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Report No: 78199-SAS

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A PROPOSED CREDIT

IN THE AMOUNT OF SDR 45.8 MILLION
(US$ 69 MILLION EQUIVALENT)

AND A PROPOSED GRANT

IN THE AMOUNT OF SDR 19.9 MILLION
(US$ 30 MILLION EQUIVALENT)

TO

NEPAL

FOR A

NEPAL-INDIA REGIONAL TRADE AND TRANSPORT PROJECT (NIRTTP)

June 3, 2013

Sustainable Development Network
South Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2013)

Currency Unit	=	NPR
NPR 87	=	US$ 1
US$ 1	=	SDR .66269

FISCAL YEAR
July 16 – July 15

ABBREVIATIONS AND ACRONYMS

AADT	Annual Average Daily Traffic
ADB	Asian Development Bank
ARCS	Audit Report Compliance System
ASYCUDA	Automated System for Customs Data
BFC	Barandabhar Forest Corridor
BOQ	Bills of Quantities
CAS	Country Assistance Strategy
CBO	Community-Based Organization
CFAA	Country Financial Accountability Assessment
CFS	Container Freight Station
CONCOR	Container Corporation of India
CPS	Country Partnership Strategy
CTD	Customs Transit Document
DFID	Department for International Development (UK)
DFTQC	Department of Food Technology and Quality Control
DoC	Department of Customs (Nepal)
DoR	Department of Roads (Nepal)
DoTM	Department of Transport Management (Nepal)
DTCO	District Treasury Controller Office
EA	Environmental Assessment
EC	European Community
EDI	Electronic Data Interchange
EMP	Environment Management Plan
ESMF	Environmental and Social Management Framework
FCS	Fragile and Conflict-Affected States
FMR	Financial Monitoring Reports
FPR	Financial Procedure Regulations
GAP	Governance and Peace Action Plan
GATT	General Agreement on Tariffs and Trade
GDF	Gender Development Framework
GESU	Geo Environment and Social Unit (Nepal DoR)
GoI	Government of India
GoN	Government of Nepal

GTZ	German Agency for International Cooperation
HDM-4	Highway Development and Management Model
HRD	Human Resource Development
ICD	Inland Clearance/Container Depot
ICP	Integrated Check Post
ICT	Information and Communication Technology
IEE	Initial Environment Examination
IFC	International Finance Corporation
IPPF	Indigenous Peoples Planning Framework
IFP	Investment Project Financing
IPR	Implementation Progress Report
ISN	Interim Strategy Note
KUSOM	Kathmandu University School of Management
LCF	Local Consultative Forum
LPI	Logistics Performance Index
M&E	Monitoring and Evaluation
MoCS	Ministry of Commerce and Supplies (Nepal)
MoF	Ministry of Finance (Nepal)
MoPIT	Ministry of Physical Infrastructure and Transport (Nepal)
NGO	Nongovernmental Organization
NITDB	Nepal Intermodal Transport Development Board
NIRTTP	Nepal-India Regional Trade and Transport Project
NLTA	Non-Lending Technical Assistance
N-M	Narayanghat-Mugling
NPC	National Planning Commission (Nepal)
NSW	Nepal Single Window System
NTIP	Nepal Trade Information Portal
NTIS	Nepal Trade Integration Strategy 2010
NTNC	National Trust for Nature Conservation (Nepal)
NTTFC	National Trade and Transport Facilitation Committee
OAG	Office of the Auditor General (Nepal)
ORAF	Operational Risk Assessment Framework
PAP	Project-Affected Person
PEFA	Public Expenditure and Financial Accountability
PCO	Project Coordination Office
PFM	Public Financial Management
PIC	Project in Charge
RAP	Resettlement Action Plan
RoW	Right-of-Way
RPF	Resettlement Policy Framework
RSA	Railway Services Agreement
RSDP	Road Sector Development Project
RTI	Right to Information
SA	Social Assessment
SAARC	South Asian Association for Regional Cooperation
SACRI	South Asia Regional Integration Unit

SAFTA	South Asian Free Trade Agreement
SAR	South Asia Region
SARTIP	South Asia Regional Trade and Integration Program
SIA	Social Impact Assessment
SOE	Statement of Expenditure
SPS	Sanitary and Phyto-Sanitary
TEA	Transport Entrepreneurs' Associations
TEU	Twenty-foot equivalent unit
TEPC	Trade and Export Promotion Center
TEU	Twenty-Foot Equivalent Units
VCDP	Vulnerable Community Development Plan
VDC	Village Development Committee
VOC	Vehicle Operating Cost
WBG	World Bank Group
WDR	World Development Report
WTO	World Trade Organization

Regional Vice President:	Isabel M. Guerrero
Country Director:	Johannes Zutt
Director, Regional Integration:	Salman Zaheer
Sector Director:	John Henry Stein
Sector Manager:	Karla Gonzalez Carvajal
Task Team Leader:	Diep Nguyen-van Houtte

NEPAL
South Asia: Nepal India Regional Trade and Transport Project

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PAD DATA SHEET

South Asia

Nepal-India Regional Trade And Transport Project (P144335)

PROJECT APPRAISAL DOCUMENT

SOUTH ASIA

SASDT

Report No.: PAD492

Basic Information			
Project ID	Lending Instrument	EA Category	Team Leader
P144335	Investment Project Financing	A - Full Assessment	Diep Nguyen-Van Houtte
Project Implementation Start Date		Project Implementation End Date	
28-Jun-2013		30-Jun-2019	
Expected Effectiveness Date		Expected Closing Date	
01-Oct-2013		31-Dec-2019	
Joint IFC	Joint Level		
Yes	Joint Project - involving co financing with IFC (loan, equity, budget, other) or staffing		
Sector Manager	Sector Director	Country Director	Regional Vice President
Karla Gonzalez Carvajal	John Henry Stein	Johannes Zutt	Isabel M. Guerrero
		Director, Regional Integration Salman Zaheer	

Borrower: Government of Nepal			
Responsible Agency: Ministry of Commerce and Supplies			
Contact:	Mr. Lal Mani Joshi	Title:	Secretary
Telephone No.:	977-1-4211446	Email:	lalmanijoshi@yahoo.com

Project Financing Data(US$M)					
[ ]	Loan	[X]	Grant	[ ]	Other
[X]	Credit	[ ]	Guarantee		

For Loans/Credits/Others

Total Project Cost (US$M): 101.00

Total Bank Financing (US$M):	99.00

Financing Source	Amount(US$M)
BORROWER/RECIPIENT	0.00
International Development Association (IDA) IDA Grant	69.00 30.00
International Finance Corporation (IFC)	2.00
Total	101.00

Expected Disbursements (in USD Million)

Fiscal Year	2014	2015	2016	2017	2018	2019	2020
Annual	2.35	26.35	32.65	31.90	5.75	0.00	0.00
Cumulative	2.35	28.70	61.35	93.25	99	99	99

Project Development Objective(s)

Proposed Development Objective(s)

The proposed Project Development Objective is to decrease transport time and logistics costs for bilateral trade between Nepal and India and transit trade along the Kathmandu-Kolkata corridor for the benefit of traders by reducing key infrastructure bottlenecks in Nepal and by supporting the adoption of modern approaches to border management.

Components

Component Name	Cost (USD Millions)
Modernize transport and transit arrangements between Nepal and India	9.00 (IDA) 7.00
Strengthen Trade-Related Institutional Capacity in Nepal	23.00
Improve Select Trade-Related Infrastructure	69.00

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [X]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04	X	

Forests OP/BP 4.36	X	
Pest Management OP 4.09		X
Physical Cultural Resources OP/BP 4.11	X	
Indigenous Peoples OP/BP 4.10	X	
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

Legal Covenants

Name	Recurrent	Due Date	Frequency
Safeguards Guidelines	x		
Description of Covenant All activities and components in the Project will be implemented in accordance with the provisions of the disclosed ESMF, RAP, VCDP, and EMP.			
Forest clearance, replantation, biodiversity conservation	x		
Description of Covenant GoN shall cause DoF within the Ministry of Forest and Soil Conservation to coordinate the planning and execution of all matters pertaining to regulatory clearances, plantation works, biodiversity conservation, including engineering and non-engineering interventions such as habitat improvement works, and other construction management measures as required under the Environmental Management Plan for activities related to the Barandabhar Forest Corridor, under Part C1 of the Project.			
Audit Reports		July 15, 2014	Annual
Description of Covenant Annual consolidated project financial statements, SOE Statement and Designated Accounts statements will be audited by OAG, which is considered acceptable by IDA for this purpose, and submitted to IDA within six months after the end of the fiscal year – January 15.			
Operational Manual		July 15, 2013	
Description of Covenant The Operational Manual will be finalized and adopted no later than July 15, 2013.			
Implementation Arrangements	x		
Description of Covenant GoN will, by July 15, 2013, mandate an active and formal Steering Committee (NTTFC) for providing overall leadership and policy guidance. GoN will ensure that PCO staff and Project Coordinators for components or sub-components are assigned for a minimum of two years, as per the laws of the Recipient.			

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Conditions	
Name	**Type**
Land acquisition for CFS/ICD in Kathmandu Valley consistent with ESMF	Disbursement Condition for Component C2.

Description of Condition

Works for the CFS/ICD in Kathmandu Valley will not begin unless the government has allocated the land required for Component C2, in form and substance acceptable to the World Bank, including having followed guidelines of the Project ESMF.

Team Composition

Bank Staff

Name	Title	Specialization	Unit
Diep Nguyen-Van Houtte	Sr. Operations Officer	Team Lead	SACRI/SASDT
Erik Nora	Communications Officer	Operations Officer	SACRI
Charles Kunaka	Sr. Trade Specialist	Logistics and Trade Specialist	PRMTR
Gerard McLinden	Sr. Customs Specialist	Customs Specialist	PRMTR
Ramesh Sivapathasundram	Lead Information Officer	IT Services components	TWICT
Deepak Man Singh Shrestha	Sr. Transport Specialist	Transport Specialist	SASDT
A.K. Farhad Ahmed	Sr. Transport Specialist	Transport Specialist	SASDT
Kishor Uprety	Sr. Counsel	Project Counsel	LEGES
Neha Pravash Kumar Mishra	Environmental Specialist	Environmental Specialist - Lead	SASDI
Dora Cudjoe	Environmental Specialist	Environmental Specialist - Supporting	SASDI
Parthapriya Ghosh	Sr. Social Development Specialist	Social Development Specialist	SASDS
Shambhu Prasad Uprety	Procurement Specialist	Procurement Specialist	SARPS
Bigyan B. Pradhan	Sr. Financial Management Specialist	Financial Management	SARFM
Shubu Thapa	Administrative Assistant	Administrative Assistant	SASDT
Roshan Darshan Bajracharya	Sr. Economist	Political Economy advice	SASEP
William John Gain	Sr. PSD Specialist	IFC Activities	CICTI
June Ghimire	Associate Operations Officer	IFC Activities	CSAIC

Non Bank Staff

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Nepal	Central Region	Kathmandu	X		

Institutional Data

Sector Board

Transport

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Transportation	General transportation sector	40		
Industry and trade	General industry and trade sector	15		
Industry and trade	Other domestic and international trade	15		
Industry and trade	Agro-industry, marketing, and trade	15		
Public Administration, Law, and Justice	Public administration-Industry and trade	15		
Total		100		

x I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Trade and integration	Trade facilitation and market access	25
Trade and integration	Regional integration	25
Trade and integration	Export development and competitiveness	25
Trade and integration	Other trade and integration	25
Total		100

I. STRATEGIC CONTEXT

A. Regional and Country Context

1. The South Asia Region (SAR) has experienced rapid GDP growth over the past three decades, averaging nearly six percent per annum. However, there are two faces of South Asia. The first South Asia is dynamic, growing rapidly, highly urbanized, and is benefiting from global integration. The second South Asia is largely agricultural, landlocked, exhibits high poverty levels, suffers from conflicts, is lagging and needs to be better integrated with the dynamic sectors in the region. Divergence between the two South Asias is on the rise and many policy, institutional, and infrastructure constraints contribute to this dichotomy. Capital flows through legal channels are negligible, transit arrangements are cumbersome and expensive, and the physical connectivity is limited and restrictive. Together, SAR economies account for 2.4 percent of world GDP. However, their share of world trade is only 1.3 percent, indicating a relatively poor performance in trade. South Asians as a whole trade more with China than with each other. Intra-regional trade as a share of total trade in South Asia is less than 5 percent,[1] the lowest in the world (Table 1).

Table 1: Intra-regional Trade as a Share of Total Trade (%)

Region	Intra-Regional Trade as a share of total trade (%)
EU	60
NAFTA	35
ASEAN	20
MERCOSUR	15
ECOWAS	10
SAR	5

Note: ECOWAS refers to Economic Community of West African States. MERCOSUR refers to the Southern Cone Common Market. ASEAN refers to the Association of South East Asian Nations. NAFTA refers to the North American Free Trade Agreement, and EU refers to the European Union.

2. The South Asia Region has the potential to raise growth through increased intra-regional trade. SAR has the highest population density in the world and the average distance between cities and borders is low. These features naturally propel trade between countries, but presently this is hindered by policy, administrative and physical barriers. The World Bank's 2012 Logistics Performance Index (LPI), a global multidimensional assessment of logistics performance, shows that as in previous years, South Asia lags behind all other regions except Sub-Saharan Africa in overall logistics performance.[2] India's performance is relatively strong (ranked 46), but the two

[1] World Bank (2012): "Preferential Trading Arrangements. Policies for Development."

[2] The LPI covers the entire supply chain, and as the results are based on a survey of the perceptions of over 1,000 logistics professionals worldwide, it is a useful tool for comparing the logistics performance across countries and identifying key reform priorities within countries. The logistics performance (LPI) is the weighted average of the country scores on the six key dimensions of the logistics environment of countries: 1) Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; 2) Quality of trade and transport related infrastructure (e.g., ports,

landlocked countries, Afghanistan and Nepal, are among the weakest performers (ranked 131 and 151 out of 155, respectively). These two countries are also the poorest in the region. Estimates suggest that annual intra-regional trade in the region could increase from the current US$5 billion to US$20 billion if restrictions on trading with neighbors are removed.[3] The benefits of scale economies could be even larger for the small landlocked countries.

3. The poor logistics performance of Nepal relative to India is apparent in Figure 1. Essentially Nepal's score in the LPI is about two-thirds that of India. The poor performance is across all six dimensions of the international LPI which suggests it is the product of some choices at the domestic level as well as those pertaining to international connectivity, i.e. dependent on integration and cooperation with neighbors such as India.

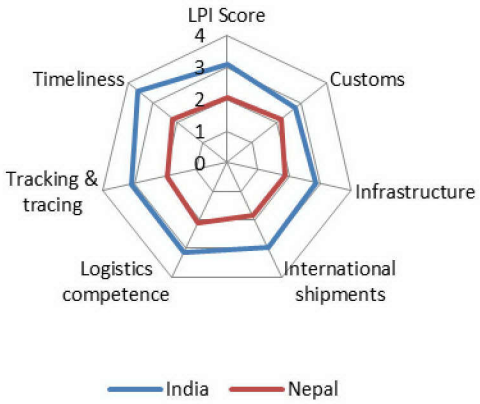

Figure 1a: Nepal Logistics Performance Relative to India, 2012

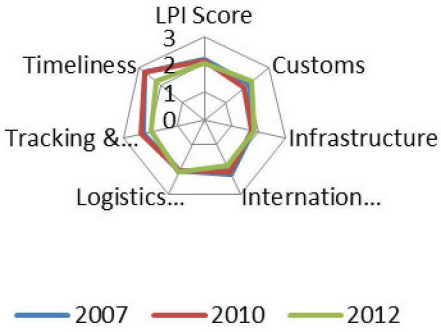

Figure 1b: Nepal Logistics Performance for 2007, 2010 and 2012

4. According to the 2011 Nepal Investment Climate Assessment (ICA), "the external sector in Nepal accounts for 47 percent of GDP with exports concentrated in low value-added, low growth segments. Exports suffer from low productivity, high tariffs, and poor transportation infrastructure. Over 60 percent of Nepal's imports and exports are traded with India, while China is emerging as a major source of imports for the country. Reinforcing Nepal's role as a transit economy could strengthen its position as a trade partner for the two countries. Due to its poor infrastructure network and a poor investment climate, only a marginal share of the bilateral trade between India and China goes through Nepal, and Nepal lies mostly outside regional production value chains. Nepal needs policies to enhance linkages to shipment lines, improve

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railroads, roads, information technology); 3) Ease of arranging competitively priced shipments; 4) Competence and quality of logistics services (e.g., transport operators, customs brokers); 5) Ability to track and trace consignments; 6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.

[3] Ahmed, Sadiq & Ghani, Ejaz, 2008. "Making regional cooperation work for South Asia's poor," Policy Research Working Paper Series 4736, The World Bank and Ahmed, Sadiq & Ghani, Ejaz, 2009. "Accelerating Growth and Job Creation in South Asia," OUP Catalogue, Oxford University Press.

the efficiency of customs, expand airport storage capacity, and address transport and labor issues in order to leverage its position as a transit economy." Specifically, the ICA report recommended a few measures to address trade-related issues facing trading enterprises, including among others: i) improving terms of trade with its neighbors; ii) supporting exporters and traders in terms of technical standards, sanitary and phyto-sanitary (SPS) measures, and intellectual property rights; iii) in the short term, bringing shipping lines to the Inland Clearance Depots (ICDs); and iv) in the medium term, providing a comprehensive program of capacity building to the Customs Department to minimize the time and documentation needed to clear customs.

5. In addition to policy and institutional reforms aimed at removing domestic constraints to growth and job creation, market integration and infrastructure connectivity are key elements to removing the constraints to trade faced by landlocked countries such as Nepal. That landlocked countries face much higher trade costs than coastal countries is well established. Such countries have to rely on their coastal neighbors for access to export gateways and to access regional and global markets. The interdependence is across several fronts; in terms of infrastructure development, harmonization and integration of policies and procedures and synchronization of operational practices. Effective cooperation and coordination across these areas is fundamental to reducing trade costs and enhancing trade competitiveness. Hausmann and Rodrik (2003) have shown that learning from and integrating with more successful neighbors can help reduce a country's new product development and initial investment costs in production and trade. Cooperation between neighboring countries can help provide the scale attractive for foreign investors and the access to intermediate goods that make new product development less costly.[4] Moreover, the 2009 World Development Report (WDR) on Reshaping Economic Geography establishes that implementing behind the border reforms (within national borders) is as important as cross-border reforms in promoting regional cooperation and integration, and enhancing a country's competitiveness, This project seeks to enhance Nepal's capacity to promote international trade, and support cooperation in regional trade and transport between Nepal and its largest trade partner as well as trade gateway, India.

6. Nepal is a geographically small landlocked country, nestled between China and India, the two most populous and among the world's most rapidly growing economies. Its territory is mostly mountainous and hilly and its transport infrastructure is poor, leaving many communities with limited access to local and international markets. As a consequence, transport costs are high and the country near-completely depends on India for transit routes. Sharing an approximately 1,800 km long border and 26 border points, India is often considered Nepal's 'natural' trading partner. The port complex of Kolkata-Haldia in India has been serving as Nepal's access to the sea and is a major transit point for Nepal's third-country trade. India also provides a large market for Nepali goods and services, and is Nepal's largest trading partner, with about 60 percent of Nepal's trade going to or coming from India. Despite its proximity and deep economic relations with India as well as China, Nepal's trade outcomes have been poor. Since 2007, exports have been stagnant while imports have increased by more than 50 percent suggesting an urgent need for an action plan to improve export competitiveness particularly by focusing on reducing inefficiencies and bottlenecks that increase the cost of exports on regional and international markets.

[4] WDR 2009: Reshaping Economic Geography, the World Bank.

7. Nepal is a country still in political transition. The significant progress achieved is yet to result in completion of the peace process as outlined the Comprehensive Peace Agreement of 2006. Reaching consensus on the constitution and progress on establishing the truth and reconciliation commission is still in progress. Despite these political fragilities, it is important to recognize that Nepal did not experience an economic meltdown or institutional and service delivery breakdown, even during the height of the conflict. With a Country Policy and Institutional Assessment (CPIA) of 3.3, it measures favorably with non-FCS low income countries. The World Bank continues to follow the principles of the WDR on Conflict, Security and Development (2011) to guide its engagement with Nepal.

8. Nepal's Trade Integration Strategy (NTIS) 2010 and 3-year National Development Plan 2010-13, prioritize the need to promote trade and improve the country's export competitiveness. Key objectives include strengthening the capacity of the country's trade-related institutions, strengthening export industries that promote economic inclusion, and strengthening the Government's capacity to implement the NTIS, improve coordination between trade-related institutions and enhance the delivery of technical assistance. While progress has been made there is still a significant unfinished agenda. Nepal also has to meet objectives related to its obligations to the World Trade Organization (WTO), South Asian Free Trade Agreement (SAFTA), and bilateral agreements with India. Most of these have to do with freedom of transit and eliminating non-tariff barriers including those related to technical and sanitary and phyto-sanitary inspections, and cumbersome clearance procedures.

9. While Nepal's trade with India does not represent a significant share of India's total trade, the two countries have had a long history of cooperation on trade and transit. For example, the borders between India and Nepal are the only fully open borders between India and its neighboring countries (visas not required for passengers from either country). In the aftermath of the global financial crisis, there is a growing recognition within India that regional cooperation and integration has a role in creating jobs and shared prosperity, and mitigating conflicts, which would all contribute to regional political stability. Further, India's agenda on domestic inclusive growth and sustainable development cannot be fully addressed without active regional cooperation in South Asia, as many lagging areas in India are located in border areas and are heavily impacted by cross-border issues.

10. With trade between India and China expected to grow in the coming years, Nepal could potentially become an important transit country for both countries. Bilateral trade between India and China reached US$58 billion in 2010; most of this trade travels by sea. The land route across the Himalayas could significantly reduce the time taken for the transport of commodities for trade directed to the western areas of China. However, to take advantage of this opportunity to transform Nepal from a landlocked to a landlinked country connected to regional and global trade, Nepal would need to address its high transport costs, attributable to its poor transport infrastructure and cumbersome trade-related policies, systems and procedures.

11. **Nepal-India Cooperation**. The Governments of Nepal and India have had a long history of cooperation on trade and transit. The two countries meet regularly at several levels to discuss these issues, from Secretary-level talks to district level discussions, through fora such as the Empowered Steering Committee (which has oversight of the implementation of the new bilateral Integrated Check Posts), the Joint Working Group on Border Management (Joint Secretary-level talks on cross-border issues), the Border District Coordination Committee (cross-border issues at

the district level) and the Inter-Governmental Committee and Sub-Committee for Trade (Secretary and Joint-Secretary level talks on trade collaboration). Through these institutional mechanisms and the agreements, the two countries are signaling the high priority they attach to bilateral and regional trade and transport. Among other responsibilities, the Indian Embassy in Kathmandu, Nepal, represents the Government of India on bilateral trade issues with Nepal. The joint IDA-IFC (World Bank Group, WBG) team has been working closely with the trade team at the Indian Embassy – who have expressed their support for the proposed Project and to their commitment to cooperate with Nepal to resolve bilateral issues to enhance trade. The implementation agency will coordinate closely with the Indian Embassy on bilateral trade issues, and the usual channels for bilateral discussions will continue to be used including the Intergovernmental Committee at Secretary and Joint-Secretary levels. In addition, the project team will also leverage the regional fora convened by the IFC to facilitate the simplification and harmonization of customs, SPS and other trade-related policies, procedures and systems.

