

KOSHI CORRIDOR (KHANDBARI-KIMATHANKA) CONCEPT NOTE

कोशी कोरिडोर (खाँदबारी–किमाथांका) सडक योजना, संखुवासभा

राष्ट्रिय राजमार्ग NH-08 | राष्ट्रिय गौरवको आयोजना

मुख्य विशेषताहरू:

- उत्तर-दक्षिण जोड्ने राजमार्ग » रानी (नेपाल/भारत सीमाना) - इटहरी - धरान - धनकुटा - खाँदबारी - किमाथांका (नेपाल/चीन सीमाना) कुल लम्बाइ ३४५ कि.मी.
- निर्माणाधीन खण्ड » खाँदबारी देखि किमाथांका सम्म १६२ कि.मी. (राष्ट्रिय राजमार्ग NH-08)
- भारत-चीन छोटो ओभरल्यान्ड मार्ग » पूर्वी नेपाल हुँदै भारत (जोगबनी) र चीन (छेन्ताङ/शिगात्से) जोड्ने सबैभन्दा छोटो सडक मार्ग
- किमाथांका भन्सार » मे २०२४ देखि पुनः सञ्चालनमा रहेको
- एसियन हाइवेसँगको लिङ्क » इटहरीमा एसियन हाइवेसँग जोडिने
- मध्यपहाडी राजमार्ग सँगको लिङ्क » बसन्तपुर/हिले सम्म जोडिने
- उत्तर-दक्षिण कोरिडोरसँगको लिङ्क » मुलघाट (धनकुटा) मा तमोर कोरिडोरसँग जोडिने
- हाइड्रोपावरसँगको लिङ्क » अरुण-२, अरुण-३, माथिल्लो अरुण, अरुण-किमाथांका लगायतका जलविद्युत आयोजनाको लाइफलाइन
- पर्यटन प्रवर्द्धन » मकालु बरुण राष्ट्रिय निकुञ्ज, मकालु आधार शिविर (मकालु ८,४८५ मी), बरुण दोभान धार्मिक स्थल सम्म पहुँच
- बजार विस्तार » अलैंची, यासाँबुम्बा, चियाँ, चौरी, जडीबुटी लगायतका स्थानीय उत्पादनहरूको व्यापार विस्तार

पूर्व तयारीको अवस्था:

- DPR, EIA, ट्र्याक खोल्ने कार्य सम्पन्न ।
- कुल १६२ कि.मी. मध्ये १६१.५ कि.मी. ट्र्याक खुलेको (वैशाख मसान्तसम्म बाँकी पहिरो र चट्टानी खण्ड खुलिने, ८० कि.मी. ग्राभेल, १९ कि.मी. कालोपत्रे (३ कि.मी. ढलान सहित) सम्पन्न
- २४ वटा पुल मध्ये १० वटा पुल निर्माण सम्पन्न (१४ पुल निर्माण बाँकी बगाएको १- एकुवा पुल सहित)

- नेपाली सेनाबाट च्यामताङ-घोङघोप्पा खण्ड (प्रस्तावित १४ कि.मी. छोटिएर १०.८१ कि.मि) २०८२ वैशाख मसान्तसम्म सम्पन्न गरी हस्तान्तरण गर्ने प्रक्रिया सुरु भएको।

अनुमानित लागत:

- कुल आयोजना लागत (परिमार्जित): ने.रु. १६ अर्ब २० करोड (चाइनिज युआन ७२९ मिलियन)
- हालसम्म खर्च भएको: ने.रु. ७ अर्ब ०२ करोड (चाइनिज युआन ३१६ मिलियन)
- बाँकी लागत: ने.रु. ९ अर्ब १७ करोड (चाइनिज युआन ४१२ मिलियन)
- भौतिक प्रगति: ४६% | वित्तीय प्रगति: ४३.३८% (२०८३ वैशाखसम्म)
- सम्पन्न लक्ष्य: आ.व. २०८५/८६ (परिमार्जित)

सडक निर्माणको विकल्प:

- बरुण (चे. ८१+००० कि.मि.) देखि हटिया (चे. ९७+००० कि.मि.) सम्मको सडक १६ कि.मि. सडक ५८ वटा घुम्ति र जटिल भूगोल रहेकोमा प्रस्तावित वैकल्पिक सडक अरुणको किनाराबाट बरुण देखि सोझै हटियासम्ममा हुने दुरी ५.५ किमि हुने र घुम्तिहरु समेल छल्न सकिने।

