephu border interface is being developed between India and Bhutan. The corridor is further served by the Bongaigaon–Changrabandha/Burimari–Sirajganj rail network, with further connectivity to Mongla, Payra, Chattogram, and Matarbari ports. This rail route is not fully operational due to a gap between Bongaigaon and Hatisar and Changrabandha and Burimari, as well as the presence of multiple gauges along the route. The section in Bangladesh is meter gauge, while the section in India is broad gauge. However, Bangladesh is in the process of converting the meter gauge section to dual gauge, with an ongoing project from Bogura to Sirajganj. Bangladesh has proposed two additional interchange points for transit trade between (i) Mogalhat (Bangladesh) and Gitaldaha (India) and (ii) Chilahati (Bangladesh) and Haldibari (India), which will connect to New Cooch Behar in West Bengal, India, and subsequently to Kokrajhar in Assam, India. The Chilahati–Haldibari link is operational for Bangladesh–India bilateral trade.

¹⁷ Bangladesh has proposed an alternative route through the Rangpur–Barabari–Kurigram–Bhurungamari–Sonahat land port road.

Figure 5: Bhutan–India–Bangladesh Corridor



BAN = Bangladesh, BHU = Bhutan, IND = India.

Notes: i. The map is not to scale and is intended solely as a schematic representation.

ii. The map, corridors, transport networks, or other aspects depicted are for illustrative purposes only and do not necessarily represent precise geographical locations, political boundaries, or other features.

iii. The boundaries, colors, labels, and other information displayed on the map do not imply, in any way, the Asian Development Bank's judgment on the legal status of any territory, nor do they constitute an endorsement or acceptance of the boundaries, colors, labels, or information shown.

Source: Asian Development Bank.

49. **Waterways and multimodal routes.** Inland waterway terminals at Dhubri or Jogighopa in India, accessible by road from Bhutan, connect to NW 2 in India and onward to the inland waterways of Bangladesh through the IBP routes, providing access to Bangladesh ports.

50. **Border points.** All road border points serving this corridor are LCSs on the India side and land ports on the Bangladesh side. There is no operational rail border point on this corridor.

51. **Status of projects under the APSI 2024–2026.**

- i. Upgrade of the Gelephu Airport has been completed with ADB support, and it is currently being developed into an international airport with support from the Royal Government of Bhutan.
- ii. Improvement of the Burimari–Rangpur Road in Bangladesh (also ADB-supported as a component of SASEC Dhaka–Northwest Corridor Project Phase 3) is at the feasibility stage.
- iii. Upgrade of the JICA-supported Tura–Dalu road in Meghalaya, India has been completed, and the Srirampur (Assam)–Tura (Meghalaya) road section in India is under construction.
- iv. Dual gauge Bogura–Sirajganj rail link in Bangladesh is at the planning stage.
- v. Joydebpur–Mymensingh Expressway public–private partnership project in Bangladesh (supported by the Government of the Republic of Korea) is at the planning stage.
- vi. The World Bank-supported Gelephu–Panbang road project (90 km) is at the project preparation stage.

- vii. The proposed Kokrajhar–Gelephu BGL, aimed at providing rail connectivity between India and Bhutan, is in the feasibility stage.
- viii. The Samtse (Bhutan)–Banarhat (India) rail line is at the project preparation stage.
- ix. Two road projects in Bangladesh, the Mymensingh–Nakla Road and the Nakla–Nakugaon Highway, are at the project preparation stage.

52. **New projects added to APSI 2025–2027.**

- i. **Projects under construction** in Bhutan–India–Bangladesh Corridor include
 - SASEC Chattogram–Cox’s Bazar dual gauge rail line project (Chattogram–Dohazari) (supported by ADB);
 - Matarbari Port Project (760-m quay) (supported by JICA);
 - Hazrat Shahjalal International Airport Expansion Project (Phase I) (supported by JICA and the Government of Bangladesh);
 - Cox’s Bazar Airport international terminal construction (supported by the Civil Aviation Authority of Bangladesh);
 - Cox’s Bazar Airport runway expansion project (supported by the Government of Bangladesh);
 - Sylhet Osmani International Airport Expansion Project (Phase I) (supported by the Government of Bangladesh and the Civil Aviation Authority of Bangladesh);
 - Hazrat Shahjalal International Airport CNS/ATM system installation including radar (supported by the Civil Aviation Authority of Bangladesh);
 - New Gelephu International Airport at Mindfulness City (supported by the Royal Government of Bhutan);
 - Jogighopa Bridge (supported by JICA);
 - National Highway 127B (NH 127B) Srirampur (Assam)–Tura (Meghalaya):
 - o Dhubri (Assam)–Phulbari (Meghalaya) Bridge over the Brahmaputra River (supported by JICA);
 - o Phulbari–Tura road section (KM 31.50–63.224) (supported by JICA); and
 - Dewathang–Nganglam highway in Bhutan (supported by the Government of India).
- ii. **Projects under planning and preparation** in the Bhutan–India–Bangladesh Corridor include
 - operationalization of IBP routes 9 and 10 through dredging and other measures (supported by the Governments of India and Bangladesh);
 - implementation of the Chattogram–Cox’s Bazar Highway Improvement Project (Phase II) (supported by JICA);
 - procurement and installation of digital gauges for collecting water level data on BIWTA–classified waterways through the GSM network (supported by the Government of Bangladesh);
 - construction of an ICT at Shimulia in Munshiganj District (supported by the Government of Bangladesh);
 - installation of solar systems, reverse osmosis plants, and marine sanitation devices in inland water transport vessels and houseboats to reduce carbon dioxide emissions and ensure availability of clean water and sewage treatment (supported by the Government of Bangladesh);
 - construction of a passenger terminal, including a boarding bridge, at Shah Amanat International Airport, Chattogram;
 - extension of the cargo building at Shah Amanat International Airport, Chattogram;

54. **Road route.** The route connects Mechinagar, Nepal (from Kathmandu) to Myanmar via the Kakarbhitta/Panitanki border point between Nepal and India, and the Moreh/Tamu border point between India and Myanmar. Access from Bhutan is available through the Bhutan–India–Bangladesh Corridor, which intersects this corridor at Hasimara and Bongaigaon. Access from Bangladesh is provided through the Sri Lanka–India–Bangladesh–India–Myanmar Corridor. This route is operational with a 2–4 lane configuration, with ongoing projects to upgrade the Kohima–Mao–Imphal section and construct the Moreh Bypass.

55. **Rail route.** There is currently no rail connection to Myanmar. However, rail connectivity has been proposed from Imphal (Manipur) to the Moreh/Tamu border point. The corridor is served by the rail route Kakarbhitta/Panitanki–Bongaigaon–Imphal. Even with the potential construction of the Imphal–Moreh rail connection, cargo would still need to be transferred to road transport, as there are no current rail development plans from Tamu in Myanmar.

56. **Border points.** The Moreh/Tamu border point is an operational ICP on the India side, while the Kakarbhitta/Panitanki border point is an LCS (proposed ICP) on the India side and an inland clearance depot on the Nepal side. There are no operational rail border points on this corridor.

57. **Status of projects under the APSI 2024–2026.**

- i. Government of India-supported
 - Mao–Imphal road is under construction; and
 - Moreh/Tamu cross-border bridge and other bridges (in India) along the Trilateral Highway are at the project preparation stage.
- ii. Government of Myanmar supported road projects including the Bago Bypass, Bago–Thilawa, and Thilawa–East Dagon are under construction.

58. **New projects added to the APSI 2025–2027.**

- i. **Projects under construction** in the Nepal/Bhutan–India–Myanmar Corridor include
 - Jogighopa Bridge (supported by JICA);
 - NH 127B Srirampur (Assam)–Tura (Meghalaya):
 - o Phulbari–Tura section (KM 31.50–63.224) (supported by JICA);
 - o Dhubri–Phulbari Bridge (supported by JICA);
 - upgrading of the Tousem–Tamenglong section of Silchar–Tousem–Tamenglong–Imphal Road (supported by the Government of India);
 - New Gelephu International Airport at Mindfulness City (supported by the Royal Government of Bhutan); and
 - Dewathang–Nganglam Highway (supported by the Government of India).
- ii. **Projects under planning and preparation** in Nepal/Bhutan–India–Myanmar Corridor include
 - Bharwa Kalan (Nautanwa)–Bhairahawa rail line (supported by the Government of India);
 - Nepalganj (India)–Nepalgunj (Nepal) (new) line (supported by the Government of India);
 - New Jalpaiguri–Kakarbhitta rail line (supported by the Government of India);
 - operationalization of the Arun River to connect to NW 58 (supported by the Government of Nepal);

- upgrading of the East–West Highway in Nepal (Chanauta–Kohalpur–Gaddachauki section);
- improvement of air traffic control facilities at Tribhuvan International Airport (supported by JICA);
- construction of the following rail links: Hasimara–Phuentsholing, Rangia–Samdrup Jongkhar (via Darranga), Pathsala–Nganglam, and Mujnai–Nyoenpaling (Pugli) (supported by the Government of India);
- NH 127B Srirampur (Assam)–Tura (Meghalaya): Phulbari–Tura section (KM 0.00–31.50) (supported by JICA).

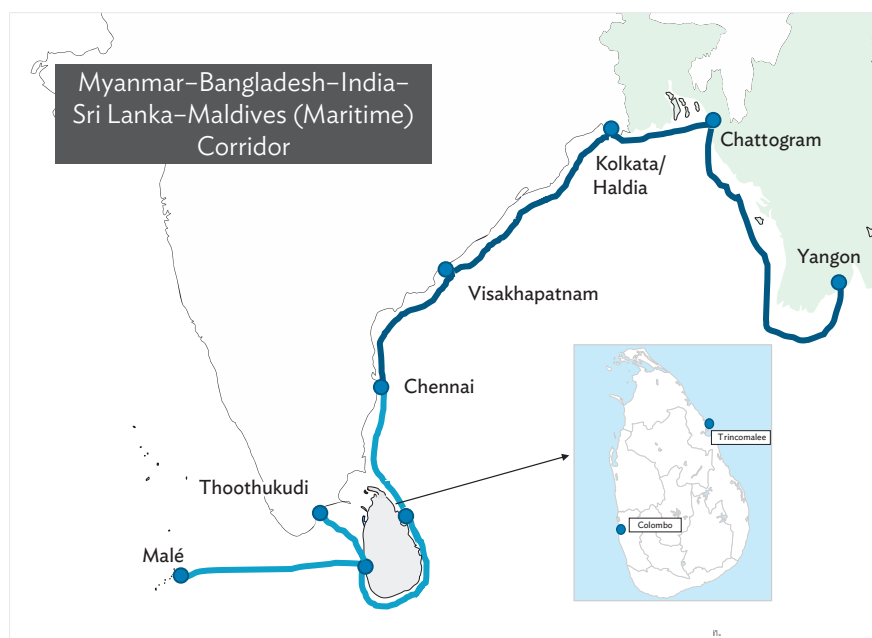
iii. **Projects completed** in Nepal/Bhutan–India–Myanmar Corridor include

- Bathnaha–Biratnagar rail link (supported by the Government of India).

6. *Myanmar–Bangladesh–India–Sri Lanka–Maldives (Maritime) Corridor*

59. **Rationale.** The Myanmar–Bangladesh–India Maritime Corridor offers an alternative multimodal access route to the landlocked North East Region (NER) of India via the Sittwe Port, providing maritime gateway access for both bilateral and third-country trade through Chattogram (Bangladesh), and Kolkata, Haldia, and Visakhapatnam (India) (Figure 7). This corridor also promotes economic growth through port-led development. The India–Sri Lanka–Maldives Maritime Corridor enhances regional and bilateral trade, facilitates passenger transit, stimulates economic development through a port-led ecosystem, and fosters broader growth opportunities.

Figure 7: Myanmar–Bangladesh–India–Sri Lanka–Maldives (Maritime) Corridor



- Notes:
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Source: Asian Development Bank.

60. **Route.** This corridor is served by the ports of Yangon and Sittwe in Myanmar, Chattogram in Bangladesh, KDS–HDC, Visakhapatnam, Chennai and Thoothukudi in India, Trincomalee and Colombo in Sri Lanka, and Malé in the Maldives. This corridor interfaces with Nepal/Bhutan–India Corridor at Indian ports and the Sri Lanka–India–Bangladesh–India–Myanmar Corridor at Sri Lankan, Indian, and Bangladeshi ports. It also connects with the Nepal–India–Bangladesh Corridor and Bhutan–India–Bangladesh Corridor at Bangladeshi ports.

61. **Status of projects under the APSI 2024–2026.**

i. **Projects under construction** include

- Matarbari Port Project (supported by JICA) in Bangladesh;
- Chattogram Port truck parking yard facility (supported by the Government of Bangladesh);
- flyover–underpass at the Visakhapatnam Airport junction to ensure smooth flow of container trailers to and from the multimodal logistics port on NH 16 (supported by the Government of India);
- Maduravoyal Elevated Corridor Project (supported by the Government of India);
- construction of Central Expressway Stage 1 (Kadawatha–Mirigama) in Sri Lanka (supported by the Government of the People’s Republic of China); and
- Greater Malé Connectivity Project and relocation of the commercial harbor (Malé Port) to Thilafushi (supported by the Government of Maldives).

ii. **Projects under planning and preparation** include

- Yangon Elevated Expressway (supported by the Government of Myanmar);
- SASEC Dhirasram Inland Container Depot (ICD) Project (supported by the Government of Bangladesh);
- Madaripur (Mostafapur)–Shariatpur–Chandpur–Lakshmipur–Begumganj Road and the Shariatpur–Padma Bridge Link Road connecting Chattogram Port and Mongla Port (supported by JICA);
- development of the Jolarpet rail terminal and connectivity, including an extended gate facility through rail for Chennai Port (supported by the Government of India);
- development of a bunkering facility in Laamu Atoll, Maldives (supported by Government of Maldives);
- SASEC Port Access Elevated Highway Project in Sri Lanka (supported by ADB and JICA); and
- flyover bridge from the Sea Horse Junction area to the dock area and direct connectivity to Mindi Yard for Visakhapatnam Port (supported by the Government of India).

62. **New projects added to the APSI 2025–2027.**

i. **Projects under construction** in the Myanmar–Bangladesh–India–Sri Lanka–Maldives Corridor include

- SASEC Chattogram–Cox’s Bazar dual gauge rail line project (Chattogram–Dohazari) (supported by ADB);
- Matarbari Port Project (760-m quay) (supported by JICA);
- construction of the international terminal building at Cox’s Bazar Airport (supported by the Civil Aviation Authority of Bangladesh);
- Cox’s Bazar Airport runway expansion project (supported by the Government of Bangladesh);
- Bandaranaike International Airport Expansion Project (Phase 2) (supported by JICA);

- Greater Malé Connectivity Project (Malé–Thilafushi Bridge) (supported by the Government of Maldives with support from the Export-Import Bank of India);
 - Velana International Airport Development Project – New Passenger Terminal (supported by the Government of Maldives with financial support from Saudi Arabia, Kuwait, and Abu Dhabi);
 - upgrading of Hanimaadhoo International Airport (supported by the Government of Maldives with support from the Export-Import Bank of India);
 - upgrading of Gan International Airport (S. Gan) (supported by the Government of Maldives with support from the Export-Import Bank of India);
 - Addu City Road Development Project (supported by the Government of Maldives with support from the Export-Import Bank of India); and
 - extension and development of Maafaru International Airport (supported by the Government of Maldives with financial support from Abu Dhabi).
- ii. **Projects under planning and preparation** in the Myanmar–Bangladesh–India–Sri Lanka–Maldives Corridor include
- operationalization of IBP routes 9 and 10 through dredging and other measures (supported by the Governments of India and Bangladesh);
 - Chattogram–Cox’s Bazar Highway Improvement Project (Phase II) (supported by JICA);
 - construction of an ICT at Shimulia in Munshiganj District (supported by the Government of Bangladesh);
 - construction of a passenger terminal, including a boarding bridge, at Shah Amanat International Airport, Chattogram;
 - extension of the cargo building at Shah Amanat International Airport, Chattogram; and
 - construction of a parallel taxiway at Shah Amanat International Airport, Chattogram.
- iii. **Projects completed** in the Myanmar–Bangladesh–India–Sri Lanka–Maldives Corridor include
- development of Cox’s Bazar Airport (Phase I) (supported by the Government of Bangladesh and the Civil Aviation Authority of Bangladesh); and
 - New Bridge Construction Project over the Kelani River.

B. Knowledge Works

63. While SASEC corridors and thematic areas have achieved progress toward better connectivity in the SASEC subregion, ongoing knowledge efforts are essential to further strengthen regional cooperation and generate synergies among member countries. These efforts will help unlock untapped trade potential. A brief overview of some key knowledge initiatives follows (also Appendix 2).

64. **The BBIN Rail-Based Cargo Movement Study.** ADB presented the final report of the study during the Transport Working Group Meeting in Kathmandu in December 2025. The final report analyzed infrastructure gaps, operational challenges, and policy and regulatory constraints affecting rail connectivity among Bangladesh, Bhutan, India, and Nepal. Delegates acknowledged the growing trade volumes in the subregion and the need to shift cargo from road to rail to reduce costs, improve efficiency, and lower greenhouse gas emissions. The study’s findings on required interventions—such as gauge conversion, capacity enhancement, development of ICDs, procurement of rolling stock, establishment of rail-based customs facilities, and policy and regulatory interventions—were noted. Country delegates confirmed that ADB could proceed with publication of the report. Implementation of the recommendations will be taken up by the countries on a bilateral or multilateral basis.

65. **Decarbonizing Transport in India by Increasing Modal Share of Railways in Passenger and Freight Traffic Study.** The study examines how Indian Railways can expand its role in India's transport system to reduce logistics costs and transport-sector emissions. ADB presented progress on the study during the Transport Working Group Meeting in Kathmandu in December 2025. The presentation informed delegates about the study's scope, including dynamic tariff strategies, marketing plans, capacity building for the business development units of Indian Railways, and identification of semi-high-speed passenger corridors. Delegates acknowledged progress on traffic analysis, stakeholder consultations, and preliminary findings, and supported ADB's efforts to develop actionable recommendations, including infrastructure upgrades, policy reforms, and digital tools.

66. **SASEC Sustainable and Inclusive Highway Network Implementation Plan.** ADB has initiated this study to estimate and project the demand and potential of the following SASEC corridors: Bhutan/Nepal–India Corridor, Sri Lanka–India–Bangladesh–India–Myanmar Corridor, Bhutan–India–Bangladesh Corridor, Nepal–India–Bangladesh Corridor, and Nepal/Bhutan–India–Myanmar Corridor. The study will identify road and rail infrastructure requirements, strategies, and solutions to meet projected demand, including highway augmentation and expressway creation; identify issues along the road and rail routes mentioned above and develop strategies for a disaster- and climate-resilient infrastructure; and prepare a phased implementation plan with financing proposals, including public–private partnerships, in consultation with SASEC countries. The Interim Report is expected to be presented in the 2026 SASEC Transport Working Group Meeting.

C. Digitalization

67. Two knowledge works are underway with the aim of laying the groundwork for advancing digitalization in the transport and logistics sectors across the SASEC region.

68. **Diagnostic Study on Digital Dynamic Data Stack for Cargo.** ADB is conducting a diagnostic assessment to evaluate the status and readiness of each SASEC partner country to operationalize a digital dynamic data stack for cargo. As part of the study, a quick assessment has been undertaken on the architectural structure of the data stack, benefits and use cases, international experience with similar systems, and applicability of the system in the context of SASEC partner countries. The assessment was explained to officials nominated by partner countries, and the quick assessment study was presented at the Transport Working Group Meeting in Kathmandu, Nepal, in 2025. As a next step, ADB will undertake country-level assessments involving stakeholder discussions, subject to the interest of SASEC partner countries, to understand the extent of digitalization of relevant government datasets, identify the specific needs of the logistics industry, assess institutional and coordination structures for operationalization and technological readiness, and assess the relevance of the concept in the context of each country. Among the SASEC countries, India has implemented the Unified Logistics Interface Platform, a digital gateway designed to break interministerial silos and streamline India's supply chain. Government of Nepal has approved a readiness assessment by ADB for the adoption of the digital dynamic data stack.

69. **Diagnostic Study on Assessment of Digital Maturity across SASEC Countries to Operationalize a geographic information system (GIS)-based Decision Support System for Infrastructure Planning Leveraging National Spatial Data Infrastructure and Systems (NSDIS).** ADB has conducted a quick assessment to (i) identify the core technical and institutional components required to operationalize a robust GIS-based decision support system; (ii) assess associated benefits; (iii) review global experiences in similar systems; and (iv) develop a flexible, generic roadmap for development of such systems. During the SASEC Transport Working Group Meeting held in Kathmandu, Nepal, in 2025, delegates reviewed findings on leveraging NSDIS for a GIS-based decision support system. The discussions highlighted that such a system would not only strengthen infrastructure planning in the transport sector but also offer significant value for broader infrastructure development, including planning for social infrastructure.