12. **Integrated Check Posts (ICPs).** A physical illustration of the close cooperation between Nepal and India for regional trade and transport is India's Integrated Check Posts program. In 2005, India and Nepal signed a Memorandum of Understanding covering the construction of four ICPs along the Nepal-India border in an effort to upgrade and integrate border controls and customs services. The ICP program includes construction of border post infrastructure including administration buildings, parking, laboratory facilities, quarantine points, a post office, a bank, lavatories and a cafeteria. In addition to investing in the four ICPs on its side of the border, India agreed to contribute INR 5 billion (about US$100 million) towards the construction of the parallel ICPs on the Nepali side. Officials from the two countries meet regularly to discuss the progress of the program through the Empowered Steering Committee, which is the interim governing body of the ICP program. The Raxaul-Birgunj border crossing was selected as the site of the first Nepal-India ICP to be constructed, as about 60 percent of Nepal's trade passes through this border point. The Government of India contributed INR 120 Crore (about US$25 million) to the construction of the ICP on the Nepali side of the border. Construction began in 2011 and is expected to be completed by end 2014. Building the ICPs at Raxaul-Birgunj will help address the current severe congestion, and increase trade between Nepal and India and third-country trade for Nepal.

13. **GoN Commitments**. While the Government of India (GoI) is addressing the bottlenecks on India's side of the border, and financing the ICPs at Nepal's key border posts, the Government of Nepal (GoN) has not been able to address the behind-the-border infrastructure or administrative bottlenecks within Nepal. These impact heavily on Nepal's capacity to export as red tape and inefficient systems and procedures simply add unnecessary costs that are ultimately reflected in a poor capacity to compete on regional markets. For Nepal to maximize the benefits of cooperation with India it is important that it addresses some of the constraints at the domestic level. Addressing these domestic constraints will unblock current congestion points for both Nepalese and Indian bilateral and international trade, and facilitate bilateral and regional harmonization of policies, systems and procedures. These investments and reforms together will benefit not only Nepalese and Indian traders, transporters, producers, and consumers, but also the third-party/international importers and exporters with whom they trade. They are also critical to stimulating Nepal's export performance.

B. Sectoral and Institutional Context

Trade Profile

14. Nepal generates close to 6 million tons of trade traffic per year, with a huge imbalance between import and export trade volumes. Imports account for about 85 percent of trade volumes and exports for the remaining 15 percent. India provides a large market for Nepali goods and services, and is Nepal's largest trading partner, with about 60 percent of Nepal's trade going to or coming from India (Table 2).

Table 2: Nepal Trade Figures 2011

Exports (in USD millions)			**Imports (in USD millions)**		
Exports to India	Exports to India as a % of Total	**Total Exports**	Imports from India	Imports from India as a % of Total	**Total Imports**
493	60%	**833**	2,569	54%	**4,724**

Source: IMF

15. Manufacturing, largely textiles, forms the bulk of Nepal's exports to high income countries as well as to China, but agricultural products also form a significant share of its exports. Exports to India are more varied, a quarter of which are food products, a quarter textiles, and 10 percent chemicals, though manufacturing is still the biggest by trade value. The manufacturing items exported most to India include iron and steel, and plastics. All of Nepal's key export products are highly price sensitive and face stiff competition on regional and international markets. Nepal's current high trade and transport costs have a direct impact on its capacity to compete in these sectors. Achieving significant reductions in these costs is expected to impact favorably on export performance.

Transit Framework for Trade

16. In addition to India, Nepal also trades with Bangladesh transiting through India, with China by land, and third countries through the Indian seaports of Kolkata and Haldia and through air freight. The Treaty of Transit between India and Nepal allows Nepali goods to transit through designated routes in India, with the ports of Kolkata/Haldia serving as gateway ports for the movement of transit cargo which moves by road or by rail to the only railhead serving Nepal at Raxaul (Indian border with Nepal) and onwards to the Inland Clearance Depot at Birgunj, Nepal across the border from Raxaul. The transit path that Nepalese international trade, including Indian bilateral trade, follows is described below along with the key barriers that they face.

17. **Kolkata-Haldia Ports to Raxaul border post with Nepal:** Current policies and incentives, as well as operational and clearance procedures cause congestion, long clearance and dwell time at Kolkata Port, as well as long transit and turnaround time for Nepalese cargo that travels by rail to the Raxaul border post. Forty-three per cent of Nepal's containerized import trade leaving Kolkata in 2011/12 was carried by rail and the rest by road. However, the rail volumes (some 18,300 TEUs) were a large proportion (70%) of the import containers passing through the Birgunj border post. Rail transport is 2.5 times cheaper than truck, though the

inefficiency and lack of predictability of the rail operations causes some exporters to use truck transport. The existing bilateral transit agreements place restrictions on how Nepalese trade may be carried even as they allow transit operations.

18. **Crossing the border from Raxaul to Birgunj:** On average it takes one to two days to clear goods at the Raxaul-Birgunj border posts, but this process can take up to four days or more if SPS inspections and laboratory testing are required or other issues emerge. Private sector traders complain of the high number of procedures and documentation required, including 19 signatures on the typical Indian Customs Transit Document (CTD), and duplication of procedures on both sides of the border. Several factors contribute to the delay as described below.

a. ***Customs:*** The Nepali and Indian systems are not connected electronically, and Customs processing on both sides of the border at Raxaul-Birgunj is not fully automated. On the Nepal side, the Customs system and related infrastructure needs to be further automated and modernized, with processes and procedures simplified and harmonized (in keeping with international standards and those applied in India). Currently, most of Nepal's land Customs facilities are inadequate and do not meet international standards. Customs inspection equipment and anti-smuggling detection facilities, as well as staffing and skills, are inadequate at most border posts. ASYCUDA++ is still not fully utilized at all Customs points and its interconnectivity to headquarters in Kathmandu is limited. The parallel use of manual systems has resulted in long processing and clearance times, as traders regularly have to employ both systems. Finally, other agencies that play a significant role in the clearance process, including agencies performing SPS inspections and certifications (Department of Agriculture, Department of Livestock Services, Department of Food Technology and Quality Control) and agencies that issue import-export permits and licenses (Ministry of Commerce and Supply, Ministry of Industry, Chamber of Commerce) are not connected to Customs or to each other, forcing traders to perform similar steps manually at various different agencies, often times submitting the same information multiple times to different agencies, increasing the time and cost to trade. With the assistance of the Government of Korea, a web-based interface has been developed and is in pilot testing. Also, with ADB support, an e-Customs Master Plan is in the final stages of development.

b. ***Laboratory testing:*** Currently, the Department of Customs, Department of Food Technology and Quality Control, Department of Livestock Services, and Department of Agriculture maintain separate laboratories of varying quality and competence. This places an unnecessary burden on traders and transporters as they are frequently required to visit several laboratories for testing at different locations. Many of these laboratories are not located near production points, border points or near each other. For example, the DFTQC regional laboratory in the Central Region is located at Hetauda, 50 km away from the Birgunj border post while the Department of Agriculture laboratory in Birgunj town is a few kilometers away from the border post. Similarly, the Department of Food Technology and Quality Control (DFTQC) laboratories in the Eastern and Western regions are located at significant distances away from the border. These challenges increase the costs for traders as they spend a significant amount of time, effort and money in getting the required inspections or tests. Furthermore, since these laboratories are not

yet internationally accredited, Nepal's trading partners, including India, do not recognize their certifications, forcing exporters to go through another round of inspections on the other side of the border, which sometimes can take up to seven days.

c. ***Transloading:*** The Nepal-India border is one of the very few in South Asia where the trucks of one country can cross the border to deliver or pickup consignments. Indian trucks are allowed into Nepal for up to 72 hours to deliver cargo before they return to India. Under normal circumstances this provides sufficient time for the trucks to drive to Kathmandu, unload and return to the border. However, congestion and other delays en-route often mean trucks cannot be turned round within this time limit. There is no restriction on the time limit for Nepalese trucks entering India, though a prior permit has to be obtained from Nepal Transit and Warehousing Co. Ltd for which a nominal fee is paid. However, it is apparent that Indian and Nepalese trucks prefer to operate largely within their respective territories. Survey feedback indicates that this is due to the informal payments and harassment that they face on the other side of the border. For example, Nepalese trucks are reluctant to drive into Indian territory due to the frequent stops/police road blocks where incidences of extortion and high informal payments are common, while Indian trucks face the same in Nepal.[5]

19. **Birgunj to Kathmandu:** Road congestion is increasing at Nepal's borders because of higher traffic volumes and because transit is constrained by the poor condition of roads. The 276 km stretch of road along the Corridor from Birgunj to Kathmandu, which forms part of the SAARC Regional Road Network (SAARC Road Corridor 2), is the most important trade route in Nepal for Nepalese and Indian international trade. Yet, sections of this road, including the 33km between Narayanghat and Mugling and the 50km Birgunj-ICD-Pathlaiya-Ratomate-Hetauda bypass section, are too narrow to accommodate existing and projected traffic flows, and in the case of the Narayanghat-Mugling section, is in poor condition posing safety risks to users and local inhabitants. This road section also experiences the heaviest traffic load carrying 90 percent of Nepal's international trade traffic. Moreover, once construction of the new Integrated Checkposts is completed, more traffic is expected to pass through the Raxaul-Birgunj border post at a faster rate, causing even greater road congestion than at present.

20. **Trucking Services:** A 2012 review by USAID of the trucking industry in Nepal found an oversupply of trucks together with lack of proper regulation to correct perceived market failure in providing efficient services. The study also found the existence of numerous transport entrepreneurs' associations (TEAs). The TEAs aim not only to equally distribute benefits among members but also to self-regulate the entire industry. However, users of trucking services suggest the associations have colluded for mutual benefit, eroded market competition and raised transport costs in Nepal. The review provides evidence that the authorities have lacked capacity to regulate the trucking industry. Trucking syndicates have therefore been left to promote practices that raise costs. The practices are in the form of rotations or use of odd-even leading systems for trucks. Even though the syndicate system is not enforced throughout the year but only when demand for transport services runs low, the effect is the same in that transport prices

[5] Study on Impact of Transportation Monopoly, USAID Nepal, September 15, 2011.

are much higher. The study estimates that syndication could be costing the Nepali economy as much as NPR 5.78 billion (US$68 million) per year.

21. **Clearance and Loading in Kathmandu:** Currently there are no parking or warehouse facilities available for trucks carrying goods from or to Kathmandu, placing significant burdens on traders, freight forwarders, transporters/truckers, and increasing further the time and cost of transport as well as leading to further congestion and safety issues on busy arterial roads. With heavy traffic congestion in and around Kathmandu, truckers have nowhere to park to load goods for export or off-load imported goods. Many end up parking on the side of the ring road – which is illegal – to wait until traders call them into the city for on-loading and off-loading (usually night time). They also have to transload onto smaller trucks to enter the city which results in additional costs. This current pattern increases the costs for transporters and traders, has a negative impact on public safety and the environment, and does not provide an opportunity for small scale exporters to consolidate shipments to reduce transport costs.

C. Higher Level Objectives to which the Project Contributes

22. The Project contributes to the Government of Nepal's current and planned Three Year Development Plan, especially its focus to strengthen economic growth and stability by developing private and community/ cooperative sectors and mainstreaming industrialization, trade and service sector in national development endeavors.

23. The FY2012-2013 Nepal Interim Strategy Note (No. 63381-NP, 06/30/11) recognize regional cooperation in trade and transit and promoting Nepal's export competitiveness as priorities. The Project is expected to make a significant contribution to improving export competiveness and regional cooperation by significantly lowering trade transaction costs and transit time and therefore is closely aligned to the priorities outlined in the forthcoming Country Assistance Strategy (CAS). Moreover, the FY2009-2012 India Country Partnership Strategy (No. 46509, 11/14/2008) highlights the importance of active regional cooperation as part of India's agenda on inclusive growth and sustainable development. The new FY2013-2015 India CPS (No. 76176-IN, 04/11/13) includes regional cooperation as one of three strategic pillars. Many lagging areas of India are located in border areas and are heavily impacted by cross-border issues.

24. The World Bank's South Asia Regional Strategy recognizes regional cooperation and integration as a key strategic objective. It pinpoints limited intraregional trade and connectivity, cumbersome procedures, non-tariff barriers, and costly road transport and logistics services as key impediments to increasing trade in the region. The SAR Regional Strategy Updates for 2012 and 2013 specifically recognize the importance of regional trade and transport systems for Nepal and for the South Asia Region.

25. Reducing trade costs will deliver significant benefits for consumers and traders, and will impact positively on export competitiveness including through lowering the costs of intermediate goods and raw materials. Lower trade costs would be reflected in lower retail prices for consumers and significantly increase export competitiveness.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

26. The proposed Project Development Objective is to decrease transport time and logistics costs for bilateral trade between Nepal and India and transit trade along the Kathmandu-Kolkata corridor for the benefit of traders by reducing key infrastructure bottlenecks in Nepal and by supporting the adoption of modern approaches to border management.

Project Beneficiaries

27. The main beneficiaries from the Project will be consumers who will benefit from lower prices of imported goods, and traders and businesses in Nepal and India who will benefit from reduced time and cost of exporting and importing goods. The project is also expected to have a positive gender impact as lower trade costs will improve the competitiveness of Nepal's key export products particularly in the agriculture and garments sectors. Both these sectors employ significant numbers of women. Moreover, as many women are involved in small scale informal trade activities they do not enjoy access to information on import/export requirements available to more organized traders. The Trade Information Portal will vastly improve the availability and accuracy of information accessible to small scale traders. Beneficiaries also include road users of the Narayanghat-Mugling (N-M) road section, as well as households and shopkeepers near the road, who will benefit from safer road conditions. The Social Impact Assessment (SIA) for the project suggests that the current narrow road is a significant safety threat for road users, households and shopkeepers along the N-M road. Many of these shopkeepers are women. Further, the SIA also indicates that improved access to district headquarters, hospitals, schools, and other government offices will particularly benefit women and children.

PDO Level Results Indicators

28. The expected outcome as a result of project interventions is a reduction of transport time and logistics costs for Nepal's international trade. This will be achieved through reductions in:

a. Time associated with meeting regulatory requirements for import, export and transit activities.

b. Border crossing time at Raxaul-Birgunj border post.

c. Total time between cargo offloading at Kolkata to arrival at Birgunj by road and rail and Birgunj to Kathmandu for trucks.

III. PROJECT DESCRIPTION

A. Project Components

29. Enhancing trade competitiveness is one of six priorities of the Government of Nepal's development plan. The Nepal Trade Integration Strategy (NTIS) 2010 seeks to enable inclusive

growth in Nepal through enhancing the competitiveness of Nepal's exports and reducing the cost of trade. The priorities of this strategy include: (i) reducing the time and cost of trade-related transactions through efforts at simplification, harmonization, and automation; (ii) building the capacity of domestic trade-related institutions including for sanitary and phytosanitary inspections, trade negotiations, logistics, and monitoring and regulating trade-related sectors; and, (iii) enhancing the Government's ability to coordinate trade-related institutions and development partners.

30. The components of the proposed Project represent a subset of the Government's plan to promote regional trade and transport. Due to IDA financing constraints and implementation capacity considerations, this first regional project for regional trade and transport in SAR will not finance all of the sub-projects and activities submitted by Government to the World Bank Group. Instead, this project has been selective and is focusing on those areas that have the most potential to improve trade competitiveness and export performance. The project should therefore be considered as an entry project for the sector, and follow-on projects can be expected following successful implementation of this project. Alternatives or sub-projects considered but rejected for this project are discussed in Section VI- Technical Appraisal Summary.

Component A: Modernize transport and transit arrangements between Nepal and India (US$9m: US$2m IFC, US$7m IDA):

The project seeks to improve the efficiency of the systems used to manage and control the movement of Nepal's and India's international trade by providing technical assistance to introduce a modern and effective transit regime between the two countries including assistance to:

(1) introduce a modern and effective transit regime including technical assistance in enhancing the capacity to negotiate trade and transit treaties;
(2) simplify and harmonize customs and border management procedures, processes and systems, especially to provide for electronic interchange of transit data;
(3) strengthen and modernize the regulation of national and international trucking services including axle load control and road safety from a transport management perspective; and

Component B: Strengthen Trade-Related Institutional Capacity in Nepal (US$23m):

(1) **Trade Portal and Single Window System Development** (US$17.35m): The project will finance the design, development and implementation of two closely interrelated information and communication technology (ICT) systems and related business process improvements to improve transparency and integrity, lower trade transaction costs, improve inter-agency coordination and reduce the time taken to clear goods. These systems will also assist Nepal to comply with current and future WTO requirements (GATT Article X) dealing with publication of trade rules and transparency. The Nepal Trade Information Portal (NTIP) will provide a single user-friendly website where comprehensive and up to date information on all tariff and non-tariff measures (including all relevant rules, regulations, procedures and fee schedules) applied at the time of import, export or transit is readily accessible to traders. The Nepal Single Window System (NSW) will allow traders to submit and have processed all required import, export and transit documentation electronically via a single gateway instead of submitting essentially the same information numerous times to different government entities. A

significant amount of preparatory work for the component has already been undertaken under the Bank-managed NLTA program including an assessment of the legal and regulatory framework, preparation of options for the most effective governance and operational models, preparation of the technical and functional architecture for the NSW, preliminary work on business process simplification, change management and communication as well as capacity building for officials and the trading community. Lessons from successful Trade Portal and National Single Window systems elsewhere in the world (such as Lao PDR for the Trade Portal and Singapore, Philippines, and Indonesia for the Single Window) have been incorporated into the project design.

(2) **Improvement of Trade-Related Laboratories** (US$3m) (including for Customs and SPS testing including food, plant, and animal quarantine): i) Provide capacity and change management support to agencies and stakeholders involved in testing and certification to agree to simplify and harmonize their procedures within Nepal, and to facilitate the upgrading of standards and mutual recognition of certifications. If co-located multi-functional laboratories are deemed necessary to facilitate the clearance process, a work plan with the input and agreement of stakeholders will be drafted which will include a governance plan, Human Resource Development (HRD) plan, and operational procedures. Particular emphasis will be given to strengthening Nepal's capacity to certify that products meet the export quality standards required by India and other trading partners. The agencies and stakeholders involved in this initiative/working group include the Ministry of Commerce and Supplies, Department of Customs, Department of Agriculture, Department of Livestock Services, Department of Food Technology and Quality Control, and the Chamber of Commerce. (ii) Finance the provision of equipment, IT systems and connectivity, technical assistance, staffing and human resources capacity development, and change management support to improve existing laboratories for international accreditation or pilot one or two new multi-functional, joint analysis laboratories at locations to be determined by stakeholders.

(3) **Institutional strengthening for Interagency Coordination including financing of Project Coordination Office (PCO)** (US$2.65m): Coordinating the multiple trade-related agencies in any country is a complex resource-intensive task, and Nepal currently does not have sufficient capacity to manage this task and ensure active and sustainable cooperation between multiple stakeholders. As such, the focus of this sub-component will be on strengthening Nepal's National Trade and Transport Facilitation Committee and the capacity of the Ministry of Commerce and Supplies (MoCS) to coordinate the trade-related agencies. Since the PCO is established within MoCS, its capacity will be strengthened to coordinate the implementation of the different activities and components of the project. Technical advisors will be hired for every sub-project, as well as skills for procurement, financial management, environmental and social safeguards, and monitoring and evaluation (M&E).

Component C: Improve Select Trade-Related Infrastructure (US$69m)

(1) **Expand and upgrade the Narayanghat-Mugling road section and implement measures for improvement of entire Birgunj-Kathmandu Corridor** (US$48m): Upgrade and expand 33km of the Narayanghat-Mugling road section to Asian Highway

Standard and address road safety, axle load control and environmental sustainability issues along the trade corridor. The N-M road section experiences the heaviest traffic load carrying 90 percent of Nepal's international trade traffic (about 6000 vehicles per day). Since the improvement of border post infrastructure is expected to increase traffic along the entire Corridor from Birgunj to Kathmandu, the Project will finance studies for environmental sustainability, road safety and Corridor improvement.

(2) **Build a Container Freight Station (CFS) or ICD in Kathmandu** (US$15.5m). To facilitate the loading and distribution of goods in the Kathmandu Valley, a CFS or ICD will be built in the Kathmandu Valley. The facility will contain a parking lot and warehousing facility, and possibly Customs clearance. Government will acquire the required land. Five possible sites were reviewed with ease of land acquisition and minimal environmental and social impact among the key criteria. The facility is also expected to provide a capacity for exporters to consolidate shipments to take advantage of lower transport costs.

(3) **Improve the infrastructure at Birgunj and Bhairahawa ICDs** (US$5.5m). Improvements are needed at these two key ICDs to facilitate further trade and to improve the efficiency of current trade. At the Birgunj ICD, the existing warehouse shed covers only 40 meters of the total 70 meters of the length of a train. During the rainy season, the goods not stored in the shed due to insufficient space are exposed to the elements and perishable goods would rot or suffer damage. There is also insufficient space for the loading and unloading of existing and anticipated future goods trade, which prolongs the queue/idle time and clearance/border crossing time. Disabling of a set of unused tracks would create additional space for loading and unloading of Nepal's international goods trade which would also speed up these processes. The new extra space is especially needed for edible oils. At the Bhairahawa ICD, heavy rains and usage have caused severe damage to the surface of the ICD pavement including the access road and parking lot. Resurfacing is needed to restore the ICD to a useable state. A maintenance plan will also be prepared to prevent such damage in the future.

B. Project Financing

Lending Instrument

31. The lending instrument is an Investment Project Financing (IFP) to the Government of Nepal. IFP is appropriate for the proposed Project given that the activities are well-defined and can be implemented over a finite time period. The GoN has requested the World Bank to provide IDA financing, including Regional IDA, to support Nepal's goals of enhancing international and intra-regional trade. The proposed activities and components will address the infrastructure and non-infrastructure constraints along the key international trade routes in Nepal. These include reforms to (i) address the fragmented supply chains arising from operational, organizational, procedural, and regulatory issues as well as business practices; and (ii) modernize the transit regime within Nepal and between Nepal and India. The project's development objective is to decrease transport time and logistics costs for bilateral trade between India and Nepal, and all activities in the project are designed to support that objective. Thus, this is a regional IDA

project in its core design. More specifically, the project meets the criteria for regional IDA as follows:

a. *Involvement of two countries including the Fragile or Conflicted-Affected state:* The proposed project involves India and Nepal, with the latter being a landlocked and conflicted-affected state.

b. *Generating spillover or cross-boundary benefits:* The proposed interventions will facilitate Nepal's international trade, including trade with India, by improving the efficiency of the trade and transit regime between Nepal and India (which supports Nepal's trade with third countries since Nepalese trade needs to transit through India), by enhancing Nepal's capacity to promote trade, and by alleviating the congestion at a road section that accounts for 90 percent of Nepal's international trade. These interventions aim to lower the transport time and cost for international trade in Nepal, and are initial steps to transform Nepal from a landlocked country to a landlinked country that can better support international trade.

c. Clear evidence of country or regional ownership: this is a high-priority project for both Nepal and India, and has received endorsement from high-level authorities in both countries. Regional cooperation in general, and this project in particular, is included as a priority in the CAS for Nepal, the CPS for India, and the World Bank South Asia Regional Strategy. The interventions in this Project are also listed as part of the top three priority projects in the SAARC (South Asia Association for Regional Cooperation) Multi-modal Transport Master Plan.

d. Platform for policy harmonization: The project leverages the existing bilateral institutional mechanisms between Nepal and India, as well as the regional fora coordinated by the IFC and SAARC, to promote the harmonization of trade policies and procedures.