Koshi Corridor (Khandbari – Kimathanka) Road Project, Sankhuwasabha

National Highway NH-08 | National Pride Project

Salient Features:

- **Shortest North-South Connecting Highway:** Rani (Nepal-India border) – Itahari – Dharan – Dhankuta – Khandbari – Kimathanka (Nepal-China border), with a total length of 345 km.
- **Project Section:** 162 km from Khandbari (Loving Hill, Ch 0+000) to Kimathanka (Ch 162+000), the under-construction segment of NH-08.
- **Shortest India-China Overland Route:** The shortest possible road link between Jogbani (India) and Chentang/Shigatse (Tibet, China) through Eastern Nepal.
- **Kimathanka Customs Point:** Customs office resumed operations in May 2024, paving the way for formal trans-Himalayan trade.
- **Asian Highway Link:** Direct connection at Itahari to Asian Highway providing access to West Bengal, Assam, East Asia and Myanmar.
- **Mid-Hill Highway Link:** Connection at Basantapur/Hile to the Mid-Hill (Pushpalal) Highway.
- **Tamor / North-South Corridor Link:** Connects to the Tamor Corridor at Mulghat (Dhankuta), creating a unified eastern Nepal corridor network.
- **Hydropower Lifeline:** Serves as the primary access route for Arun-II, Arun-III (900 MW), Upper Arun (1,061 MW), Arun-Kimathanka and other small hydropower projects in the Arun Valley.
- **Tourism Expansion:** Provides access to Makalu Barun National Park, Makalu Base Camp (Mt. Makalu, 8,485 m – the world's 5th highest peak), Barun Doban (religious site) and Bhotkhola Himalayan villages.
- **Market Expansion:** Facilitates trade of Alaichi (large cardamom), Yarsagumba, tea, Chyangra, ghee, medicinal herbs and other high-value local produce of Sankhuwasabha.

Current Status:

- DPR, EIA, and track opening completed for the entire 162 km.
- Track Opened: 162 km (Projected 14 km Chyamtang–Ghongoppa segment completed by Nepal Army shortening to 10.8 Km and on the process of handover to Department of Roads by mid of May, 2026).
- Gravel Standard Road: ~80 km completed.
- Blacktop (DBST): ~17 km completed (including 3 km RCC rigid pavement).
- Bridges: 10 of 24 completed; 14 bridges remaining (including damaged Ekuwa Bridge).

Estimated Cost:

- **Total Project Cost (revised):** NPR 16.20 billion (Chinese Yuan ~729 million).
- **Expenditure to Date:** NPR 7.02 billion (~43.38% financial progress).
- **Remaining Cost:** NPR 9.17 billion (Chinese Yuan ~412 million) for blacktop completion and 14 remaining bridges.
- **Revised Completion Target:** Fiscal Year 2085/086 BS (2028/29 AD).

Concept Note

Koshi Corridor (Khandbari – Kimathanka), Sankhuwasabha

1. Background

The Koshi Corridor, designated as National Highway NH-08, is a 345 km strategic North-South road that connects Rani (Biratnagar) at the Nepal-India border in Morang District to Kimathanka at the Nepal-China (Tibet) border in Sankhuwasabha District. The corridor traverses the entire vertical cross-section of Eastern Nepal — from the Terai plains through the mid-hills to the high Himalayan zone — passing through Itahari, Dharan, Bhedetar, Dhankuta, Hile, Leguwa, Khandbari, Num, Dovan, Barun, Hattiya, Hung-Hung, Chyamtang, Chepuwa and Ghongoppa before reaching Kimathanka.

The southern segment of the corridor — Rani to Khandbari (183 km) — has already been blacktopped to two-lane standard and handed over to the Road Division Office for routine maintenance. The remaining 162 km from Khandbari (Loving Hill, Ch 0+000) to Kimathanka (Ch 162+000) is the active project section, currently being upgraded to dedicated double-lane blacktop standard with 24 associated bridges. Kimathanka, located at an elevation of approximately 2,300 m, serves as the Nepalese counterpart to the Chinese border crossing at Chentang (Zhentang) in Dinggye County, Tibet Autonomous Region.

This route represents the shortest possible overland trade connection between India and China through Eastern Nepal, offering significant advantages in time, distance and cost compared to the Tatopani and Rasuwagadhi crossings further west. The Kimathanka customs point resumed operations in May 2024, and the Government of Nepal and the Government of China have both expressed strong interest in developing this route into a fully operational trans-Himalayan economic corridor under the broader "Koshi Economic Corridor" framework.