During the SOM in Kathmandu, Nepal, in 2025, it was advised that the SASEC Secretariat undertake an assessment of digital maturity across SASEC partner countries, focusing on the key elements required to operationalize GIS-based infrastructure planning through NSDIS. This activity will be pursued under the Economic Corridor Development operational priority for infrastructure and spatial planning, with one use case being multimodal transport planning.

D. Logistics

70. **Project on Strengthening Integrated and Multimodal Logistics Ecosystem in India.** Improvement of multimodal logistics infrastructure, alongside policy and regulatory reforms in the logistics sector, represents a new approach to strengthening trade corridors under the SASEC program. ADB has been supporting India's Strengthening Multimodal and Integrated Logistics Ecosystem (SMILE) program, which focuses on transforming the logistics landscape. Key components of the program include (i) the Multimodal National Master Planning; (ii) the National Logistics Policy; (iii) strengthening institutional frameworks; (iv) implementing smart systems for safe, efficient, and low-emission logistics, including a dynamic logistics data stack; (v) standardizing logistics assets such as warehousing; and (vi) improving export–import logistics.

71. The SMILE program was supported by ADB through a policy-based loan, with two subprograms of \$250 million (in FY2023) and \$350 million (in FY2025). Both the subprograms have been successfully completed. As part of the post-program partnership, ADB is supporting various initiatives to improve efficiency in the logistics sector. These include the development of a rating system for warehouses and related assets, a gender responsive warehousing framework, preparation of Sectoral Plan for Efficient Logistics for food and public distribution, preparation of state and city logistics plans, and process mapping at land ports.

III. TRADE FACILITATION

72. Trade facilitation has been an operational priority under the SASEC program from its inception. ADB has been extending policy-based loans and grants for trade facilitation programs at both the regional (Bangladesh–Bhutan–Nepal) and national (Nepal) levels since 2012. These initiatives have supported governments in meeting their commitments under the Trade Facilitation Agreement (TFA) of the World Trade Organization (WTO) and aligning with related international customs standards, such as the revised Kyoto Convention of the World Customs Organization.

73. The SASEC Trade Facilitation Strategic Framework (STFSF) 2014–2018 outlined four priority areas to guide the SASEC trade facilitation program: (i) modernization and harmonization of customs procedures, (ii) standards and conformity assessment, (iii) enhancement of cross-border facilities, and (iv) facilitation of seamless transport, with institutional strengthening and capacity building, as an overarching support.

74. The SASEC Operational Plan for 2016–2025 established six trade facilitation priorities as focus areas for ADB's assistance in this area. These priorities are to (i) simplify trade documentation; (ii) promote automation in border agencies and develop national single windows (NSWs); (iii) strengthen national conformity bodies to address sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT); (iv) develop and implement through-transport (motor vehicle) agreements;¹⁸ (v) develop trade-related infrastructure in ports, dry ports, and land border crossings; and (vi) build capacity and improve coordination in trade facilitation.

¹⁸ Besides the BBIN MVA discussed earlier, the SASEC Secretariat had supported the drafting of the India–Myanmar–Thailand MVA, although it has yet to be signed pending resolution of outstanding issues. The SASEC Secretariat will facilitate discussions on these matters if requested by the concerned countries.

75. The SASEC Customs Subgroup (SCS)¹⁹ has been a key institutional mechanism since 2014 for advancing customs-related trade facilitation within the SASEC framework. The SCS oversees and monitors subregional initiatives (SRIs) aimed at customs facilitation for cross-border trade and transit. ADB's current assistance focuses on supporting the SCS and its SRIs that aim to strengthen cooperation among SASEC customs administrations for better compliance monitoring, promote coordinated border management, and facilitate the exchange of information and data. Key initiatives include

- i. exchange of documents at border crossing points;
- ii. border meetings among customs authorities;
- iii. electronic exchange of pre-arrival data;
- iv. use of the regional ECTS;
- v. cross-border route studies, also known as highly facilitated trade corridor (HFTC) studies;²⁰ and
- vi. cross-border coordinated border management.

76. Apart from these six subregional initiatives, improvement of cross-border facilities has largely been integrated into SASEC road connectivity projects in partner countries and has been included in discussions related to transport and logistics in SASEC corridors (refer to the discussion under the transport operational priority). Transport facilitation to enhance the efficient transnational movement of people, goods, and vehicles is not just supported through the BBIN MVA but also addressed in the SASEC cross-border route studies.

A. Projects and Knowledge Initiatives

77. Policy-based loans and grants extended by ADB since 2012 (amounting to \$69 million) for trade facilitation programs in Bangladesh, Bhutan, and Nepal have supported governments in aligning with related international trade facilitation conventions and standards. The programs have also strengthened key customs operations, including risk management, post-clearance audit, advance rulings, authorized economic operator (AEO) programs, pre-arrival processing, and expedited shipment procedures.

78. The coronavirus disease (COVID-19) pandemic experience of partner countries not only brought a sense of urgency to advance trade facilitation for sustaining supply chains but also created an opportunity for substantial reforms as countries sought to build back better. Under the SASEC program, an action plan was prepared to minimize human interaction in addressing disruptions, ensure business continuity, enhance interagency and cross-border coordination, and implement special protocols for sensitive or critical goods.

79. The projects centered around trade facilitation in the SASEC subregion are summarized below.

- i. **Bangladesh Trade Facilitation Sector Development Program (SDP).**²¹ Phase I of the SDP has been successfully completed, covering improvements in the legal framework in line with international standards, business process reforms, and strengthened institutional capacity. The policy reforms included progress in WTO TFA implementation, preparing a roadmap for implementing the United Nations Economic and Social Commission for Asia and the Pacific Framework Agreement on Cross-border Paperless Trade, improving processes for

¹⁹ The SCS seeks to advance subregional trade facilitation by promoting customs reforms and modernization, strengthening interagency cooperation, and enhancing partnerships with the private sector, all aimed at eliminating trade barriers and fostering trade development.

²⁰ The HFTC studies have been moved to the economic corridor development operational priority following discussions and endorsement at SASEC meetings held in Kathmandu, Nepal in November–December 2025.

²¹ ADB. Bangladesh: South Asia Subregional Economic Cooperation Integrated Trade Facilitation Sector Development Program. <https://www.adb.org/projects/53260-001/main>.

pre-arrival processing, post-clearance audit, transit cargo and perishable cargo. The program also strengthened the use of customs laboratories, non-intrusive inspection equipment, and training facilities. As an SDP, it also supports border infrastructure development; Phase I covered Akhaura, Sonamasjid, and Tamabil land ports; Phase II of the SDP is under implementation.

- ii. **Bhutan Trade Expansion and Diversification Program.**²² Reforms include revamping the National Trade Facilitation Committee, establishing a central mechanism to develop and operate dry ports, strengthening SPS and TBT frameworks, conducting a TFA gap analysis followed by a multiyear action plan, expanding the digitalization of trade processes, improving customs compliance and valuation frameworks, and enhancing SPS and TBT regimes.
- iii. **Maldives National Single Window Project.**²³ Phase I of the Maldives NSW Project has been launched with modules for user and vessel management, vessel arrival, sea cargo manifest submission, and live vessel and tally data. Phase II plans to integrate 17 additional systems including customs declarations and licenses, permits, certificates, and other documents.
- iv. **Nepal Customs and Trade Logistics Modernization Plan.**²⁴ Nepal implemented the Customs Reform and Modernization Plan 2021–2026 under the SASEC Customs and Logistics Program. Its key measures include the introduction of online document submission, post-clearance audit, and a valuation database. Complementary efforts also focus on improving trade logistics through a new trade logistics policy.
- v. **Sri Lanka Trade and Industry Development.**²⁵ Reforms include the revamping of the AEO and advance ruling programs through regulatory impact assessments to expand coverage, the introduction of ECTS to facilitate movement between ports and inland inspection yards, support for NSW scoping and preparation, and the conduct of time release studies. These efforts are complemented by initiatives supporting small and medium enterprises and economic zone development.

80. The full list of ADB-supported trade facilitation projects in SASEC countries is available in Appendix 3.

81. To improve trade facilitation across cross-border regulatory agencies, the SASEC Secretariat has been conducting a number of knowledge works. These aim to support downstream projects, while making specific recommendations to address the gaps and challenges in the trade environment. Illustratively, a subregional study on cross-border e-commerce was conducted to strengthen the regulatory framework; identify gaps, challenges, and opportunities; and develop recommendations to support the growth and success of e-commerce in the subregion.

82. Capacity building efforts have been integral to SASEC trade facilitation work harnessing the principles of South–South cooperation—drawing on shared experiences, regional expertise, and peer learning among developing countries—to strengthen the institutional and operational capabilities of SASEC partner countries.

83. The full list of trade facilitation knowledge work in SASEC countries is available in Appendix 4.

²² ADB. Bhutan: Trade Expansion and Diversification Program (Subprogram 1). <https://www.adb.org/projects/58522-001/main>.

²³ ADB. Maldives: South Asia Subregional Economic Cooperation National Single Window Project. <https://www.adb.org/projects/51330-001/main>.

²⁴ ADB. Nepal: South Asia Subregional Economic Cooperation Customs and Logistics Reforms Program (Subprogram 1). <https://www.adb.org/projects/54402-001/main>

²⁵ ADB. Sri Lanka: Supporting the Development of Economic Zones and Small and Medium-Sized Enterprise Dynamism to Boost Competitiveness and Jobs. <https://www.adb.org/projects/56093-001/main>.

B. Sanitary and Phytosanitary Measures and Technical Barriers to Trade

84. Under the Standards and Conformity Assessment pillar of the STFSE, measures were introduced to enhance subregional trade through strengthened interagency cooperation and partnerships with the private sector to reduce trade barriers.

85. During 2017–2018, national diagnostic studies on SPS–TBT were conducted for Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka. The studies identified commodities for which a SASEC country had export capacity but another SASEC country was importing from outside the subregion. They also highlighted SPS- and TBT-related nontariff measures that may be restricting trade, as well as gaps in legislative, institutional, infrastructural, and human capacity.

86. Studies to inventory SPS–TBT facilities in Maldives, Nepal, and Bhutan were completed and shared with respective governments. These studies inventoried the SPS–TBT institutions, relevant legislation, human resources, infrastructure, and laboratories for sample testing, certification, and metrology related to imports and exports. The studies recommended measures to strengthen the capacity of SPS–TBT facilities and institutions to promote trade. Further, the SPS–TBT studies led to the initiation of a food ecosystem approach in the region, including food safety, food security, and food trade. This will also help develop regional value and supply chains in the food sector.

87. In line with the decisions taken in the SASEC meetings in Kathmandu, Nepal in November–December 2025, similar studies will be conducted in Bangladesh and Sri Lanka as well and the Bhutan and Maldives studies will be updated. As the study for Nepal was completed in just 2023, no immediate update is required.

88. A comprehensive list of projects related to SPS–TBT is provided in Appendix 5. A full list of knowledge initiatives related to SPS–TBT can be found in Appendix 6.

C. Digitalization

89. Digitalization has been central to SASEC trade facilitation, evolving from electronic customs and reduced paperwork to fully integrated systems linking customs and other agencies through NSW. These reforms lower costs, speed clearance, enhance transparency and compliance, and enable inclusive, remote participation, supported by tools like non-intrusive inspection and electronic cargo tracking. National single window initiatives across SASEC partner countries are listed below.

- i. **Maldives NSW.** ADB is supporting the Government of Maldives in implementing the Maldives NSW, an integrated digital platform linking customs and other cross-border regulatory agencies, enabling paperless processing, automated approvals, and risk-based controls. Once operational, the NSW will enhance interoperability and data exchange, reducing clearance time and costs while improving transparency and compliance.
- ii. **Sri Lanka Trade NSW.** ADB is supporting the Government of Sri Lanka in designing a unified Trade NSW (TNSW), a digital trade platform integrating multiple cross-border regulatory agencies. It will promote electronic documentation, automated workflows, and risk-based processing. The ADB support is focused on strengthening the institutional capacity for implementing the TNSW, through business process re-engineering and data harmonization.
- iii. **Bhutan NSW.** The Royal Government of Bhutan (with support from the World Bank) is developing digital trade systems including NSW, automated border processes, and electronic data exchange. A blueprint has been prepared. When fully implemented, the project is expected to reduce manual processes while enhancing compliance and transparency.
- iv. **Regional Trade Facilitation Gap Analysis.** A regional assessment has been included under APSI to evaluate digital readiness across SASEC countries, focusing, inter alia, on customs

automation, interoperability, and single window systems. The study identifies gaps in paperless processing and risk management and recommends targeted digital reforms to improve efficiency, reduce costs, promote e-payments, and support inclusive trade participation.

- v. **Regional Electronic Cargo Tracking System (ECTS).** The regional ECTS combines electronic seals with a real-time monitoring platform to digitalize transit operations and monitor other customs-controlled processes. It integrates with customs systems to improve cargo visibility, reduce diversion risks, and strengthen risk-based enforcement, thereby enhancing efficiency, compliance, and trust across regional corridors.
- vi. **Coordinated Border Management.** This initiative advances digital integration among border agencies through shared platforms, automated inspections, and electronic data exchange. It improves coordination, reduces duplication, and enhances transparency, enabling faster clearance and more effective enforcement while supporting remote trade participation.

IV. ENERGY

90. The SASEC Vision (2017) underscores the critical role of energy in advancing regional integration within South Asia. It emphasizes the need to enhance energy access and security through the development of energy infrastructure, promotion of intraregional power transmission projects to reduce costs and dependency on imports, and the expansion of clean energy resources. The SASEC Operational Plan (2016), revised in 2019, recognizes energy as one of three core operational priorities within the initiative.

91. In 2022, the SASEC Energy Working Group (EWG) convened and issued six key observations, which include

- i. analyzing the feasibility of energy interconnections to improve access, particularly focusing on nearest-point interconnections, as well as grid stability;
- ii. securing availability of low-cost, long-term financing;
- iii. developing a power market in the region based on interconnections;
- iv. leveraging ADB's TA resources to compile best practices and identify opportunities for countries to benefit from these approaches;
- v. exploring the development of a regional SVC for electrical grid equipment, supporting both new projects and the maintenance of assets, with adherence to the necessary technical standards for energy security; and
- vi. promoting frequent technical-level interactions and coordination.

92. During the subsequent meetings, the SASEC EWG unanimously endorsed a series of initiatives, encompassing knowledge studies and projects, in response to these observations. These initiatives are detailed further below.

93. Discussions on progress and high-priority initiatives in the energy sector focus on advancing SASEC-wide network integration efforts, particularly in power trade and optimizing nearest-point interconnectivity.²⁶ A key operational area for energy is the promotion of clean, low-carbon energy sources, such as wind, solar, hydro and biofuels. The SASEC initiative will also prioritize enhancing the supply chain resilience of electrical grid equipment in the region, alongside supporting digital initiatives for utility modernization. The APSI includes proposals for fostering knowledge exchanges, incorporating industry best practices, and facilitating technology transfer for the development of clean energy solutions.

²⁶ The SASEC Vision proposed flagship initiatives in two areas, namely, power trade development and cooperation in oil and gas. However, the APSI (2022–2024 onward) does not include projects in oil and gas.

94. The SASEC countries aim to leverage power trade to provide affordable renewable energy, primarily hydropower, from nations such as Bhutan and Nepal to countries like Bangladesh, India, and Sri Lanka. Power trade can also support power swap arrangements to address seasonal fluctuations in supply and demand. The SASEC program supports the development of nearest-point interconnections, which will facilitate the cross-border transmission of hydropower. This will enable countries to share the costs and benefits of large-scale hydropower and transmission infrastructure, while helping to balance the needs of national markets, considering the variations in demand and supply patterns.

A. Power Trade and Related Projects

95. Power trade in the region is predominantly operational through bilateral agreements between India and Bangladesh, Bhutan, Nepal, and Myanmar. Given India's central geographic location, substantial generation capacity, and large energy demand, it naturally serves as the hub for SASEC power trade. India's Revised Guidelines for Import/Export (Cross-Border) of Electricity – 2018, issued in December 2018, facilitate (i) tripartite electricity trading under bilateral agreements, (ii) trading through power exchanges with clearance from the designated authority, and (iii) the relaxation of ownership restrictions for cross-border electricity trade. The interconnections between India and Bangladesh, Nepal, and Myanmar have historically been fully utilized but face capacity constraints, limiting further power trading opportunities. Expanding the power market in the region will necessitate infrastructure upgrades, particularly for nearest-point interconnections. Several cross-border transmission projects are under consideration among SASEC countries. A significant milestone was achieved with the signing and operationalization of the region's first tripartite agreement between Nepal, India, and Bangladesh, under which Nepal exports 40 megawatts (MW) of electricity to Bangladesh via India's power grid. This agreement sets the foundation for a more integrated power market in SASEC, fostering regional cooperation and advancing the energy sector. Nepal and Bhutan have also begun power trading through India's power exchange platform, marking a shift from traditional negotiated agreements. The key features and progress of bilateral power trade between the SASEC partner countries are outlined below.

96. **India–Bhutan power trade.** Since 1986, Bhutan has been a power exporter to India through various hydropower projects (HPPs) and associated transmission lines. Each new HPP in Bhutan includes the necessary transmission infrastructure to deliver power to the desired load centers in India. Bhutan's hydropower sector continues to evolve as a critical pillar of its energy partnership with India. Two major export-oriented HPPs are currently under construction: the 1,200 MW Punatsangchhu I and the 600 MW Kholongchhu. While Punatsangchhu I has experienced commissioning delays, Punatsangchhu II successfully began operations in 2025, and the Mangdechhu project has been generating power since 2019. Due to unprecedented demand growth in recent years, Bhutan procures substantial quantities of electricity from India's power exchanges to meet domestic supply gaps. Development partners, including ADB, continue to support the expansion of Bhutan's export-oriented hydropower portfolio through projects such as the Nyera Amari HPP (404 MW), Bunakha HPP (180 MW), and the Dorjilung HPP (1,125 MW). These investments will strengthen regional energy security and contribute meaningfully to shared clean energy goals.

97. **India–Nepal power trade.** Power trade between India and Nepal has evolved from addressing the energy needs of isolated border areas to a broader exchange for domestic consumption. Initially, the Nepal Electricity Authority procured electricity from Indian utilities in Bihar, Uttar Pradesh, and Uttarakhand. Over time, Nepal's power imports from India have increased, supported by various domestic transmission strengthening projects, many of which have been assisted by ADB. Recognizing the need for coordinated efforts, a Joint Working Group (JWG) and Joint Study Committee (JSC) were formed to manage power trade and transmission connectivity between the two countries. This collaboration resulted in a long-term integrated transmission plan, designed to evacuate surplus hydropower from Nepal's projects. The plan also includes an action plan for HPPs expected to be completed by 2025, with

a long-term perspective through 2035. In December 2018, Nepal’s Ministry of Energy, Water Resources, and Irrigation launched the Transmission System Development Plan, aligned with updated generation and load forecasts through 2040. This plan outlines a 400 kV East–West line interlinked with radial lines along river corridors and incorporates six Nepal–India connections. Nepal’s participation in India’s power exchanges has grown, with the country purchasing electricity during periods of deficit and selling surplus hydropower during the monsoon season. A historic agreement in 2024 between India and Nepal will significantly increase power exports from Nepal, with a target of reaching 10,000 MW of exports within the next decade, positioning Nepal as a key exporter of clean hydropower in the region. Further, in 2025, a Memorandum of Understanding (MoU) was signed between POWERGRID, a Maharatna Central Public Sector Enterprise of India, and the Nepal Electricity Authority, marking a key milestone in advancing regional power connectivity. The MoU outlines the formation of two joint venture companies, one each in India and Nepal, to implement high-capacity cross-border transmission infrastructure. The proposed projects include the development of the 400 kV Inaruwa (Nepal)–Purnea (India) and 400 kV Dododhara (Nepal)–Bareilly (India) double-circuit transmission lines. These critical links will substantially enhance power exchange between the two countries, strengthening energy security, improving grid stability, and supporting economic growth across the region.

98. **India–Bangladesh power trade.** Power trade between India and Bangladesh has seen significant advancements. Currently, Bangladesh imports 2,650 MW of electricity from India under six contracts. A 400 kV transmission line between Baharampur (India) and Bheramara (Bangladesh), along with high voltage direct current back-to-back substations at Bheramara, was commissioned in October 2013 and expanded in 2018, increasing the transmission capacity from 500 MW to 1,000 MW. These improvements, undertaken by Power Grid Corporation of India Ltd. and Power Grid Bangladesh PLC, have been critical in enhancing cross-border trade. Currently, Bangladesh imports 1,000 MW from India under four agreements through the Baharampur–Bheramara transmission link, with one agreement conducted on a government-to-government basis and the others via a competitive tendering process. A decision made during the 8th JSC/JWG meeting also allows Bangladesh to import up to 160 MW at Cumilla from the Palatana Power Plant in Tripura, India, via radial interconnection. Additionally, a power purchase agreement with Adani Power allows Bangladesh to import up to 1,496 MW from Adani’s Godda Power Project in Jharkhand. Ongoing strategic discussions focus on establishing the Katihar (India)–Parbotipur (Bangladesh)–Bornagar (India) 765 kV transmission line, which will serve as a backbone for intraregional electricity trade.