Project Cost and Financing

32. The project is estimated to cost US$101 million, including US$2 million from IFC's South Asia Regional Trade and Integration Program (SARTIP). The IDA funding will be US$99 million, of which US$59.3 million will be supported by the IDA Regional Program. The implementation period is six years.

Table 3. Project Cost and Financing

Project Components	Project cost	IDA Financing	% Financing
A. Modernize transport and transit arrangements between Nepal and India	US9 m	US$7 m	78
B. Strengthen Trade-Related Institutional Capacity in Nepal	US$23 m	US$23 m	100
C. Improve Select Trade-Related Infrastructure	US$69m	US$69m	100
Total Costs including physical and price contingencies	**US$101 m**	**US$99 m**	**98**

C. Lessons Learned and Reflected in the Project Design

33. The following lessons learned from evaluation of Bank-supported and other donor-supported projects in Nepal and from stakeholder workshops carried out during project preparation have been incorporated in the design of this project.

34. *Coordination between trade-related agencies is important to maximize project benefits.* In order to produce greater synergy and impact it is important to ensure coordinated program planning and implementation, particularly between the main implementing agencies. In order to achieve this, a coordinating committee - the National Trade and Transport Facilitation Committee (NTTFC) - has been established and will also serve the function of Steering Committee for the Project. The NTTFC includes representation from the trade-related government ministries, departments, parastatals and private sector organizations. Private sector stakeholders are also consulted regularly through the Nepal Business Forum, a consultative mechanism set up by the IFC. Technical working groups have also been established and formalized for the key multi-sector sub-projects including the Trade Portal and Single Window, and the multi-functional laboratories.

35. *Frequent changes in political leadership and project staff, and related capacity issues.* All projects supported by development partners in Nepal have been impacted by the frequent turnover in political leadership and senior civil servants, much of which can be traced to the uncertain political situation. However, the Bank's Country Management Unit in Nepal, in partnership with other development partners and Government, has developed a plan for addressing this key capacity issue. The plan which shall remain consistent with the Civil Service Act includes: (i) the development of a complete personnel database system covering transfer, vacancy, scholarship/trainings, and information relating to disciplinary actions or performance of all government staff; (ii) a management audit will be conducted for development projects which will focus on the issue of staff transfer; (iii) the implementation of staff transfer guidelines by concerned ministries with a target for decreasing the frequency of staff transfer. Any staff transferred with less than two years' tenure will be reported; and (iv) the development and implementation of a comprehensive Human Resources Development Plan for all civil servants which will include a large training component. The Project will also hire extra capacity support from the private sector to mitigate the impact on Project implementation in the case of civil servant transfers.

36. *The importance of rigorous monitoring and evaluation.* The IEG review of transport and other projects in the Bank concluded that monitoring and evaluation at the project level should be strengthened: indicators should be clear and measurable, with a supporting monitoring system and associated capacity, and a mechanism for evaluation and addressing problems identified during regular monitoring. For the proposed Project, the Project Coordination Office (PCO) in MoCS will coordinate the M&E functions for the Project. A corridor monitoring system has already been designed and implemented during project preparation with the collaboration of stakeholders in both India and Nepal. The Nepal Intermodal Transport Development Board (NITDB, under MoCS) owns the monitoring system, and M&E capacity has been added in the project design. A customized methodology was used for baseline data collection (based on WB, World Customs Organization and WTO best practices and guidelines) with a regular and

rigorous schedule for ongoing data collection, monitoring and evaluation. The NTTFC, as the Steering Committee for the Project, will discuss semi-annual data and monitoring reports and propose actions for addressing identified problems.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

37. Implementation of the Project will be under the general oversight of the Ministry of Commerce and Supplies. However, the Project's four main activities will be implemented by three different government ministries. These three ministries have gained experience and expertise through previous implementation of World Bank roads projects and the 1998-2003 Nepal Multimodal Transit and Trade Facilitation Project.

i) The Ministry of Physical Infrastructure and Transport (MoPIT) will oversee the implementation of the Narayanghat-Mugling road segment including biodiversity conservation and road safety activities, and the strengthening of the Department of Transport Management (DoTM) for axle load control, transport sector regulation, and road safety from a transport management perspective. MoPIT has implemented and is currently implementing several roads and bridges projects financed by the World Bank and other donors;

ii) The Department of Customs (DoC) within the Ministry of Finance (MoF) will lead the development of the Single Window system and co-lead the development of the Trade Portal in close collaboration with MoCS;

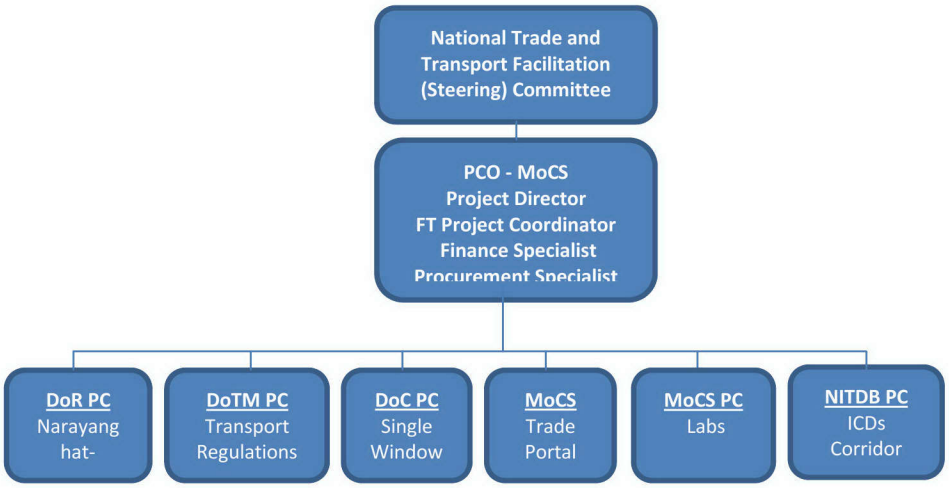
iii) The Ministry of Commerce and Supplies will lead the development of the Trade Portal, Trade-Related Laboratories, and Inland Clearance Depots. The Nepal Intermodal Transport Development Board will be responsible for the ICDs.

38. A Project Coordination Office within MoCS will serve as the implementing agency. The PCO, which will be headed by the Joint Secretary, MoCS, will be responsible for the day-to-day implementation of the Project and for coordinating the relevant implementing ministries/agencies. The PCO will be staffed at the minimum with a Project Director and Project Coordinator from MoCS, Finance Officer, Finance Assistant, Procurement Specialist, Environment and Social Safeguards Specialists and Administrative Assistant. Successful implementation of the Project will require strengthening of the implementation capacity of the PCO. The Project will therefore provide capacity support to strengthen the core functions of the PCO, including but not limited to Financial Management, Procurement, safeguards, M&E, and technical functions as needed.

39. Each component or key set of activities will also be assigned a dedicated Project Coordinator led by the appropriate agency. e.g. Department of Roads for the Narayanghat-Mugling road, Department of Customs for the Single Window, MoCS for the Trade Portal, trade-related laboratories, and ICDs. Key multi-agency technical committees have also been established to oversee the implementation of the Single Window, Trade Portal and trade-related laboratories.

40. The Project will also hire extra capacity support from the private sector. The National Trade and Transport Facilitation Committee, as Steering Committee for the Project, will make decisions and provide guidance on key policies and implementation decisions for the Project. It will provide regular reports on progress to the Office of the Prime Minister and Council of Ministers (OPMCM). The NTTFC will also be supported by Technical Working Groups covering the Trade Information Portal, the National Single Window and trade-related laboratories.

Figure 2. Implementation Arrangements



B. Results Monitoring and Evaluation

41. The Results and Monitoring Framework developed for the Project is included in Annex 1. The overall monitoring and evaluation will be the responsibility of the PCO. Each implementation agency will monitor indicators relevant to its own sub-project and report to the PCO in MoCS who will coordinate the collection of the data. M&E capacity has been added in the project design. A significant part of the M&E framework is the corridor monitoring system that has already been designed and implemented during project preparation with the collaboration of stakeholders in both India and Nepal. The Nepal Intermodal Transport Development Board owns and manages this corridor monitoring system. A customized methodology was used for baseline data collection, in collaboration with Kathmandu University School of Management (KUSOM), with a regular and rigorous schedule for ongoing data collection, monitoring and evaluation. Partnership with KUSOM allows the training of university students in the skills of surveying, data collection, and M&E for Nepal as a whole. Some of these students will be working with NITDB on M&E on a rotating internship basis. The NTTFC will discuss semi-annual data and monitoring reports and propose actions for addressing identified problems. The World Bank Group supervision team will also monitor semi-annual data during supervision missions.

C. Sustainability

42. The Bank's Transport Business Strategy[6] defines sustainability in transport systems as having financial, economic, operational, institutional, environmental and social dimensions. The project is economically viable as the accumulated discounted benefits exceed costs. However, sustainability of economic benefits requires good quality of construction works and adequate maintenance to prevent premature failure of infrastructure. As such, the WBG team will continue to work with GoN on new and ongoing initiatives for maintenance of trade and transport infrastructure. Ensuring that road safety aspects are adequately incorporated in the Project and for the long-term will also address the key dimensions of sustainability and ensure public benefits. The GoN remains committed to financing the rehabilitation and maintenance of roads in Nepal while the NITDB is tasked with the ongoing maintenance of ICDs and the Department of Customs is tasked with the maintenance and improvement of Customs systems.

43. Key to the operational sustainability of the Project's investments will be the capacity of the implementing agencies including how their HRD frameworks or plans manage the development of adequate skills, limit staff transfers and incentivize performance. Specific HRD plans are under development for MoCS, including its agencies the NITDB and Trade and Export Promotion Center (TEPC), and the Department of Customs. The Project team will monitor the implementation of these plans by Government with the support of development partners.

[6] World Bank. "Transport Business Strategy for 2008-2012: Safe, Clean and Affordable Transport for Development." 2008. Washington, D.C.

44. To ensure environmental sustainability, all subprojects will require environmental screening. Sub-projects with significant impacts will require further impact assessment and mitigation plans. The Environmental Management Plan (EMP) will be part of the bidding documents for the road component and the guidelines of the Environmental and Social Management Framework (ESMF) prepared for the other trade-related infrastructure managed by MoCS/NITDB will be strictly followed. The PCO will also get capacity support for environmental and social management skills.

45. Social sustainability will be assured by building stakeholder ownership through enhanced participation of project-affected persons (PAPs) and road users in project design, implementation, monitoring and evaluation. The Suggestion and Complaint Mechanism will allow stakeholders to address grievances, a key contributor to project sustainability. The Vulnerable Community Development Plan (VCDP) has also been developed for the road component, which is the component with the highest expected impact on local communities.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Stakeholder Risk	**Moderate**
Implementing Agency Risk	
- Capacity	**High**
- Governance	**Substantial**
Project Risk	
- Design	**Substantial**
- Social and Environmental	**Substantial**
- Program and Donor	**Moderate**
- Delivery Monitoring and Sustainability	**Substantial**
- Other (Optional)	
- Other (Optional)	
Overall Implementation Risk	**High**

B. Overall Risk Rating Explanation

46. The overall implementation risk of the operation is considered to be High. Details are provided in the Operational Risk Assessment Framework or ORAF (Annex 4) and the following paragraphs summarize key risks that support this evaluation.

47. The political situation in Nepal continues to be in flux and government leadership changes frequently which can affect ownership and commitment at the Ministerial and Secretary level. This could pose a risk to the speed and quality of project preparation and implementation. If there is a change in political leadership, the team would work with new leadership to ensure

efficient and continuous project implementation. At the technical level, staffing has remained stable, and the team will continue to engage at this level to ensure adequate commitment and continuity even through political leadership changes. Extra capacity support hired from the private sector will also help mitigate the impact of civil servant staff changes.

48. Sector coordination has been weak within Nepal and insufficient coordination and information sharing among trade-related agencies could cause delays during project preparation and implementation. However, coordination has already significantly improved in the last few months with support from the IFC and a Bank-managed DFID-financed technical assistance program - Nepal Regional Trade Non-Lending Technical Assistance (NLTA) Program - designed to enhance the government's capacity to implement the NTIS by providing technical assistance to the key trade-related institutions to develop plans for trade and transport promotion and logistics, put in place an effective monitoring system, undertake key sector studies and obtain just-in-time expertise (as needed), and draft capacity development plans (including for HR development, change management and coordination). Institutions covered by this NLTA include the Ministry of Commerce and Supplies (and its agencies Nepal Intermodal Transport Development Board Secretariat and Trade and Export Promotion Council), Department of Customs under Ministry of Finance, and Ministry of Physical Infrastructure and Transport. Key results expected include: (i) Enhanced capacity to monitor transport time and costs at Nepal's main trade corridors; (ii) Enhanced capacity to coordinate trade-related institutions and development partners; and (iii) Enhanced capacity/knowledge in trade and transport systems and logistics. The proposed Project's interventions are also expected to accelerate the improvement of the coordination function.

49. Through the support of the above NLTA program, the GoN has established a coordinating committee entitled the National Trade and Transport Facilitation Committee as described in paragraph 34, which is also the Project's Steering Committee. A Secretariat in the PCO will provide support to the NTTFC, and a plan to ensure capacity and sustainability of the NTTFC will be developed and implemented. Key components and sub-projects that require multi-sector collaboration, such as the Single Window and Trade Portal, will also have national technical committees or working groups with adequate multi-sector representation to ensure coordination and buy-in of all relevant stakeholders. These Committees will have clear terms of references and responsibilities documented. Private sector stakeholders and beneficiaries will also be consulted regularly through the Nepal Business Forum, a consultative mechanism set up by the IFC.

50. Risks related to implementation of procurement and contract administration procedures, specifically collusion and cartelling among contractors and intimidation of contractors during the bidding and execution of works, need to be managed carefully. Building on the successful piloting of e-submission by the Department of Roads under the on-going World Bank-financed Road Sector Development Project (RSDP), e-submission procedures will be used for all works contracts under the Project. The DoR's e-procurement web portal for e-submission of bids is an on-line facility for acquiring of bids and submission of bids to increase transparency, non-discrimination, equality of access, and open competition in the procurement process. It has helped to reduce the collusive and coercive practices, thus promoting fair and competitive pricing in public procurement.

51. While the anticipated environmental impacts from almost all planned Project interventions/activities (other than roads) are expected to be minor in nature, there are risks associated with the proposed widening and strengthening of Narayanghat-Mugling road. A small section of this road (about 6 km) falls within the Barandabhar Forest Corridor (BFC) that has been gazetted as a Protected Forest in February 2012. Even within this zone, a stretch of about 4 km or less remains free from human habitation and has forest cover on both sides of the road, necessary for wildlife connectivity. The Project road traverses through the BFC's western fringe but is not within the buffer zone of Chitwan National Park. Despite this, a risk pertaining to opposition regarding road development through this ecologically sensitive stretch from some stakeholders remains.

52. Further, the expansion and upgrade of the Narayanghat-Mugling road, which is expected to affect 74 households, could pose a risk if issues are inadequately addressed. The project will implement the Resettlement Action Plan (RAP) as finalized in consultations with the affected persons. Consultations with the Project Affected Persons (PAPs) were carried out at eleven different locations in two rounds: between March 13, 2012 and March 23, 2012, and between December 1, 2012 to December 4, 2012. A Vulnerable Community Development Plan has also been developed to ensure the participation of the vulnerable peoples in the entire process of preparation, implementation, and monitoring of project activities. The project will leverage a dedicated grievance redressal system developed by DoR under the Nepal Bridges Project which coordinates all relevant departments and offices, employs a formal tracking system for complaints, and generates reports on the status of complaints.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analyses

53. The expected impacts of the Project can be divided into four main areas: (i) reducing cargo dwell time and its unpredictability in the port of Kolkata in India; (ii) reducing cargo clearance and border crossing times at the main border posts, and in particular at the Birgunj border post; (iii) reducing loading and unloading time and unpredictability in Kathmandu; and iv) improving transparency and predictability of import, export and transit requirements. The various components of the Project all contribute to lowering time and unpredictability at these three locations. Table 4 summarizes the expected impact of each project component at the three locations.

Table 4. Project Economic Impact

Activity	Step	Expected impact
Component 1: Modernize transport and transit arrangements between Nepal and India (US$9m)		
Simplify and harmonize customs and border management procedures, processes and systems, especially to provide for electronic interchange of data	Cargo removal from Kolkata and border clearance at Raxaul/Birgunj	Reduction in cargo dwell time and uncertainty in port and at Birgunj border post and ICD
Introduce a modern and effective transit regime between the two countries.	Transit in India	Reduction in India transit time and uncertainty
Strengthen and modernize the regulation of international trucking services	Trucking services in Nepal	Reduction in trucking costs
Component 2: Strengthen Trade Related Institutional Capacity in Nepal (US$20m)		
Trade Portal and Single Window System Development	Border crossing and destination clearance in Kathmandu	Reduction in border crossing time and reduced costs to traders associated with regulatory requirements.
Improvement of Trade-Related Laboratories	Faster clearance for imports and exports	Reduction in lab test time and uncertainty
Component 3: Improve Select Trade-Related Infrastructure (US$72m)		
Expand and upgrade the Narayanghat-Mugling road section (33km)	Road transit	Reduction in road section travel time and uncertainty
Build a CFS or ICD in Kathmandu	Clearance/un-loading in Kathmandu Truck utilization	Reduction in clearance/un-loading time in Kathmandu and improved vehicle utilization
Improve the infrastructure at Birgunj and Bhairahawa ICDs	Cargo clearance at ICD	Reduction in clearance and border crossing time and uncertainty at Birgunj ICD

Model to Estimate Impact of Project

54. The economic evaluation of the Project is based on a supply chain approach which provides a convenient conceptual framework to disentangle logistics costs deriving from the sequence of transit operations, and subsequently assess the impact of policy, regulatory or infrastructure measures. A quantitative supply chain model is developed identifying the impact of cost, delays and uncertainty in lead time. The shipper in Nepal bears the costs of transport and transit from/to the port in India and to/from warehouse or factory (of both containerized and bulk cargo).

55. Arvis, Raballand and Marteau (ARM, 2010)[7] use a supply chain model originally proposed by Baumol and Vinod (1970) to develop a logistics costs model for a corridor. The model, which has been used on other World Bank-financed trade and transport projects,[8] is

[7] The model is describe in detail in Arvis, J. F., Raballand, G. and Marteau, J. F. 2010. The Cost of Being Landlocked: Logistics Costs and Supply Chain Reliability. Washington, DC: World Bank

[8] See for example East Africa Trade and Transport Project (P079734) and CEMAC Trade and Transport Project (P079736).

developed from the perspective of the shipper and seeks to determine the total logistics costs associated with the time, cost and reliability performance of a corridor. This end-user supports costs directly or through fees paid to agents providing services such as freight forwarders or transport operators. The model also takes into consideration whether the transport services industry are competitive or cartelized. This is very relevant in Nepal.

56. Based on the model total logistics costs can be estimated as follows:

Logistics costs	=	Transportation Costs	=	Costs incurred by trucking firms
	+	Moving inventory costs	=	representing tied up capital and
	+	Delay Hedging Costs	=	induced costs to hedge unreliability inventory and warehousing costs, or shift to faster more expensive mode of transportation

57. For modeling purposes transport costs are decomposed into fixed and variable costs, the moving inventory costs are based on a linear relationship between the value of goods and the time it takes to move the goods along the corridor while hedging inventory to account for unpredictability depends on variance in lead time. A simple strategy is assumed where shippers maintain a safety inventory level to hedge against delivery delays and deal with the cost of stock-out. A detailed description of the model and the results of the analyses is presented in Annex 6.

58. Using the ARM model estimates of the costs and cost savings for the case with and without the project were estimated. The estimates are based on very conservative estimates of the likely impact of the project and traffic projections. The main assumptions are:

- Gains resulting from implementing the project are estimated only for delays and uncertainty related to imports. Import volumes are more than 80 percent of Nepal's international trade traffic flows. As such any interventions that reduce costs for imports will also reduce costs for exports. In any case, exports face fewer impediments that imports.
- Parameters for elements such as value of time are estimated at very conservative levels, based on empirical evidence form similar projects and elsewhere in the world.
- Changes in freight rates are not modeled due to lack of data. The main savings are therefore assumed to derive mainly from greater utilization of trucks deriving from reductions in time and uncertainties.
- The reductions in time will result in a reduction in demurrage charge Nepalese importers typically face at Kolkata. These charges were estimated in a Government of Nepal study at approximately US$68.8 million dollars per year. A reduction in turn-round time for containers is assumed to translate into a proportional reduction in this time. However, consistent with the conservative approach and to minimize the influence of changes in shipping line policies on empty containers, such savings would be additional, and therefore not included in the cost-benefit analysis.

59. Project interventions are expected to start impacting transport and logistics in the second year of project implementation. As noted above, the analysis takes into consideration projected growth in traffic based on trends over the past several years where average growth has been just over 4 percent per annum.

60. The distribution of costs and benefits of the project are summarized in Table 5 below.

Table 5. Cost and Benefits Per Year and Per Intervention Costs

Costs and benefits per year per intervention	**Year**						**Total**
	1	**2**	**3**	**4**	**5**	**6**	
Transport regulation	0.03	0.33	1.33	1.31			**3.00**
Bilateral transit reforms	0.20	0.95	0.95	0.95	0.95		**4.00**
Trade Portal	0.03	0.56	0.56				**1.15**
Single window	0.23	3.98	3.98	3.98	3.95		**16.10**
Capacity building	0.61	0.51	0.51	0.51	0.51		**2.65**
N-M road	0.62	15.26	16.86	15.13	0.13		**48.00**
ICD, M&E	0.48	4.32	7.32	8.69	0.20		**21.00**
Multi-functional labs	0.07	0.44	1.13	1.36			**3.00**
Total	**2.26**	**26.34**	**32.64**	**31.92**	**5.74**	**0.00**	**98.90**
Benefits							
Component							**Total**
Port	0.00	0.00	15.38	13.80	3.64	2.17	**34.99**
Border post	0.00	0.00	0.00	21.08	20.16	20.96	**62.20**
Nepal transit	0.00	0.00	9.54	4.38	7.40	8.25	**29.57**
Kathmandu	0.00	0.00	0.00	25.04	3.92	4.53	**33.49**
Lab tests	0.00	0.00	0.46	0.83	1.30	1.33	**3.93**
ICD	0.00	0.00	0.11	0.33	0.30	0.31	**1.05**
Totals	-		**25.49**	**65.47**	**36.72**	**37.55**	**165.23**
Net benefits of project	**(2.02)**	**(21.00)**	**(5.09)**	**21.32**	**17.58**	**19.02**	**29.82**
	Discount rate		**12%**				
	EIRR		**30%**				

61. The cost-benefit analysis of the project indicates that the project economic benefits are satisfactory with positive ENPV for the entire project as well as for all components, at a 12 percent discount rate over a 20-year evaluation period. The EIRR of the overall project is positive and the project remains viable even in the case of a 10 percent increase in costs or a 20 percent reduction in the value of time.