Key benefits include:

- Establishing the shortest India-China overland trade route through Eastern Nepal (Jogbani – Kimathanka – Chentang – Shigatse).
- Providing a strategic alternative to the Tatopani and Rasuwagadhi corridors, which are vulnerable to seismic damage and overburdened.
- Connecting to the Asian Highway at Kakarbhitta (via Itahari, ~92 km) — opening access to West Bengal, Assam, Myanmar and East Asia.
- Linking the Mid-Hill (Pushpalal) Highway at Hile and the Tamor Corridor at Mulghat (Dhankuta), forming an integrated eastern Nepal corridor network.
- Serving as the primary access lifeline for the Arun Valley hydropower cluster — Arun-II, Arun-III (900 MW), Upper Arun (1,061 MW), Arun-Kimathanka and several smaller projects.

- Boosting tourism to Makalu Barun National Park, Makalu Base Camp (Mt. Makalu 8,485 m — the world's 5th highest peak), Barun Doban religious site, and the high-altitude Bhotkhola Himalayan villages.
- Promoting export-oriented growth of high-value local produce — large cardamom (alaichi), Yarsagumba, tea, ghee, Chyangra, and medicinal herbs.
- Supporting border-area development, regional integration and stronger people-to-people relations between Nepal, India and China.

This corridor is therefore vital for Nepal's national development objectives — creating a robust trans-Himalayan transportation system, fostering regional economic growth, and strengthening Nepal's strategic position as a land-linked nation between two major economies.

2. Objectives

- Establish a direct, all-weather trade and transit route between Nepal and China (Chentang/Shigatse, Tibet) via Kimathanka.
- Provide the shortest land bridge between India (Jogbani) and China (Chentang) through Eastern Nepal.
- Promote balanced regional economic development by improving transport infrastructure in remote Sankhuwasabha district and surrounding hill/mountain areas.
- Enable smooth construction, operation and grid integration of the Arun Valley hydropower projects.
- Facilitate access to tourism destinations, agricultural markets, and educational/health services in Eastern Nepal.
- Strengthen friendly bilateral relations and cross-border cooperation with both China and India.

3. Location and Land Availability

- Location: Sankhuwasabha District, Koshi Province, Nepal.
- Local Bodies along the Project: Khandbari Municipality, Chichila, Makalu and Bhotkhola Rural Municipality.
- Project Office: North-South Koshi Road Project Office, Khandbari, Sankhuwasabha.
- Maximum Elevation along the Alignment: ~2,700 m (allowing year-round vehicular movement on most of the alignment).
- Land Acquisition: Substantially completed; right-of-way demarcated for the entire 162 km project section.
- Environmental Clearance: EIA approved; certain segments fall within the buffer zone of Makalu Barun National Park requiring specific environmental safeguards.

4. Estimated Cost

The project is being implemented as a National Pride Project under the Government of Nepal. Cost details (revised, as of FY 2082/83) are summarised below:

Cost Component	Amount
Total Project Cost (revised)	NPR 16.20 billion (CNY ~729 million)
Expenditure to Date (Magh 2082)	NPR 7.02 billion (CNY ~316 million)
Financial Progress	43.38%
Physical Progress	46%
Remaining Cost (estimated)	NPR 9.17 billion (CNY ~412 million)
FY 2082/83 Capital Allocation	NPR 610.59 million
Average Blacktop Cost	NPR 70 million per km
Average Bridge Cost	NPR 2.5 million per metre

5. Timeline

- Construction Commenced: Fiscal Year 2065/066 BS (2008/09 AD).
- Track Opening Completed
- Revised Projected Completion: Fiscal Year 2085/086 BS (mid-July 2029 AD).
- Earliest possible operational opening of Kimathanka customs route: subject to bridge completion (target : design-and-build contracts proposed for 14 remaining bridges, 24.7 Km Black Top Road Standard for Arun Dovan to Barun Section and 12.355 Km of Gravel Road for Ghongoppa to Kimathanka Section).