99. **India–Myanmar power trade.** India currently supplies 3 MW of power to Myanmar from Moreh (India) to Tamu (Myanmar). Myanmar’s Ministry of Energy and Electricity has received proposals to increase power imports from India and the Lao People’s Democratic Republic (Lao PDR) through cross-border transmission lines, which will support Myanmar’s electrification efforts in border communities. In July 2025, agreements were also signed for DPR preparation of the Imphal–Tamu 400 kV transmission link with a high-voltage-direct-current back-to-back station, alongside internal transmission augmentation in Myanmar.

100. **Progress.** Since 2020, ADB’s commitment of approximately \$477 million toward domestic power transmission and generation projects in Nepal has supported the development of future capacity to allow the export of surplus power. Among these, the SASEC Power Transmission and Distribution System Strengthening Project (2020, \$200 million) will modernize the power supply system in Kathmandu and distribution in surrounding regions, enabling the evacuation of hydropower and facilitating regional trade. Nepal is also engaged in the development of major HPPs: Dudh Koshi (635 MW), led by ADB and the World Bank, and Upper Arun (1,061 MW), spearheaded by the World Bank with ADB support. Other development partners are also exploring involvement in these large-scale projects, toward meeting both domestic energy demands and facilitating regional exports.

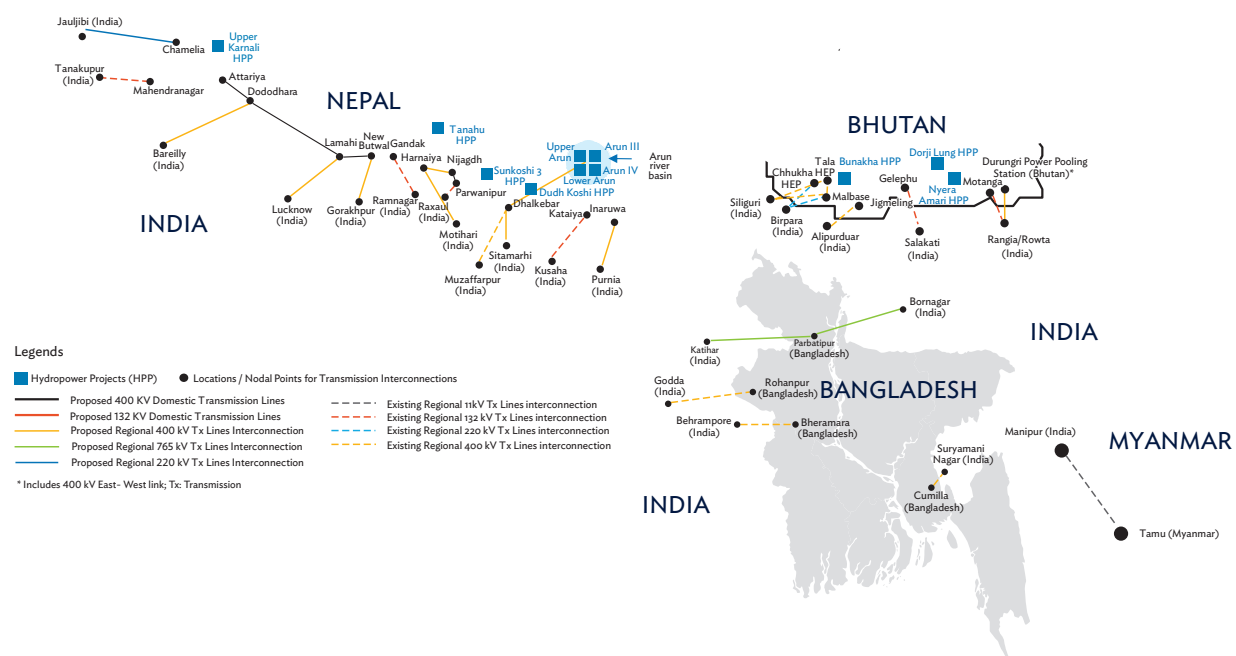
101. In Bangladesh, the Dhaka–Western Zone Grid Expansion Project (2019, \$300 million) will address transmission deficiencies and strengthen power transfer capacity within the country, while also supporting increased regional trade with India. Additionally, ADB’s regional TA (approved in 2023, \$3 million) for the energy sector is supporting SASEC countries to identify and prepare power projects of regional significance, foster capacity building for regional cooperation, and enhance collaboration among agencies in the SASEC partner countries.

102. Enhanced SASEC trading of clean hydropower from Nepal and Bhutan to Bangladesh and India is poised to be a significant driver of post-COVID-19 green recovery. As power markets in the region continue to evolve, there is a growing need to develop more robust electricity infrastructure, improve grid reliability, and enhance cross-border power transmission. Strengthening the region’s transmission capacity and power generation pipeline will ensure reliable, high-quality electricity supply to consumers while solidifying Bhutan and Nepal’s roles as net energy exporters within SASEC. These efforts will also contribute to achieving universal access to reliable power, advancing sustainable energy for all, and reducing dependence on fossil fuels.

103. The existing cross-border grid interconnections and the projects included in the APSI 2025–2027 are presented in Figure 8.

104. The full list of ADB-supported power projects in the SASEC partner countries can be found in Appendix 7.

Figure 8: Existing Cross-Border Transmission Lines and Energy Projects under the Action Plan for SASEC Initiatives 2025–2027



HPP = hydropower project, kV = kilovolt, SASEC = South Asia Subregional Economic Cooperation, Tx = transmission.

- Notes:
- The map is not to scale and is intended solely as a schematic representation.
 - The map and the transmission lines depicted are for illustrative purposes only and do not necessarily represent precise geographical locations, political boundaries, or transmission line routes.
 - 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.

B. Knowledge Initiatives

105. In the energy sector, substantial progress has been made in strengthening regional connectivity amongst the SASEC partner countries through the expansion of cross-border interconnections and advancement of bilateral and trilateral power trade. However, continued and coordinated efforts remain essential to unlock the full regional power-trade potential. During the EWG meetings in 2023 and 2024, partner countries endorsed a set of priority knowledge initiatives focused on technical and commercial analyses for interconnections, supply- and value-chain strengthening, green energy financing, capacity building, and best-practice sharing. In EWG 2025, these priorities were reaffirmed.

1. *Updating of Regional Transmission Master Plan*

106. In 2016, ADB conducted a cross-border transmission master plan study covering the SASEC partner countries. The primary objective was to identify beneficial cross-border transmission developments for 2020–2030, taking into account the generation development plans of individual countries. The SASEC partner countries recognized the need to update the findings of the 2016 report to reflect changes and developments in their national plans, policies, and forecasts. Consequently, an updated techno-economic analysis was performed for the 2024–2030 period. A comprehensive study model was developed, incorporating demand, generation, and transmission data for the study period, based on the power development plans of individual countries, independent study reports, and publicly available data. The results of the study clearly demonstrated that significant benefits could be realized through power trade among SASEC countries, across various future scenarios considering demand and generation availability. The master plan will be updated regularly to align with national master plans. The updated master plan's findings are being integrated into the grid-interconnection master plan for the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation partner countries.

107. In EWG 2025, countries agreed that the regional transmission master plan should be updated at least once every 5 years, ensuring that regional planning reflects new system developments, emerging interconnection opportunities, and market dynamics. Following EWG and SOM endorsements, ADB will undertake further analytical work to strengthen nearest-point interconnections across the region. Key follow-up initiatives endorsed under EWG 2025 include the following:

- i. ADB supported Sri Lanka in advancing commercial feasibility assessments and viable business models for the proposed India–Sri Lanka transmission interconnection. In EWG 2025, Sri Lanka reaffirmed the importance of the project, and ADB remains committed to supporting additional environmental and social safeguard assessments on the Sri Lankan side.
- ii. ADB will also carry out new corridor studies to facilitate clean-energy evacuation and expand regional cooperation, including potential pre-feasibility analysis for the Maldives inter-island connectivity study and the Bhutan solar integration study.

2. *Green Fuel Development Initiative*

108. ADB has undertaken multiple analytical initiatives to support the clean fuel transition in the SASEC partner countries. Beyond the scenario-based roadmap prepared under the SASEC regional energy cooperation TA program,²⁷ ADB is also implementing a dedicated SASEC regional TA program on green fuel development,²⁸ which expands the scope of knowledge work and regional cooperation on clean fuels. The TA aims to help the region transition from fossil fuels to low-carbon green fuels, including advanced biofuels, green hydrogen, and green ammonia. The TA is designed as a regional knowledge and support platform covering the SASEC countries.

²⁷ ADB. 2018. South Asia Subregional Economic Cooperation Regional Energy Cooperation. <https://www.adb.org/sites/default/files/project-documents/52070/52070-001-tar-en.pdf>.

²⁸ ADB. 2022. South Asia Subregional Economic Cooperation Green Fuel Development Initiative. <https://www.sasec.asia/index.php?page=project&pid=221&url=reg-sasec-green-fuel-dev>.

109. The TA implementation has progressed substantially, with several foundational analyses already completed. These include the inception report; macroeconomic scenario and energy-transition assessment; energy demand and supply analysis; and resource potential studies on biofuels, e-fuels, green hydrogen, and green ammonia, along with assessments of clean-energy transition gaps, cross-regional green-fuel trade opportunities, and a comprehensive list of opportunities across multiple sectors. Preparation of a long list of pilot projects, shortlisting of projects for deeper study, feasibility assessments, and knowledge-sharing activities are currently underway, while the development of sector strategies, scale-up schemes, and international exposure visits are scheduled for later phases. Country-level progress is also notable:

- i. **India** has completed green-fuel potential and feedstock studies, initiated engagement with the Ministry of Petroleum and Natural Gas, and begun discussions with NTPC Limited for pilot projects at the proposed Green Hydrogen Hub in Andhra Pradesh.
- ii. **Bhutan** has completed a sustainable aviation fuel feasibility study, held stakeholder workshops, and submitted a concept paper on compressed biogas.
- iii. **Sri Lanka** has completed multiple missions and identified a municipal solid-waste-based compressed biogas plant as a pilot project.
- iv. **Bangladesh** has completed a feedstock and green fuels production potential study.
- v. **Maldives** has completed a feedstock and green fuels production potential study.
- vi. **Nepal** has completed a feedstock and green fuels production potential study.

3. *Resource Complementarity and Resilience Planning*

110. ADB, through SASEC, is actively undertaking knowledge initiatives on resource complementarity and resilience planning in the region. During the EWG meeting in November 2023, member countries underscored the importance of ADB's engagement in this area, and recommended a comprehensive assessment of regional resource complementarity and resilience planning. One of the key objectives of the proposed knowledge work is to assess the benefits of solar-hydro power trade by leveraging the complementarity between these renewable energy sources. Solar power generation can help meet daytime peak demand, while hydropower provides a stable and reliable source of electricity. Through sharing or swap arrangements and the development of necessary infrastructure, integration of these complementary resources can enhance energy security, reduce dependence on fossil fuels, and support climate change mitigation in the region. At the EWG 2025 meeting, the Resource Complementarity Study was presented and received strong appreciation from member countries, as it demonstrated clear seasonal and technological synergies across hydropower, solar, wind, and thermal resources across BBIN countries and Sri Lanka. The study showed that surplus monsoon-season hydropower in Bhutan and Nepal could significantly reduce curtailment and thermal generation in neighboring systems, while solar-rich periods in India could help meet dry-season deficits in the Himalayan countries. The analysis also highlighted the increasing importance of storage solutions in managing variability and improving system flexibility, thereby reducing overall system costs and enhancing reliability. Member countries emphasized that this work should not remain a one-time analytical exercise and agreed that the Resource Complementarity Study should be updated once every 2 years to incorporate new capacity additions, evolving demand projections, and emerging technologies.

4. *Power Market Development within the SASEC Partner Countries*

111. ADB supports a range of knowledge products aimed at advancing power-market development and strengthening evidence-based planning within SASEC. These include a review and update of power market development in the region, which assessed the status of cross-border transmission initiatives, emerging interconnection opportunities, evolving load forecasts, changes in national generation-expansion plans,

and the resulting impacts on generation costs. An economic analysis of the benefits of interconnected grids quantified the system-wide cost savings and reliability improvements achievable through expanded regional power trade by evaluating future electricity-demand trajectories and policy commitments across SASEC countries. In addition, ADB conducted an assessment of the technical and economic benefits of linking South Asia and Southeast Asia, examining long-term resource availability, energy-demand growth over the next 2 decades, power-system scenarios, socio-economic development needs, and projected carbon-dioxide emission reductions from deeper regional integration. In EWG 2025, member countries emphasized that the development of regional and national power markets remains important for modernizing the sector and strengthening system operations, market mechanisms, and institutional frameworks across the SASEC partner countries.

5. *Strengthening the Supply and Value Chains of Electrical Grid Equipment in the SASEC Partner Countries*

112. The EWG 2025 meeting endorsed the commissioning of a detailed regional diagnostic study on the SVCs for electrical grid equipment, with the objective of developing concrete recommendations and a regional action plan that also reflects country-specific needs. The proposed study is expected to cover: (i) demand outlook for key transmission, distribution, and renewable-energy-related equipment; (ii) gaps in testing and certification systems; (iii) opportunities to harmonize standards and labeling frameworks across the region; (iv) trade facilitation and customs processes affecting equipment flows; and (v) options for engaging original equipment manufacturers and strengthening local industry, including regional manufacturing, on-site assembly, and logistics solutions. Countries also emphasized the importance of improving market intelligence, enhancing transparency in procurement practices, and deepening technical dialogue and capacity-building support.

6. *Digital Utility Initiative*

113. Digitalization has the potential to transform power systems and power trade in the region by improving operational efficiency, transparency, reliability, and responsiveness across the electricity value chain. Through real-time monitoring of generation, transmission, and demand patterns, digital technologies can strengthen grid stability, reduce system losses, support better load dispatch, and help mitigate the risk of outages and blackouts. Digital platforms can also enhance coordination among utilities and system operators by enabling better visibility of network conditions, transmission availability, and power flows, thereby creating an important foundation for more efficient cross-border electricity trade and deeper regional integration. In addition to supporting power trade, digitalization can improve utility performance more broadly through grid automation, supervisory control and data acquisition systems, enterprise platforms, and smart metering, all of which contribute to better planning, asset management, customer service, and commercial efficiency.

114. At the same time, the growing digitalization of utility operations has heightened the importance of cybersecurity, particularly given the increasing interdependence between information technology and operational technology systems. Many utilities in the region continue to face gaps in digital maturity, system integration, and cyber resilience, which can expose critical infrastructure to operational disruption and service risks if not addressed in a timely manner. In response to requests from partner countries, ADB supported the preparation of digital roadmaps for power sector utilities in Bhutan and Nepal, which identified priority actions and good practices in areas such as automation, digital platforms, and cybersecurity preparedness. ADB also conducted a cybersecurity capacity-building workshop in June 2025, which participating countries welcomed as an important first step in developing a broader program of training and technical support for utilities in the region. As a next step, the SASEC program will support country-level digital readiness assessments to identify gaps in

smart metering, GIS-linked asset registries, data platforms, enterprise architecture, and cybersecurity. It will use these findings to prepare phased utility modernization roadmaps, including National Energy Stacks. ADB will also develop practical implementation toolkits—such as a Digital Asset Registry Guide, a Smart Metering Interoperability Reference Note, and a Utility Cybersecurity Readiness Framework—while gradually advancing shared data exchange protocols, regional cybersecurity cooperation, and pilot initiatives such as digital twins or coordinated renewable forecasting for selected interconnections. Going forward, the SASEC program will seek to scale up this initiative to help utilities become more digitally enabled, cyber-resilient, and future-ready, thereby supporting modern power-system operations, improved service delivery, and the long-term development of integrated and secure power markets in the region.

7. *Capacity Building Plan for the Power Sector*

115. Empowering each partner country with the necessary skills, technological expertise, and institutional frameworks is essential for effectively harnessing and distributing the collective energy potential within the region. In response to the EWG’s recommendation, ADB undertook a comprehensive needs assessment for capacity-building programs, addressing both technical and soft-skill requirements across partner countries. This assessment provided a clear understanding of regional training needs and informed the development of tailored training programs. ADB will also collaborate with relevant training institutions to meet the skill development needs within the region.

8. *Creating a Regional Green Finance Facility*

116. Securing low-cost funding to support partner countries in achieving their climate goals sustainably is a critical prerequisite. ADB has established the ASEAN Catalytic Green Finance Facility, a regional fund designed to finance clean energy projects within ASEAN. During the EWG meeting in 2025, countries requested ADB to establish a regional fund along similar lines for the unique needs and priorities of the SASEC partner countries.

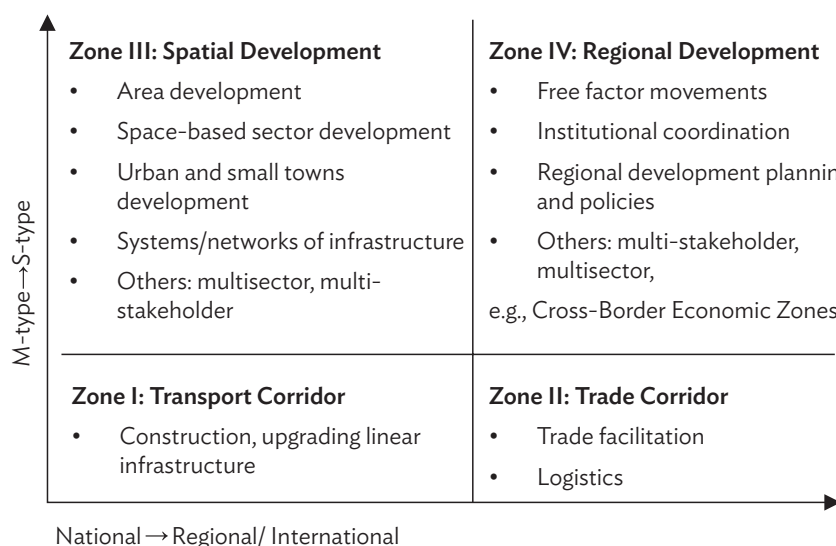
117. The full list of ADB-supported knowledge initiatives in the energy sector in the SASEC partner countries can be found in Appendix 8.

V. ECONOMIC CORRIDOR DEVELOPMENT

118. While SASEC countries have experienced rapid economic transformation and robust growth since the 1990s, a key challenge remains the creation of more productive and better-paying jobs at scale. In response, countries have shown increasing interest in the economic corridor approach to promote production and service clusters and strengthen regional value chains, particularly in manufacturing, by leveraging transport corridor development and deeper regional connectivity to better integrate with Asia’s dynamic production networks.

A. **Economic Corridor Development Framework**

119. **Strategic framework for economic corridor development (ECD).** The strategic framework developed by ADB aims to enhance multimodal connectivity in identified corridor regions by advancing high-quality infrastructure, development of trade facilitation and logistics to transform transport corridors to trade corridors, spatial development of production and service clusters and networks along with SVC development and supporting policy and institutional reforms that boost investments and competitiveness (Figure 9).

Figure 9: Conceptual Framework for Economic Corridor Development

ADB = Asian Development Bank.

- Notes: i. M-type corridors are primarily concerned with movement (transport and trade) and S-type corridors, with a spatial focus (regional development and spatial transformation).
- ii. This is an ADB-wide framework that may require variation and customization based on the ground situation of the South Asia Subregional Economic Cooperation countries.

Source: ADB. 2023. Economic Corridor Development: From Conceptual Framework to Practical Implementation-Guidance Note. September. Manila. <https://www.adb.org/sites/default/files/publication/913256/economic-corridor-development-guidance-note.pdf>.

120. **Refined ECD framework.**²⁹ The refined ECD framework, therefore, emphasizes the broadening and deepening of economic activities within a defined area through a coordinated mix of hard and soft infrastructure, attractive economic incentives for private investment, market development, and strengthened institutions and regulations. The framework distinguishes between M-type corridors, which are primarily concerned with movement (transport and trade) and S-type corridors, which have a spatial focus (regional development and spatial transformation).

121. **Transport corridor as starting point.** An exercise in ECD typically begins with a transport corridor, owing to its simple physical and functional characteristics. A transport corridor links two or more nodes, which may be economic clusters (functional economic areas [FEAs]) of varying sizes, including endpoints that serve as gateways to external regions. Given their conceptual simplicity, transport corridors are ubiquitous due to their significant development impact.

122. **Transition from transport to trade corridors.** A broader version of ECD, encompassing both transport and trade corridors focuses on the role of transport networks (not just arterial road or rail) in connecting regions to facilitate the movement of goods and people for both domestic and international trade, supported by efficient logistics and trade facilitation.