62. The economic evaluation for the Narayanghat-Mugling road used the Highway Development and Management Model (HDM-4), a globally accepted analytical tool for

economic analysis for highways with investment alternatives, which simulates life cycle conditions and costs and provides economic decision criteria for multiple road design and maintenance alternatives. The main project economic benefits considered by the analysis are: (i) road user cost savings primarily including vehicle operating cost (VOC) savings for vehicular traffic using the project road, and time savings for passenger and goods carried in transit; (ii) savings associated with improved road safety measures; and (ii) reduced cost to the Government/PWD in the form of reduced road maintenance costs.

B. Technical

63. As discussed in paragraphs 16-21, hard and soft barriers to trade exist along the entire transit corridor for Nepalese international trade and they are inter-linked. As such, only a coordinated, integrated multi-sector program can address these linked constraints. Any solution that only addresses one barrier but not the others will only have limited effectiveness.

64. Component 1 seeks to address the delays experienced by rail and road traffic between Kolkata Port and Raxaul-Birgunj and the high costs incurred for Nepalese traders. Many of the delays currently experienced at Kolkata Port are due to the special treatment given to Nepalese trade including the inability of Nepalese trade to get a through bill of lading to be processed inland at Birgunj or even further inland at Kathmandu. The bilateral transit agreements restrict Nepalese goods to use only Kolkata-Haldia ports, and select routes for trucks which has cost implications for Nepalese trade. There are also restrictions on the type of wagon that can be used for Nepalese trade, and that a full rake must be formed of exclusively Nepalese trade before it can be moved. The delays linked to these restrictions, if resolved, can reduce transit time significantly. Finally, facilitating electronic data interchange and automation of the CTD (Customs Transit Declaration) between Birgunj and Kolkata Port can also reduce clearance and border crossing time for goods. This will also benefit exporters as the current transit requirements place a heavy administrative burden and unnecessary additional costs on Nepali traders exporting goods to third countries. Estimates are that more than 90 percent of containers shipped to Nepal incur demurrage charges, which translate to several million dollars per year.

65. The Trade Portal and Single Window proposed in Component 2 will save time and cost for traders as they will facilitate obtaining up-to-date information on all the relevant regulations, forms, fees and processes in one place for imports, exports, and transit trade in the case of the Trade Portal; and facilitate the input and simultaneous processing of required data (simplified and harmonized between agencies) only once instead of the multitude of times in the current situation. Both systems will facilitate the coordination of agencies that process trade.

66. In terms of road infrastructure for trade, the 276 km stretch of road from Birgunj to Kathmandu, which forms part of the SAARC Regional Road Network (SAARC Road Corridor 2), is the most important trade route in Nepal, so delays along this route have transport time and cost implications for Nepalese trade. The heaviest traffic load is on the Narayanghat-Mugling-Kathmandu road section, which carries 90 percent of Nepal's trade, so upgrading this road section to good condition is a priority for transport of trade. The Narayanghat –Mugling (N-M) road starts at Narayanghat (km. 0+000). However, the proposed improvements under the Project will start from Aptari (km 2+425) (junction where bypass road to Bharatpur meets the N-M road)

and end at Mugling (km 35+677). Annual Average Daily Traffic (AADT) is 6000 with about 38 percent trucks, 26 percent buses, 16 percent utility vehicles and cars and the rest two-wheelers. The road passes through forest area, settlements and cultivated land. Presently, the width of the road is 6 to 10 meters. The width of the road is intended to be widened to 11 meters up to km 16 and from there to Mugling to 9 meters. The original design for the road was carried out in July 2011 and has now been revised based on the latest developments in the adjoining land, traffic projections and increased attention to road safety, biodiversity and traffic management issues.

67. The ICD at Birgunj has been operating since the year 2000. It is managed by a private operator, Himalayan Terminals, a joint venture of the Container Corporation of India (CONCOR) and Nepalese private investors. It is close to a two-lane road leading to Birgunj town and border post, and adjacent to the future Integrated Check Point at Birgunj-Raxaul. Traffic has grown over the past twelve years from 9000 TEUs in 2000 to nearly 20,000 in 2011 and is expected to increase. The current warehouse shed is only 40 meters whereas the length of the train is 70 meters, leaving unloaded goods to the elements and risk of rot/damage in inclement weather conditions. There is also insufficient space to unload additional goods, including edible oils and POL (petrol, oil and lubricants). The Project will fund the disabling of two of the three currently un-used lines by building a cement platform flush with the rail lines which will keep the rail lines for future use as needed (when rail possibly extends into Nepal) but also allow the platform to be used for loading/unloading and truck crossing.

68. The ICD at Bhairahawa is a road-based ICD with an administrative block, an inspection yard, a custom litigation and goods shed and 18,500 square meters of parking area with a bituminous pavement. The ICD was constructed in 2000 and its operation started the same year. Due to frequent rains and use by heavy commercial vehicles the pavement has now severely deteriorated with extensive cracking, potholes, undulations, base failure and exposed base. Drainage of the parking area is also poor. Reparations are needed immediately as traffic movement is severely hampered under current conditions. Soil investigation, laboratory testing together with axle load survey and traffic count were carried out as input into detailed designs and costing. One third of the total area of pavement will be paved as flexible and the remainder as rigid pavement to withstand the heavy commercial vehicles.

69. The Container Freight Station or Inland Clearance Depot in Kathmandu will give trucks a place to park for loading and unloading which they currently do not have, at a key origin and destination point for trade. It would also save transporters and traders the current need to trans-load on to smaller vehicles before entering the city. In the long-term, when Nepal and India are able to negotiate the through bill of lading for Nepalese trade, goods can be cleared in Nepal rather than at border points in between saving clearance and trans-loading time at the borders. Five alternative sites around Kathmandu were examined and rated using the following criteria:

- Highway accessibility for external domestic regions and international border access;
- Highway accessibility related to urban distribution connections within Kathmandu;
- Ease of procurement of the site in terms of planning permissions and negotiating rights;
- Location site suitability for proposed functions (size, terrain);
- Land Value; and
- Environmental and social issues/risks.

70. The GoN requested the development of seven multi-functional laboratories including at the Central Lab in Kathmandu, Birgunj ICD, and five other key border points between Nepal and India including Bhairahawa, Biratnagar, Nepalgunj, Mechi/Kakarbitta and Kailali. However, given the significant change management work involved in such a venture, where four different agencies are to be co-located and asked to simplify, harmonize and work together, it is advisable to initially implement one to two laboratories at key locations first, and then to gather lessons from these experiences before embarking on developing other laboratories. Selection of the pilot site(s) will be heavily influenced by the need to undertake laboratory testing to certify the quality and conformity of exports.

71. The Government also requested the development of an ICD at Dodhara-Chandani in the Far Western Region of Nepal, which borders India and is geographically isolated from the core areas of the country. Domestic and international trade connectivity to India is poor due to the state of transport infrastructure. Income in the region is among the lowest in Nepal, while the region's trade volume accounts for only about one percent of the total national trade volume. The Government of Nepal would like to promote trade and connectivity for the region with the rest of Nepal and with neighboring India by developing an ICD at Dodhara-Chandani. The nearest border crossing at Dhangadhi (Kailali) is constrained on the India side due to the access road passing through a wild life reserve, and cannot be improved. However, given that feasibility studies are ongoing and that complementary infrastructure for access to the ICD need to be built first, the financing of this ICD is not included in this Project. This proposed ICD would provide significant freight journey time savings with Delhi, India.

C. Financial Management

72. ***Risk Analysis***. The key institutions that will be engaged in the proposed Project are the Ministry of Commerce and Supplies, the Department of Customs under the Ministry of Finance and the Department of Roads and the Department of Transport Management under the Ministry of Physical Infrastructure and Transport. For successful implementation of the Project, there is a need for strong coordination and collaboration among all participating agencies. Given the multi-sector nature of the project which requires specialized focus with rapid response approach, it is important to ensure that the proposed governance arrangement for the implementation of the Project is put in place as quickly as possible. From the financial management perspective, the overall risk is "High" and the residual risk after mitigating measures is "Substantial".

73. The proposed high level Steering Committee chaired by the Secretary, MoCS (National Trade and Transport Facilitation Committee) will have a key oversight role to ensure smooth implementation of the Project. In addition, a dedicated Project Coordination Office at MoCS will comprise a Project Director, Project Coordinator, Technical Specialists, Finance Specialist, Procurement Specialist, Accountant and Administrative Assistant. The PCO will be responsible for overall coordination and monitoring of Project activities. Each of the sub-projects will have their own project management arrangements with a dedicated Project Coordinator, Finance Officer and other technical experts. In order to simplify the design of this multi-sectoral intervention, implementing agencies would be grouped according to the line of command arrangements in the system. The PCO under MoCS will coordinate with all other agencies

under MoCS (which include the Nepal Intermodal Transport Development Board Secretariat and Trade and Export Promotion Center), and the Department of Customs. On the other hand, DoR will coordinate with DoTM since both these Departments are under the same Ministry. From a line of command and authorization viewpoint, the Secretary of the MoCS will delegate authority to the Project Director of the PCO, who will further delegate to the concerned implementing agencies (including the Department of Customs) to implement the program. Similarly, the Secretary of MoPIT will delegate the authority to the DoR and DoTM for project execution. From the programming perspective, implementing agencies under the MoCS and the Department of Customs will prepare their work program and budget and submit to the Project Director of the PCO who will then consolidate into one work program to be reflected under a dedicated budget head. On the other hand, DoTM will provide its work program and budget to DoR which will coordinate into one work program and be reflected in another dedicated budget head. Two budget heads are, therefore, proposed under the Project. In terms of reporting, the PCO and the DoR will be responsible for preparing a consolidated report and financial statements. The PCO being an overall coordinator of the Project will be kept informed of all activities by the DoR. Budget requests will be prepared and submitted by MoCS and MoPIT starting from Fiscal Year 2013-14. The Project Operations Manual will be prepared which will define the roles and responsibilities of each implementing agency and the PCO, and operational modality and fund flow arrangements, which will need to be reviewed and endorsed by the Steering Committee. This will be the basis for effective implementation of the Project. There will also be strong efforts in capacity building both in technical areas as well as overall project management which include procurement and financial management. To address the gaps that have been identified during the assessment, risk mitigation Action Plans have been agreed, and the risks will be reduced as the action plans get implemented.

74. ***Planning and Budgeting.*** The proposed operation will follow the government financial management procedures. The budgeting procedures for preparation, approval, implementation, and monitoring are elaborated in the Financial Procedure Regulations (FPR). The annual work program and budget will be based upon the work program to be prepared by MoCS and MoPIT which will be endorsed by the Project Steering Committee. Annual work programs and budgets are submitted to the National Planning Commission (NPC) and MoF for discussion. Two separate budget lines will need to be created in the 'Appropriation Book' (Red Book) for FY2013/14 – for the PCO under MoCS and for the DoR.

75. MoF will release authorization for expenditures to the Secretaries of MoCS and MoPIT. The Secretaries of MoCS and MoPIT will further delegate the authorization for expenditure to the Project Director of the PCO under MoCS and to DoR/DoTM respectively. The PCO Project Director will delegate authority to the respective implementing agencies including the Department of Customs.

76. ***Financial Management Staffing.*** Accounts will be maintained by the finance staff of each implementing unit. The PCO of MoCS will need to confirm a dedicated team of staff which includes the Project Director, a full-time Project Coordinator, one Procurement Specialist (consultant), one Finance Specialist supported by a team of Assistants and a computer operator. After the Project is approved, positions will be created for the Finance Officer and Finance Assistant. In the interim, the MOCS will assign one of its finance staff to oversee this project.

Qualified staff having computer experience will be deployed to the Project. As the program activities expand, a Finance Consultant will be recruited from the market to support the Finance team and the Project. In DoR, the existing structure of the Foreign Cooperation Division which is managing the Road Sector Development Project will also manage this project. There is no need to add any staff for the purpose of this project.

77. ***Implementation Progress Reports (IPRs).*** The PCO under the MoCS and the DoR will separately submit trimesterly Implementation Progress Reports which include financial monitoring reports (FMRs) and the procurement management reports. DoR already has experience preparing such reports under the ongoing RSDP project. Project implementation progress reports will be produced as soon as the Project is effective showing the sources and uses of funds, output monitoring report, procurement management report and narrative progress report in format to be agreed upon during negotiations. To match the public sector planning and reporting cycle, the IPR will be produced on a trimesterly basis and submitted within 45 days from the end of the preceding trimester.

D. Procurement

78. Procurement for the proposed operation will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 ("Procurement Guidelines"), in the case of goods, works and non-consulting services; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 ("Consultant Guidelines") in the case of consultants' services, and the provisions stipulated in the Legal Agreement. For each contract to be financed under the Credit/Grant, procurement methods or consultant selection methods, the estimated costs, prior review requirements, and time frame will be agreed between the Borrower and the Bank in the Procurement Plan which needs to be prepared by the borrower and reviewed by the Bank prior to the approval of the Project. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

79. A procurement capacity assessment of the major implementing agencies was carried out in March 2013. The Project involves a large number of implementing agencies including fourteen different central level agencies of which nine line ministries dealing with quite different technical aspects of the Project. Based on the volume of budget allocated, an implementation arrangement has been agreed among the Bank fiduciary (FM and procurement) team and Project team represented by most of the major implementing agencies. As per the simplified implementation arrangement worked out for effective implementation of the Project from procurement and financial management perspective, two major agencies have been identified for overall procurement management – (i) One such agency is the Department of Roads responsible for managing its own procurement and providing procurement support/guidance to the Department of Transport Management; (ii) The second agency is the PCO in MoCS who will be responsible for managing/guiding procurement of all the remaining implementing agencies. Though these two agencies serve as focal/leading agencies for procurement management, many other implementing agencies will be carrying out their procurement by themselves under the

guidance of these two agencies. DoR's procurement team currently involved in managing the ongoing Bank-financed project, i.e RSDP, will manage the road component of this project. Considering its current performance level and increased procurement load due to this Project, DoR's procurement risk is rated as "Substantial". To maintain this risk rating, there should be some procurement capacity building program for all staff involved in initiating procurement, reviewing the process and decision making. With regard to the PCO in MoCS, it is a newly-formed agency to manage this project. Therefore, its procurement management risk was thoroughly assessed based on the proposed organizational structure, current staffing capacity and procurement load. On the basis of this assessment, the overall procurement risk for the project is rated "High", and the residual risk "Substantial" after the establishment of full-fledged PCO under the MoCS, preparation of a Project Operations Manual including a procurement section. A procurement advisor/consultant is in place to support the project staff in procurement management and a consolidated and comprehensive procurement plan for the first 18 months is prepared. The detailed procurement assessment is available in the Project files.

E. Social (including Safeguards)

80. For the project as a whole, and specifically for trade-related infrastructure, an Environmental and Social Management Framework (ESMF) has been prepared including a screening tool (to help in identifying appropriate locations for sub-projects, wherever applicable); identification of likely impacts; a management plan, including elements that have to be integrated during the planning and design of specific activities and; monitoring mechanism to manage the issues pertaining to environmental and social safeguards. The components of the ESMF include the Resettlement Policy Framework (RPF), Indigenous Peoples Planning Framework (IPPF), Gender Development Framework (GDF), and consultation framework.

81. ***Land Acquisition and Resettlement.*** The Narayanghat-Mugling road lies in Chitwan district of Central Development Region of Nepal. The road was constructed initially as a single lane road. Later, it was widened to intermediate lane with additional structures. The right of way (RoW) for this road was declared in 1977 and deemed to be acquired and owned by the government. All the road improvement work is confined within the existing Right of Way and therefore additional land acquisition is not required for the proposed upgrading works of this sub-project. The present detailed design requires 11 meters widening up to km 16+400 where the road passes through flat land. After km 16+400, the rocky hill area begins where widening is proposed to be limited to 9 meters. In both sections, the existing Right of Way is 25 meters on either side of the road and so there is no need for additional land acquisition. The Project, however, will adversely impact 80 private structures owned by 74 households (414 PAPs). Most of the affected private structures are residential cum commercial premises. The proposed Project will also affect 11 community structures which include public toilet, temple, and park with a statue of political leader, a chautara, waiting hall, and a youth club. The operational policy on involuntary resettlement OP 4.12 has been triggered and a Social Impact Assessment was carried out. Based on the results of the Social Impact Assessment, a Resettlement Action Plan has been prepared and disclosed.

82. Temporary use of land will be required during road construction to operate the contractor's campsites, labor camps, quarry and tipping site, crusher plant and stock piling yard,

etc. For temporary use of private land, written agreement will be made between the land and asset owner and contractors specifying period of occupancy, market value of crops normally produced on the land (in case of agricultural land), mode of payment, land protection and proper rehabilitation measures after the withdrawal of contractor or expiry of lease period.

83. ***Vulnerable Community:*** For the Project road, there are a total of 66 vulnerable households which includes 55 janjati (nearly three fourth of the total affected households), 6 dalit (8 percent) and 4 chepang community households (5.41 percent), and one female-headed household. All these households are squatters and depend on small businesses and trade and wage labor for their livelihood. The operational policy on Indigenous People OP 4.10 has been triggered and a Vulnerable Community Development Plan has been prepared. While measures to address adverse social impacts are covered in the RAP, the community level issues have been addressed through the VCDP. The VCDP also details the strategy for participation of vulnerable communities in the project implementation; mechanism for continued consultation; institutional set up for implementation, grievance mechanism, timeframe for implementation and budgetary requirements.

84. ***Gender.*** Most of the women's status indicators (including those pertaining to health, literacy, work force participation, spousal abuse) show that gender equity and empowerment remain serious issues in the Project area. As part of the RAP, a Gender Development Plan has been prepared for the Project. The plan seeks to address the various gender-related issues through a set of activities and programs. The plan specifies the implementation mechanism, roles of different institutions and individuals, the indicators for further assessment and also the means of verification. To make the gender development plan a time-bound initiative, a time frame for implementation of each activity has also been specified. Gender analysis will be part of the social assessment of the trade-related infrastructures.

85. ***Grievance Redressal.*** The Project will also establish a grievance redress mechanism that will allow Project-affected Persons (PAPs) to seek review of any disagreeable decisions, practices and activities arising compensation for assets, and technical and general project-related disputes. As specified in the RAP and ESMF, PAPs will be made fully aware of their rights and the procedures for doing so verbally and in writing during compensation, survey, and time of compensation. The PAPs will have access to both locally-formed grievance-redress committees as specified under the ESMF and RAP, i.e. Local Consultative Forum (LCF) and courts of law. The PAPs will have unhindered access to the grievance redress office to forward and file their complaints, and can choose to file their complaints to the court if they feel that their grievances have not been addressed appropriately. It will in no case affect the jurisdiction specified in the law enforced to file complaints in the competent court. PAPs will be exempted from all administrative fees incurred, pursuant to the grievance redress procedures except for cases filed in court. The grievance recording register will also be placed at the Project-In-Charge office and Consultant's RE office, and project-affected people as well as local people can lodge their complaints and feedback at these offices related to assets acquisition and construction related activities.

F. Environment (including Safeguards)

86. ***Environmental Issues/Impacts.*** The proposed Project will contribute to positive economic growth both locally in the project area and at the regional level between Nepal and India by removing barriers to trade and transportation. However, specific interventions envisaged under the project such as the widening and upgrading of the Narayanghat-Mugling road may have some potential adverse environmental impacts in its area of influence.

87. Though the civil works for the N-M road have been planned within the existing Right of Way, the fragile ecosystem in this hilly/mountainous country poses greater than average environmental risks, if not managed appropriately. The key environmental issue of concern is the existing and likely impact of the road on biodiversity/wildlife. A small section of the Narayanghat-Mugling road (about 6 km) from Aaptari to Jugedi falls within the Barandabhar Forest Corridor (BFC) that has been gazetted as a Protected Forest in February 2012. Within this zone (of about 6 km), a stretch of about 4 km or less remains free from human habitation and has forest cover on both sides of the road, necessary for wildlife connectivity. Even though there is continuous high volume traffic flow causing congestion on the road in addition to presence of a small town (Ramnagar), institutions, sites of religious importance, fuel stations and other factors of anthropogenic disturbance along and close to the road, recognizing the importance of BFC, it is necessary to reduce impingement and restore integrity (to the feasible extent) of the said forest corridor. More so, the terrain through which the road traverses is vulnerable to slope failures and instability risks. Therefore, the other environmental issues associated with the proposed civil works of the N-M road include likely impacts pertaining to road design (slope stability and drainage issues); work site safety management (including occupational health and safety of construction workers); materials management; disposal of construction wastes and; soil erosion.

88. On other project interventions such as (a) improvement of trade-related laboratories; (b) construction of selected Inland Container/Clearance Depots (ICDs); (c) strengthening the Department of Transport Management to better manage or regulate the road transport sector, the anticipated environmental impacts are not likely to cause any significant, irreversible or long-term damage to the natural and physical environment.

89. ***Environmental Management.*** Two specific instruments have been designed/developed for the project for effectively addressing the various identified environment issues: (i) preparation of an Environmental and Social Management Framework dealing with avoidance and minimization of the likely adverse impacts for the project as a whole and; (ii) Environmental Assessment (EA) and preparation of corridor-specific management plan for the Narayanghat-Mugling road. Both these instruments include measures to minimize and mitigate environmental impacts through all stages of the project.

90. The ESMF developed for the project covers all components/interventions. Given that there are several small sub-projects (other than the N-M road, which is a major investment) and locations/sites for most are not known at this stage, the ESMF was chosen as an instrument to guide the management of safeguards aspects. The ESMF includes an environmental and social screening tool to guide the identification of appropriate sites/locations for sub-projects.

91. For the N-M road, an Initial Environment Examination (IEE) report prepared in 2010 by DoR has been revised to the level of an EA and EMP (Environment Management Plan) in line with the requirements of the Bank's operational policies, with specific attention to concerns related to biodiversity management. Also, a corridor-specific EMP has been prepared to address environmental sustainability issues, slope stability issues and other construction-stage impacts. The EMP also includes a monitoring plan for construction and operation-stage impacts. For effective implementation of EMPs, management measures have been appropriately cross-referenced in the design drawings, contract conditions and Bills of Quantities (BOQs). More details are in Annex 3.