6. Project Status

Detailed Project Reports (DPR), Environmental Impact Assessment (EIA), and full track opening of the 162 km alignment have been completed. The current status of major activities is summarised below:

Activity	Target	Achieved	Remarks
Track Opening	162 km	162 km	
Gravel Standard Road	162 km	80 km	Ongoing in multiple packages for further 49Km Road.
Blacktop (DBST)	162 km	19 km	Including 3 km RCC pavement
Bridge Construction	24 nos.	10 nos.	Ekuwa Bridge damaged in 2081/82 floods

Section-wise Status:

- **Khandbari – Phaksinda Dovan (Ch 0 – 49 km):** Four packages of DBST blacktop construction in progress; physical progress ranging from 65% to 88% across packages.
- **Phaksinda Dovan – Naya Basti (Ch 49 – 53 km):** RCC rigid pavement completed at Arun bridge approaches.
- **Naya Basti – Barun (Ch 53 – 80 km):** Gravel road up to Gola Bazaar (Ch 74); track opened up to Barun. Multi-year contract proposed for 24.7 km blacktop (Dovan – Barun).
- **Barun – Hung-Hung (Ch 80 – 113 km):** Gravel-top road improvement underway; physical progress 30%, contract end FY 2083/84.
- **Hung-Hung – Chyamtang (Ch 113 – 134 km):** Gravel-top construction in progress; physical progress 50%, contract end FY 2083/84.
- **Chyamtang – Ghongoppa (Ch 134 – 144.7 km):** Track opened by Nepal Army; landslide clearance and track improvement underway.
- **Ghongoppa – Kimathanka (Ch 144.7 – 162 km):** Maintenance and gravel-top upgrading; multi-year contract proposed for full blacktop.

7. Implementation Modality

The project is currently being implemented under the Government of Nepal's National Pride Project framework, with annual capital allocation through the federal budget, executed by the Department of Roads through the dedicated North-South Koshi Road Project Office in Khandbari. Track opening of the most challenging Chyamtang–Ghongoppa segment was executed by the Nepal Army Construction Directorate under inter-agency coordination.

Given the strategic importance of the corridor for trans-Himalayan trade and the substantial remaining cost, the project is also being proposed for development partner support — in particular, technical and financial assistance from the Government of China (Tibet Autonomous Region / Dinggye County Government) for the blacktopping and bridge construction works in the Khandbari – Kimathanka section, in alignment with the Koshi Economic Corridor framework.

8. Responsibilities

Nepal's Responsibilities

- Facilitate land acquisition, right-of-way clearance and resettlement.
- Coordinate utility relocation (transmission lines, water supply, telecommunications).
- Provide administrative, security and local-level support for project implementation.
- Ensure timely budget allocation, disbursements and payment to contractors.
- Establish customs, immigration, quarantine and security infrastructure at Kimathanka in coordination with Chinese authorities.

- Carry out environmental safeguards and biodiversity protection within the Makalu Barun buffer zone.

China's (Proposed) Responsibilities

- Provide grant/technical assistance for blacktopping and bridge construction along the Khandbari – Kimathanka section (162 km, 14 remaining bridges).
- Supply advanced construction technology, modern equipment, and engineering expertise for high-altitude and difficult-terrain road works.
- Coordinate cross-border infrastructure at Chentang to complement Nepal's customs and immigration setup at Kimathanka.
- Support capacity building of Nepali engineers and contractors in mountain road construction and slope stabilisation.

9. Economic and Strategic Significance

- **Trade & Economic Growth:** Reduced transport costs, expanded cross-border trade, formalised customs operations at Kimathanka, and growth-multiplier effects across Koshi Province through tax revenues, employment and industrialisation.
- **Strategic Trans-Himalayan Connectivity:** Shortest India-China overland route through Eastern Nepal, providing strategic redundancy alongside the Rasuwagadhi and Tatopani corridors and reducing Nepal's vulnerability to single-point border closures.
- **Hydropower Development:** Direct access to over 3,000 MW of planned hydropower capacity in the Arun Valley (Arun-II, Arun-III, Upper Arun, Arun-Kimathanka and others) — essential for project construction logistics, operation, and future grid integration.
- **Tourism Development:** Improved access to Makalu Barun National Park, Makalu Base Camp trek, Barun Doban, Bhotkhola Himalayan villages, and high-altitude viewpoints — strengthening adventure, religious and cultural tourism.
- **Regional Integration:** Connecting remote mountain communities of Sankhuwasabha (Bhotkhola, Makalu, Chichila, Sabhapokhari) to district, provincial and national markets and services — directly addressing geographical exclusion.
- **Local Economy Boost:** Market expansion for high-value local produce — large cardamom, Yarsagumba, tea, ghee, Chyangra, and medicinal herbs — supporting livelihoods of border-area communities.
- **Border Security:** Improved logistical access for security agencies, supporting effective border administration and disaster response in remote Himalayan areas.