123. **Area-based development under national ECD.** In spatially developing production and service clusters and networks within a country for national ECD the focus is on identifying specific geographical areas and promoting the development of FEAs and their trade links. Such development often necessitates transport infrastructure (roads, railways, ports, etc.); interventions like setting up special economic zones,

²⁹ ADB. 2023. Economic Corridor Development: From Conceptual Framework to Practical Implementation-Guidance Note. September. Manila. <https://www.adb.org/sites/default/files/publication/913256/economic-corridor-development-guidance-note.pdf>

industrial parks, tourism clusters, and concomitant urban and housing infrastructure; and formulating targeted policies for attracting investments that can stimulate economic growth and enable trade. Starting in the 1990s, Malaysia undertook ECD to address developmental disparities (such as interstate or rural–urban disparities) and improve the quality of economic growth. In addition to corridors in Sabah and Sarawak, three key corridors were established in Peninsular Malaysia: the East Coast Economic Corridor, the Northern Corridor Economic Region, and Iskandar Malaysia in South Johor. Each corridor specialized in a specific set of economic activities such as agriculture, industry, renewable energy, or tourism. A similar area-based development approach was applied in the Greater Mekong Subregion (GMS), with investments in towns along the GMS corridors. A similar approach is also employed in the ADB-supported East Coast Economic Corridor development in India.

124. **Cross-border ECD approach.** The cross-border ECD approach seeks to harness agglomeration benefits and economies of scale by integrating or merging independent FEAs across borders, thereby increasing the density, range, and scope of economic activities. A key example is the Central Asia Regional Economic Cooperation (CAREC) initiative, which includes the Almaty–Bishkek Economic Corridor (ABEC), launched in 2014 to integrate Almaty, Kazakhstan’s economic hub, with Bishkek, the capital of the Kyrgyz Republic. Spanning 200 kilometers (km), ABEC focuses on connecting transport infrastructure with sectors such as tourism, while also striving to create a unified economic zone for health, education, urban development, and disaster risk management.

B. Supply and Value Chain Development

125. Supply and value chain development is an important pillar of ECD, as it determines how efficiently goods move from input supply through production, processing, and distribution to final markets. Well-organized supply chains ensure timely access to inputs, logistics services, and infrastructure at competitive cost, while robust value chains add and capture value through aggregation, quality upgrading, processing, and compliance with market standards, thereby translating connectivity and regulatory reforms into measurable productivity gains, employment, and trade diversification. In the SASEC context, strengthening domestic SVCs helps align producers, service providers, and regulators around corridor investments, and cross-border regional value chains allow countries to leverage complementarities, pool scale, and deepen their participation in regional and global production networks. Under the SASEC program, this agenda is being advanced in a phased manner, starting with deeper analytical and operational focus on priority areas where stronger regional SVCs can directly support economic corridor investments, enhance resilience, and generate broad-based employment across the subregion. Current priority focus areas include agriculture (including food and agribusiness value chains) and electrical grid equipment, while previous analytical studies have also examined textile and pharmaceutical SVCs.

126. **Food SVCs.** Supply and value chains in the SASEC region present significant opportunities—particularly in agriculture, fisheries, spices, processed foods, and select high-value crops. SASEC countries are already part of value chains for rice, shrimp, cardamom, fruit juice, bread, citrus, and several animal products, reflecting cross-border trade patterns and complementarities. However, fragmented production systems, low technology adoption, underdeveloped logistics and storage, variable food safety standards, and inconsistent traceability remain major constraints.

127. Unlocking the full potential of food SVCs requires, inter alia, targeted interventions to expand productive capacities, harmonizing food safety and SPS standards with global benchmarks, expanding laboratory testing and digital traceability infrastructure, upgrading cold storage and rural roads, and expanding access to modern logistics. Strengthening regulatory and institutional capacities is needed to ensure standards, certification, and risk-based food control for safe and efficient trade. Integrating smallholders and micro, small, and medium-sized enterprises, promoting climate-resilient, certified production, and expanding digital single windows and mutual recognition agreements will collectively support more resilient, competitive SVCs in the subregion.

128. **Electrical grid equipment SVCs.** The discussion on SVCs in the SASEC partner countries has identified reliable access to quality electrical grid equipment as a vital enabler for expanding and sustaining power infrastructure. Current SVCs in the subregion are characterized by fragmented domestic manufacturing capacity, heavy dependence on imports, procurement delays, and the absence of harmonized standards and testing protocols. These persistent challenges raise project costs and limit the resilience and pace of infrastructure development, underscoring the need for coordinated solutions to strengthen regional SVCs.

129. Building on diagnostic assessments, several prospects and requirements for advancing regional value chains in electrical grid equipment have been highlighted. Priorities include enhancing domestic manufacturing capacity, harmonizing standards across countries, streamlining customs procedures, and creating pooled procurement platforms to achieve scale and efficiency. Drawing on successful examples from India’s energy-efficient lighting programs, there are opportunities to replicate pooled procurement models for other product categories too. Developing a regional roadmap, scaling up manufacturing collaboration, and instituting comprehensive quality control frameworks will be essential to create resilient regional value chains and support the broader goals of economic integration and energy security.

130. **Other SVCs.** Value chains with significant potential in the SASEC region extend beyond food and electrical grid equipment to include sectors such as textiles and pharmaceuticals, both of which play a critical role in regional trade and industrial integration. To unlock actionable opportunities within these promising sectors, a comprehensive analysis at the HS-6-digit product level is essential for pinpointing specific goods that can support the development of robust regional SVCs. Such an in-depth evaluation will enable targeted interventions and facilitate more effective regional collaboration, helping partner countries to capitalize on complementarities in manufacturing and trade capacities. This approach will also inform policy and investment decisions needed to strengthen cross-border linkages and maximize the growth potential of textiles, pharmaceuticals, and other high-value product categories within SASEC. However, as guided by the SASEC meetings in 2025, ADB is currently prioritizing Food SVCs and SVCs for electrical grid equipment, while further analytical and operational work on other SVCs, including textiles and pharmaceuticals, may be taken up in subsequent phases.

C. Building Blocks of Economic Corridor Development under the SASEC Program

1. Comprehensive Trade Gateway Ecosystem Development

a) Concept and Strategic Rationale

131. **Framework overview.** The Comprehensive Trade Gateway Ecosystem (CTGE) is an integrated framework designed to enhance regional trade and logistics efficiency by addressing both at-the-gateway and behind-the-gateway aspects of trade flow. This approach recognizes that seamless cross-border cargo movement cannot be achieved solely by upgrading infrastructure and procedures at physical borders. Instead, it requires targeted, multilayered interventions encompassing “at-the-gateway” modernization (such as at seaports, airports, and land ports), behind-the-gateway connectivity and logistics, and the surrounding urban–rural, industrial, and residential ecosystem that directly interact with export–import operations. The framework also recognizes the critical importance of managing the interface with urban, semi-urban, and rural settlements in the vicinity of the trade gateway—where logistic flows and local economic activity often interact and sometimes generate congestion, land-use conflict, or other bottlenecks. By adopting an ecosystem-wide perspective, the CTGE addresses cross-cutting challenges such as multimodal integration (road, rail, and river/waterways), warehousing and logistics park development, and institutional coordination among customs, port authorities (sea/air/land), urban authorities, and private sector participants. This helps ensure sustained process efficiency and cost reduction not only at border gates but throughout the supply chain.

132. **Importance of trade gateways for regional competitiveness.** Seaports, airports, and land ports are critical conduits for high-value, high-volume, and time-sensitive export-import cargo. The effectiveness of their operations establishes the benchmark for regional supply chain competitiveness and is critical to the SASEC region’s successful integration with global markets. These gateways enable access to a diverse array of global and regional partners and facilitate the movement of goods on a large scale. Delays, capacity constraints, or inefficiencies at these critical nodes disproportionately inflate logistics costs for manufacturers and exporters, limiting opportunities for growth, investment, and job creation.

133. **SASEC meeting guidance and analytical approach.** During the SASEC meetings held in Kathmandu, Nepal (November–December 2025), SASEC countries endorsed the proposal for ADB to undertake analytical studies on CTGE development—including urban and semi-urban node assessment behind the trade gateway—using a multisector approach and prioritizing high-intensity trade gateways. The studies will adopt a holistic ecosystem approach covering at-the-border infrastructure and facilitation, behind-the-border connectivity and logistics systems, and the interaction between trade gateways and surrounding urban and semi-urban areas. The analysis will examine trade movement through the corridor, the gateway, and the surrounding urban and semi-urban ecosystem, including border infrastructure and processes, hinterland connectivity, institutional coordination, and spatial interactions affecting efficient export-import operations.

b) Seaport Gateway Ecosystem Development

134. **Role of seaports in regional trade.** Seaports play a critical role in supporting regional and international trade by facilitating the movement of containerized, bulk, and time-sensitive cargo. Their operational efficiency directly affects logistics costs, supply chain reliability, and trade competitiveness within the SASEC region.

135. **Priority seaport gateways.** The choice of Colombo seaport (Sri Lanka) and Chattogram seaport (Bangladesh) as focus gateways is informed by their strategic significance to regional and national trade, as outlined below:

- i. Colombo seaport serves as a significant node of South Asia’s shipping network, functioning as a major transshipment hub that links global trade routes across Asia, Europe, and Africa. As Sri Lanka’s premier maritime gateway, it handles over 90% of the country’s total cargo,³⁰ exerting a profound influence on both national and regional logistics and supply chains.
- ii. Chattogram seaport stands as Bangladesh’s primary maritime entry and exit point, managing more than 90% of the nation’s international trade volumes.³¹ Its operational performance has a direct impact on Bangladesh’s overall economic health and plays an increasingly critical role in the connectivity and efficiency of broader SASEC regional value chains.

136. **Seaports in India.** Several seaports in India are important from both regional and global trade perspectives. While ADB has supported studies on port processes in four Indian ports under the SMILE program,³² these ports have not yet been assessed under the CTGE framework endorsed during the SASEC meetings held in Kathmandu in 2025. The inclusion of Indian seaports under the CTGE framework will be undertaken in a phased manner (as needed), building on the port process studies already completed.

³⁰ Inoka Perera. 2019. South Asia’s logistical hub: Challenges and opportunities for Sri Lanka’s transshipment future. 21 June. South Asia @ LSE. <https://blogs.lse.ac.uk/southasia/2019/06/21/south-asias-logistics-hub-challenges-and-opportunities-for-sri-lankas-transshipment-future/>.

³¹ Based on Chittagong Port Authority data as reported in Bangladesh Sangbad Sangstha. 2026. Ctg Port reaches all-time high in key performance indicators. 1 January. <https://www.bssnews.net/business/346967>.

³² These include the Jawaharlal Nehru Port Trust, VO Chidambarnar Port Trust, Thoothukudi (VOCPT), Syama Prasad Mookerjee Port (Kolkata), and the Deendayal Port, Kandla.

137. **Scope of seaport ecosystem assessment.** The study will adopt a two-layered ecosystem approach. The at-the-gateway assessment will evaluate the adequacy of port infrastructure as well as port processes to ensure efficient, congestion-free cargo movement. It will cover key areas including first- and last-mile connectivity, multimodal transfer facilities, marshaling for various cargo types (including refrigerated cargo), warehousing and storage capacity, testing infrastructure for regulatory compliance, gate operations, berthing capacity, and green infrastructure initiatives. Additionally, the study will assess land availability in the port hinterland to support future industrial, warehousing, and logistics development. Analysis of the behind-the-gateway ecosystem will focus on: (i) infrastructure related to road and rail connectivity to the port; (ii) congestion caused by urban agglomeration near approach and departure routes linked to the port; (iii) management of projected port expansion; and (iv) the presence and effectiveness of institutional mechanisms for coordinating with urban and spatial development agencies to balance urban and spatial development needs with the operational efficiency of the port.

c) Airport Gateway Ecosystem Development

138. **Role of airports in trade facilitation.** Airports are critical gateways for high-value, perishable, and time-sensitive cargo and therefore play an important role in export competitiveness and international trade integration. Efficient airport operations are particularly important for sectors dependent on rapid and reliable logistics services.

139. **Priority airport gateways.** The choice of Hazrat Shahjalal International Airport (Dhaka) and Tribhuvan International Airport (Kathmandu) as focus gateways is informed by their strategic importance to national and regional trade flows, as outlined below:

- i. Hazrat Shahjalal International Airport is Bangladesh's foremost air cargo hub and an essential enabler for the country's thriving exports of garments and perishables, as well as for high-value imports. The airport's efficiency is therefore central to the competitiveness and growth of Bangladesh's export-oriented industries.
- ii. Tribhuvan International Airport is Nepal's main international aviation gateway, playing a crucial role for both cargo and passenger flows. Given Nepal's landlocked status, the airport's reliability and efficiency are vital for maintaining uninterrupted access to international markets and meeting the country's economic and mobility needs.

140. **Scope of airport ecosystem assessment.** The study will assess airport cargo-handling systems, customs and inspection facilities, warehousing and cold-chain infrastructure, landside connectivity, and multimodal logistics linkages associated with airport operations. It will also examine congestion and spatial pressures associated with urban and spatial development near airport access corridors, along with institutional coordination arrangements necessary to support efficient cargo movement and future airport expansion.

d) Land Port/Land-Based Gateway Ecosystem Development

141. **Role of land-based gateways in regional connectivity.** Land-based gateways play a critical role in facilitating cross-border trade and strengthening regional connectivity within the SASEC region. Efficient trade flows through these gateways require coordinated border management, streamlined customs and inspection systems, improved transport connectivity, and effective management of border-town interactions with export–import operations. The approach also emphasizes coordinated border management, including One Stop Border Post development, to streamline regulatory procedures and reduce dwell time.

142. **Priority land-based gateways.** Key land-based gateways identified for assessment include Birgunj–Raxaul and Biratnagar–Jogbani on the Nepal–India border, and Phuentsholing/Pasakha–Jaigaon on the Bhutan–India border.

143. **Scope of land gateway ecosystem assessment.** The study will adopt a holistic ecosystem approach focusing on: (i) border infrastructure and processes, including coordinated border management, customs systems, inspection facilities, information and communication technology systems, and cross-border data exchange; (ii) behind-the-border infrastructure, including last-mile connectivity, rail integration, intermodal facilities, warehouses, cold storage, and partner government agency facilities; and (iii) spatial dynamics associated with urban and rural interactions along gateway corridors to mitigate conflicts with export–import operations and support sustainable urban growth.

e) Expected Outcomes of Comprehensive Trade Gateway Ecosystem Studies

144. This knowledge work is expected to result in targeted interventions to modernize trade gateways, reduce transaction costs, and foster regional integration across the SASEC partner countries.

2. *Highly Facilitated Trade Corridors*

a) Rationale and Overview

145. **Rationale.** A significant portion of global trade takes place through routes that connect major economic or logistics clusters. Efficient operations in these routes therefore assume added significance for the trading economies connected through multimodal routes.

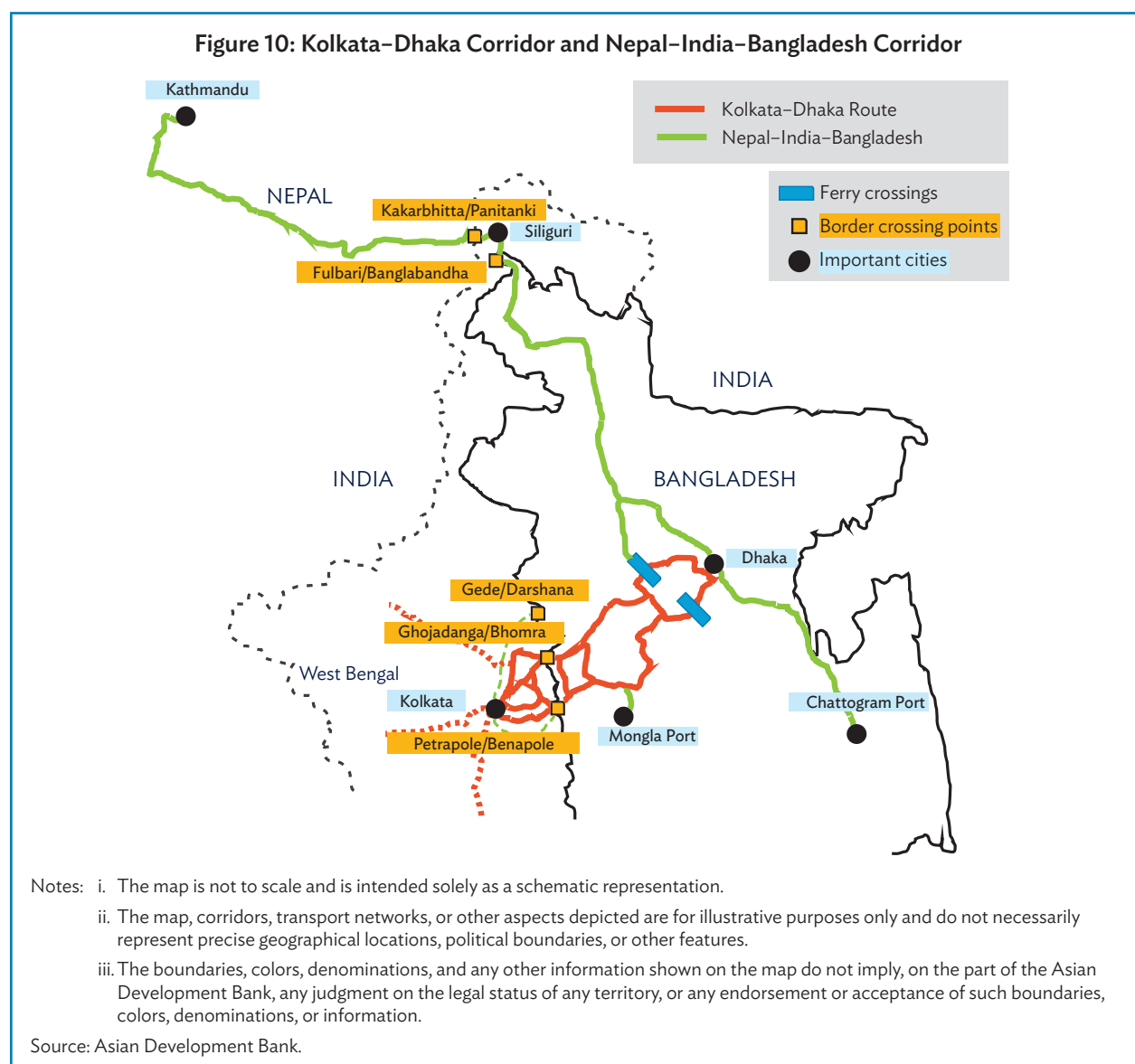
146. Improving the efficiency of cross-border cargo operations along a route requires addressing infrastructure (both transport and other trade-related infrastructure) and regulatory bottlenecks that have an impact on trade efficiency. Experience from implementation of the trade facilitation measures in SASEC subregion also indicates that synchronizing the improvements in transport and trade infrastructure, trade facilitation, border or gateway infrastructure, behind-the-border/gateway infrastructure, and rendering support through robust institutional measures is key to enhancing trade efficiency. Initiatives customized to suit the needs of each route can generate more impactful results.

147. As part of the SASEC initiative, focus has been on transforming key regional trade routes into Highly Facilitated Trade Corridors (HFTCs), by addressing physical infrastructure gaps, border inefficiencies, and weak trade facilitation systems along these routes.

148. The HTFC Action Plan includes recommendations, identifies responsible agencies, and defines timelines for implementation of the HFTC. The action plan categorizes measures into route-specific, national, and regional actions. This action plan will be integrated with the web-based progress update tool being formulated by the SASEC Secretariat. The plan will be implemented in phases, beginning with short-term recommendations, to transform the trade routes into HFTCs as quickly as possible.

b) Completed and Upcoming Studies

149. **Completed studies.** Two SASEC cross-border route studies have been completed: (i) the Kolkata–Dhaka corridor via Petrapole–Benapole and other points, and (ii) SASEC Road Corridor 4 connecting Kathmandu to Chattogram/Mongla ports (Figure 10). These studies identify key bottlenecks such as poor road conditions, lack of rail and port infrastructure, congestion at integrated check posts, absence of cold storage and testing facilities, and inefficient cargo clearance processes.