92. Further, to better appreciate environmental concerns at the regional level, particularly for those road links/trade corridors that have fragmented natural habitats/wildlife areas in the past (such as the Mahendra Highway and the Birgunj-Hetauda road section), a study with a focus on road safety and environmental sustainability for corridor improvement will be carried out during project implementation. These existing road sections are not being funded for improvement under the Project but form a crucial part of the trade and transport corridor between Birgunj and Kathmandu. The study will inform the decision-making process about the need, approach and interventions required to balance out the trade and transport infrastructure demands in the near future on the one hand and environmental sustainability requirements on the other.

93. ***Institutional Arrangements.*** The Department of Roads, which is the implementing agency for the Narayanghat-Mugling sub-project, is familiar with the Bank's safeguards requirements, through its involvement in two other Bank funded projects, namely Road Sector Development Project and Road Maintenance and Development Project. Staff in the Geo Environment and Social Unit (GESU) of the DoR has basic knowledge and experience in environmental and social fields gained through other projects financed by the Bank and other donors. Specific capacity strengthening support is necessary, as assessed during the Environmental and Social Assessment studies, particularly on issues pertaining to biodiversity management. In this regard, early in project implementation, suitable orientation and training programs will be conducted for GESU/DoR staff. The DoR will also hire full time environmental safeguards staff as part of the Supervision Consultant's team.

94. For the other components/activities, MoCS will be responsible for project coordination, including the required safeguards management. MoCS does not have significant experience in managing environmental and social safeguard issues. External experts from the market have been hired to assist the safeguards management and implementation of the Environmental and Social Management Framework in particular.

95. ***Disclosure.*** All safeguard documents, including the draft Environmental and Social Management Framework (ESMF) for the overall project and the draft environmental safeguards reports (EA, EMP) and social safeguards reports (RAP, VCDP) for the N-M road sub-project have been disclosed in the Bank's InfoShop and GoN's websites on February 27, 2013.

G. Safeguards Policies Triggered

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[X]	[ ]
Pest Management (OP 4.09)	[ ]	[X]
Indigenous Peoples (OP/BP 4.10)	[X]	[]
Physical Cultural Resources (OP/BP 4.11)	[X]	[ ]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Forests (OP/BP 4.36)	[X]	[ ]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects on International Waterways (OP/BP 7.50)	[ ]	[X]
Projects in Disputed Areas (OP/BP 7.60)	[ ]	[X]

96. Keeping the overall impacts of the project in mind and in particular the issues associated with the civil works of N-M road, the NITTFP has been categorized as a category 'A' project. OP 4.01 has been triggered to ensure that all major (like road) and minor (other trade-related infrastructure) investments are planned and designed to be environmentally sound by integrating appropriate principles and approaches into the overall decision making process. While the proposed Project interventions are not likely to cause significant conversion or damage to the Barandabhar Forest Corridor, OP 4.04 and OP 4.36 have been triggered as the forest corridor is a declared protected area and fulfills the definition of a critical natural habitat. In addition, other policies triggered include OP 4.10, 4.11 and 4.12.

H. Other Safeguards Policies Triggered *(if required)*

Annex 1: Results Framework and Monitoring

South Asia: Nepal-India Regional Trade and Transport Project

Project Development Objective

The proposed Project Development Objective is to decrease transport time and logistics costs for bilateral trade between Nepal and India and transit trade along the Kathmandu-Kolkata corridor for the benefit of traders by reducing key infrastructure bottlenecks in Nepal and by supporting the adoption of modern approaches to border management.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	YR5	YR6- End Target			
Time associated with meeting regulatory requirements for import, export and transit activities (days)	No	Days	14	14	14	12	9	8	7	Annual	DoC	PCO/MoCS
Border Crossing time at Raxaul-Birgunj border post.	No	Days	2.3	2.3	2.3	2.3	1.5	1.5	1.5	Semi-annual	Customized Corridor Monitoring System and survey data	NITDB
Total time between cargo offloading at Kolkata to arrive in Birgunj by road and rail, and Birgunj to Kathmandu for trucks	No	Days	Road: 10 Rail: 22	Road: 10 Rail: 22	Road: 10 Rail: 22	Road: 9.0 Rail: 20	Road: 9.0 Rail: 20	Road: 8.0 Rail: 17.6	Road: 8.0 Rail: 17.6	Semi-annual	Customized Corridor Monitoring System and survey data	NITDB

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	Cumulative Target Values						Frequency	Data Source/ Methodology	Responsibility for Data Collection
				YR1	YR2	YR3	YR4	YR5	YR6 - End Target			
Component 1: Modernize transport and transit arrangements between Nepal and India												
Percentage of transit goods cleared through electronic CTD	No	%	0	0	0	20	40	50	100	Semi-annual	Nepal Customs and Indian Customs	DoC
Component 2: Strengthen Trade-Related Institutional Capacity in Nepal												
Growth in Hit Rate for Trade Portal	No	%	0	0	0	Base Year	20	30	40	Semi-annual	Website statistics	MoCS (through TEPC)
Agencies Integrated into Single Window	No	#	0	0	0	2	3	4	5	Semi-annual	Project Implementation Progress and Supervision reports	DoC
Labs Developed or Improved and Operational	No	#	0	0	0	1	1	1	1	Semi-annual	Project Implementation Progress and Bank Site Supervision reports	MoCS
Component 3: Improve Trade-Related Infrastructure												
Km of Road Improved	Yes	Km	0	0	0	33	33	33	33	Semi-annual	Supervision Consultant and Bank Site Supervision reports	DoR
ICDs/CFSs Built or Improved	No	#	0	0	1	2	2	3	3	Semi-annual	Supervision Consultant and Bank Site Supervision reports	NITDB

Kathmandu-Raxaul-Birgunj-Kolkata Corridor Monitoring System

1. Designing an appropriate results framework and M&E system is an indispensable part of any project. The overall monitoring and evaluation will be the responsibility of the the PCO in MoCS. The NITDB will host the corridor monitoring system and coordinate data gathering and analysis for the system. The NITDB already collects but has not to any significant extent analyzed data it receives from the Corporation of India (CONCOR) and from Himalaya Terminals, the operator of the ICD at Birgunj, on trains carrying Nepali cargo. M&E capacity has been added in the project design.

2. The focus of the data system is on time, reliability and cost of moving a container between Kolkata and Kathmandu, and vice versa. Reliability will be measured as the variance of the time to accomplish each stage of movement. Data would be collected for six stages that cargo goes through: (i) dwell time at the port of Kolkata, (ii) transit through India, (iii) border crossing in India, (iv) border crossing in Nepal, (v) transit through Nepal and (vi) movement of empty container either from Birgunj or from Kathmandu to Kolkata. A twenty-foot container has been adopted as a representative traffic unit which can be monitored with consistency over time. An ability to track container movement using their identification numbers is at the center of the system that has been developed.

3. Most of the data required can be obtained from computerized sources (port, rail, customs). However, all data relating to cargo moved by road require field surveys. A customized methodology was used for survey data collection, in collaboration with Kathmandu University School of Management (KUSOM), with a regular and rigorous schedule for ongoing data collection, monitoring and evaluation. Partnership with KUSOM allows the training of university students in the skills of surveying, data collection, and M&E for Nepal as a whole. Some of these students will be working with NITDB on M&E on a rotating internship basis. The NTTFC will discuss semi-annual data and monitoring reports and propose actions for addressing identified problems. The World Bank Group supervision team will also monitor semi-annual data during supervision missions.

4. Data will be collected for a period of one week every six months, and two additional shorter periods in the first year.

Time

5. Time is one of the most important indicators of corridor performance. Both the total time it takes cargo to move from door to door and the time it takes to pass through the various components of a corridor are important. The total time is essentially the sum of the times for each component.

6. In this case we are interested in the measures of time and cost that provide detail on the distribution about the mean. In logistics, there are usually a range of services which offer different combinations of cost, time and reliability in order to meet the diversity of demand. Shippers of bulk cargoes and low value commodities are more concerned with minimizing cost than time, whereas the logistics of containerized cargoes and especially high value goods are more concerned with time and even more with

reliability. As a result, the range of indicator values is more important than the average and a production possibility frontier is more relevant than a range.

Reliability

7. The reliability of transport times and costs is probably more important to traders than the actual times and costs. The trader needs to be sure that the goods will arrive as expected, so even if the transit time is a few days longer he can allow for that in the production and delivery schedule, whereas uncertainties especially in the transit time require an allowance that is greater than the uncertainty.

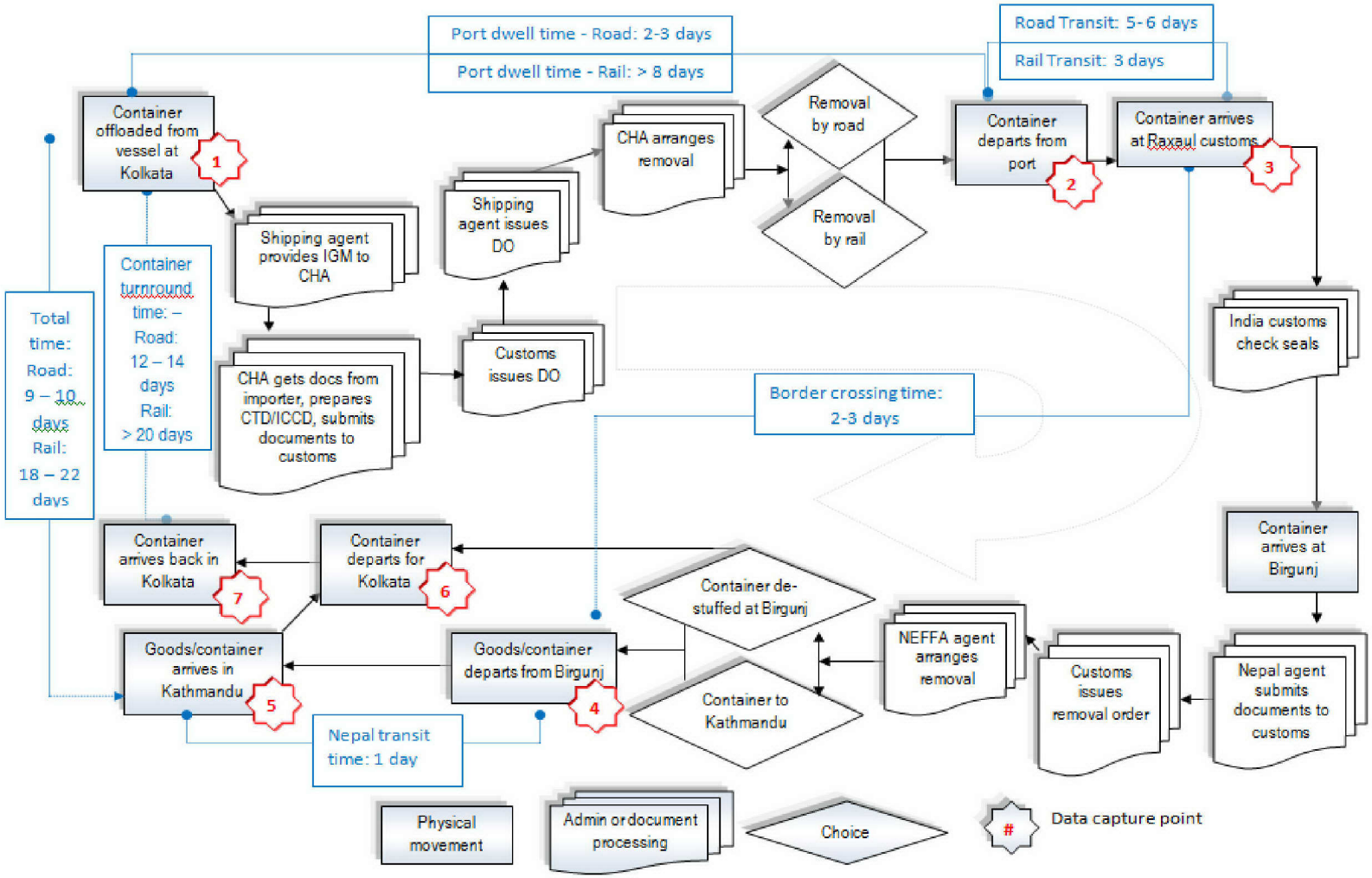
8. Not all traders have similar perceptions of the reliability of transit times and the way to deal with lack of certainty. For some, the important characteristic is the probability of the goods arriving at a certain point in the supply chain, so the perception is one based on probability. For others it is the cost associated with a certainty of arrival at the final destination at the required time, so for them the perception is one of cost. For use in monitoring the corridor performance we will use a measure that is generally understood by traders and forwarders and reflects the way they deal with uncertainty. For transit times we use the standard deviation.

Cost

9. The cost of transport to the shipper is more consistent than the time, and the way in which the size and frequency of shipments has been specified should be sufficient to remove much of the variation in cost. However, there remains the vexed question of payment for irregular charges at various stages of transport through the corridor. The level of concern about these payments on the land transport stages corridors has increased. On this corridor some estimates point to informal costs being as much as 10% of the transport price. For monitoring purposes, any informal payments are almost certainly covered in the amount that transporters and freight forwarders charge to their clients in the tariffs, since neither transporters nor forwarders are likely to end up as the final payers of informal charges. Unfortunately the reflection of the charges in the tariff is likely to be higher than the actual informal costs incurred as the transports and forwarders will add in an allowance to ensure that they are not out-of-pocket. The cost that we are interested in for monitoring is the cost actually paid by the trader, so the tariff or charge that they pay to the transporter and/or forwarder – including any allowance to cover informal charges – is the appropriate one.

ANNEX 1B: DATA TYPES, SOURCES AND BASELINE VALUES (ALL VALUES MEASURED FOR 20' CONTAINER)

NEPAL – INDIA TRADE AND TRANSPORT FACILITATION PROJECT
PROCESS MAPPING AND M&E PRIMARY DATA COLLECTION POINTS



Annex 2: Detailed Project Description

South Asia: Nepal-India Regional Trade and Transport Project

The project will finance three components that address the key factors that impede efficient transit of goods traded between Nepal and India including third-country trade.

Component A: Modernize transport and transit arrangements between Nepal and India (US$9m: US$2m IFC, US$7m IDA): The objective of this component is to improve the efficiency of the systems used to manage and control the movement of bilateral trade between Nepal and India, and Nepal's third country trade transiting through India.. The component will provide technical assistance through international experts who will provide global knowledge and best practices, help update bilateral and regional treaties, provide on-demand capacity and technical support, and provide change management support. Although some flexibility needs to be accommodated in this component for evolving agreements and treaties that may lead to changes in demand for the type of support that will be needed, the key activities envisioned for support include:

(1) Introducing a modern and effective transit regime including technical assistance in enhancing the capacity to negotiate trade and transit treaties;

(2) Supporting Customs authorities in both countries to simplify and harmonize customs and border management processes and systems, especially to provide for electronic interchange of data. Currently, the Customs Transit Document (CTD) is sent manually between Kolkata and Birgunj, taking too long and resulting in CTD arrival after the goods, which means goods have to wait for the CTD before completing clearance. Implementing EDI to among other things, automate the CTD, will support efficient communication and clearance of trade between the two countries. Bilateral and regional fora will be organized, and technical experts will be provided to both countries to conduct assessments and draft agreements as necessary.

(3) Providing capacity support to the road transport regulatory authority in Nepal within the Department of Transport Management to strengthen and modernize the regulation of international trucking services. Current policies will be reviewed, assessed and recommendations for reform as well as enforcement will be made and support provided for implementation. Key issues of focus include axle load control, road safety from a transport management perspective, and the organization/structure of the trucking services industry and its impact on transport prices.

Component B: Strengthen Trade-Related Institutional Capacity in Nepal (US$23m):

(1) **Trade Portal and Single Window System Development** (US$17.35m): Conscious of the long delays and high trade and transport costs faced by Nepalese traders, the GoN has recognized the need to improve its border management performance and is working to streamline and improve systems and procedures. To date the GoN has already invested in the partial automation of the Department of Customs (DoC or Customs) which now

operates the ASYCUDA++ system for declaration processing at its major border posts. The DoC has also started to apply risk management principles and no longer undertakes time-consuming and costly physical inspections on all consignments. The current inspection rate is 60 percent which is still high by international standards. However, while the principal responsibility for the processing and clearance of goods rests with Customs, there are over twenty other government agencies that also play a significant role in the import, export and transit process.[9] Current procedures dictate that these agencies complete their regulatory responsibilities before a customs declaration is lodged with the Department of Customs. Such an approach is not in keeping with accepted international practice. Recent World Bank research suggests that clearance times in most countries are largely determined by the performance of the weakest link in the border processing chain and that Customs authorities are rarely responsible for more than one-third of clearance delays. Such a conclusion highlights the need to expand the reform and modernization agenda beyond the traditional agenda of customs automation to a much more comprehensive "whole of border" reform approach that supports effective cooperation and information sharing among all border management agencies.

The project will therefore finance the development and implementation of two key ICT systems for trade promotion, and related business process improvements designed to support effective collaboration among government agencies. Once implemented, the systems are expected to significantly improve transparency and integrity, lower trade transaction costs, and reduce the time taken to clear goods. While the project will finance the development and implementation of both systems in parallel, activities will be phased so as to prioritize delivery of the TIP in order to provide the trading community with a visible series of meaningful benefits while progressively building the strong inter-agency collaboration and private public sector cooperation that will be essential to developing the more ambitious NSW.

(a) **Nepal Trade Information Portal** (US$ 1.25m). This sub-component will support the development and implementation of the Nepal Trade Information Portal. The system will provide a user-friendly website where comprehensive and up-to-date information on all tariff and non-tariff measures applied at the time of import, export or transit is readily accessible to traders and centralized in one website. Information will include all relevant rules, regulations, procedures and fee schedules. The system will also provide additional features such as the capacity to search rulings on tariff classification and valuation, trade agreements, downloading of relevant forms for permits and licenses, a capacity for traders to comment on pending regulatory changes, and performance metrics. The Project will finance a firm-level consultancy contract to develop and implement the Nepal Trade Portal building on the preliminary

[9] The most important of these are: Ministry of Agriculture and Cooperatives (Department of Food Technology and Quality Control, Department of Agriculture, Department of Livestock); Ministry of Health and Population (Department of Drug Administration); Ministry of Commerce and Supplies (Department of Commerce and Supply Management, Nepal Intermodal Transport Development Board, Nepal Transit and Warehousing Company Ltd, and Trade and Export Promotion Center); Ministry of Foreign Affairs (Consulate Office, Kolkata); Ministry of Industry (Department of Cottage and Small Industries, Department of Industry, Bureau of Standards and Metrology); Ministry of Physical Infrastructure and Transport (Department of Transport Management, Department of Roads); Ministry of Forests and Soil Conservation; Ministry of Law and Justice; Ministry of Tourism and Civil Aviation; Nepal Rastra Bank (Department of Foreign Exchange Management).

data collection and functional specification work undertaken under the NLTA program. The project will also finance the establishment of sustainable support and maintenance mechanisms including the recruitment of two local consultants; one an ICT specialist who will act as the system webmaster and the second who will act as content management coordinator. In addition, the component will finance hardware costs and any software licenses that may be required.

(b) **Nepal Single Window System** (US$14.4m). This sub-component will support the design and implementation of the Nepal Single Window system (NSW). Once implemented, the system will allow traders to submit and process all required import, export and transit documentation electronically via a single gateway instead of submitting essentially the same information numerous times to different government entities some that are automated and others that still rely on paper-based documentation. The system will be designed to interface with existing Customs systems such as the ASYCUDA++ system and is not expected to replace any satisfactorily functioning legacy systems in participating agencies. Likewise, where participating agencies do not have automated back office systems, the Single Window will provide a basic automated workflow engine allowing all key agencies to participate fully in the initiative without the need for extensive automation of existing processing systems. The system will also provide a sound basis for the rationalization and simplification of regulatory requirements within and between participating agencies and will significantly enhance the operational effectiveness of non-Customs agencies. For example, the NSW will enable participating agencies to take advantage of automated risk management and selectivity features that will accelerate the adoption of modern risk-based approaches to regulatory compliance.

A significant amount of preparatory work for the component has already been undertaken under the Bank-managed NLTA program. This work included an assessment of the legal and regulatory framework, preparation of options for the most effective governance and operational models, preparation of the technical and functional architecture for the NSW, as well as preliminary work on business process simplification and data harmonization. Significant work has also been undertaken in developing the strategy and planning for change management and communication as well as capacity building for officials and the trading community.

The system financed by the project will draw on the lessons learned from successful Single Window systems elsewhere, particularly those where the Bank has been providing advice and support, including Indonesia and the Philippines that have adopted a similar "whole of border management" approach. Implementation of the system is a major undertaking for all public and private sector stakeholders and will therefore require significant time and resources. In the first phase of implementation, the system will connect the key agencies responsible for approximately 80 percent of trade transactions. In later phases of the project all relevant agencies will be connected.

The component will finance a major firm-level contract to finalize the design and implement the NSW. The contractor will be expected to build on the preparatory work undertaken during the NLTA program. In addition to implementation of the NSW the contractor will support a range of activities designed to enhance the long-term operation and sustainability of the system. These include: work on the revenue and fee model (in compliance with WTO rules); development of risk management capabilities in non-customs agencies; preparation of service level agreements between participating agencies; support for the establishment of the operating entity and governance mechanisms and change management and communication support for stakeholders (including training of users). The component will also finance hardware requirements and any required software licenses for the lead agency and all participating agencies.

Once implemented, the NSW and related systems will be responsible for processing all import, export and transit consignments, and the participating agencies and trading community will become heavily dependent on the system. As such, system reliability and availability will become an important issue with any system downtime resulting in delays and additional costs for traders. In keeping with established good ICT practice, a fully functioning and well-equipped Disaster Recovery Center will be established at a separate location from the operational headquarters of the Department of Customs. Such a center will ensure business continuity and adequate data back-up in the event of a natural disaster or unforeseen event that might take the production server and related hardware out of operation. The sub-component will therefore finance the fit-out of an appropriate remote site, the procurement of required generators (for the site and operational locations) and uninterrupted power supply equipment as well as back up servers with sufficient capacity to maintain business continuity. In addition, in order to adequately monitor network performance the sub-component will also finance the procurement of appropriate ICT infrastructure monitoring tools.

ICT Capability Enhancement for Nepal Department of Customs (US$1.7m). While the Department of Customs in Nepal has successfully implemented the ASYCUDA ++ system and is the most ICT-capable of the participating NSW agencies, its capacity to effectively manage and maintain the extensive ICT infrastructure and network needed for the NSW needs to be significantly strengthened. The component will also finance the building of a strong in-house capacity to effectively manage current and future ICT systems and related infrastructure. In order to build this capability to strategically manage all the expected ICT investments and ensure a reliable and stable operational environment, significant support will be required. The component will finance capacity building activities for an initial period of one year followed by periodic visits in the following years. The focus will be to establish a strong and effective in-house ICT capability and instill in personnel the appropriate professional disciplines necessary to support the long term operation and strategic management of all the related ICT investments. Activities will include training and mentoring to key personnel. The sub-component

may also finance local ICT specialists for the duration of the project as well as the establishment of a robust help-desk facility.