Schematic Diagrams

Figure 1: Koshi Corridor – Linear Route Diagram

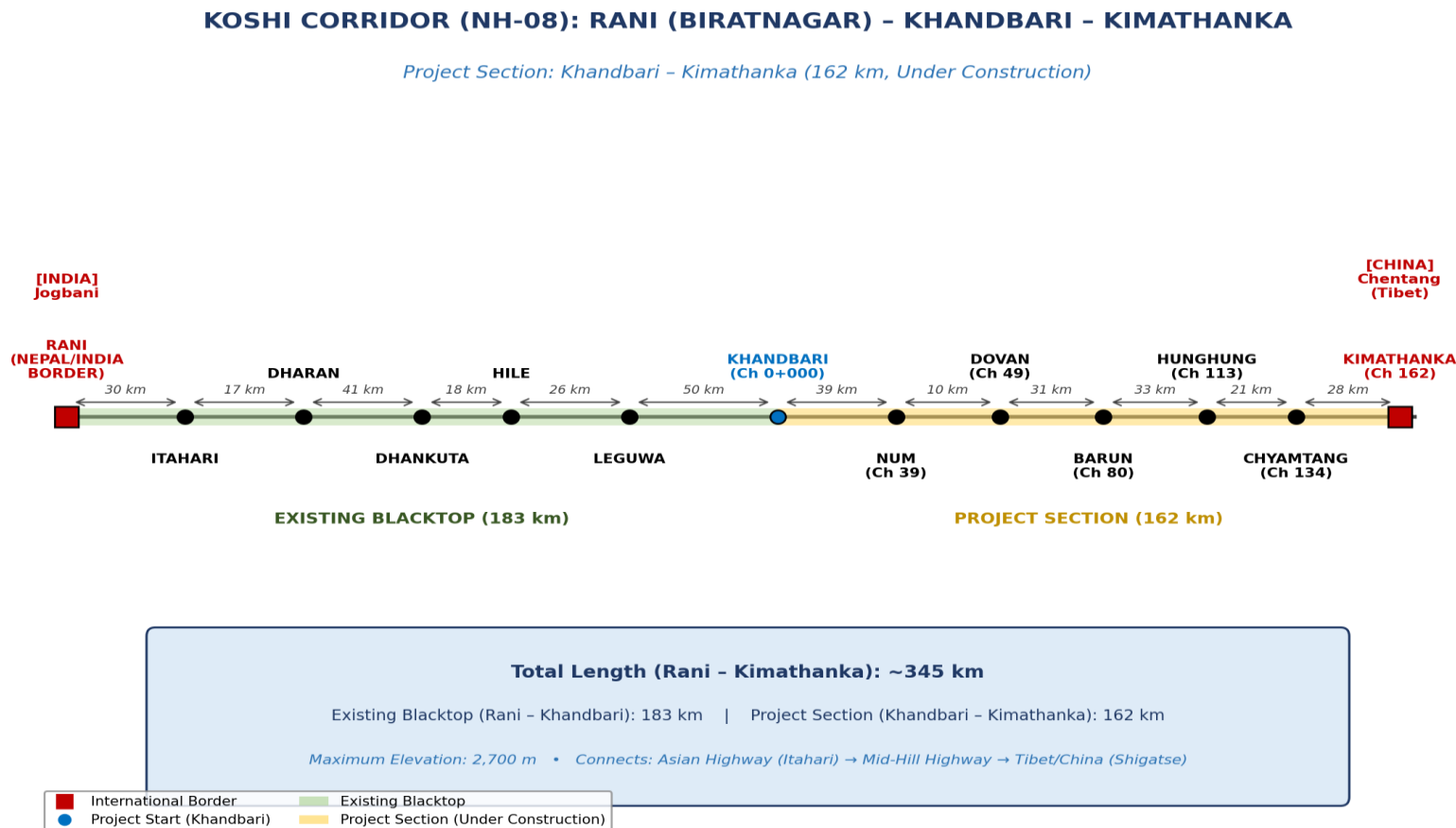


Figure 1 shows the complete Koshi Corridor (NH-08) alignment from Rani (Nepal-India border) to Kimathanka (Nepal-China border), highlighting the existing 183 km blacktopped section (Rani – Khandbari) and the 162 km project section under construction (Khandbari – Kimathanka), along with major chainage points and inter-node distances.