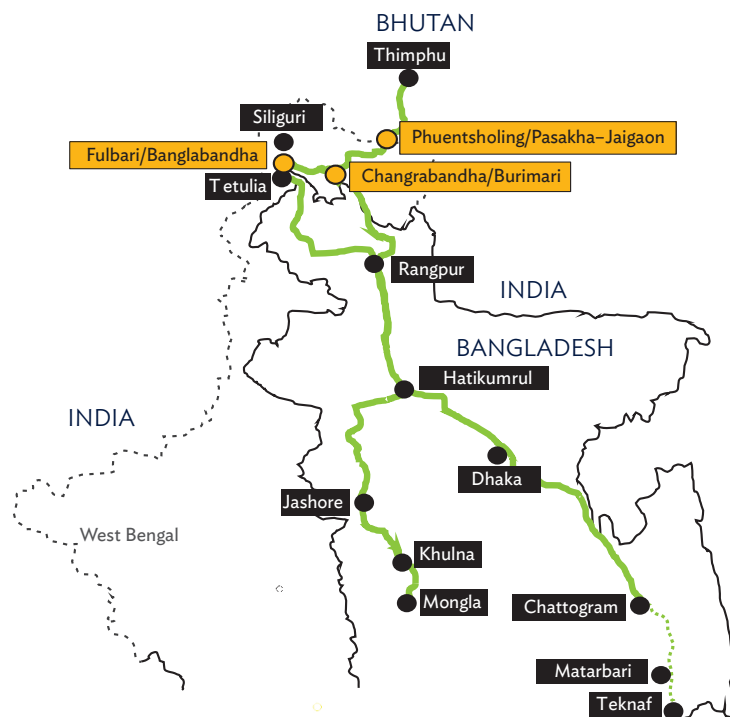


150. A third study on the route Phuentsholing–Jaigaon–Changrabandha–Burimari–Chattogram has recently been completed (Figure 11). The key objective of this study is to improve trade facilitation and logistics efficiency along the route by identifying infrastructure gaps and complexities in business processes and logistics issues impacting trade, and recommending a set of interventions to ensure efficient cross-border flow of trade and strengthen regulatory effectiveness.

151. Under these studies, recommendations have been identified as both “hard” (infrastructure upgrades like roads, ICPs, scanners) and “soft” (e.g., single-window systems, pre-arrival processing, risk management, digitalization) to facilitate seamless trade between SASEC countries.

152. **Upcoming studies.** During the Trade Facilitation Working Group Meeting held in Thimphu, Bhutan in November 2024, SASEC partner countries requested ADB to undertake additional studies for HFTCs for select SASEC cross-border routes; the request was endorsed by the SOM [Appendix 10 (c), rows 5 and 6]. The additional route studies include:

- Phuentsholing/Pasakha (Bhutan)–Jaigaon (India)–Siliguri (India)–Kolkata and Haldia ports (India); and
- Kathmandu–Birgunj (Nepal)/Raxaul (India) and Biratnagar (Nepal)/Jogbani (India)–Kolkata and Haldia ports (India).

Figure 11: Bhutan–India–Bangladesh Corridor

- Notes:
- i. The map is not to scale and is intended solely as a schematic representation.
 - ii. The map, corridors, transport networks, or other aspects depicted are for illustrative purposes only and do not necessarily represent precise geographical locations, political boundaries, or other features.
 - iii. 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.

c) Related Projects and Knowledge Initiatives

153. Following the Transport Working Group meeting held in Kathmandu, Nepal in December 2025, ADB was requested to undertake a route study of the Indo-Bangladesh Protocol (IBP) routes and identify areas for improvement, including multimodal connectivity along the corridor and the design and development of barges and vessels to enhance cargo movement. The proposed study will assess how selected India–Bangladesh inland waterway routes can be upgraded into HFTCs by strengthening infrastructure, reducing regulatory and operational bottlenecks, and improving trade facilitation across the full route. It will also examine current constraints on IBP routes, including cargo-wise cost-benefit implications, and recommend measures to improve trade efficiency, multimodal connectivity, and the overall use of inland water transport for cross-border trade.

3. Spatial Development of Growth Hubs

154. Complementing the SASEC corridors and HFTC analytical work, the SASEC project portfolio includes a diverse mix of spatial development of growth hubs (production and service clusters) and connecting infrastructure supported by ADB.

- i. In India, the Visakhapatnam–Chennai Industrial Corridor Development Program (Tranche 2) is advancing core trunk infrastructure to catalyze manufacturing investment, with implementation under way.
- ii. As part of the Chennai–Kanyakumari Industrial Corridor (CKIC) Development, the Tamil Nadu Urban Flagship Investment Program and the Tamil Nadu Industrial Connectivity

Project are strengthening urban services and last-mile connectivity to industrial nodes, while the CKIC Power Sector Investment Project is expanding reliable power supply to corridor-linked areas.

- iii. To extend corridor-led growth to eastern and northeastern India, West Bengal Industrial and Economic Corridor Sector Development Program is in the pipeline and the Tripura Industrial Infrastructure Sector Development Project is under implementation.
- iv. In Nepal, the Regional Urban Development Project and the Urban Resilience and Livability Project focus on upgrading municipal infrastructure and disaster-resilient services in secondary cities, reinforcing the role of well-planned urban centers as anchors for future economic corridors.
- v. ADB is supporting Sri Lanka to enhance the competitiveness of firms and create jobs by strengthening economic zones and boosting small and medium-sized enterprises.

155. The complete list of ECD projects with the status of implementation is provided in Appendix 9.

156. The knowledge work supports economic corridor operations through a series of targeted analytical studies across India and Bangladesh.

- i. It includes two completed studies for the West Bengal Economic Corridor that use remote sensing and geospatial analysis, together with detailed economic and infrastructure diagnostics, to inform corridor alignment, investment prioritization, and policy reforms in the state.
- ii. In Bangladesh, a Northwest Dhaka–Southeast Economic Corridor study and a logistics sector development assessment are diagnosing bottlenecks in transport, logistics, and industrial ecosystems to guide future investments with regional implications.
- iii. Complementing these corridor diagnostics, the India Industrial Park Rating System 3.0 study is updating comparative benchmarks on park performance and investor readiness.
- iv. The India–Bangladesh inland water transport (IWT) protocol route study will be taken up to assess navigational, institutional, and market issues for scaling up IWT connectivity.

157. The complete list of ECD knowledge work with the status of implementation is provided in Appendix 10.

4. *Tourism*

158. Tourism is a strategic opportunity for SASEC’s ECD agenda. In 2024, the region welcomed about 27.5 million international visitors and earned about \$43.3 billion in tourism receipts.³³ However, tourism’s contribution to regional GDP remains relatively modest at around 3%–4%,³⁴ with large disparities across countries and limited multicountry travel due to infrastructure gaps, restrictive travel regimes, fragmented marketing, and uneven distribution of benefits.

159. SASEC partner countries are not only geographically proximate but also share rich natural and cultural heritage, which contributes significantly to the tourism experience in the region. Multicountry tourism, beyond offering a diverse range of products, also addresses the objectives of (i) optimizing tourism visitation, (ii) mitigating demographic and territorial imbalances in tourism, (iii) enabling critical resource sharing, (iv) ensuring equitable distribution of benefits, and (v) enhancing resilience against adverse events.

³³ ADB. 2024. *Key Indicators for Asia and the Pacific 2024*. Manila. <https://www.adb.org/sites/default/files/publication/984521/ki2024.pdf>.

³⁴ World Travel & Tourism Council. 2024. *Travel & Tourism Economic Impact 2024*. London. <https://researchhub.wttc.org/product/economic-impact-report-global-trends>.

160. The SASEC Vision document, launched in 2017 (footnote 3), identified flagship tourism initiatives on

- i. promoting SASEC as a unified tourist destination; and
- ii. supporting the tourism sector in the Maldives, which included three projects aimed at improving internal tourism connectivity.

161. In 2019, regional consultations on tourism development were held in India and Nepal, involving stakeholders from government, tourism associations, and the private sector. These consultations explored the potential for cooperation in tourism, identified mutually beneficial strategic initiatives (such as the collaborative development of products and circuits), discussed joint marketing opportunities, and recommended mechanisms for coordination and sustainability of efforts. Following these consultations, a study on promoting SASEC as a tourist destination was completed in 2019.

162. In 2020 and 2021, the tourism industry faced severe challenges due to the COVID-19 pandemic, with significant declines in international arrivals, employment, and tourism receipts.

163. ADB undertook several knowledge initiatives in 2021 and completed them in 2022. These included (i) Strengthening Institutional Mechanisms for SASEC Tourism (scoping study); and (ii) Achieving Sustainable Cruise Tourism for the Maritime SASEC Region Post-COVID-19. These studies identified key areas for regional cooperation, outlined specific actions to establish institutional mechanisms for tourism, and focused on reducing physical and procedural border constraints. They also prioritized multi-country thematic tourism products such as Buddhist tourism, sea cruise tourism, and medical tourism.

164. In 2022, tourism was recognized as a priority theme during the SASEC Nodal Officers' Meeting. During SASEC meetings held in November–December 2023, the completed knowledge works, sectoral challenges, and opportunities for institutional-level cooperation were discussed in detail. SASEC partner countries emphasized that tourism deserves comprehensive attention, given its strong potential for economic growth as well as regional dimensions and the scope for harnessing synergies across multiple thematic circuits. Responding to this, ADB organized a SASEC Tourism Knowledge Workshop on 24–25 November 2025.

165. Key outcomes and priorities emerging from the SASEC Tourism Knowledge Workshop held on 24–25 November 2025 included the following:

- i. SASEC countries reaffirmed tourism as a key driver of inclusive, sustainable, and corridor-based regional growth.
- ii. Countries endorsed thematic and multicountry circuits, including Buddhist, Ramayana, nature-based, and cultural heritage routes, while emphasizing the importance of improved connectivity, digital integration, harmonized standards, and strengthened Tourism Satellite Accounts.
- iii. Participating countries highlighted priorities including community-based and regenerative tourism, protection of ecological and heritage sites, private-sector participation, capacity building, and disaster preparedness.
- iv. Countries also emphasized joint marketing, knowledge sharing, and strengthened institutional mechanisms, including the proposed SASEC Tourism Forum, to position SASEC as an integrated, resilient, and competitive regional destination.
- v. ADB presented the thematic concept of “One Region, Many Journeys” and noted that additional tourism circuits could be considered in future phases of work.

- vi. Given the common importance of nature-based tourism across SASEC partner countries, countries agreed that this theme would be taken up in the next phase of studies.
- vii. At the request of SASEC countries ADB is developing a SASEC Tourism Development Framework 2035.

166. **Projects.** The tourism project portfolio focuses on building a competitive, integrated Buddhist and cultural tourism circuit across the SASEC subregion. It combines major destination and connectivity investments with site-specific heritage upgrades. In Maldives and Nepal, civil aviation projects are expanding capacity and resilience at Velana International Airport and Gautam Buddha International Airport to handle growing passenger flows and improve regional air links. In India and Nepal, several destination-focused projects are upgrading urban infrastructure, visitor facilities, and community-based tourism services along priority Buddhist and cultural circuits. These include the Tripura Urban and Tourism Development initiative, the Uttar Pradesh Pro-Poor Tourism initiative at Sarnath and Kushinagar, the development of the Mahabodhi Heritage Complex at Bodh Gaya (Bihar), and the SASEC South Asia Tourism Infrastructure Development Project in Nepal. Complementary to activities under Buddhist Circuit tourism development, is the plan to establish rail connectivity between Sarnath (India) and Lumbini (Nepal) to strengthen multimodal access and deepen cross-border pilgrimage and heritage tourism.

167. The complete list of tourism projects with implementation status is provided in Appendix 11.

168. **Knowledge initiatives.** The tourism knowledge work program provides a concise roadmap for sustainable, resilient, and better-connected tourism in the SASEC subregion. It delivers core diagnostics on regional institutions, cruise tourism, and tourism master plans in Maldives and Nepal, and is supporting tourism resilience efforts in Sri Lanka. In Nepal, the Sudurpashchim Province Tourism Master Plan 2022–2032 has been completed, providing a 10-year strategic framework and prioritized action plan to guide sustainable, inclusive tourism development and investment across the province. Future studies will design a regional tourist visa/ticket, a sustainable tourism program framework, and upgraded standards, data, and aviation arrangements, alongside a gap analysis for the Buddhist Circuit and cruise infrastructure to shape a practical pipeline of reforms and investments.

169. The complete list of tourism knowledge work with implementation status is provided in Appendix 12.

5. *Food System Development*

170. The SASEC Secretariat organized a knowledge workshop in Kathmandu on 2–3 December 2025 that highlighted an ecosystem and value chain approach to food security, food safety, and food trade, drawing on lessons from ASEAN, CAREC, and ADB-supported agriculture projects.

171. SASEC partner countries agreed on shared priorities, including strengthening post-harvest and storage systems, harmonizing food safety standards with international norms, enhancing regional laboratory capacity, and advancing farm-to-fork traceability. As a way forward, they endorsed upstream analytical work such as post-harvest loss assessments, SPS–TBT inventory updates, capacity building initiatives, and value chain studies.

172. Participants underscored food security, food safety, resilient SVCs, and strengthened technical capacity as core priorities for regional cooperation and an important building block of ECD. Senior Officials endorsed a forward agenda centered on building SVC resilience through productivity improvements, investments in post-harvest and processing infrastructure, accreditation of laboratories, quarantine upgrades, stronger market linkages, and targeted value chain assessments.

173. Senior Officials also supported further harmonization of SPS–TBT standards, upgrading of laboratories, enhanced risk-based inspections, and expanded digital traceability to enable safer and more predictable food trade. Several countries called for mutual recognition arrangements, joint inspections, a regional SPS–TBT portal, and greater support for Good Agricultural Practices and Good Manufacturing Practices adoption.

174. The workshop identified priority areas for upstream knowledge work to strengthen regional food security, safety, and trade under SASEC. Priority analytical work includes new SPS–TBT inventorization studies in Bangladesh and Sri Lanka, updating earlier work in Bhutan and Maldives, post-harvest loss assessments to guide cold chain and logistics investments, and country-level and regional food safety standards gap analyses to support regulatory alignment with global benchmarks. The workshop also emphasized strengthening testing infrastructure through support for laboratory accreditation, viable business models for regional testing laboratories, and capacity building for officials and technicians in quality testing. Additional priorities include organizing training and exposure visits to other ADB regional programs, conducting country-level value chain assessments for selected commodities, and ensuring that these knowledge products translate into actionable project pipelines and policy reforms.

175. At the request of SASEC countries ADB is developing a SASEC Food Systems Development Framework 2035.

D. Digital Transformation for Economic Corridor Development

176. Digitalization is a pivotal cross-cutting theme across SASEC’s four operational priorities—transport, trade facilitation, energy, and ECD. For ECD, digitalization is central to advancing competitive, resilient, and sustainable economic corridors across the SASEC partner countries. Given the wide range of interventions required, strategic prioritization is essential. While national efforts to strengthen digital infrastructure and digital public infrastructure are already underway, the ECD program will focus its next phase on the following priority areas:

- i. undertaking a diagnostic study on the operationalization of the National Spatial Data Infrastructure and Systems (NSDIS) for GIS-based decision support systems for infrastructure and area-based planning;
- ii. advancing the digital agenda for unlocking tourism potential in the region through
 - developing integrated digital tourism portals and regional branding platforms, drawing on the GMS and CAREC experience as well as proposals from Bangladesh, India, Maldives, and other countries for common regional websites and information platforms;
 - applying digital and GIS-based area planning tools to map tourism assets, plan clusters and circuits, and coordinate multisector investments, building on ongoing GIS mapping initiatives and India’s PM GATI SHAKTI and similar platforms;
 - strengthening Tourism Satellite Accounts (TSA) and data systems through harmonized, digitally enabled data collection, analytics, and reporting, with ADB requested to assess TSA status and propose a roadmap for all SASEC partner countries;
 - expanding digital payment systems and e-services for visitors, including e-visas, integrated ticketing, trekker tracking, and digital service delivery at tourism sites, as highlighted by Maldives, Nepal, Sri Lanka, and other countries; and
 - leveraging smart tourism tools for destination and crowd management, including real-time monitoring, visitor management applications, and AI-enabled systems proposed by several countries to improve visitor experience and safety.

- iii. advancing the digital agenda for unlocking food systems potential in the region by
 - **scaling up digitized trade and border management systems**, such as national single windows, electronic SPS certification, e-licensing, and risk-based inspections, to reduce clearance times, transaction costs, and nontariff barriers along priority food corridors;
 - **developing data-driven and traceable food systems** through farm-to-fork digital traceability models, livestock and produce registries, and enhanced digital platforms for early warning, weather and market monitoring, and price analytics; and
 - **strengthening interoperable digital quality infrastructure**, including electronic reporting and mutual recognition of test results across accredited laboratories, regional information platforms for SPS/TBT and standards, and exploration of regional testing hubs to support compliant, rules-based food trade.
- iv. undertaking need-based diagnostic studies to further strengthen digital payment systems (studies for Bhutan and Nepal, as requested in 2024, have been completed and shared with the respective countries); and
- v. undertaking need-based digital risk assessments and road map preparation related to cybersecurity, data protection, and institutional capacity as a cross-cutting priority.

177. **Implementation.** ADB and SASEC partners may support national and local authorities through technical assistance, policy dialogue, and targeted investments. This includes supporting pilot projects, scaling up best practices, and building enabling environments for digital business models. By advancing digitalization in economic corridors, the SASEC region can achieve accelerated trade, reduce logistics costs, boost productivity, and ensure more inclusive economic opportunities.

178. At the request of SASEC countries ADB is developing an Approach Paper for Digital Transformation for the SASEC Program.

179. The full list of ADB-supported knowledge and other initiatives in digitalization in the SASEC region can be found in Appendix 13.

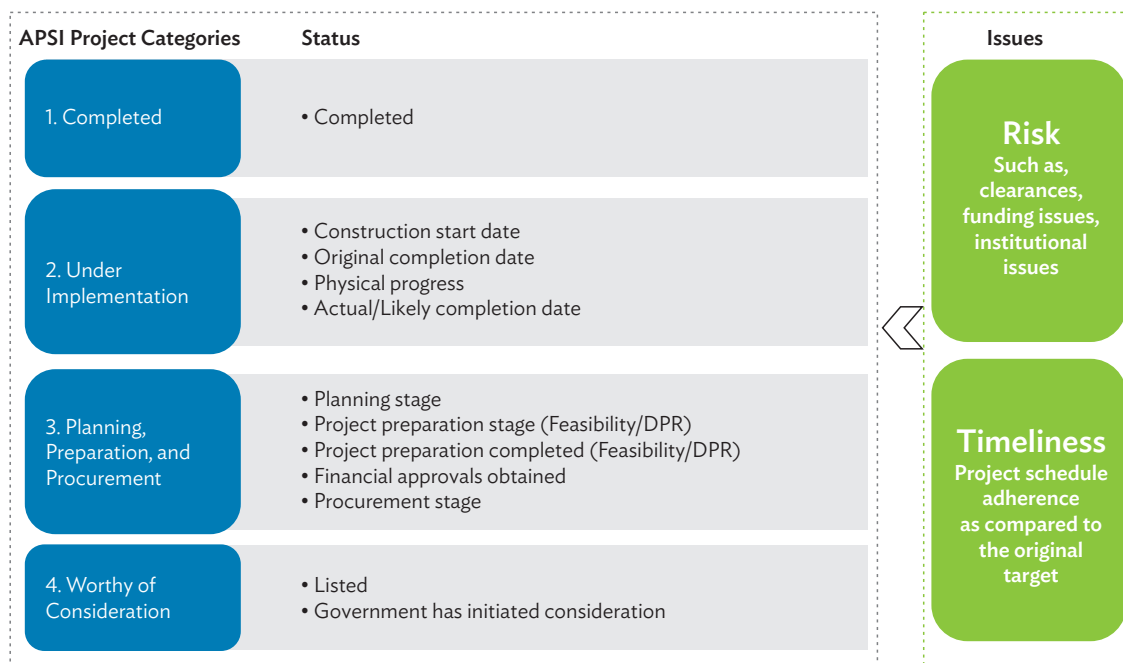
VI. ACTION PLAN FOR SASEC INITIATIVES: PROGRESS UPDATE FRAMEWORK

180. A key decision from the SASEC SOM in December 2023 was the establishment of a progress update framework for all APSI projects. This framework will enable SASEC senior officials to receive regular updates on project implementation, which is particularly critical for cross-border projects or those with cross-border implications.

181. Access to such information will support SASEC countries in making well-informed decisions and engaging in productive discussions during SASEC meetings. Moreover, it will assist Finance and Planning Ministries in making sound financing decisions, ensuring more effective and coordinated project management.

182. A key consideration was to ensure the framework's simplicity, enabling its implementation across SASEC countries and applicability across sectors. As previously mentioned, APSI projects and knowledge initiatives have been categorized into four groups, which serve as the foundation for this framework. Specific stages within these categories have also been identified for both projects and knowledge work (Figures 12 and 13).