(2) **Improvement of Trade-Related Laboratories** (US$3m) (including for Customs and SPS testing including food, plant, and animal quarantine): i) Provide capacity and change management support to agencies and stakeholders involved in testing and certification to agree to simplify and harmonize their procedures within Nepal, and to facilitate the upgrading of standards and mutual recognition of certification. If co-located multi-functional laboratories are deemed necessary to facilitate the clearance process, a work plan with the input and agreement of stakeholders will be drafted which will include a governance plan, HRD plan, and operational procedures. The agencies and stakeholders involved in this initiative/working group include the Ministry of Commerce and Supplies, Department of Customs, Department of Agriculture, Department of Livestock Services, Department of Food Technology and Quality Control, and the Chamber of Commerce. (ii) Finance the provision of equipment, IT systems and connectivity, technical assistance, staffing and human resources capacity development, and change management support to improve existing laboratories for international accreditation or pilot one or two new multi-functional, joint analysis laboratories at locations to be determined by stakeholders.

(3) **Institutional strengthening for Interagency Coordination including financing of Project Coordination Office (PCO)** (US$2.65m): Coordinating the multiple trade-related agencies in any country is a complex resource intensive task, and Nepal currently does not have sufficient capacity. As such, the focus of this sub-component will be on strengthening the Nepal National Trade and Transport Facilitation Committee and the capacity of MoCS to coordinate the trade-related agencies. Since the PCO is established within MoCS, its capacity will be strengthened to coordinate the implementation of the different activities and components of the project. Technical advisors will be hired for every sub-project, as well as skills for procurement, financial management, environmental and social safeguards, and M&E.

Component C: Improve Select Trade-Related Infrastructure (US$69m)

(1) Expand and upgrade the Narayanghat-Mugling road section and conduct studies and implement axle load control and road safety measures for improvement of entire Birgunj-Kathmandu Corridor (US$48m): The 276 km stretch of road along the Corridor from Birgunj to Kathmandu, which forms part of the SAARC Regional Road Network (SAARC Road Corridor 2), is the most important trade route in Nepal for Nepalese and Indian international trade. Yet, sections of this road, including the 33km between Narayanghat and Mugling and the 50km Birgunj-ICD-Pathlaiya-Ratomate-Hetauda bypass section, are too narrow to accommodate existing and projected traffic flows, and in the case of the Narayanghat-Mugling section, is in poor condition posing safety risks to users and local inhabitants. This road section also experiences the heaviest traffic load carrying 90 percent of Nepal's international trade traffic (about 6000 vehicles per day). Moreover, once construction of the ICPs is completed, more traffic is expected

to pass through the Raxaul-Birgunj border post at a faster rate, causing even greater congestion than at present. The proposed Project will upgrade and expand the Narayanghat-Mugling road section to Asian Highway Standard and address road safety, axle load control and environmental sustainability issues along the trade Corridor. Since the improvement of border post infrastructure is expected to increase traffic along the entire Corridor from Birgunj to Kathmandu, the Project will also finance studies for the environmental sustainability and improvement of the Corridor.

(2) **Build a CFS or ICD in Kathmandu** (US$15.5m). Currently there are no parking or warehouse facilities available for trucks carrying international goods trade from or to Kathmandu, placing significant burdens on traders, freight forwarders, transporters/truckers, and increasing further the time and cost of transport. With heavy traffic congestion in and around Kathmandu, truckers have nowhere to park to off-load imported goods or load goods for export which increases the costs for transporters and traders, and has a negative impact on public safety and the environment. To facilitate the loading and distribution of goods in the Kathmandu Valley, a CFS or ICD will be built in the Kathmandu Valley. The CFS will contain a parking lot and warehousing facility, and possibly Customs clearance which would make the facility an ICD. Government will acquire the required land. Five possible sites were reviewed with ease of land acquisition and minimal environmental and social impact being among the key criteria.

(3) **Improve the infrastructure at Birgunj and Bhairahawa ICDs** (US$5.5m). Improvements are needed at these two key ICDs to facilitate further trade and to improve the efficiency of current trade. At the Birgunj ICD, the existing warehouse shed covers just more than half the length of a train. During the rainy season, the remaining goods are exposed to the elements and perishables goods would rot or suffer damage. There is also insufficient space for the loading and unloading of existing and anticipated future goods trade, which prolongs the queue/idle time and clearance/border crossing time. Disabling of a set of unused tracks by paving the spaces in between to make a flush platform would create additional space for loading and unloading of Nepal's international goods trade which would also speed up these processes. The new extra space is especially needed for edible oils. At the Bhairahawa ICD, heavy rains and usage have caused severe damage to the ICD pavement including the access road and parking lot. Resurfacing is needed to restore the ICD to a useable state. A maintenance plan will also be prepared to prevent such damage in the future.

Table 2.1. Project Estimated Costs

Component	Cost (millions)
Component A: Modernize transport and transit arrangements between Nepal and India	US$ 9.0 m
1. Introducing a modern and effective transit regime including technical assistance in enhancing the capacity to negotiate trade and transit treaties.	US$ 4.5 m
2. Supporting Customs authorities in both countries to simplify and harmonize customs and border management processes and systems, especially to provide for electronic interchange of data.	US$ 2.0 m, IFC parallel co-financing and IFC-managed
3. Providing capacity support to the road transport regulatory authority in Nepal within the Department of Transport Management to strengthen and modernize the regulation of international trucking services.	US$ 1.5 m
Unallocated	US$ 1.0 m
Component B: Strengthen Trade-Related Institutional Capacity in Nepal	US$ 23.0 m
1. Trade Portal and Single Window System Development	US$ 17.35 m
a. Nepal Trade Information Portal	US$ 1.25 m
b. Nepal Single Window System	US$ 14.4 m
c. ICT Capability Enhancement for Nepal Department of Customs	US$ 1.7 m
2. Improvement of Trade-related Laboratories	US$ 3.0 m
3. Institutional strengthening for Interagency Coordination including financing of Project Coordination Office (PCO)	US$ 2.65 m
Component C: Improve Select Trade-Related Infrastructure	US$ 69.0 m
1. Expand and upgrade the Narayanghat-Mugling road section and conduct studies and implement axle load control and road safety measures for improvement of entire Birgunj-Kathmandu Corridor	US$ 48.0 m
a. Works for Narayanghat-Mugling Road	US$ 37.4 m
b. Supervision Consultant	US$ 1.0 m
c. Social and Environmental Expert	US$ .032 m
d. Supervision Vehicles (3 pickups)	US$ .200 m
e. Refurbishment of regional office building at Narayanghat	US$ .100 m
f. Training	US$ .100m
g. Future Project Preparation and Implementation including road safety audit and selected road safety works along Birgunj-Kathmandu Corridor	US$ 7.0 m
h. Contingency	US$ 2.2 m
2. Build a CFS or ICD in Kathmandu	US$ 15.5 m
3. Improve the infrastructure at Birgunj and Bhairahawa ICDs	US$ 5.5 m
a. Extension of Storage Shed at Birgunj ICD	US$ 1.6 m
b. Railway Tracks Modification at Birgunj ICD	US$ 1.1 m
c. Pavement work at Bhairahawa ICD	US$ 1.6 m
d. Supervision Consultants and TA	US$ .4 m
e. Monitoring System for NITDB	US$ .3 m
f. Contingency	US$ .5 m

Annex 3: Implementation Arrangements

South Asia: Nepal-India Regional Trade and Transport Project

Project Institutional and Implementation Arrangements

1. As agreed through consultation with all the implementation agencies and with the National Trade and Transport Facilitation Committee, the Project's activities will be implemented by three different government ministries. The Department of Roads, MoPIT will oversee the implementation of the Narayanghat-Mugling road segment and Department of Transport Management, MoPIT will oversee the implementation transport management measures including for road safety and axle load control measures; The Department of Customs, MoF, will manage the development of the Single Window System; and MoCS will implement the Trade-Related Laboratories, the Trade Portal, and the ICDs (by NITDB within MoCS).

2. The Ministry of Commerce and Supplies will be the coordinating ministry for this Project. As such, a Project Coordination Office (PCO) will be established within MoCS to serve as the coordinating implementation agency. The PCO in MoCS will be responsible for the monitoring and evaluation for the entire Project. NITDB will be responsible for the Kolkata-Kathmandu Corridor monitoring system. NITDB is considered the most suitable for this role as it currently monitors all logistics related infrastructure in Nepal. The PCO, which will be headed by the Joint Secretary, MoCS, will be responsible for the day-to-day implementation of the Project and for coordinating the relevant implementing ministries/agencies. It is envisaged that Government will make the following appointments to staff the PCO: the Joint-Secretary of MoCS as Project Director, a full-time Project Coordinator at Under-Secretary level, and Finance Specialist. The PCO will also obtain skills in procurement, financial management, monitoring and evaluation, and environmental and social safeguards.

3. In addition, the sub-projects will need to be assigned their own Project Coordinator. Project Coordinators need to be appointed for the respective implementation of (i) Narayanghat-Mugling Road (DoR); (ii) DoTM capacity development, axle load control and transport management measures including for road safety (DoTM); (iii) Single Window system (DoC); (iv) Trade Portal (MoCS); (v) trade-related laboratories (MoCS); and, (vi) ICDs (NITDB, MoCS). It is expected that staff from the Trade and Export Promotion Center (TEPC, within MoCS) will be deputized to be the Project Coordinator for the Trade Portal. Successful implementation of the Project will require strengthening of the implementation capacity of the PCO. The Project will therefore provide technical support to strengthen the core functions of the PCO, including but not limited to financial management, procurement, environmental and social safeguards, and technical areas of sub-projects. The M&E capacity of the PCO in MoCS and NITDB which will work closely with the PCO will also be strengthened.

4. Key multi-agency technical committees have also been established to oversee the implementation of the Single Window, Trade Portal and trade-related laboratories.

Financial Management, Disbursements and Procurement

5. *Country Financial Management Environment.* The Nepal Country Financial Accountability Assessment (CFAA) that was conducted jointly by the Government of Nepal and IDA in 2002 and subsequently updated in 2005, concluded that the failure to comply with the impressive legal and regulatory fiduciary framework makes the fiduciary risk in Nepal "High", but the risk is similar to that in most developing countries. The situation has not significantly changed. The Public Financial Management (PFM) Review (May 2007) has reaffirmed that the PFM system in Nepal is well designed but unevenly implemented. The PFM benchmarks established in 2008 based on the Public Expenditure and Financial Accountability (PEFA) framework led by the government with technical assistance of the World Bank have endorsed the continuing "high" fiduciary risk with several PFM indicators rated at low scale. Joint DFID and World Bank progress review carried out in September 2008 and later in February 2009 have revealed little progress on implementation of PEFA Action Plan. Some of the prevailing country level risks include deteriorating control environment, insufficient monitoring, increasing threat of collusion and intimidation to bidders, weakening oversight agencies with the absence of institutional leaders which include the Auditor General and the Chief Commissioner of the CIAA have a wider impact on the country's accountability environment including at the sectoral or project level. While these challenges prevail, improving overall financial accountability framework remains a high priority of every government in transition. Frequent transition of political leadership in the government has been the main cause of slow movements in accelerating PFM reforms as envisaged by PEFA Action Plan. Some of the actions undertaken during challenging transition period such as, promulgation of the Public Procurement Act and Public Procurement Regulations in 2007, amendment of the Financial Administration Regulations in 2007, and the self-assessment of various PFM Indicators as per PEFA Guidelines in 2007 are some examples of government's continued commitments. Implementation of these frameworks through an integrated PFM reform package through a set of mutually supportive actions that are realistic and can generate positive impacts is critical to mitigate fiduciary risks. Such a package has been reflected in the PFM Strategy Document prepared by the government. A high level steering committee chaired by the Finance Secretary provides necessary forum for close monitoring on implementation with continuation of collaborative support from development partners.

6. *Risk Analysis.* The proposed Nepal-India Regional Trade and Transport Project is a multi-sectoral project with the engagement of a number of trade-related institutions to support the implementation of the Nepal Trade Integration Strategy which prioritizes the need to facilitate trade and improve the country's export competitiveness. Key objectives include strengthening the capacity of the country's trade-related institutions, strengthening export industries that promote economic inclusion, and strengthening the Government's capacity to implement the NTIS, coordinate trade-related institutions and technical assistance. The key institutions that will be engaged in the proposed project are the Ministry of Commerce and Supplies (MoCS), the Department of Customs (DoC) under the Ministry of Finance and the Department of Roads (DoR) and the Department of Transport Management (DoTM) under the Ministry of Physical Infrastructure and Transport (MoPIT). For successful implementation of the project, there is a need for strong coordination and collaboration amongst all participating agencies. Given the multi-sector nature of the project which requires specialized focus with rapid response approach, it is important to ensure that the proposed governance arrangement for

the implementation of the project is put in place as quickly as possible. From the financial management perspective, the overall risk is "High" and the residual risk after mitigating measures is "Substantial".

7. The proposed high level Steering Committee (NTTFC) chaired by the Secretary, MoCS will have a key oversight role to ensure smooth implementation of the project. In addition, a dedicated Project Coordination Office at MoCS will comprise of a Project Director, Project Coordinator, Technical Specialists, Finance Specialist, Procurement Specialist, Accountant and Administrative Assistant. The PCO will be responsible for overall coordination and monitoring of project activities. Each of the sub-projects will have their own project management arrangements with a dedicated Project Manager, Finance Officer and other technical experts. In order to simplify the design of this multi-sectoral intervention, implementing agencies would be grouped according to the line of command arrangements in the system. The PCO under the MoCS will coordinate with all other agencies under the MoCS which include the Nepal Intermodal Transport Development Board Secretariat (NITDB) and Trade and Export Promotion Center (TEPC), and the Department of Customs (DoC) which is under the Ministry of Finance. On the other hand, DoR will coordinate with DoTM since both these Departments are under the same Ministry. From line of command and authorization viewpoint, the Secretary of the MOCS will delegate authority to the Project Director of the PCO, who will further delegate to the concerned implementing agencies (including the Department of Customs) to implement the program. Similarly, the Secretary of MoPIT will delegate the authority to the DOR and DoTM for program execution.

8. From the programming perspective, implementing agencies under the MoCS including the DoC will prepare their work program and budget and submit to the Project Director of the PCO who will then consolidate into one work program to be reflected under a dedicated budget head. On the other hand, DoTM will provide its work program and budget to DoR which will coordinate into one work program and be reflected in another dedicated budget head. Two budget heads are, therefore, proposed under the Project. In terms of reporting, the PCO and the DoR will be responsible to prepare a consolidated report and financial statements. The PCO being an overall coordinator of the Project will be kept informed of all activities by the DoR. Budget requests will be prepared and submitted by MoCS and MoPIT starting from Fiscal Year 2013-14. The Project Operations Manual will be prepared which will define the roles and responsibilities of each implementing agencies and the PCO, and operational modality and fund flow arrangements, which will need to be reviewed and endorsed by the Steering Committee. This will be the basis for effective implementation of this project. There will also be strong efforts in capacity building both in technical areas as well as overall project management which include procurement and financial management. To address the gaps that have been identified during the assessment, risk mitigation Action Plans have been agreed, and the risks will be reduced as the action plans get implemented.

PLANNING AND BUDGETING

9. The proposed operation will follow the government financial management procedures. The budgeting procedures for preparation, approval, implementation, and monitoring are elaborated in the Financial Procedure Regulations (FPR). The annual work program and budget will be based upon the work program to be prepared by MoCS and MoPIT which will be endorsed by the Project Steering Committee. Annual work programs and budgets are submitted to the National Planning Commission (NPC) and MOF for discussion. Two separate budget lines will need to be created in the 'Appropriation Book' (Red Book) for FY2013/14 – for the PCO under MoCS and for the DOR.

10. MoF will release authorization for expenditures to the Secretaries of MoCS and MoPIT. The Secretaries of MoCS and MoPIT will further delegate the authorization for expenditure to the Project Director of the PCO under MoCS and to DoR/DoTM respectively. The PCO Project Director will delegate authority to the respective implementing agencies including the Department of Customs.

11. *Funds Flow Arrangements.* GoN will release the budget as per the approved work program to MoCS and MoPIT in three tranches as per its fund release procedures. The budget approved by GoN will be indicated in the government's budget (Red Book). Prior to the approval of the work program and budget, one-third release of the previous year expenditures or projected expenditures for the first trimester, whichever is lower, will be made to the MoCS and MoPIT through the respective DTCOs. Fund release for procurement of goods and consultants can be made directly from the Designated Accounts which will be maintained by the PCO and DoR. Fund release for IDA's share of other expenditures which include civil works, small value goods/consultants and incremental operating costs will be pre-financed through GoN's consolidated fund.

12. Upon approval of the work program and budget, appropriate adjustments will be made against the advance for the first trimester release. Subsequent second and third trimester releases are based on performance reflected by the physical progress reports as required by Schedule 2 of the FPR.

13. For reimbursement of IDA's share of expenditures to GoN's consolidated fund, two Designated Accounts will be established in US Dollars at NRB to facilitate quick payments of various activities under the project including reimbursement under terms and conditions acceptable to IDA. The Designated Accounts will be managed by the PCO and DoR respectively.

14. *Project Financial Accounting, Reporting and Internal Controls.* In order to ensure that project financial statements are consolidated, all implementing agencies including the PCO will ensure that separate books of accounts are maintained for the project and that accounts are prepared on a cash basis. Accounting information will be regularly updated to generate timely financial reports. As required by the government system, the coordinating agencies, the PCO and the DoR will maintain required ledgers which include the Withdrawal Monitoring Register, Credit/Grant Register and Designated Accounts Ledger. GoN's internal control system will be applied to monitor the progress of the project in accordance with sound accounting practices.

The accounting systems contain the following features: (i) application of consistent cash accounting principles for documenting, recording, and reporting its financial transactions; (ii) a well-defined chart of accounts that allows meaningful summarization of financial transactions for financial reporting purposes; (iii) maintenance of withdrawal monitoring register, Credit/Grant Registers, the record of SOEs and Designated Accounts Ledger; (iv) the asset register; (v) monthly closing and reconciliation of accounts and statements; and (vi) the production of annual financial statements. Internal audits will be carried out through the government system.

15. The PCO of MoCS and the DoR will be accountable to prepare trimesterly Implementation Progress Report (IPR) and project financial statements with consolidation of financial information from all cost centers. The project IPR will be prepared from the outset, showing the sources and uses of funds, output monitoring report, procurement management report, and narrative progress report in format to be agreed upon. To match the public sector planning and reporting cycle, the IPR will be produced on a trimesterly basis and submitted within 45 days from the end of the preceding trimester.

16. *Financial Management Staffing.* Accounts will be maintained by the finance staff of each implementing unit. The PCO of MoCS will need to confirm a dedicated team of staff which include the Project Director, a full-time Project Coordinator, one Procurement Specialist (consultant), one Finance Specialist supported by a team of Assistants and a computer operator. After the project is approved, positions will be created for the Finance Officer and Finance Assistant. In the interim, the MoCS will assign one of its finance staff to oversee this project. Qualified staff having computer experience will be deployed to the Project. As the program activities expand, a Finance Consultant will be recruited from the market to support the Finance team and the Project. In DoR, the existing structure of the Foreign Cooperation Division which is managing the Road Sector Development Project will also manage this Project. There is no need to add any staff for the purpose of this project.

17. *Implementation Progress Reports (IPRs).* The PCO under the MoCS and the DoR will separately submit trimesterly Implementation Progress Reports which include financial monitoring reports (FMRs) and the procurement management reports. DoR already has experience preparing such reports under the ongoing RSDP project. Project implementation progress reports will be produced as soon as the project is effective showing the sources and uses of funds, output monitoring report, procurement management report and narrative progress report in format to be agreed upon during negotiations. To match the public sector planning and reporting cycle, the IPR will be produced on a trimesterly basis and submitted within 45 days from the end of the preceding trimester.

18. *External Audit.*[10] The following is the audit[11] requirements under the Project:

[10] Also referred to as Final Audit in Nepal.

[11] The standard Terms of reference applicable for the projects will be discussed and agreed with OAG.

Annual consolidated project financial statements, SOE Statement and Designated Accounts statements will be audited by OAG, which is considered acceptable by IDA for this purpose, and submitted to IDA within six months after the end of the fiscal year – January 15.

19. The following audit reports would be monitored in the Audit Report Compliance system (ARCS):

Table 3.1. Audit Reports

Implementing Agency	Audit	Auditors	Audit Due Date
PCO	Project Consolidated Financial Statement	OAG	6 months after the end of fiscal year (January 15th)
DoR	Project Consolidated Financial Statement	OAG	6 months after the end of fiscal year (January 15th)

20. *Financial Management Action Plan.* The Action Plan to strengthen the financial management capacity of the Project were agreed between the Recipient and IDA and are summarized below:

Table 3.2. Financial Management Action Plan

Action	Responsibility	Completion Date
1. Submit Annual Work Program and Budget for FY2013/14 to include this Project in the "Red Book", and request MOF to assign separate budget codes for the project, one for the PCO and the other for the DOR.	MoCS DoR MoF	July 15, 2013
2. Prepare and finalize the Project Operational Manual.	MoCS	July 15, 2013
3. Depute a dedicated Finance Officer and a Finance Assistant at the PCO.	MoCS	July 15, 2013
4. Develop and agree on the formats for Implementation Progress Reports.	PCO DoR IDA	Prior to Negotiations

21. *Supervision Plan.* Project implementation progress will be closely monitored by the PCO, DoR and IDA. The Project Steering Committee chaired by the MoCS Secretary will have an oversight of project implementation for the purposes of supervision on fiduciary aspects of both procurement and financial management. The PCO and the DoR will report on project implementation progress through a trimester report, the IPR. The agreed action plan will be closely monitored to ensure appropriate actions are being implemented. Key FM fiduciary work includes: (i) periodic visits to cost centers for *ex-post* reviews, (ii) reviews of implementation progress report and audit report and preparing summaries of such reports; and (c) participating in supervision missions and keeping the team informed of financial management issues or improvements. The initial supervision focus will be on the progress of implementation of agreed actions, and facilitating both agencies in maintaining sound Financial Management arrangements throughout project implementation.

Disbursement

22. *Allocation of credit/grant proceeds.* Total project costs are estimated at US$101 million, which include US$2.0 million contribution from IFC as parallel financing. The total IDA funding is estimated US$99 million of which the Bank's Regional IDA envelope for the South Asia Region will contribute US$59.3 million, and the IDA funding for Nepal will contribute US$39.7 million. The implementation period is 6 years.

23. Disbursement under the proposed Project will be made as indicated in Table 3.3. GoN will finance salaries for civil servants assigned to the Project. Incremental operating costs will be financed for the PCO in MoCS. IDA financing will be inclusive of taxes.

Table 3.3. Allocation of Credit Proceeds

Category	Amount of the Credit Allocated (expressed in SDR)	Amount of the Grant Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, and consultants' services, including Training and Workshops for Part A of the Project		4,600,000	100%
(2) Goods, works, non-consulting services, and consultants' services, including Training and Workshops, and Incremental Operating Costs for Part B of the Project		15,300,000	100%
(3) Goods, works, non-consulting services, and consultants' services, including Training and Workshops: (a) for Parts C.1 of the Project (b) for Parts C.2 of the Project (c) for Part C.3 of the Project	 31,800,000 10,300,000 3,700,000		100%
TOTAL AMOUNT	45,800,000	19,900,000	

24. **Disbursement Arrangements.** Applicable disbursement methods include: Advance, Direct Payment, Reimbursement and Special Commitment. To facilitate disbursements, two Designated Accounts in US Dollars will be established – one to be managed by the PCO and the other to be managed by the DoR. Fund release for procurement of works, goods and consultants will be made directly from the Designated Accounts. For large value contracts, direct payment method for disbursements will be used. Small value contracts, goods of small values, training, workshops, incremental Operating Costs and Project management costs will first be pre-financed by the government, and once the accounts are consolidated and approved will be transferred from the Designated Accounts to the government's consolidated fund.