Figure 2: Strategic Connectivity Network

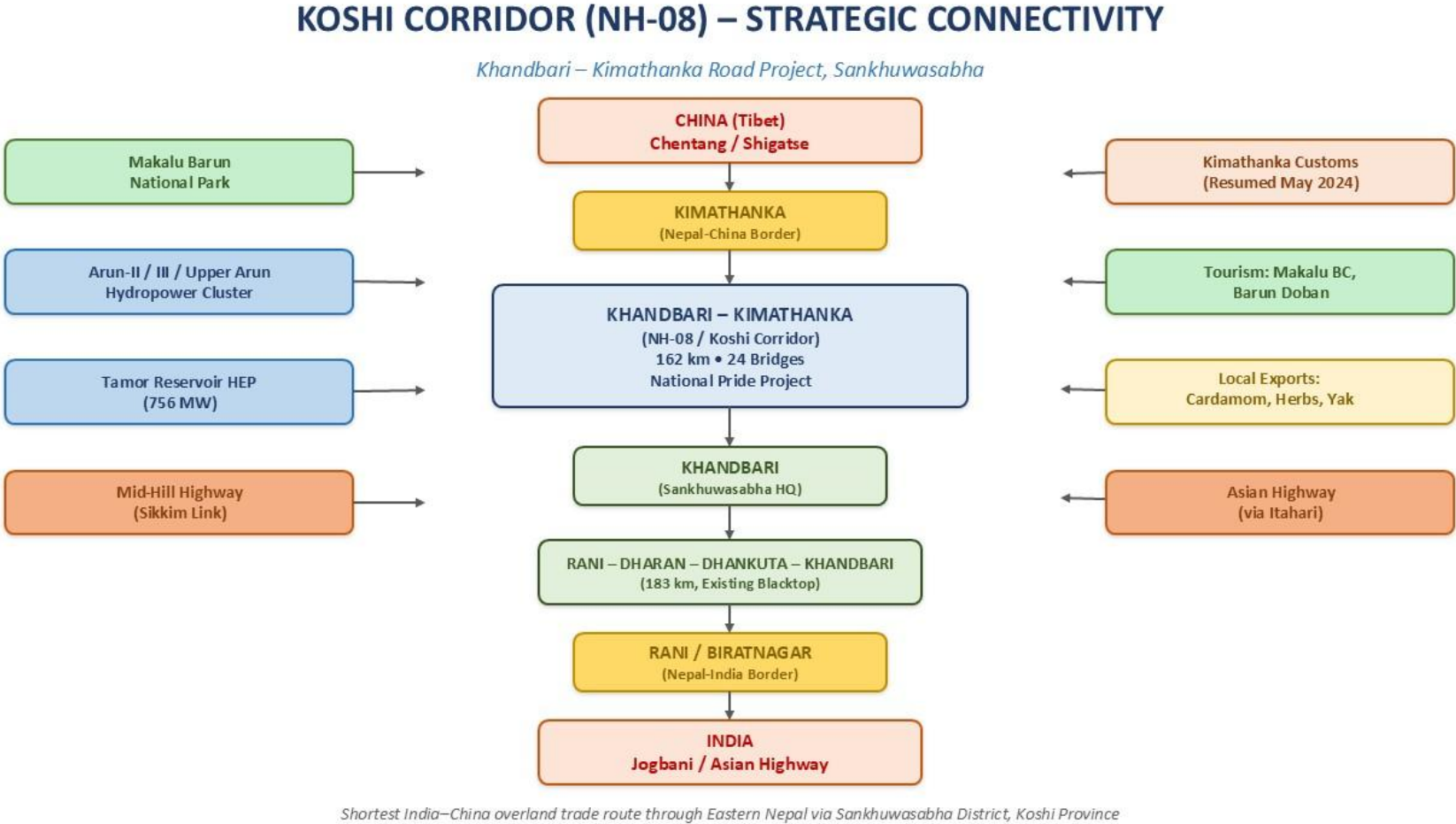


Figure 2 illustrates the strategic connectivity of the Koshi Corridor — its links to international borders (India and China), its integration with the existing road network, the major hydropower projects it serves, the tourism and conservation assets it unlocks, and the local economic value chains it supports.