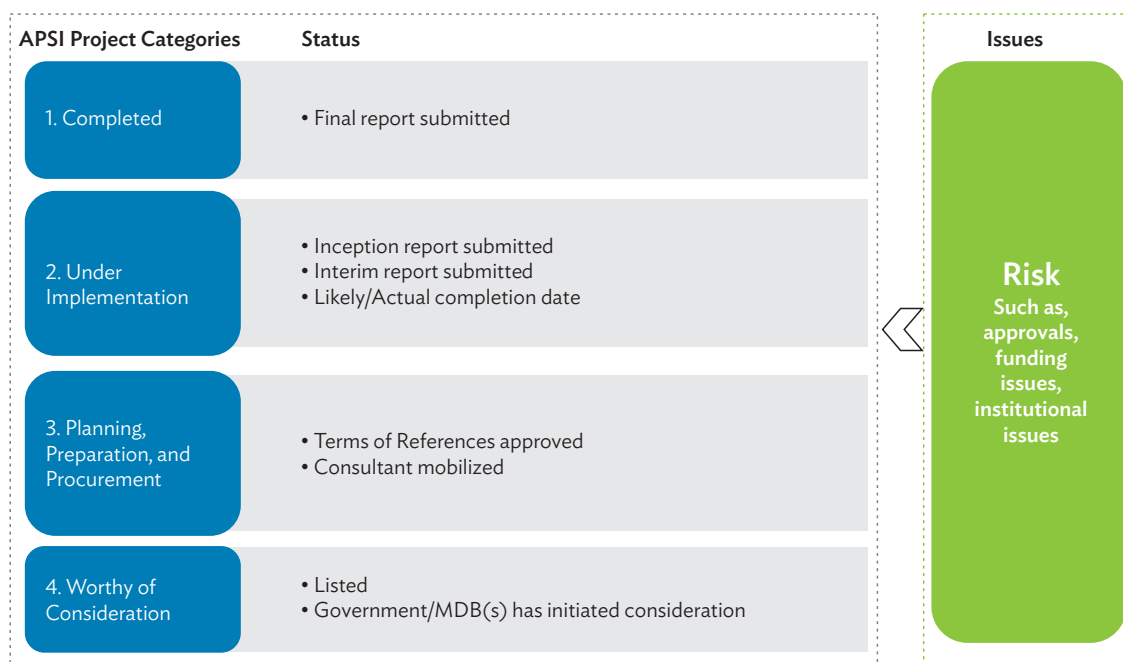
Figure 12: Framework for Project Categorization and Progress Tracking



APSI = Action Plan for SASEC Initiatives, DPR = detailed project report, SASEC = South Asia Subregional Economic Cooperation.

Source: Asian Development Bank.

Figure 13: Framework for Knowledge Initiative Categorization and Progress Tracking



APSI = Action Plan for SASEC Initiatives, MDB = multilateral development bank, SASEC = South Asia Subregional Economic Cooperation.

Source: Asian Development Bank.

183. An initial spreadsheet has been developed to operationalize this framework, with plans to transition it to a web portal accessible to all SASEC countries. It is proposed that the status of projects and knowledge initiatives be updated biannually, on 1 January and 1 July each year.

APPENDIXES

These appendixes were compiled by ADB country consultants based on discussions with the respective governments of India, Bangladesh, Sri Lanka, the Maldives, and Nepal. Discussions held with donor agencies such as Japan International Cooperation Agency also informed the appendixes.

In all the appendix tables

- project status is “as of December 2025”;
- where the cost is presented in \$ million, \$ stands for the United States dollar;
- In Appendix 1, serial numbers may not be sequential as they refer to the master APSI project list while the lists under this appendix are segregated by country;
- where the cost is in italics, it is indicated that the cost has been converted from the local currency to \$ @ 1\$ = ₹85.65;
- Category is defined as (1) completed, (2) under implementation, (3) planning and preparation, and (4) worthy of consideration; and
- the terminology used may be understood in the following way: End Date = Actual or estimated date of completion, Target Date = Original date of completion.

Appendix 1: Transport Projects

A1.1 Bangladesh

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
1	Cross-border road improvement project (5 bridges on Bhanga–Jashore–Narail Highway, 4 bridges on Chattogram–Cox’s Bazar Highway and 8 bridges and 7 culverts on Ramgarh–Baraiyhat Regional Highway)	Road	JICA	318.77	1	Completed	June 2024	100	
2	Western Bangladesh Bridge Improvement Project	Road	JICA	247.81	1	Completed	October 2024	100	78.9
3	SASEC Dhaka–Sylhet Corridor Road Investment Project (Dhaka [Katchpur]–Sylhet)	Road	ADB	1,439.88	2	Construction	December 2026	12.4	16.3
4	4-lane + 6-lane upgrading Sylhet–Tamabil section	Road	AIIB	304.96	2	Construction	June 2025	2.6	4.3
5	Upgrading Sylhet–Sheola/Sutarkandi Road (Sylhet–Charkhai–Sheola)	Road	WB	362.30	2	Construction	December 2027	0.03	0.1
6	SASEC Dhaka–Northwest Corridor Road Project (SASEC Road Connectivity Project-2: Upgrading of Elenga–Hatikamrul–Rangpur Highway into 4-lane)	Road	ADB	1,618.40	2	Construction	30 June 2026	74.7	74.7

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A1.1 Bangladesh: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
7	Upgrading of Jhenaidah–Jashore Road	Road	WB	356.40	2	Construction	June 2026	19.1	23.1
8	Rehabilitation of Baraiyarhat–Heako–Ramgarh roads (widening of Baraiyarhat–Heako–Ramgarh Road)	Road	LoC	94.22	2	Construction	Slated for completion in 2024; delayed since	43	39.4
9	Chattogram–Cox's Bazar Highway improvement (23.52 km road, 13 bridges, and 1 flyover)	Road	JICA	728.18	2	Construction	August 2029		0.01
10	Improvement of Rangpur–Banglabandha Road (component of SASEC Dhaka Northwest Corridor Project Phase–3)	Road	ADB	355.14	3	Project preparation			
11	Improvement of Hatikamrul–Bonpara–Kustia–Jhenaida Road	Road	AIIB	907.15	3	Project preparation			
12	Improvement of Burimari–Rangpur Road (component of SASEC Dhaka Northwest Corridor Project Phase–3)	Road	ADB	925.40	3	Project preparation			
13	SASEC South Corridor Improvement Project (Daulatdia–Faridpur–Barishal–Kuakata)	Road	ADB	556.99	3	Project preparation			
14	SASEC Chattogram Port Access Road Improvement Project	Road	ADB	280.93	3	Project preparation	1 June 2028		
15	SASEC Dhaka–Chattogram PPP Highway Project (tranche 1) (MFF) (widening of Dhaka–Chattogram Highway into 6-lane highway) (288 km)	Road	ADB	2,309.45	3	Project preparation			
16	Joydebpur–Mymensingh Expressway PPP	Road		817.44	3	Planning			
17	Upgrading Mymensingh–Nakla Road (R371) (development of Mymensingh [Raghurampur]–Phulpur–Nakla–Sherpur Regional Highway) (65.14 km)	Road		72.81	3	Planning			
18	Upgrading Nakla–Nakugaon Highway (N402)	Road		N/A	3	Planning			
19	Madaripur (Mostafapur)–Shariatpur Chandpur–Lakshmipur–Begumganj Road and Shariatpur to Padma Bridge Link Road connecting Chattogram Port and Mongla Port	Road	JICA	762.00	3	Project preparation			
20	BG rail line between Chilahati and Chilahati border	Rail	GOB	16.59	1	Completed		100	
21	DG double rail line between Akhaura and Laksam	Rail	ADB	641.70	1	Completed	October 2025	100	
22	SASEC Chattogram–Cox's Bazar Railway Project (Dohazari–Cox's Bazar section)	Rail	ADB	1,151.09	1	Completed	June 2026	99.7	88.4

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A1.1 Bangladesh: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
23	Khulna–Mongla Port rail line	Rail	LoC	378.92	1	Completed	June 2025	100	
24	Akhaura–Agartala DG railway link (Bangladesh section)	Rail	GOI	40.68	1	Completed	June 2024	100	
25	Rehabilitation of Kulaura–Shahbazpur rail line	Rail	LoC	78.10	2	Construction	Slated for completion in 2024; delayed since	54.5	43.5
26	Padma Bridge Rail Link Project (Dhaka–Jashore)	Rail	PRC	4,312.84	2	Completed	December 2024	96	
27	Jamuna Railway Bridge	Rail	JICA	1,945.80	2	Completed	March 2025	95	
28	DG railway line from Bogra to Sirajganj	Rail	LoC	859.11	3	Planning	30 June 2026	16.8	
29	DG double line between Joydebpur–Ishurdi	Rail	JICA	1,874.00	3	Project preparation	2030		
30	SASEC Railway Connectivity Dhaka–Cumilla Chord-line Project	Rail	ADB	N/A	3	Project preparation			
31	SASEC Tongi–Akhaura Dual Gauge Project	Rail	ADB	1,700.00	3	Project preparation			
32	SASEC Laksam–Chattogram Dual Gauge Project	Rail	ADB	1,520.00	3	Project preparation			
33	Dual Gauge Line from Parbatipur to Kaunia	Rail		184.97	3	Project preparation	31 December 2025	0.8	
34	DG from Akhaura to Sylhet (MG to DG and parallel DG line)	Rail	GOB	1,769.72	4	Government/ MDB(s) has initiated consideration			
35	Jashore–Benapole new BG line parallel to the existing line	Rail	ADB	N/A	3	Project preparation			
36	Chakaria to Moheshkhali new single line DG link including Matarbari power plants	Rail	ADB	N/A	3	Project preparation			
37	Railway link to the bay terminal of Chattogram Port at Potenga	Rail	GOB	N/A	3	Project preparation			
38	BG rail line from Bhanga Junction to Payra Port and Kuakata via Barishal	Rail	GOB	N/A	3	Project preparation			
39	Abdulpur–Rajshahi new BG line parallel to existing one	Rail	ADB	N/A	3	Project preparation			
40	Abdulpur–Santahar–Parbatipur new BG line parallel to existing DG line, including Abdulpur bypass	Rail	ADB	N/A	3	Project preparation			

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A1.1 Bangladesh: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
41	Electric traction (including overhead catenary and substation) along Narayanganj–Dhaka–Chattogram	Rail	GOB	N/A	3	Project preparation			
42	Joydebpur–Jamalpur new DG line and conversion of existing MG to DG line	Rail	GOB	N/A	3	Project preparation			
43	Bhairab Bazar–Mymensingh new DG/BG line and conversion of existing MG to DG line (link between SC 4 and SC 2)	Rail	GOB	N/A	3	Project preparation			
44	Santahar to Amnura new BG line (E–W link between two rail routes of SC 3)	Rail	GOB	N/A	3	Project preparation			
45	MG to BG Bangabandhu Bridge East–Jamalpur–Dewanganj Bazar	Rail		N/A	3	Project preparation			
46	FS with DD for construction of new bridge parallel to the existing Hardinge Bridge in the western zone of Bangladesh Railway	Rail	ADB		3	Project preparation			
47	SASEC Chattogram–Cox’s Bazar DG Rail Line Project (Chattogram–Dohazari)	Rail	ADB	N/A	2	Construction			
48	Matarbari Port Project (RHD Part: Matarbari Port Connecting Road) (27.2 km)	MT	JICA	1472.33	2	Construction	December 2029		
49	Chattogram Port–truck parking yard facility outside the port	MT	GOB	60.00	2	Construction	June 2027	30	25
50	Construction of bay terminal	MT	WB	57.00	3	Planning			
51	SASEC Dhirasram Inland Container Depot Project	Rail	ADB	794.60	3	Planning			
52	BRWTP–1: Dredging in the Dhaka–Chattogram Channel and adjoining routes, including terminal facilities and allied components	IWT	IDA	2,918.38	2	Construction	June 2026	50	
53	Development of Chilmari River Port	IWT	GOB	20.05	2	Construction	2027	25	
54	Dredging of the inland waterway route of Mongla–Chandpur–Mawa–Goalanda–Paksey	IWT	GOB	109.79	2	Implementation	June 2026	82	
55	Procurement of 35 dredgers, ancillary crafts, and allied equipment	IWT	GOB	384.30	2	Construction	2027	30	
56	Establishment of an ICT at Ashuganj, Bangladesh	IWT	LoC	149.02	2	Implementation	2025	42	
57	Dredging program along river Kushiara in the 295 km long IBP Route of Ashuganj–Zkiganj	IWT	GoI:GoB	8.13	2	Implementation	2026	43	
58	Dredging program along the river Brahmaputra–Jamuna in the 192 km long IBP Route of Sirajganj–Daikhawa	IWT	GOI, GOB	19.36	2	Implementation	2026	49	

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A1.1 Bangladesh: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
59	Development of an ICT and bulk terminal at Khanpur, Narayanganj	IWT	GOB	33.36	2	Construction	2027	9	
60	Jamuna River Sustainable Management Project (Channel Development) Phase-1	IWT	IDA	52.80	2	Implementation	2028	1.5	
61	FS for preparation of the Mongla–Ghasiakhali Canal Upgrading Project	IWT	USAID	1	3	Project preparation			
62	Development of navigability along river Gumti	IWT	GOI, GOB	3.88	3	Planning			
63	Improvement of navigability of a stretch of 122 km from Raimangal to Chalna along the IBP Routes #1, 2, 3, and 4, and intensify aids to night navigation	IWT	GOB	N/A	3	Planning			
64	Operationalization of IBP Routes #5 and 6 through development of navigability along river Padma in the route of Paksey–Rajshahi–Sultanganj–Maia–Dhulian	IWT	GOI, GOB	N/A	3	Planning			
65	Improvement of navigability along the river Brahmaputra–Jamuna from Aricha to Sirajganj in the IBP Routes #1 and 2	IWT	GOB	N/A	3	Planning			
66	Development of navigability along the 116 km long route: Barak, Karimganj (India) to Sylhet–Chhatak (Bangladesh)	IWT		N/A	3	Planning			
67	Development and maintenance of 140 km long IWT route between Chandpur and Payra Port.	IWT		N/A	3	Planning			
68	Development of a multimodal terminal at Noapara (Bangladesh) and improvement of fairway	IWT		N/A	4	Listed			
69	Improvement of 119 km fairway between Thegamukh (Mizoram, India) and Rangamati–Kaptai (Bangladesh) fairway	IWT	GOI, GOB	N/A	4	Listed			
70	Operationalisation of IBP Route 9 and 10 by dredging and other measures	IWT	GOI/GOB		3	Planning			
173	Chattogram–Cox’s Bazar Highway Improvement Project (Phase II) (expansion of National Highway 1 except for the improvement section under Phase I)	Road	JICA	2023	3	Planning			
180	Modernization of Baghabari River Port	IWT	GOB	469.42	3	Project Preparation	2026		

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A1.1 Bangladesh: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
181	Procurement and installation of digital gauges for collecting water level data of BIWTA-classified waterways through the GSM network.	IWT	GOB	38.73	3	Project Preparation	2028		
182	Construction of ICT at Shimulia in Munshiganj district	IWT	GOB	380.02	3	Project Preparation	2030		
183	Installation of solar systems, reverse osmosis plants, and marine sanitation devices in IWT vessels and houseboats to reduce carbon dioxide emissions, ensuring availability of clean water and sewage treatment	IWT	GOB	12.29	3	Project Preparation	2027		
184	Matarbari Port Project (760 meter quay)	MT	JICA	938.00	2	Construction	June 2029		
185	Hazrat Shahjalal International Airport Expansion Project (Phase I)	Air	JICA, GOB	1783.26	2	Construction	30 June 2026	99.9	86.5
186	Projects for improving security of international airports	Air	JICA, CAAB	31.49	1	Completed	31 December 2021	100	61.1
187	Development of Cox's Bazar Airport (Phase I)	Air	GOB, CAAB	224.52	1	Completed	30 June 2024	100	98.3
188	Construction of international terminal building at Cox's Bazar Airport	Air	CAAB	30.22	2	Construction	30 June 2026	88.6	69
189	Runway expansion at Cox's Bazar Airport	Air	GOB	309.13	2	Construction	31 December 2026	83.7	73.7
190	Sylhet Osmani International Airport Expansion Project (Phase I)	Air	GOB, CAAB	231.72	2	Construction	31 December 2027	23	14.5
191	Installation of CNS/ATM system, including radar, at Hazrat Shahjalal International Airport.	Air	CAAB	78.58	2	Construction	31 December 2025	99.9	88.5
192	Construction of passenger terminal, including boarding bridge, at Shah Amanat International Airport, Chattogram	Air			3	Project Preparation			
193	Extension of cargo building at Shah Amanat International Airport, Chattogram	Air			3	Project Preparation			
194	Construction of parallel taxiway at Shah Amanat International Airport, Chattogram	Air			3	Project Preparation			

AIIB = Asian Infrastructure Investment Bank; BG = broad gauge; BIWTA = Bangladesh Inland Water Transport Authority; BRWTP = Bangladesh Regional Inland Water Transport Project; CAAB = Civil Aviation Authority of Bangladesh; CNS/ATM = communication, navigation, and surveillance/air traffic management; DD = detailed design; DG = dual gauge; DPP = development project proposal; FS = feasibility study; GOB = Government of Bangladesh; GOI = Government of India; IBP = Indo-Bangladesh Protocol; ICT = inland container terminal; IDA = International Development Association; IWT = inland water transport; JICA = Japan International Cooperation Agency; km = kilometer; LoC = line of credit; MDB = multilateral development bank; MFF = multitranché financing facility; MG = meter gauge; MT = motor transport; N/A = not available; PPP = public-private partnership; PRC = People's Republic of China; RHD = Roads and Highways Department; SASEC = South Asia Subregional Economic Cooperation; SC = SASEC Corridor; USAID = United States Agency for International Development; WB = World Bank.

Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country.

Source: Asian Development Bank.

A1.2 Bhutan

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
71	Lhamoizingkha to Sarpang new road construction (~95 km)	Road	ADB	80.00	3	Project preparation			
72	Gelephu to Panbang (90 km)	Road	WB	110.00	3	Project preparation			
73	Dewathang–Nganglam Highway	Road	GOI	43.00	2	Implementation	2028		
74	SASEC Transport, Trade Facilitation, and Logistics Project	Road	ADB	23.07	2	Implementation	30-Jun-26	90	
75	SASEC Air Connectivity Project (Gelephu)	Air	ADB	7.60	1	Completed	2023	100	
76	Upgrade of Gelephu airport to international airport	Air	RGOB	2.00	3	Project preparation	2024		
195	New Gelephu International Airport at Mindfulness City	Air	RGOB		2	Construction	1 December 2029		

ADB = Asian Development Bank, GOI = Government of India, km = kilometer, RGOB = Royal Government of Bhutan, SASEC = South Asia Subregional Economic Cooperation, WB = World Bank.

Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country.

Source: Asian Development Bank.