25. *Supporting documents for applications for requests for reimbursement and for reporting eligible expenditures paid from the DA include: (a)* List of payments against contracts that are subject to the Association's prior review and records evidencing eligible expenditures (e.g., copies of receipts, supplier invoices) for payments against contracts that are subject to the World Bank's prior review; (b) Statement of Expenditure(SOE) for all other expenditures/contracts; (c) Bank statement and a reconciliation of the Designated Accounts for application of advance and reporting eligible expenditures paid from the Designated Account. The requests for Direct Payment should be supported by records evidencing eligible expenditures, e.g., copies of supplier invoices.During the supervision, the mission will closely review SOE claims to ensure that funds are utilized for the intended purpose. Any ineligible expenditure identified during such reviews will need to be refunded to IDA.

26. *Designated Accounts.* Two Designated Accounts in US Dollars (one for the PCO and the other for the DoR) will be established at the Nepal Rastra Bank, on terms and conditions satisfactory to IDA. The authorized allocation for Designated Accounts will be US$ 3.0 million (PCO) and US$ 5.0 million (DoR). The Designated Accounts will be operated under the joint signature of the Project Director and the Finance Officer. The PCO and the DoR will ensure that the bank/cash books are reconciled with bank statements every month. They will separately submit replenishment applications for the Designated Accounts on a monthly basis, and replenishment applications will be accompanied by reconciled statements from the bank in which the accounts are maintained, showing all Designated Account transactions. Supporting documentation will be maintained by the respective cost centers for at least one fiscal year after the year in which the last disbursement from the credit took place, and will be available for review by IDA staff and independent auditors.

Procurement Risk Assessment (PRAMS) of PCO/MoCS

27. The following risks related to procurement activities by the PCO within MoCS have been identified.

Table 3.4. Risk and Mitigation Measure Summary

Risk Factor	Risk	Mitigation Measures
Risk Factor 1: *Accountability for Procurement*	Likely delay in making procurement decisions as the procurement process has to be initiated by	A Project Operations Manual (POM)including procurement section is prepared and made available to all the staffs of implementing agencies.

Decisions in the Implementing Agency or Agencies	different implementing agencies, pass through different advising units/ staff with limited procurement experience. Rating: **HIGH**	Ensure that the procurement decision making is fully covered in the Manual. The Manual should also mention the backup staff so that decision can be made without any delay in case of absence of the primary staff. Timeline agreed to be submitted to the Bank for review is May 31, 2013.
Risk Factor 2: *Internal Manuals and Clarity of the Procurement Process*	Staffs have inadequate practical or hands-on guidance/ experience on the procurement process. Rating: **Substantial**	Enforce the POM as prepared for the risk factor-1 above to facilitate procurement process and decision making.
Risk Factor 3: *Record Keeping & Document Management Systems*	Procurement documentation may be difficult to manage because of many implementing agencies. Rating: **Moderate**	• Original bills/invoices and vouchers to be kept by Account/ FM section of each implementing agency (IA), • Copies of these documents and all other original procurement documents (procurement plan, estimate, notice, bid doc, bid evaluation reports, decision files, contracts, etc.) to be kept by procurement initiating unit of the IA.
Risk Factor 4: *Staffing*	Likelihood of delay or Improper implementation of procurement activities, implementation delays and inadequate quality of contract deliverables due to involvement of various staff with inadequate procurement experience in procurement management. Rating: **High**	• Deploy immediately (during project design phase) a dedicated procurement advisor/ consultant as an expert and extended hand of the PCO to provide support in preparing bid/RFP documents, bid/proposal evaluation reports, contract documents, etc. • Need for deployment of such procurement advisor/ consultant is high to start capacity building of the concerned PCO/ IA staff. • Considering the procurement of sophisticated goods including lab equipment, PCO has to take services of some specialized consultants for technical support including specification writing. • Procurement training for the project related staff to be involved in or associated with procurement management. Phase-wise training program should be reflected in the procurement plan. • Considering the large number of implementing agencies involved in the Project and volume of procurement work, engagement of a procurement consultant in addition to the one deployed during project design phase is recommended.
Risk Factor 5: *Procurement Planning*	Less competition or delay in procurement processing due to lack of proper market survey, planning or preparation of detailed procurement plan with proper slicing and packaging arrangement	• Preparation of a master procurement plan for the project covering the entire project period. This is a list of procurement activities with year of procurement initiation/ implementation. • Preparation of a detailed and consolidated

	and selection of appropriate procurement method. Rating: **High**	procurement plan for the first 18 months of the project covering all the implementing agencies. • The timeline for submitting the procurement plan for the first 18 months to the Bank for review is May 17, 2013.
Risk Factor 6: *Bidding documents,(pre-qualification, short listing, and evaluation criteria)*	Less or unbalanced competition, chances of rebidding due to improper qualification and evaluation criteria, technical specifications, contract conditions. Rating: **High**	• Ensure that appropriate standard bidding documents or request for proposals are adopted, • Ensure that qualification and evaluation criteria and specifications are set based on adequate market study on potential bidders/ suppliers/ consultants/ service providers and goods available in the market. • Take support of procurement consultant and specialized technical experts/consultants to prepare bidding/RFP documents, technical specifications and bid/proposal evaluation reports.
Risk Factor 7: *Advertisement, Pre-bid/proposal Conference and Bid/Proposal Submission*	Reduced competition due to unclear criteria or unattractive slicing and packaging. Rating: **Substantial**	Ensure conducting pre-bid or pre-proposal meetings for potential bidders/ consultants during bidding period for complex procurement activities.
Risk Factor 8: *Evaluation and Award of contract*	Difficulty in evaluation and/or delay in decision making due to inadequate or improper qualification and evaluation criteria and specifications and inadequate procurement experience, especially in case of complex procurement. Rating: **High**	• Discuss such criteria with bid evaluation committee (BEC) members while setting them during bidding document preparation, • Include related experts in the BEC, • Take support of procurement consultant, • Use standard templates for bid/ proposal evaluation.
Risk Factor 9: *Review of Procurement Decisions and Resolution of Complaints*	There is no practice of review of procurement decisions in-house or by the ministry and also complaint receiving and handling. This may be because of small procurement jobs handled in the past. Rating: **Substantial**	Devise a mechanism of complaint receiving and handling by assigning the job to a dedicated staff for registering, record keeping and forwarding the complaint for decision making. Ensure that the Manual for the risk factor-1 above includes this provision too.
Risk Factor 10: *Contract Management and Administration*	Likely delay in project implementation due to involvement of different sections, unit in the procurement process and inadequate experience of in procurement and contract management. Rating: **High**	Ensure that the Manual prepared for the risk factor-1 above is strictly enforced and PCO conducts regular monitoring of the procurement process and contract management.
Risk Factor 11: *Procurement Oversight*	Transparent and fair bidding may affected due to weak procurement oversight. Rating: **Moderate**	NA

Procurement Arrangements

28. Procurement for the proposed operation under the Project will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 ("Procurement Guidelines"), in the case of goods, works and non-consulting services; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011 ("Consultant Guidelines") in the case of consultants' services, and the provisions stipulated in the Legal Agreement. For each contract to be financed under the Credit/Grant, procurement methods or consultant selection methods, the estimated costs, prior review requirements, and time frame will be agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

29. All expected procurement of goods, works and consultants' services will be listed in the project's General Procurement Notice (GPN).

30. In order to ensure economy, efficiency, transparency and broad consistency with the provisions of Section 1 of the Procurement Guidelines, the following exceptions to local procedures shall apply in the case of National Competitive Bidding:

i. bid documents shall be made available, by mail or in person, to all who are willing to pay the required fee;
ii. foreign bidders shall not be precluded from bidding and no preference of any kind shall be given to national bidders;
iii. bids shall be opened in public in one place, immediately after the deadline for submission of bids;
iv. qualification criteria (in case pre-qualifications were not carried out) shall be stated in the bidding documents, and if a registration process is required, a foreign firm declared as the lowest evaluated bidder shall be given a reasonable opportunity of registering, without let or hindrance;
v. evaluation of bids shall be made in strict adherence to the criteria disclosed in the bidding documents, in a format and specified period agreed with the Association and contracts shall be awarded to the lowest evaluated bidders;
vi. re-bidding shall not be carried out without the prior concurrence of the Association; Extension of bid validity shall not be allowed without the prior concurrence of the Association (A) for the first request for extension if it is longer than four weeks and (B) for all subsequent requests for extension irrespective of the period;
vii. There shall not be any restrictions on the means of delivery of the bids.

31. *Procurement Planning.* The Procurement Plan for the key contracts for goods, works, non-consulting services and consultants' services expected under the Project will be prepared by DoR for Component C1 and DoTM for Component A3 with support/guidance from DoR. The PCO in MoCS will prepare for all remaining implementing agencies and submit to the Bank

before project negotiations. Preparation of bidding documents for the first year's procurement should be initiated now and submitted to the Bank. Procurement under the project will be carried out in accordance with the Procurement Plan. Procurement plans will be closely monitored and updated as required. No procurement, regardless of the value, will be done by the implementing agencies unless it has been included in the procurement plan cleared by the Bank. Any change in the procurement plan including estimated cost of any contract will promptly be conveyed to the Bank for its review and clearance. The Procurement Plan will also be available in the DoR and PCO/MoCS websites and in the Bank's external website.

32. *Prior Review.* The Procurement Plan shall set forth those contracts which shall be subject to the Bank's prior review. All other contracts shall be subject to Post Review by the Association.

33. *Post Review.* All other contracts will be subject to Post Review by the Bank. The DoR and PCO/MoCS will send to the Bank a list of all contracts for Post Review on an annual basis.

Environmental Management and Safeguards

34. *Environmental Issues/Impacts.* The proposed project is located in Nepal, a geographically small landlocked country. Nestled between China and India, the two most populous and among the world's most rapidly growing economies, Nepal's territory is mostly mountainous/hilly and its transport infrastructure is poor, leaving many communities with limited access to local and international markets. Transport costs are high and the country near-completely depends on India for transit routes. In terms of road infrastructure for trade, the 276 km stretch of road from Birgunj to Kathmandu, which forms part of the SAARC Regional Road Network (SAARC Road Corridor 2), is the most important trade route in Nepal. Yet, sections of this road, including the 33 km of the Narayanghat-Mugling section and the 50 km Birgunj-ICD-Pathlaiya-Ratomate-Hetauda section, are too narrow to accommodate existing (and projected) traffic passing through them. Moreover, once construction of the Integrated Check Posts (ICPs) is completed by India, more traffic is expected to pass through the Raxaul-Birgunj border post at a faster rate, causing even greater congestion than at present along the Birgunj to Kathmandu route.

35. The heaviest traffic load is on the Narayanghat-Mugling-Kathmandu road section, parts of which are neither in good condition, nor safe. Traffic from Birgunj, Biratnagar and Bhairahawa converges near Narayanghat. The approximately 144 km stretch of road between Narayanghat and Kathmandu therefore carries the heaviest traffic load in Nepal dominated by trucks carrying domestic and international trade traffic, and has been identified by the private sector as the most important stretch of road for trade traffic in Nepal.

36. The proposed Project will contribute to positive economic growth both locally in the project area and at the regional level between Nepal and India by removing barriers to trade and transportation created due to poor condition of hard and soft infrastructure. The main beneficiaries from the Project will be traders and businesses in Nepal and India who will benefit from reduced time and cost of exporting and importing goods. Consumers will also benefit from lower prices on imported goods.

37. The proposed improvement and upgrading of the Narayanghat-Mugling (N-M) road, one of the key interventions planned under the project will result in positive benefits. The expected positive outcomes of this sub-project include improved connectivity between the Terai districts and Kathmandu enhancing access to economic opportunities, administrative centres, health services, higher education facilities and savings in travel time and transportation costs for the local population using the road. Beneficiaries will also include road users as well as households and shopkeepers near the road, who will benefit from safer road conditions.

38. However, specific interventions planned for the N-M road is likely to have some potential adverse environmental impacts in its area of influence. The road has been proposed for improvement under Component 3 of the project and an appreciation of its characteristics/ issues remains the most relevant from a safeguard analysis perspective for this project. Even though this is an existing road with considerable traffic, planning and construction of this road corridor would require avoidance/ mitigation measures to ensure that adverse environmental impacts are minimized and properly managed.

39. The N-M road starts at Narayanghat (km. 0+000). However, the proposed improvements under the project will start from Aptari (km 2+425) (junction where bypass road to Bharatpur meets the N-M road) and end at Mugling (km 35+677). The road lies in Chitwan district of Central Development Region of Nepal. The road was constructed initially as a single lane road. Later, it was widened to intermediate lane with additional structures. Traffic movement is around 6000 vehicles per day. The road traverses along the left bank of the Trishuli River. The project road has bridge crossings over 18 tributaries of this River. Major settlements along the road alignment are Aptari, Ramnagar, Jugedi, Dasdhunga, Ghumaune, Simaltar, Khahare, Syauli Bazar and Mugling. The road passes through forest area, settlements and cultivated land. Presently, the width of the road is 6 to 10 meters. The width of the road is intended to be widened to 11 meters up to km 16 and from there to Mugling to 9 meters.

40. The N-M road links Bharatpur Municipality with Kabilash, Dahakhani, Chandibhanjyang and Darechock VDCs of Chitwan district. The right of way (RoW) for this road was declared in 1977 and deemed to be acquired and owned by the government. All the road improvement work is confined within the existing RoW and therefore additional land acquisition is not required for the proposed upgrading works of this sub-project. The present detailed design requires 11 meters widening up to km 16+400 where the road passes through flat land. After km 16+400, the rocky hill area begins where widening is proposed to be limited to 9 meters. In both sections, the existing Right of Way is 25 meters on either side of the road and so there is no need for additional land acquisition requirement.

41. Though the civil works for the N-M road have been planned within the existing Right of Way (RoW), the fragile ecosystem in this hilly/mountainous country poses greater than average environmental risks. The key environmental issue of concern is the existing and likely impact of the road on biodiversity/wildlife. A small section of the Narayanghat-Mugling road (about 6 km) from Aaptari (chainage 2+400) to Jugedi (chainage 8+500) falls within the Barandabhar Forest Corridor (BFC) that has been gazetted as a Protected Forest in February 2012.

42. The Barandabhar Protected Forest is a 29 km long forest patch, extending from Mahabharata range in the north to Chitwan National Park to the south. Major tree species are Sal at the Terai and mixed Sissoo-khair forest at the hill side. It is rich in biological diversity both in terms of the plant and animal species found here. This forest is also an important corridor for the

one-horned rhinoceros, a globally threatened species. The rich biological diversity of BFC has witnessed severe pressure from human interferences, leading to forest clearance and adverse impact on wildlife. The forest is bisected by many roads, including the east-west Mahendra Highway, which has fragmented the natural habitat creating a barrier to the free movement of wildlife.

43. Within the BFC zone (of about 6 km) through which the N-M road traverses, a stretch of about 4 km or less remains free from human habitation and has forest cover on both sides of the road, necessary for wildlife connectivity. Even though there is continuous high volume traffic flow causing congestion on the road in addition to presence of a small town (Rampur), institutions, sites of religious importance, fuel stations and other factors of anthropogenic disturbance along and close to the road, recognizing the importance of BFC, it is necessary to reduce impingement to the integrity of the said forest corridor on account of proposed project activities.

44. The Narayanghat-Mugling road traverses in a north-south direction through the BFC's western fringe. While a part of the BFC lies within the buffer zone of Chitwan National Park (CNP), the proposed project road is entirely located outside this ecologically sensitive buffer zone of CNP. Wildlife such as Bandel (*Sus scrofa cristatus*), Syal (*Canis aureus*), Hanuman Langur (Semenopithecus), Rato Bandar (*Macaca mulatta)*, Chituwa (*Panthera pardus)*, Jarayo (*Cervus unicolor*), Chital (*Axis axis*), Harin (Muntiacus muntijac), Ghoral (*Naemorhedus goral*), Nilgai (*Boselapus tragacamelus*), Monkey (*Macaca mulatta*) and Ban Biralo (*Felis chaus),* are known to move across the existing road, particularly in the night.

45. The interventions for road improvement may cause undesirable impacts on the biodiversity found in adjoining areas of the alignment. Typical direct impacts that may adversely affect plants and animals include loss of habitat, pressure on already fragmented habitats, movement zone restrictions, threat from increased risk of collision with vehicles and pollution of habitat zone and water sources from various construction activities. Commonly encountered indirect impacts may include altered hydrology, biota contamination and transmission of diseases. While the proposed project interventions are not likely to cause significant conversion or damage to BFC, OP 4.04 and OP 4.36 is being triggered as the forest corridor is a declared protected area and qualifies the definition of a critical natural habitat under the policy. Management measures would be required for avoiding/minimizing disturbances such as those mentioned above, particularly during the construction stage.

46. More so, the terrain through which the road traverses is vulnerable to slope failures and instability risks. The topographical setting of the road alignment corridor is characterized by hill and river basin. It is largely a rugged terrain consisting of northwest to southeast and north to south trending ridges. The traffic movement on the road also gets constrained by landslides/land slips, particularly during the monsoons. As a result, culverts get blocked and the debris flows cause extensive damage downhill by overtopping the road bench and/or or cause ways. Therefore, some other environmental issues associated with the proposed civil works of the N-M road include likely impacts pertaining to road design (slope stability and drainage issues); work site safety management (including occupational health and safety of construction workers) and; soil erosion.

47. More specifically, the likely impacts include: (i) felling of limited number of roadside trees (estimated to be 266); (ii) destabilization of slopes (including landslides, mud slips, soil

erosion) with consequent damage to forests, water sources, properties, and farmlands; (iii) improper management and disposal of debris and other wastes arising from construction activities; (iv) impacts on water resources used by the people such as springs, river/streams and hand pumps; (v) impairment to or worsening of the local drainage; (vi) road safety concerns due to increased traffic speeds; (vii) the potential for poorly planned or managed development induced by the improved highway; (viii) moderate impacts on sensitive sites including community assets and religious places; (ix) improper identification and management of material sources (sand, water, earth, aggregate); and (x) construction phase impacts including those related to camp site operation, dust generation and pollution from plants & construction machinery/vehicles.

48. On other project interventions such as (a) improvement of trade-related laboratories; (b) construction of selected Inland Container/Clearance Depots (ICDs); (c) strengthening the Department of Transport Management to better manage or regulate the road transport sector, the anticipated environmental impacts are not likely to cause any significant, irreversible or long-term damage to the natural and physical environment. However, the information about nature, scale and magnitude of environmental impacts from such activities/interventions will emerge once the on-going feasibility and other studies are concluded. All such sub-projects that would be identified for financing under the project will under-go an environmental screening - based on the results/findings from this exercise, further decisions about their inclusion would be made, which may also include requirement for detailed impact assessment for case/s for which significant impacts are likely to occur.

49. No significant, irreversible, indirect and/or long term adverse environmental and social impacts are currently envisaged. On the whole, the project would benefit trade and transport between Nepal and India, which is particularly important as Nepal is a land-locked country and its economy and growth (even sustenance for items not produced within the country) substantially depends on the trade with its neighboring countries. In addition, access and use of various social services is expected to increase with an improvement in the mobility of people living close to or using the N-M road.

50. The Right of Way (RoW) for the Narayanghat-Mugling road was declared in 1977 and deemed to be acquired and owned by the government. All the road improvement works have been designed such that the widening activities remain confined to the existing RoW. Therefore additional private land acquisition is not required for the up-grading works and the requirement for forest land diversion has remained confined to a small section of the road. The project however will displace some squatters and encroachers and that would lead to loss of shelter, livelihood or sources of livelihood.

51. Land-use change is a long-term impact that is likely to be induced by a road improvement program/project in the hills. Development of road-side settlements (local markets) in specific areas is a common form of land-use change likely to occur along a road. Intensification of agricultural land-uses, and change in cropping pattern (shift from subsistence agriculture to production of cash crops e.g. vegetables) is another form of road induced impacts.

52. On the environment side, with the integration of EA findings in the engineering design, bidding documents and with proper implementation of ESMF/EMP, even the existing issues of habitat fragmentation, biodiversity management, road safety and slope instability are expected to decrease with the execution of the project.

53. The other trade-related infrastructure supported as part of the project does not entail any adverse or significant environmental and social impacts. To ensure that such sub projects do not cause any significant adverse impacts, the identified propositions will undergo an environment and social screening process. In case significant impacts are likely to occur, the sub-project/s in question will require environmental and social assessment and preparation of mitigation/management plans as per the agreed Environmental and Social Management Framework (ESMF) prepared for the project.

54. Keeping the over-all impacts of the project in mind and in particular the issues associated with the civil works of N-M road, NITTFP has been identified as a category 'A' project. OP 4.01 has been triggered to ensure that all major (like road) and minor (other trade-related infrastructure) investments are planned and designed to be environmentally sound by integrating appropriate principles and approaches into the overall decision making process.

55. *Analysis of Alternatives.* Despite the fact that the N-M road is already in existence and operational for years and the likely impacts from the project can be mitigated/managed to a substantial extent through proper implementation of the EMP, the environmental assessment process explored options and analyzed alternatives for the road alignment, particularly for the six (6) kilometer section traversing through the Barandabhar Protected Forest. The purpose of this exercise was to minimize any adverse environmental impacts arising on account of the planned project interventions and to resolve existing problems of habitat fragmentation/wildlife habitat connectivity issues in the Barandabhar Protected Forest area. An intensive exercise for analyzing alternatives was carried out, which also included analysis of a non-project alternative. Major considerations used for this exercise included: (i) possible options for avoiding the Barandabhar Forest Corridor; (ii) use the existing alignment as much as possible in the other sections; (iii) avoiding of fragile/instable/steep slopes and; (iv) avoiding impact on the river/drainage channels, including areas affected by toe-cutting.

56. Further, a site specific adjustment as well as careful selection between alternatives available is needed to avoid or minimize the adverse impacts on natural and physical environment. This includes proper selection of alternatives for: (a) materials sources (such as water sources to be used for construction and quarry sites); (b) waste-disposal sites and; (c) construction camp/plant sites. The mechanism to do so has been built into the environmental assessment and management process.

57. For all other project interventions, the requirement for analyzing alternatives has been provided for in the Environmental and Social Management Framework (ESMF). The ESMF prepared for effective safeguards management in the project, especially for selecting sites for the trade related facilities, requires analysis of various alternatives as part of the environment and social screening process. As per the agreed ESMF, the screening results and analysis of alternatives, as needed on a case-to-case basis, will be reviewed and cleared by the Bank prior to approving the sub-project/s for implementation.