A1.3 India

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
78	Upgrading of Aizawl–Zokhawthar section (Champai–Zokhawthar)	Road	WB		1	Completed			
79	Upgrading of Karimganj–Sutarkandi Road	Road	GOI	92.44	2	Construction		2.2	
80	Bihar National Highway Improvement (Patna–Gaya)	Road	JICA	295.53	1	Completed	December 2024	98.5	
81	Upgrading of NH 40 Dawki to Shillong Road in Meghalaya (including rehabilitation of Dawki bridge at the border)	Road	JICA	257.77	2	Construction		41.1	38.3
83	Upgrading of Mao–Imphal section	Road	GOI	342.75	2	Construction		43.2	34.1
84	Upgrading of Joghigopa–Paikan–Guwahati Road	Road	GOI	446.93	2	Construction		81.7	75.3
85	Moreh–Tamu cross border bridge/ other bridges along the trilateral highway	Road	GOI		3	Procurement			
86	Assam Road Network Improvement (State Roads)	Road	ADB	500.00	2	Construction	30 June 2029	8	
87	Upgrading of Tousem–Tamenglong section of Silchar–Tousem–Tamenglong–Imphal Road	Road	GOI	227.08	2	Construction	July 2026	92.4	89.6

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A1.3 India: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
88	Upgrading of Tousem–Mahur section of Silchar–Tousem–Tamenglong–Imphal Road	Road	GOI	421.87	2	Construction	28 August 2026	67.9	59.4
89	Upgrading of Tamenglong–Imphal section of Silchar–Tousem–Tamenglong–Imphal Road	Road	ADB	206.50	1	Completed		100	
90	Upgrading of Agartala–Aizawl section (Manu–Simlung)	Road	GOI	168.90	1	Completed		77.3	76
91	Upgrading of Aizawl–Zokhawthar section (Aizawl–Champai)	Road	GOI	406.00	1	Completed		99.2	97.5
92	Tura–Dalu section of NH 217	Road	JICA	223.90	1	Completed		88.1	87
93	Aizawl to Tuipang (NH 54) going north to south in Mizoram state	Road	JICA	223.90	1	Completed		98.3	95.6
94	Kailashahar–Khowai (NH 208) going north to south in Tripura state	Road	JICA	99.51	2	Construction	September 2026	99.3	98.6
95	Srirampur (Assam) to Tura (Meghalaya) (NH 127B), Srirampur–Dhubri section	Road	JICA	177.81	2	Construction	2028	67.2	63.7
96	Flyover bridge from Seahorse Junction area to dock area at Visakhapatnam	Road	GOI	5.42	3	Project preparation			
97	Construction of flyover–underpass at Visakhapatnam airport junction to ensure flow of container trailers to–from MMLP setup on NH 16	Road	GOI	7.11	2	Construction	June 2026	90	
98	Direct connectivity to Mindi Yard from E. Co. Railways–SC Railway for Visakhapatnam port	Road	GOI	33.00	3	Project Preparation			
99	Maduravoyal Elevated Road Corridor Project	Road	GOI	703.00	2	Construction	May 2026	10	
100	Upgrading of Hapachara–Joghigopa Road	Road	GOI	916.38	2	Construction	March 2026	98.6	96.1
101	Upgrading of Shillong–Badarpur Road	Road	GOI	2,669.47	3	Project preparation			
103	Upgrading of Agartala–Aizawl section (Simlung–Aizawl)	Road	GOI	N/A	3	Project Preparation			
104	4- to 6-laning (V.O. Chidambaranar Port to junction of NH 138 and NH 38)	Road	GOI	24.10	2	Construction			
105	Bihar New Ganga Bridge Project	Road	ADB	715	2	Implementation	31 December 2023		
106	SASEC Road Connectivity Investment Program, tranche 1	Road	ADB	424.80	2	Implementation	27 March 2024		
107	Jiribam–Imphal BG line	Rail	GOI	1,725.54	2	Construction		69	
108	Dimapur–Kohima BG line	Rail	GOI	802.77	2	Construction		70	

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A1.3 India: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
109	Kokrijhar–Galephu BG line	Rail	GOI	403.54	3	Project preparation			
110	Samtse to Banarhat new railway construction (16 km)	Rail	GOI	67.36	3	Project preparation			
111	Hasimara–Phuentsholing rail line	Rail	GOI	31.63	3	Project preparation			
112	Rangia–Samdrup Jonkhar rail line via Darranga	Rail	GOI	99.77	3	Project preparation			
113	Pathsala–Nganglam rail line	Rail	GOI	120.38	3	Project preparation			
114	Mujnai–Nyoenpaling (Phuentsholing) rail line	Rail	GOI	184.21	3	Project preparation			
115	Mahishasan Zero Point–Shahbazpur rail line (200 m pending)	Rail	GOI	4.54	2	Construction		90	
116	Balughat–Hili new line (29.6 km)	Rail	GOI	137.95	2	Construction	March 2027	9	
117	Bathnaha–Biratnagar (Budhnagar) (Bathnaha–Nepal Customs) 8 km	Rail	GOI	24.33	1	Completed	July 2024		
118	Development of Jolarpet rail terminal and connectivity, incl. extended gate facility through rail for Chennai port	Rail	GOI	14.06	3	Project preparation	March 2023	93.6	
119	JMVP on NW 1 from Haldia to Varanasi (1,390 km)	IWT	WB	800.00	2	Construction	December 2026	73	
120	Multimodal terminal at Haldia, Sahibganj, and Kalughat as part of JMVP	IWT	WB		1	Completed	2024	100	
121	Assam Inland Water Transport Project	IWT	WB	88.00	2	Completed	December 2025		
122	Regional Waterway Grid—for improvement of inland waterway connectivity with Bangladesh, Nepal, and Bhutan	IWT			3	Project preparation			
175	Jogighopa Bridge	Road	GOI	746.76	2	Construction		70.2	69.1
176	Srirampur (Assam) to Tura (Meghalaya) (NH 127B), Phulbari–Tura section (0.00–31.50 km)	Road	JICA	38.24	3	Procurement			
177	Srirampur (Assam) to Tura (Meghalaya) (NH 127B), Phulbari–Tura section (31.50–63.22 km)	Road	JICA	31.02	2	Construction			
178	Srirampur (Assam) to Tura (Meghalaya) (NH 127B) Dhubri–Phulbari Bridge	Road	JICA	583.43	2	Construction	12 September 2028	63	61

ADB = Asian Development Bank, BG = broad gauge, DPR = detailed project report, E. Co. = east coast, GOI = Government of India, IWT = inland water transport, JICA = Japan International Cooperation Agency, JMVP = Jal Marg Vikas Project, km = kilometer, MMLP = multimodal logistics park, N/A = not available, NH = national highway, NW = national waterway, SC = south central, WB = World Bank. Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country. Source: Asian Development Bank.

A1.4 Maldives

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
123	Greater Malé Connectivity Project to connect Malé with Villingli, port of Gulhaifahu and Thilafushi Industrial Zone	Road	LoC GOI	500.00	2	Construction	2026	66	
124	85 navigational lighthouses throughout the Maldives	MT		2.50	3	Planning			
125	Bunkering facility in Laamu Atoll	MT			3	Planning			
126	Relocation of commercial harbor/Malé port to Thilafushi	MT			2	Construction			
163	Greater Malé Connectivity Project (Malé–Thilafushi Bridge)	Road	INEX, P-GOM, IND		2	Construction			
164	Velana International Airport Development (new passenger terminal)	Air	KSA, KWT, ABU		2	Construction	July 2025		
165	Upgrading of Hanimaadhoo International Airport	Air	INEX, P-GOM		2	Construction	November 2025		
166	Upgrading of Gan International Airport	Air	INEX, P-GOM		2	Construction	December 2026		
167	Addu City Road Development	Road	INEX, P-GOM		2	Construction			
168	Extension of Maafaru International Airport	Air	ABU, P-GOM		2	Construction			

ABU = Abu Dhabi Fund; GOI = Government of India; IND = India; INEX = Indian Export–Import; KSA = Kingdom of Saudi Arabia, Saudi Fund for Development; KWT = Kuwait, Kuwait Fund for Arab Economic Development; LoC = line of credit; MT = motor transport; P-GOM = project funded by Government of Maldives.

Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country.

Source: Asian Development Bank.

A1.5 Myanmar

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
127	2-lane upgrade of Tamu–Kyigone–Kalewa road section	Road	GOI		1	Completed			
128	Bago Bypass Project, upgrade of Bago–Thilawa and Thilawa–East Dagon Road	Road	GOM		2	Construction			
129	Upgrade of Kalewa–Yargi road section	Road	GOI		2	Construction	1 March 2025	55	
130	Yangon Elevated Expressway	Road	GOM	900.00	3	Procurement			
131	Upgrading of Zokhawthar–Kalewa section	Road			4	Listed			
132	Development of an inland container depot at Mingalardon with rail siding	Rail	GOM		4	Listed			
133	Rehabilitation of Vessel Traffic Navigation Aid in Yangon River to allow night navigation	MT	GOM		4	Listed			

GOM = Government of Myanmar, GOI = Government of India, MT = motor transport.

Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country.

Source: Asian Development Bank.

A1.6 Nepal

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
135	Accelerating transport and trade connectivity in Eastern South Asia–Nepal Phase, upgrading of East–West Highway (Butwal–Gorusinghe–Chanauta section (69 km)	Road	WB	275.00	2	Construction	January 2030	16	12.5
136	Upgrading of Kathmandu–Naubise–Mugling Road (part of Nepal Strategic Road Connectivity and Trade Improvement project)	Road	WB	120.00	2	Construction	October 2026	45	25
137	Nagdhunga tunnel construction	Road	JICA	193.25	2	Construction	April 2025	97.5	76.7
138	Upgrading of East–West Highway (Kakarbhitra–Laukahi section)	Road	ADB	362.47	2	Construction	December 2029	24	6.6
139	SASEC Road Improvement Project (Narayanghat to Butwal)	Road	ADB	179.36	2	Construction	July 2026	73	46.3
140	Upgrading of national highway between Mugling and Pokhara	Road	ADB	254.00	2	Construction	June 2026	71	42.1
141	4-lane expressway between Kathmandu and Nijgadh	Road	GON	1,580.00	2	Construction	April 2027	44	39.6
142	SASEC Highway Improvement Project (East–West Highway, Kanchanpur– Kamala section)	Road	ADB	256.40	2	Construction	June 2026	64	45.3
143	Upgrading of East–West Highway (Dhalkebar–Pathlaiya section)	Road	WB	248.00	3	Project preparation	1 September 2027	15	
144	Upgrading of East–West Highway (Kamala–Dhalkebar section)	Road	WB	N/A	3	Procurement	1 September 2032		10
145	Upgrading of Pathlaiya–Hetauda–Narayanghat Road	Road	ADB	270.00	3	Project preparation			
146	Nepal–India Cross-Border Railways–Jainagar–Janakpur–Bijalpur BG line (52 km)	Rail	GOI	70.14	1	Completed	April 2023	100	
147	E–W electrified railway project (Kakarbhitra–Bardibas and Nijgadh–Gaddachauki)	Rail	GON	10,200.00	3	Project preparation			
148	E–W electrified railway project (Bardibas–Nijgadh) (82 km)	Rail	GON	800.00	2	Construction	2028	45.4	45.6
149	Nepal–India Cross-Border Railways–Bijalpur–Bardibas BG line (17 km)	Rail	GOI	52.63	2	Implementation	1 July 2023		
150	Raxaul–Kathmandu BG Electrified Railway Project	Rail	GOI	3,840.00	3	Project preparation			
152	Bharwa Kalan (Nautanwa)–Bhairahawa	Rail	GOI	48.90	3	Planning			
153	Nepalgunj (India)–Nepalgunj (Nepal) new line	Rail	GOI	38.45	3	Planning			
154	New Jalpaiguri–Kakarbhitra	Rail	GOI	54.17	3	Planning			

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A1.6 Nepal: continued

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
155	TIA modernization project and TA for air navigation services	Air	JICA	41.84	1	Completed	September 2023	100	
156	Upgradation of Gautam Buddha International Airport	Air	ADB, OFID	76.10	1	Completed	2022	100	
157	SASEC South Asia Tourism Infrastructure Development Project (Nepal)	Air	ADB	105.50	1	Completed	2024	100	
158	Tribhuvan International Airport Capacity Expansion Project (expansion of parallel taxiway and hangar apron areas)	Air	ADB	80.00	2	Construction	November 2026	50	45
159	Capacity building program for aviation professionals	Air			4	Listed			
169	Upgrading of East–West Highway (Chanauta–Kohalpur section)	Road			3	Planning			
170	Upgrading of East–West Highway (Kohalpur–Gaddachauki section)	Road			3	Planning			
171	Improvement of air traffic control facilities at Tribhuvan International Airport	Air	JICA		3	Project preparation			
196	Operationalization of Arun River to connect NW 58	IWT	GON		3	Project preparation			

ADB = Asian Development Bank, GOI = Government of India, GON = Government of Nepal, IWT = inland water transport, JICA = Japan International Cooperation Agency, km = kilometer, NW = national waterway, OFID = OPEC Fund for International Development, SASEC = South Asia Subregional Economic Cooperation, TA = technical assistance, TIA = Type Inspection Authorization, WB = World Bank.

Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country.

Source: Asian Development Bank.

A1.7 Sri Lanka

S. No.	Project Name/Particulars	Mode	Agency	Cost (\$ million)	Category	Stage	End Date	Physical Progress (%)	Financial Progress (%)
160	Central Expressway (Mirigama–Kurunegala section)	Road			1	Completed	January 2022	100	100
161	Construction of Central Expressway Stage 1 (Kadawatha to Mirigama)	Road	PRC	186.57	2	Implementation	2027	40	57
162	SASEC Port Access Elevated Highway Project	Road	ADB, JICA	702.93	2	Implementation	December 2025	98.7	64
172	New bridge construction project over the Kelani River	Road		276.19	1	Completed			
174	Bandaranaike International Airport Expansion Project (Phase 2)	Air	JICA	599.73	2	Construction		6	

JICA = Japan International Cooperation Agency, PRC = (the) People's Republic of China, SASEC = South Asia Subregional Economic Cooperation.

Note: Serial numbers may not be sequential as they refer to the master APSI project list while the list here is segregated by country.

Source: Asian Development Bank.

Appendix 2: Transport Knowledge Works

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Advancing Cooperation in the Maritime Sector Studies	REG	1	Completed
2.	Safe mobility and regional connectivity	REG	1	Completed
3.	Data analytics for assessing SASEC logistics movement	REG	1	Completed
4.	BBIN MVA Studies: 1) foreign vehicles fees & charges, 2) route harmonization, 3) vehicle insurance requirements	BBIN	1	Completed
5.	India–Bangladesh Rail-based Cargo Movement Study	BAN–IND	1	Completed
6.	BBIN Rail-based Cargo Movement Study	BBIN	1	Completed
7.	SASEC Sustainable and Inclusive Highway Network Implementation Plan	REG	3	Consultant mobilized
8.	Establishment of baseline and institutional mechanism for SASEC APSI result monitoring	REG	4	Government/MDB(s) has initiated consideration
9.	Feasibility of freight rail between Thimphu and Phuentsholing	BHU	4	Listed
10.	Study for reform and improvement of regulatory framework and management of cross-border IWT	BBIN	4	Listed
11.	Study for standardization of vessel, navigational standard, aids to navigation across the border, and introducing RIS	BAN–IND	4	Government/MDB(s) has initiated consideration
12.	Inland Waterway-based Subregional Cargo Movement Study	BBIN	4	Government/MDB(s) has initiated consideration
13.	Study for subregional container traffic by inland waterway	BBIN	4	Government/MDB(s) has initiated consideration
14.	Institutional capacity building, including setting up a SASEC IWT Center for R&D	BBIN	4	Listed
15.	Study on integration of coastal shipping and IWT	BBIN	4	Listed
16.	Study on vessel finance and vessel designing in the region to create a regional benchmark/standard	BAN–IND	4	Government/MDB(s) has initiated consideration
17.	Decarbonization roadmap for IWT: Identification of decarbonization initiatives and development of roadmap for regional waterway	BAN–IND	4	Government/MDB(s) has initiated consideration
18.	Study on process improvement and digitization of cross-border procedures for ease of inland water and coastal movement	BBIN	4	Listed
19.	Knowledge work on modern techniques to maintain navigability—river training, dredging, bandalling, etc.	BAN–IND	4	Listed
20.	Study on Integrated VTMS	BAN–IND	4	Listed
21.	Study on salvage and rescue system of vessels in distress	BAN–IND	4	Listed
22.	Feasibility study for multimodal connectivity from Bhutan to IBP routes	BAN–BHU–IND	4	Government/MDB(s) has initiated consideration
23.	Showing sustainability initiatives in the SASEC region ports—roadmap for moving towards carbon neutrality in ports	REG	4	Government/MDB(s) has initiated consideration
24.	Study on development of inland dry port (land port) near Padma Bridge and Bangabandhu (Jamuna) Bridge to facilitate multimodal connectivity and transportation system	BAN	4	Government/MDB(s) has initiated consideration
25.	Feasibility study for Tamu–Kalaywa–Yargyi–Monywa–Mandalay rail link	MYA	4	Listed

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Appendix 2: continued

S. No.	Project Name/Particulars	Country	Category	Stage
26.	Digitalization of Bangladesh Railway operational information and management system	BAN	4	Listed
27.	Study for economic viability of rail connectivity between India and Bhutan (Pasakha, Nganglam, Samdrup, Jongkhar, and Phuentsholing)	BHU	2	
28.	Bhutan Multimodal Transport Masterplan (WB ACCESS Project)	BHU	3	Terms of references approved
29.	Feasibility of IWT in Manas and Sunkoshi	BHU	4	Government/MDB(s) has initiated consideration
30.	Study on cost comparison based on value of time amongst various modes of transport (Kolkata–Kalughat–Raxaul), (Kolkata–Sahibganj–Biratnagar), (Kolkata–Varanasi–Raxaul/Birgunj)	NEP	4	Government/MDB(s) has initiated consideration
31.	Study for increasing the draft on Kolkata and Haldia channel leading up to Sagar along with bank protection strategies and associated cost implications	IND	4	Listed
32.	Study on 20 national waterways	IND	4	Listed
33.	Feasibility study for Indo–Bangladesh Protocol Routes	BAN-IND	4	Listed
34.	Study on size and type of barges	BAN	4	Listed
35.	Transport: Platform for transport data collection and performance monitoring	REG	4	Listed
36.	Transport/Logistics: Study on the status of digital dynamic data stack in line with Unified Logistics Interface Platform	REG	3	Consultant mobilized
37.	Transport: Study on the status of Digital Multimodal National Master Plan	REG	3	Consultant mobilized

APSI = Action Plan for SASEC Initiatives; BAN = Bangladesh; BBIN = Bangladesh, Bhutan, India, Nepal; BHU = Bhutan; IBP = Indo–Bangladesh Protocol; IND = India; IWT = inland water transport; MDB = multilateral development bank; MVA = Motor Vehicle Agreement; MYA = Myanmar; R&D = research and development; REG = regional; RIS = river information services; SASEC = South Asia Subregional Economic Cooperation; VTMS = vehicle traffic management system; WB = World Bank.

Source: Asian Development Bank.

Appendix 3: Trade Facilitation Projects

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target Date	End Date	Physical Progress (%)
1.	SASEC Integrated Trade Facilitation Sector Development Program for Bangladesh BLPA Part	BAN	ADB	22.0	2	Ongoing	2 July 2022	31 December 2026		1
2.	National Single Window Project for Maldives	MDV	ADB	11.9	2					
3.	Customs Administration Reform and Modernization Project	MDV	ADB							
4.	SASEC Customs and Logistics Reform Program for Nepal tranche 1	NEP	ADB	5.4	1	Completed			2023	

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Appendix 3: continued

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target Date	End Date	Physical Progress (%)
5.	Diagnosing and capacity building projects in authorized economic operator, risk management, and expedited shipment (trade component)—under funding by European Union	NEP	EU		2	Implementation	February 2020	November 2024		
6.	SASEC Customs and Logistics Reform Program for Nepal tranche 2	NEP	ADB	50.0	2		2024	2025		
7.	SASEC Customs and Logistics Reform Program for Nepal tranche 3	NEP	ADB	50.0	3		2025	2027		
8.	Strategic Road Connectivity and Trade Improvement Project—trade facilitation component	NEP	IDA	42.0	2	Implementation	2020	2027		
9.	Accelerating transport and trade connectivity in Eastern South Asia–Nepal phase 1 Project (trade component)	NEP	IDA	6.5	2	Implementation	2022	2028		
10.	Construction of ICP—Nepalgunj (land ports)	NEP	GOI	23.2	1	Completed	2022		2024	100
11.	Construction of ICP—Bhairahawa (land ports)	NEP	GOI	28.6	2	Construction	2023	2025		45
12.	Construction of ICP—Dodhara–Chadani (land ports)	NEP	GOI	43.2	3	MoU signed, DPR approved	2024	2026		
13.	Implementation of single window for Sri Lanka	SRI	ADB		3	PIU established				

ADB = Asian Development Bank, BAN = Bangladesh, BLPA = Bangladesh Land Port Authority, DPR = detailed project report, EU = European Union, GOI = Government of India, ICP = integrated check post, IDA = International Development Association, MDV = Maldives, MoU = memorandum of understanding, NEP = Nepal, PIU = project implementation unit, SRI = Sri Lanka.

Source: Asian Development Bank.

Appendix 4: Trade Facilitation Knowledge Works

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Study on establishing a comprehensive monitoring framework for SSTF 2035 through indicators and baseline analysis	REG	4	Listed
2.	Study on national-level trade facilitation gap analysis	REG	4	Listed
3.	Gap analysis and roadmap for implementation of short-, medium- and long-term strategies	REG/MDV	4	Listed
4.	Study on intra-SASEC trade to identify potential opportunities and corresponding gaps for specific commodities	REG	4	Listed
5.	Regional Electronic Cargo Tracking System	REG	4	Listed
6.	SPS–TBT Inventorization Studies and Food Regulatory Ecosystem	REG	4	Listed
7.	Strengthening coordinated border management	REG	4	Listed
8.	Develop an approach/framework for DPI-linked cross-border and regional trade facilitation system	REG	4	Listed

BAN = Bangladesh, BHU = Bhutan, DPI = digital public infrastructure, MDV = Maldives, REG = regional, SASEC = South Asia Subregional Economic Cooperation, SPS–TBT = sanitary and phytosanitary measures–technical barriers to trade, SRI = Sri Lanka, SSTF = SASEC Strategy 2035 for Trade Facilitation.

Source: Asian Development Bank.

Appendix 5: Projects Related to Sanitary and Phytosanitary Measures and Technical Barriers to Trade

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target Date	End Date	Physical Progress (%)
1.	Nuts and Fruits in Hilly Areas Project in Nepal	NEP	ADB	74.45	2	Implementation	December 2022	February 2030		
2.	Assistance in developing testing facilities, including regional testing facilities, based on needs assessment	TBD	TBD		4					

ADB = Asian Development Bank, NEP = Nepal, SASEC = South Asia Subregional Economic Cooperation, TBD = to be decided.
Source: Asian Development Bank.

Appendix 6: Knowledge Works Related to Sanitary and Phytosanitary Measures and Technical Barriers to Trade

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Feasibility study on setting up a regional trade portal with updated SPS–TBT information for enhanced transparency and information sharing mechanism between SASEC countries.	REG	4	Listed
2.	Developing a SASEC regional arrangement for enhancing the capacity of technical personnel at training centers in India (inspired by the model adopted by customs).	REG	4	Listed
3.	Developing a mutually accepted arrangement of conformity assessment of certification and testing.	REG	4	Listed
4.	Study on the status of testing laboratory infrastructure in SASEC countries, their need for upgradation, and assess the possibility of setting up regional testing facilities at strategic locations to support efficient food trade in the region.	REG	4	Listed
5.	Assistance in developing testing facilities, including regional testing facilities at convenient locations (for e.g., Siliguri, West Bengal).	REG	4	Listed
6.	Harmonization of SASEC standards for select food products of high trade potential, based on Codex Standards	REG	4	Listed

APSI = Action Plan for SASEC Initiatives, REG = regional, SASEC = South Asia Subregional Economic Cooperation, SPS–TBT = sanitary and phytosanitary measures–technical barriers to trade.
Source: Asian Development Bank.

Appendix 7: Energy Projects

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target Date	End Date	Physical Progress (%)
1.	Bangladesh Dhaka–Western Zone Grid Expansion	BAN	ADB	750	2	Construction	2019	2024	2024	
2.	Katihar (India)–Parbotipur (Bangladesh)–Barnagar (India–NER) 765 kV D/C line	IND–BAN	TBD		3	Project preparation				
3.	Nyera Amari 404 MW HPP	BHU	ADB, others	500	3	Project preparation	2027	2032		

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Appendix 7: continued

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target Date	End Date	Physical Progress (%)
4.	Bunakha 180 MW HPP	BHU	ADB, others	500	3	Project preparation	2026	2031		
5.	Dorji Lung Hydropower Project (1,125 MW)	BHU	World Bank and private sector	1,700	2	Construction	2025	2032		
6.	Utility-scale solar PV project and rooftop solar PV project	BHU	ADB	190	2	Construction	2025	2028		
7.	400 kV East–West link	BHU			4	Listed				
8.	Durungri power pooling station, Bhutan to Rangia/Rowta, India (to be split into 2 projects)	IND–BHU	EXIM Bank		4	Listed				
9.	Imphal (India)–Tamu (Myanmar)	IND–MYA	TBD		3	Project Preparation Stage				
10.	Arun 3 (900 MW)–Dhalkebar (Nepal)–Sitamarhi (India) 400 kV D/C line	IND–NEP	Private	150	2	Construction				
11.	Dododhara (Nepal)–Bareilly (India) 400 kV Transmission Line Project	IND–NEP	GOI, GON	105	3	Project Preparation Stage	2025	2029	2029	
12.	Nijgadh (Nepal)–Motihari (India) 400 kV Transmission Line Project	IND–NEP	ADB, others TBD	75	4	Government/ MDB(s) has initiated consideration				
13.	Inaruwa (Nepal)–Purnea (India) 400 kV Transmission Line Project	IND–NEP	TBD	30	3	Project Preparation Stage		2030		
14.	Lamahi/Kohalpur (Nepal)–Lucknow (India) 400 kV Transmission Line Project	IND–NEP	GON, GOI	20	4	Government/ MDB(s) has initiated consideration		2035		
15.	New Butwal (Nepal)–Gorakhpur New (India) 400 kV D/C line and associated lines in Nepal	IND–NEP	GON, GOI, MCC	18	2	Construction	2024	2026		
16.	Madurai (India)–Mannar (Sri Lanka) Interconnection	IND–SRI	TBD		3	Project Preparation Stage				
17.	Dudh Koshi 635 MW HPP	NEP	ADB, WB, others	2,300	3	Project Preparation Stage	2025	2032	2032	
18.	Lamahi–Dododhara–Attariya 400 kV Transmission Line Project	NEP	ADB, others TBD	439	3	Project Preparation Stage	2026	2029	2029	
19.	Chamelia (Nepal)–Jauljibi (India) 220 kV Transmission line	IND–NEP	GON, GOI		3	Project Preparation Stage	2026	2027		

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Appendix 7: continued

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target Date	End Date	Physical Progress (%)
20.	Butwal (Nepal)–Lamahi (Nepal) 400 kV Transmission line	NEP	ADB		2	Construction	2014	2024	2024	
21.	Upper Arun 1,061 MW HPP	NEP	WB, ADB, JICA, others	2,000	3	Project Preparation Stage	2017	2031	2031	
22.	Arun 3 HPP	NEP	Private	1,110	2	Construction	2020	2025	2025	
23.	Upper Karnali HPP	NEP	Private		3	Project Preparation Stage				
24.	Arun 4 HPP	NEP	Private	607	3	Project Preparation Stage	2027	2032	2032	
25.	Lower Arun HPP	NEP	Private		3	Project Preparation Stage				
26.	Sunkoshi 3 HPP	NEP	Private	1,531	3	Project Preparation Stage	2027	2032	2032	
27.	Tanahu HPP	NEP	ADB, JICA, EIB	503	2	Construction	2021	2027	2027	

ADB = Asian Development Bank; BAN = Bangladesh; BHU = Bhutan; D/C = direct current; EIB = European Investment Bank; EXIM = export–import; GOI = Government of India; GON = Government of Nepal; HPP = hydropower project; IND = India; JICA = Japan International Cooperation Agency; kV = kilovolts; LoC = line of credit; MCC = Millennium Challenge Corporation; MDB = multilateral development bank; MW = megawatts; NEP = Nepal; OFID = OPEC Fund for International Development; PV = photovoltaic; SRI = Sri Lanka; TBD = to be decided; WB = World Bank.

Source: Asian Development Bank.

Appendix 8: Energy Knowledge Works

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Commercial feasibility of the India–Sri Lanka interconnection for Government of Sri Lanka	IND–SRI	1	Completed
2.	Green Fuel Development Initiative	REG	2	Interim report submitted
3.	Assessment of the supply and value chain of electrical equipment in the SASEC region, including battery manufacturing in the countries	REG	2	Interim report submitted
4.	Digital Utility Initiative: Digital roadmap and training on cybersecurity	REG	2	Interim report submitted
5.	Resource Complementarity Study (Technical/Commercial); update in every 2 years/next update 2027	REG	2	Interim report submitted
6.	Update of the Regional Transmission Master Plan; update in every 5 years/next update in 2027)	REG	2	Interim report submitted
7.	Solar Integration Study in Bhutan	REG	3	Terms of references approved

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Appendix 8: continued

S. No.	Project Name/Particulars	Country	Category	Stage
8.	Safeguard studies for India–Sri Lanka interconnection (Sri Lanka side)	SRI	4	Listed
9.	Creating SASEC Green Finance Facility (Task)	REG	3	Terms of references approved
10.	Green hydrogen ecosystem development plan for the countries/SASEC region	REG	2	Inception report submitted
11.	Establishment of domestic power market platform in Bhutan	BHU	2	Inception report submitted
12.	Common policy guidelines for regional power market integration (Bangladesh)	REG	4	Listed
13.	Capacity development to undertake technical study for regional interconnections for Bangladesh	BAN	4	Listed
14.	Technical study for intra-regional grid interconnections for power market development in Bangladesh	BAN	4	Listed
15.	Study on deployment of sustainable aviation fuel	REG	2	Inception report submitted
16.	Case studies on best practices for capacity building in power sector for SASEC countries	REG	2	Interim report submitted
17.	Inter-island grid interconnection study for Maldives	MDV	4	Listed
18.	Study of optimal electricity generation mix for Nepal	NEP	4	Listed
19.	Study on transmission wheeling charge stimulation models for regional trade for Myanmar	MYA	4	Listed
20.	Study on the mapping and feasibility of wind energy projects in coastal areas	MDV	4	Listed
21.	Bangladesh ECD and Regional Integration Study (Energy)	BAN	2	Draft report submitted

BAN = Bangladesh, BHU = Bhutan, ECD = Economic Corridor Development, MDV = Maldives, MYA = Myanmar, NEP = Nepal, REG = regional, and SRI = Sri Lanka, SASEC = South Asia Subregional Economic Cooperation.

Source: Asian Development Bank.

Appendix 9: Economic Corridor Development Projects

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target	End	Physical Progress (%)
1.	Visakhapatnam–Chennai Industrial Corridor Development Program, tranche 2	IND	ADB	358.0	2	Implementation	2016	December 2024		62
2.	Tamil Nadu Urban Flagship Investment Program	IND	ADB		2	Tranche 3 ongoing	2019	December 2026		14
3.	Tamil Nadu Industrial Connectivity Project	IND	ADB		2	Ongoing	2021	June 2027		75
4.	Chennai–Kanyakumari Industrial Corridor: Power Sector Investment Project	IND	ADB		2	Ongoing	2020	June 2025		63

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Appendix 9: continued

S. No.	Project Name/Particulars	Country	Agency	Cost (\$ million)	Category	Stage	Start	Target	End	Physical Progress (%)
5.	Industrial Corridor Development Program Subprogram 1 and 2	IND	ADB	500.0	1	Completed			February 2024	
6.	West Bengal Economic Corridor	IND	ADB	350.0	3	Project preparation completed				
7.	Tripura Industrial Infrastructure Sector Development Program	IND	ADB	84.5	2	Implementation				
8.	Regional Urban Development Project	NEP	ADB	214.0	2	Implementation	December 2017	June 2025		90
9.	Urban Resilience and Livability Improvement Project	NEP	ADB	201.5	2	Implementation	March 2024	30 April 2029		15
10.	SASEC Customs and Logistics Reforms Program (Subprogram 2)	NEP	ADB	50.0	3	Project preparation completed				
11.	SASEC Customs and Logistics Reforms Program (Subprogram 3)	NEP	ADB	53.0	4	Listed				
12.	Supporting the development of economic zones and small and medium-sized enterprise dynamism to boost competitiveness and jobs	SRI	ADB	200.0	3	Project Preparation Stage				

ADB = Asian Development Bank, IND = India, NEP = Nepal, SASEC = South Asia Subregional Economic Cooperation, SRI = Sri Lanka.
Source: Asian Development Bank.

Appendix 10 (a): Economic Corridor Development Knowledge Works

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Integrating Remote Sensing and Geospatial Analysis to Inform the West Bengal Economic Corridor Development	IND	1	Completed
2.	West Bengal Economic Corridor Development Study Report	IND	1	Completed
3.	Northwest Dhaka South East Economic Corridor Study	BAN	3	Consultant mobilized
4.	Logistics Sector Development for Increased Economic Competitiveness	BAN	3	Consultant mobilized
5.	India Industrial Park Rating System Study 3.0	IND	2	Inception report submitted
6.	Inland Water Transport Route Study (India–Bangladesh)	BAN–IND	4	Listed

BAN = Bangladesh, IND = India, SASEC = South Asia Subregional Economic Cooperation.
Source: Asian Development Bank.

Appendix 10 (b): Knowledge Works Pertaining to Comprehensive Trade Gateway Ecosystem Development

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Comprehensive Ecosystem Development at and behind Trade Gateway for enhancing EXIM efficiency at Chattogram Port, Bangladesh	BAN	3	Terms of References approved
2.	Comprehensive Ecosystem Development at and behind Trade Gateway for enhancing EXIM efficiency at Colombo Port, Sri Lanka	SRI	3	Terms of References approved
3.	Comprehensive Ecosystem Development for Enhancing Air Travel and EXIM Efficiency through Process Mapping at Hazrat Shahjalal Airport, Dhaka	BAN	4	Government/MDB(s) has initiated consideration
4.	Comprehensive Ecosystem Development for Enhancing Air Travel and EXIM Efficiency through Process Mapping at Tribhuvan International Airport, Kathmandu	NEP	4	Government/MDB(s) has initiated consideration
5.	Comprehensive Ecosystem Development for Enhancing EXIM Efficiency through Process Mapping at other gateways	REG	4	Government/MDB(s) has initiated consideration
6.	Land Port Process Study for two ports - Raxaul and Agartala	IND	2	Inception Report Submitted
7.	Comprehensive Trade Gateway Ecosystems Assessment at Bhairahawa (Nepal)–Sonauli (India) Land Ports	IND–NEP	3	Terms of References approved
8.	Study on cross-border coordinated border management appropriate to the routes and border points covered in the Routes studies	BAN–BHU–IND–NEP	1	Completed

BAN = Bangladesh; BBIN = Bangladesh, Bhutan, India and Nepal; BHU = Bhutan; EXIM = export–import; IND = India; MDB = multilateral development bank; NEP = Nepal; REG = regional.

Appendix 10 (c): Knowledge Works Related to Highly Facilitated Trade Corridors

S. No.	Project Name/Particulars	Country	Category	Stage
1.	Preparation of HFTC action plan, identifying relevant recommendations from routes studies, the agencies responsible and possible timelines for initiating and completing their implementation.	BAN–IND–NEP	2	Ongoing
2.	Study on enabling cross-border electronic exchange of pre-arrival information.	REG	4	Listed
3.	Study on the design and application of a regional electronic cargo tracking system.	REG	2	Ongoing
4.	Study on CBCBM appropriate to the routes and border points covered in the routes studies.	BAN–IND–NEP	2	Ongoing
5.	Route studies along: (i) Nepal–Kolkata route passing through Birgunj–Raxaul and Biratnagar–Jogbani, (ii) Phuentsholing/Pasakha–Jaigaon–Changrabandha–Burimari and Fulbari/Banglabandha to Chattogram, (iii) Phuentsholing/Pasakha–Jaigaon to Kolkata, and (iv) Akhaura–Moreh route passing through Agartala.	BBIN	2	Ongoing
6.	Study to standardize business processes at the border points.	REG	4	Listed

BAN = Bangladesh; BBIN = Bangladesh, Bhutan, India and Nepal; CBCBM = cross-border coordinated border management; HFTC = Highly Facilitated Trade Corridor; IND = India; NEP = Nepal; REG = regional.

Appendix 11: Tourism Projects

S. No.	Project Name/Particulars	Country	Mode	Agency	Cost (\$ million)	Category	Stage	Start	Target	End	Physical Progress (%)
1.	VIA expansion project including Noovilu seaplane terminal	MDV	Civil Aviation	SFD, OFID, ADFD, KF	350	1	Construction	2019	2022	2025	
2.	Upgrade of GBIA	NEP	Civil Aviation	ADB, OFID	76.1	1	Completed	2015	2018	2022	100
3.	Tripura Urban and Tourism Development Project	IND	Destination	ADB	100	2	Ongoing	2023	2029		
4.	Uttar Pradesh Pro-poor Tourism Development Project at Sarnath and Kushinagar Buddhist Circuit	IND	Destination	WB	8.7	2	Construction	2022	2024		
5.	Buddhist Circuit Tourism Development (India)	IND	Circuit/ Destination	ADB		3	Listed				
6.	Mahabodhi Heritage Corridor, Bodh Gaya	IND	Destination			4	Listed				
7.	Improving rail connectivity between Sarnath (India) and Lumbini (Nepal). The section between Dohrighat and Sahjanwa with track length of 82 km and 12 intermittent stations.	IND/ NEP	Rail	MoR, GOI	160	3	Sanctioned				
8.	Improving rail connectivity between Bodh Gaya (India) and proposed Kushinagar station (India). Construction of railway track of approx. 20 km from Jatdumri Halt to Neora/ Danapur with 4 intermittent stations. Proposed feasibility for construction of railway line from Panchdeori Halt to Kushinagar (proposed railway station) of approx. 40 km length.	IND	Rail	MoR, GOI		4	Listed (Part Construction)			2024	
9.	Improving rail connectivity between Kushinagar (India) and Lumbini (Nepal). Connecting proposed Kushinagar railway station to Nautanwa near Nepal border. Revival of the old railway track used for sugarcane transportation from Hetimpur to Sardarnagar for a length of 64 km.	IND/ NEP	Rail	MoR, GOI	176.5	3	Sanctioned				

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Appendix 11: continued

S. No.	Project Name/Particulars	Country	Mode	Agency	Cost (\$ million)	Category	Stage	Start	Target	End	Physical Progress (%)
10.	Improving road connectivity between Lumbini (Nepal) and Sarnath (India). 3 stretches have been identified for 215 km of strengthening, upgrade, and provision for wayside amenities/signage.	IND/ NEP	Road			4	Listed				
11.	Improving road connectivity between Sarnath (India) and Bodh Gaya (India). 2 stretches have been identified for 30 km of strengthening, upgrade, and provision for wayside amenities/signage.	IND	Road			4	Listed				
12.	Improving road connectivity between Bodh Gaya (India) and Kushinagar (India). 7 stretches have been identified for 270 km of strengthening, upgrade, and provision for wayside amenities/signage.	IND	Road			4	Listed				
13.	Improving road connectivity between Kushinagar (India) and Lumbini (Nepal). 2 stretches have been identified for 90 km of strengthening, upgrade, and provision for wayside amenities/signage.	IND/ NEP	Road			4	Listed				
14.	Improving last mile connectivity and pedestrian environment improvement in core Buddhist pilgrimage destinations (Lumbini, Sarnath, Bodh Gaya, and Kushinagar).	IND/ NEP	Last Mile Connectivity			4	Listed				
15.	Improving air connectivity ecosystem between GBIA for Lumbini, LSIA for Sarnath, BGIA, and KIA.	IND/ NEP	Civil Aviation			4	Listed				

ADB = Asian Development Bank, ADFD = Abu Dhabi Fund for Development, BGIA = Bodh Gaya International Airport, GBIA = Gautam Buddha International Airport, GOI = Government of India, IND = India, KEXIM = Export Import Bank of Korea, KF = Kuwait Fund, KIA = Kushinagar International Airport, LoC = line of credit, Government of India, LSIA = Lal Bahadur Shastri International Airport, MDV = Maldives, MoR = Ministry of Railways, NEP = Nepal, OFID = OPEC Fund for International Development, SFD = Saudi Fund for Development, WB = World Bank.

Note: ADB recognizes Korea as the Republic of Korea.

Source: Asian Development Bank.

Appendix 12: Tourism Knowledge Works

S. No.	Project Name/Particulars	Agency	Category	Stage
1.	Scoping study on strengthening institutional mechanism for tourism in SASEC	ADB	1	Final report submitted
2.	Achieving sustainable cruise tourism for the maritime SASEC region post-COVID-19	ADB	1	Final report submitted
3.	Maldives TMP 5, 2023–2027, Goals and Strategies	ADB	1	Final report submitted
4.	Sudurpashchim Province Tourism Master Plan 2022–2032	UNEP and UNDP	1	Final report submitted
5.	Supporting tourism resilience in Sri Lanka	ADB	2	Ongoing
6.	Feasibility study on SASEC regional tourist visa/ticket		4	Listed
7.	Regional Sustainable Tourism Program framework development		3	Listed
8.	Study on aviation ecosystem across SASEC tourism destinations		4	Listed
9.	Modernizing tourism data collection, accounting and analysis methods for SASEC countries		3	Listed
10.	Compendium of benchmarked standards and practices for South Asia tourism industry, including sustainable tourism development in the region		3	Listed
11.	Gap analysis for upgrading Buddhist Circuit's connectivity, preparation of destinations development and management plans, and other tourism related infrastructure and capacities in relation to global standards		4	Listed
12.	Gap analysis and passenger survey for SASEC sea and river cruise development – physical infrastructure, tourism infrastructure at port destinations, product viability, capacity development etc.		4	Listed
13.	Investment needs assessment for sustainable tourism growth and climate impact adaptation and the formulation of a road map for private sector investment enhancement		4	Listed

ADB = Asian Development Bank, SASEC = South Asia Subregional Economic Cooperation, TMP 5 = Fifth Tourism Master Plan, UNDP = United Nations Development Programme, UNEP = United Nations Environment Programme.

Source: Asian Development Bank.

Appendix 13: Digitalization Knowledge Works

S. No.	Project Name/Particulars	Agency	Category	Stage
1.	Transport: Data analytics for assessing SASEC logistics movement	ADB	1	Completed
2.	Transport: Platform for transport data collection and performance monitoring	ADB	4	Listed
3.	Transport: Port process and digital reform assessment for select SASEC ports	ADB	4	Listed
4.	Transport: Gateway process mapping and development of standard operating procedures to standardize processes across ports for enabling regional integration and promote digitization	ADB	4	Listed
5.	Transport: Study on status of digital dynamic data stack in line with ULIP for SASEC partner countries	ADB	2	Ongoing
6.	Trade Facilitation: National Single Window (Digital Component)	ADB	4	Listed

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Appendix 13: continued

S. No.	Project Name/Particulars	Agency	Category	Stage
7.	Economic Corridor Development: Master Planning of Growth Hubs	ADB	4	Listed
8.	Economic Corridor Development: Assessment of digital maturity in SASEC partner countries to operationalize Infrastructure Planning leveraging National Spatial Data Infrastructure and Systems.	ADB	4	Listed
9.	Energy: Digital Utility Initiative: Digital roadmap and training on cybersecurity	ADB	4	Listed
10.	Digital Infrastructure and Digital Public Goods: Status of digital infrastructure and development of digital public goods in SASEC countries.	ADB	1	Completed
11.	Digital Payment Systems: Study on digital infrastructure and payment systems study for SASEC countries (Bhutan and Nepal)	ADB	2	Completed
12.	Digitalization of APSI Progress Update: Web Enabled Tool for progress update	ADB	3	Planning

ADB = Asian Development Bank, APSI = Action Plan for SASEC Initiatives, SASEC = South Asia Subregional Economic Cooperation, ULIP = Unified Logistics Interface Platform.

Sources: i. Row 10: Asian Development Bank. 2025. *Digital Public Infrastructure: Landscape and Opportunities in South Asia*. Manila. <https://www.adb.org/sites/default/files/publication/1114321/digital-public-infrastructure-south-asia.pdf>.

ii. For all others: Asian Development Bank.