58. *Environment Management.* Two specific instruments have been designed/developed for the project for effectively addressing the various identified environment and social issues: (i) preparation of an Environment and Social Management Framework dealing with avoidance and minimization of the likely adverse impacts for the project as a whole and; (ii) Environment and social assessment and preparation of corridor-specific management plans for the Narayanghat-Mugling road, which has been identified as a key sub-project under Component 3 of the project.

Both these instruments include measures to minimize and mitigate environment and social impacts through all stages of the project. Proper integration of findings from the safeguard studies and public consultation process into the planning/decision-making process and engineering outputs (design and bidding documents) would help in avoiding/reducing the environmental and social issues that may arise due to the project.

59. The ESMF developed for the project covers all components/interventions. Given that there are several small sub-projects (other than the N-M road, which is a major investment) and locations/sites for most are not known at this stage, the ESMF was chosen as an instrument to guide the management of safeguard aspects. The ESMF includes an environmental and social screening tool to guide the identification of appropriate sites/locations for sub-projects. It identifies the potential issues and provides possible/required mitigation/management measures to deal with them. It will enable potential environmental and social concerns of the proposed sub-projects to be thoroughly assessed in planning phase and design phases. It will also guide selection of appropriate measures to be considered for project implementation. This framework will serve as a tool to guide the decision-makers and project implementers to select the optimal project intervention based on screening results; prepare specific mitigation plan/s, as and if required and; guide the supervision, monitoring, reporting and institutional arrangements for the project components/activities.

60. For the Narayanghat-Mugling road, an Initial Environment Examination (IEE) report prepared in 2010 by DoR has been revised to the level of an EA and EMP in line with the requirements of the Bank's operational policies, with specific attention to concerns related to biodiversity management.

61. Also, a corridor specific EMP has been prepared to address issues related to biodiversity management and slope stability. Measures include: (i) arrangements to facilitate wildlife movement (provision of civil structure/underpass and traffic calming); (ii) use of bio-engineering techniques; (iii) minimization of tree cutting and forest land diversion requirements through appropriate engineering interventions; (iv) restoration of natural drainage; (v) provision of signage; (vi) identification of material sources and waste disposal sites such that disturbances to natural habitat are avoided; and (vii) support habitat improvement measures within BFC and dove-tailing efforts with other on-going schemes of Forest Department/other donors/partners.

62. The EMP also addresses construction-stage impacts such as (a) air and noise pollution, dust from material transport, crushers and asphalt plants; (b) water and soil pollution from spills of fuel, lubricants and construction camp wastes; (d) operation and rehabilitation of borrow pits, quarries and construction camps/plant sites; (e) traffic safety and management; and (f) worker's health and safety. The management plan provides for relocation/shifting of impacted community resources in as good or better condition, with local communities encouraged to commit to their maintenance. The EMP also includes a monitoring plan for construction and operation-stage impacts. For effective implementation of EMPs, management measures have been appropriately cross-referenced in the design drawings, contract conditions and Bills of Quantities (BOQs).

63. Further, to better appreciate environmental concerns at the regional level, particularly for those road links/trade corridors that have fragmented natural habitats along the Birgunj-Kathmandu Corridor, studies will be carried out to inform the decision-making process about the need, approach and interventions required to balance out the trade and transport infrastructure demands in the near future on the one hand and Corridor improvement, environmental

sustainability and road safety requirements on the other. The findings/ outcomes of these studies would be available for the use of GoN irrespective of the source of funding used for road widening/improvement/maintenance of the trade corridor in future.

64. *Consultations.* The primary stakeholders related to this project include: (i) the road-side shop owners/vendors, road users and community (including Forest User Groups) residing along the N-M sub-project/road and; (ii) traders, suppliers, truck owners and other workers at the trade facilities. The secondary stakeholders include officials from Ministry of Commerce, Customs Department, Land Administration, National Parks, Forests, District Administration, Wildlife Experts, Non-Governmental Organizations (NGOs) and other Community Based Organizations (CBOs).The project preparation has benefitted from inputs derived from a wide spectrum of stakeholder consultations and opinions. All environment safeguard documents, including the ESMF, IEE, EA and EMP, were prepared based on a consultation process that sought feedback from key stakeholders. The public consultation carried out during the preparation of the said environment and social safeguard instruments includes personal interviews, village meetings, focus group discussions, consultations with experts and NGOs.

65. The consultations were designed such that: (i) links between communities and their natural resource base adjacent to project locations were explored; (ii) public awareness and information sharing on the project process was promoted and; (iii) views/opinions of the communities on local issues were solicited. The objective of the local level consultations was to inform the community about the proposed project and its activities, expected benefits from the project, likely adverse impacts and possible mitigation/management measures, including options for dealing with loss of common property resources.

66. The environment and social assessment process included a total of eleven community consultations were held in two phases (March and December 2012). Additionally, consultations were carried out between May and December 2012 with Government Officials/ Departments and agencies working at the national level such as WWF-Nepal and NTNC. These consultations helped in incorporating community and expert opinions in the project design process.

67. Dialogue and disclosure actions during the assessment and implementation of the project are designed to ensure that those stakeholders, irrespective of whether they benefit from or are adversely affected by the project interventions, are well informed and can participate in the decision-making process.

68. *Institutional Arrangements.* The most significant issues with regard to safeguards are associated with Component 3 of the proposed project, namely expansion and upgrade of the Narayanghat-Mugling road section. The Department of Roads (DoR), which will be the implementing agency for this component, is familiar with the Bank's safeguard requirements, through its involvement in two other Bank funded projects, namely Road Sector Development Project (RSDP) and Road Maintenance and Development Project (RMDP). On the social and environmental management aspects, the department has gained basic familiarity and experiences with regard to the Bank's safeguard requirements through the said on-going projects.

69. The staff in Department of Roads is generally aware of environmental issues and management requirements. Staff in the Geo Environment and Social Unit (GESU) of the DoR has basic knowledge and experience in environmental and social fields gained through other projects financed by the Bank and other donors. GESU's knowledge regarding environmental and social aspects has been enhanced by their role in preparing and implementing ESMFs,

EMPs, RAPs and VCDPs. There are some examples of effective implementation of RAP in Bank funded Road Sector Development Project. Similarly there are examples of good environmental practices such as bio-engineering and various guidance documents. However, the extent of their use is limited. Works of the GESU in the past have been hampered by frequent transfer of staff, lack of financial and logistical resources, and deficiency in coordination with other units/agencies. However, given the overall past experiences in preparing and implementing externally-funded projects, GESU has the potential to strengthen its knowledge base and capacity and put them together into practice in the proposed Project.

70. Specific capacity strengthening support is necessary, as assessed during the Environmental Assessment studies, particularly on issues pertaining to biodiversity management. In this regard, early in project implementation, suitable orientation and training programs will be conducted for GESU and DoR staff. GESU's current staff (including the Environment Consultant currently on-board) will support and supervise the implementation of the EMP for the N-M road. The Project will also hire full time environment staff working with Supervision Consultants.

71. For the other components/activities, MoCS/NITDB will be responsible for project co-ordination, including the required safeguards management. MoCS/NITDB does not have any experience of managing environmental and social safeguard issues. External experts from the market are being hired to assist the safeguards management and implementation of the Environmental and Social Management Framework (ESMF) in particular. The PCO will also get capacity support for enhancing environmental and social management skills.

72. *Monitoring and Evaluation of Environmental Safeguards.* The application and implementation of EMF/EMPs will be closely monitored using parameters prescribed in the said documents by Environment Specialists (those on the MoCS, CSC and GESU/DoR team), who will report on a regular basis. Additionally, a comprehensive assessment report on environmental, health and safety performance will be prepared by the implementing agencies (MoCS and DoR) at mid-term and end-term.

73. *Disclosure.* All safeguard documents, including the draft Environmental and Social Management Framework (ESMF) for the over-all project and the draft environment reports (EA/EMP) for the Narayanghat-Mugling sub-project proposed to be taken-up in the first year have been disclosed in the Bank's InfoShop and GoN's websites. The draft safeguard documents were disclosed in-country and on Bank's InfoShop on 02/27/2013. Final versions of these documents will also be disclosed after incorporating any further feasible and relevant comments/suggestions that may be received from the communities or other interested stakeholders.

74. The copies of the ESMF, EA and EMP and the executive summaries of the said documents in vernacular language (Nepali) are being placed at the offices of implementing agencies, enabling easy access of any community or individual/s to the project/sub-project information. The executive summaries, which are currently being translated in local language, will be placed in the office of local self-government body (VDCs) and contractors' office/s, when the agencies come on-board. With the consultations being a continuous process, updating of environment safeguard instruments, if any, during project implementation stage will also follow similar disclosure requirements.

Social Safeguards

75. *Adverse Impacts*. The right of way (RoW) for Narayanghat-Mugling road was declared in 1977 and deemed to be acquired and owned by the government and all the road improvement work is confined within the existing RoW and therefore additional land acquisition is not required for the proposed upgrading works of this sub-project. The project however will adversely impact 80 private structures owned by 74 households (414 PAPs). Most of the affected private structures are residential cum commercial premises. The proposed project will also affect 11community structures. In the project road, there are total 65 vulnerable households who will be adversely affected. All these households are squatters and depend on small businesses and trade and wage labor for their livelihood. The other trade related facilities to be managed by MoCS does not entail significant adverse impacts.

76. *Measures taken to address safeguards issues*. For the project as a whole, and specifically for trade-related infrastructure, an Environment and Social Management Framework, including a screening tool (to help in identifying appropriate locations for sub-projects, wherever applicable); identification of likely impacts; a management plan, including elements that have to be integrated during the planning and design of specific activities and; monitoring mechanism to manage the issues pertaining to environment and social safeguards has been prepared. ESMF will ensure management of environmental and social issues in the project. The ESMF supports the three important goals of the project: (a) to ensure the social and environmental sustainability of the projects, (b) to comply with the national environmental and social legislation, and (c) to comply with the World Bank Environmental and Social Safeguards Policies. The ESMF details out the policies, procedures and institutional responsibilities for assessing and managing the potential environmental and social risks and impacts that may come up throughout the project cycle. The objective of the ESMF is to provide a management instrument that provides technical guidance on applicable legal and regulatory requirements, institutional responsibilities, methodologies, instruments, and procedures in order to ensure adequate analysis, mitigation, and management of social and environmental risks and impacts during the entire project cycle. The components of ESMF include resettlement policy framework (RPF), indigenous peoples planning framework (IPPF), gender development framework (GDF), and consultation framework.

77. For Narayanghat-Mugling Road social impact assessment was carried out. During the preparation stage, community was extensively consulted. There is presence of indigenous people and other vulnerable community. A free and pre-informed consultation was carried out with the IPs and vulnerable community. Based on SA, SIA and consultations, project has prepared Resettlement Action Plan and Vulnerable Community Development Plan. The RAP and VCDP, and the translation of the executive summaries in the local language, have been disclosed "in country" and also in the Bank's InfoShop.

78. *Mainstreaming gender equity and empowerment.* Most of the women's status indicators (including those pertaining to health, literacy, work force participation, spousal abuse) show that gender equity and empowerment remain serious issues in the project area. As part of the RAP, a Gender Development Plan has been prepared for the Project. The plan seeks to address the various gender related issues through a set of activities and programs. The plan specifies the implementation mechanism, roles of different institutions and individuals, the indicators for further assessment and also the means of verification. To make the gender development plan a

time-bound initiative, a time frame for implementation of each activity has also been specified. Gender analysis will be part of the social assessment of the trade-related infrastructures.

79. *Grievance Redressal.* The Project will also establish a grievance redress mechanism that will allow project-affected persons (PAPs) to seek review of any disagreeable decisions, practices and activities arising compensation for assets, and technical and general project-related disputes. As specified in RAP and ESMF, PAPs will be made fully aware of their rights and the procedures for doing so verbally and in writing during compensation, survey, and time of compensation. The PAPs will have access to both locally constructed grievances redress committees specified under ESMF and RAP i.e. Local Consultative Forum (LCF) and courts of law. The PAPs will have unhindered access to the grievance redress office to forward and file their complaints, and can choose to file their complaints to the court if they feel that their grievances have not been addressed appropriately. It will in no case affect the jurisdiction specified in the law enforced to file complaints in the competent court. PAPs will be exempted from all administrative fees incurred, pursuant to the grievance redress procedures except for cases filed in court. Grievance recording register will also be placed at the Project in-Charge (PIC) office and Consultant's RE office. Project affected people as well as local people can lodge their complaints and feedback at these offices related to assets acquisition and construction related activities.

80. *Monitoring and Evaluation (M&E) of Social Safeguards.* The Project has a monitoring and supervision mechanism to ensure that the economic condition of affected households shall not be worse than that of their situation without the project intervention. Regular monitoring is essential and only an instrument to understand the socio-economic condition of the affected household. Two types of monitoring, internal and external will be administered in three levels: (i) process level (ii) output level and (iii) impact level.

81. The internal monitoring is the primary responsibility of the PCO, which along with the Social Officer of GESU and SDRS from monitoring and supervision consultant will carry out internal monitoring on regular basis. A quarterly report of internal monitoring will be prepared by the Social Officer of GESU in consultation with SDRS. The office of the project in-charge (PIC) will maintain a record of all transaction in their resettlement database, followed by entitlement records signed by the affected persons and survey based monitoring of resettlement and land acquisition progress. The Local Consultative Forums will play an important role in monitoring providing feedback on community concerns, grievances and requests.

82. The implementation activities will be evaluated externally during mid- term and end term through an independently agency hired by the PCO. A sample survey (10 percent among the PAPs) of affected households needs to be undertaken to assess the degree to which the project's resettlement objectives and social development goals have been met. Sample surveys of affected households will be undertaken as a part of this activity. The impacts will be measured against the results of socio-economic baseline surveys conducted during resettlement planning stage. This activity will be undertaken by an external agency familiar with resettlement aspect of the infrastructure development.

Monitoring and Evaluation (M&E) of Project

83. The Results and Monitoring Framework developed for the project is included in Annex 1. The overall monitoring and evaluation will be the responsibility of the PCO. M&E capacity has been added in the project design. As mentioned earlier, a corridor monitoring system has already been designed and implemented during project preparation with the collaboration of stakeholders in both India and Nepal, and is managed by NITDB. A customized methodology was used for baseline data collection, in collaboration with Kathmandu University School of Management (KUSOM), with a regular and rigorous schedule for ongoing data collection, monitoring and evaluation. Partnership with KUSOM allows the training of university students in the skills of surveying, data collection, and M&E for Nepal as a whole. Some of these students will be working with NITDB on M&E on a rotating internship basis. The NTTFC will discuss semi-annual data and monitoring reports and propose actions for addressing identified problems. The World Bank Group supervision team will also monitor semi-annual data during supervision missions.

Role of Partners

84. The IFC contributing US$2 million for the implementation of this project's activities through a parallel financing mechanism, IFC's (South Asia Regional Trade and Integration Program (SARTIP). DFID has provided significant support in the financing of this Project. DFID, GTZ and ADB offer significant capacity support to GoN in support of the implementation of the NTIS, and the Bank team is well coordinated with these and other development partners supporting regional trade and transport in Nepal.

Annex 4: Operational Risk Assessment Framework (ORAF)

South Asia: Nepal-India Regional Trade and Transport Project

Stage: Appraisal

<table>
<tr><th colspan="7">Project Stakeholder Risks</th></tr>
<tr><td>Stakeholder Risk</td><td colspan="6">Rating Moderate</td></tr>
<tr><td rowspan="4">Description:

1. Government leadership changes frequently which can affect ownership and commitment at the Ministerial and Secretary level. This could pose a risk to the speed and quality of project preparation and implementation. However, the project has strong ownership in key ministries and the GoN’s Trade Integration Strategy (NTIS) has political buy-in.
2. Opposition to the project from stakeholders is expected to be limited, though priorities and interests among some stakeholders may not converge on issues related to trade policy and proposed investments. For example, (i) the private sector may oppose regulatory reforms; and (ii) the proposed co-location of multi-functional labs may meet some resistance among some stakeholders.</td><td colspan="6">Risk Management:
1. If there is a change in political leadership, the team would work with new leadership on rationale and the need for continuity. At the technical level, staffing has remained stable, and the team will continue to engage at this level to ensure adequate commitment and continuity.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
Not Yet Due</td><td>Stage:
Both</td><td>Recurrent:
☑</td><td>Due Date:</td><td>Frequency:
Quarterly</td></tr>
<tr><td colspan="6">Risk Management:
2. Key stakeholders will be consulted regularly during the preparation process, and information disclosure to the general public as well as to stakeholders will be undertaken. The team has an ongoing dialog with the National Trade and Transport Facilitation Committee (NTTFC) which will continue during implementation. Private sector stakeholders and beneficiaries are consulted regularly including through the Nepal Business Forum, a consultative mechanism set up by the IFC.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☑</td><td>Due Date:</td><td>Frequency:
Quarterly</td></tr>
<tr><th colspan="7">Implementing Agency (IA) Risks (including Fiduciary Risks)</th></tr>
<tr><td>Capacity</td><td colspan="6">Rating High</td></tr>
<tr><td>Description:</td><td colspan="6">Risk Management:
1. The Project will provide technical support to strengthen the core functions of the</td></tr>
</table>

<table>
<tr><td rowspan="6">1. The complexity of a multi-sectoral operation of this scale raises concerns regarding the lead agency's (MoCS) technical and management capacity to carry out the program. However, MoCS has gained experience and expertise through the implementation of the Nepal Multimodal Transit and Trade Facilitation Project.
2. There are limitations to technical capacity and availability of competent staff, which vary by agency. The current procurement, FM, and M&E capacity within MoCS and DoC are considered weak. Although DoR has successfully implemented several Bank roads projects, the support of a Supervision Consultant team will be needed to bolster supervision quality, reporting, and contract management.
3. As with most projects in Nepal, frequent transfer of key staff from the project team is a risk.</td><td colspan="6">PCO, including Financial Management and Procurement. It will also strengthen the M&E capacity of NITDB to further improve its capacity to monitor transport time and costs at Nepal's main trade corridor, the Kolkata-Raxaul-Birgunj-Kathmandu Corridor. The Project will also support human skills development and other strategic institutional strengthening measures for targeted trade-related agencies including the MoCS, DoC, NITDB, Trade and Export Promotion Council, and Department of Transport Management.</td></tr>
<tr><td>Resp:
Bank</td><td>Status:
Not Yet Due</td><td>Stage:
Implementation</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2018</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
2. The team will continue to engage at the technical level - where staffing has remained stable to date – to ensure adequate commitment and continuity. Further, to ensure continuation in the event of staff changes, the team is proposing a "twinning arrangement" where specialists from the private sector would be hired by the Project for each of the main components. The assignment of a Supervision Consultant/Engineer will also reduce the risk of frequent transfer of project personnel as the Supervision Consultant will be the project engineer throughout the implementation of the project.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2018</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
3. The World Bank is currently implementing a NLTA designed to enhance the government's capacity by providing technical assistance to the key trade-related institutions. This is expected to enhance capacity of MoCS, DoC, and NITDB to implement the project.</td></tr>
<tr><td>Resp:
Bank</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
30-Jun-2014</td><td>Frequency:</td></tr>
<tr><td>Governance</td><td>Rating</td><td colspan="4">Substantial</td></tr>
<tr><td>Description:</td><td colspan="5">Risk Management:
1. The Bank's NLTA is expected to enhance MoCS' capacity to coordinate trade-</td></tr>
</table>

1. Complex implementation arrangements, involving multiple agencies and several layers of government, could lead to weak oversight, uneven performance, and pose governance challenges. 2. For the road component, lack of competition in the construction industry due to a limited number of qualified contractors and dominance of few large firms pose a risk.	related institutions and development partners. The establishment of the NTTFC is also expected to help in this regard. As noted, the Project will provide technical support to strengthen Financial Management and Procurement, and an international procurement advisor will be hired to provide TA and participate in technical review committees for bids.					
	Resp:	**Status:**	**Stage:**	**Recurrent:**	**Due Date:**	**Frequency:**
	Both	In Progress	Both	☐	31-Dec-2018	
	Risk Management: 2. The team will ensure proper "slicing and packaging" and timing of contracts to match the contractors' capacity. There will be approximately two contracts each exceeding US$10 million. International Competitive Bidding (ICB) will be used to procure the consultants with high/strict qualification requirements.					
	Resp:	**Status:**	**Stage:**	**Recurrent:**	**Due Date:**	**Frequency:**
	Both	Not Yet Due	Both	☐	31-Aug-2014	
	Risk Management: All procurement would be done through competitive processes. The Bank will provide strong oversight of all procurements. The team has secured financing from DFID to hire i) a local procurement expert to help MoCS and DoC prepare bidding documents for trade-related infrastructure and to provide procurement TA; and ii) an international procurement adviser to provide TA in procurement for the Project, including to participate in technical review committees for bids. Building on the successful piloting of e-bidding by the Department of Roads, e-bidding procedures will be used for all contracts under the project. The e-Bidding system is an on-line facility for acquiring of bids and submission of bids to increase transparency, non-discrimination, equality of access, and open competition in the procurement process					
	Resp:	**Status:**	**Stage:**	**Recurrent:**	**Due Date:**	**Frequency:**
	Both	Not Yet Due	Both	☐	31-Dec-2018	
Project Risks						
Design	**Rating**	**Substantial**				

<table>
<tr><td>Description:

The scale of the operation represents a risk and, indeed, the project is a large undertaking for MoCS. As with any large multi-sectoral projects, there are risks of poor design, leading to failure or poor performance.</td><td colspan="6">Risk Management:

Lessons learned from previous WB multi-sectoral projects, especially the Nepal Multimodal Transit and Trade Facilitation Project, will be fully taken into consideration. Project design will also be informed by the ongoing WB-financed NLTA. The project design also reflects extensive consultations with key stakeholders.</td></tr>
<tr><td></td><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2013</td><td>Frequency:</td></tr>
<tr><td>Social and Environmental</td><td>Rating</td><td colspan="5">Substantial</td></tr>
<tr><td rowspan="5">Description:

Environment:
1. Inadequate experience and lack of co-ordination between the key implementing agencies may lead to delays in preparation and implementation of environmental management and safeguard activities
2. Risk that environmental issues are not evaluated with due diligence and/or Bank safeguard implementation support is not adequately funded
3. Potential non-compliance with Bank environment safeguards policies/guidelines/safeguard instruments due to lack of capacity/co-ordination. for the prevention or mitigation of any negative impacts on physical, biological resources and on human health and safety
4. While the anticipated environmental impacts from almost all planned project interventions/activities (other than road/s) are expected to be minor in nature, there are risks associated with the proposed widening and strengthening of Narayanghat-Mugling road. A small section of the Narayanghat-Mugling road (about 6 km) falls within the Barandabhar Forest Corridor (BFC) that has been gazetted as a Protected Forest in February 2012. Despite this, a risk pertaining to opposition regarding road</td><td colspan="6">Risk Management:

An Environment Management Framework (EMF) covering all components/sub-components of the NITTFP will be prepared, with due consultations with key stakeholders. The EMF will include a screening tool (to help in identifying appropriate locations for sub-projects, wherever applicable); identification of likely impacts; a management plan, including elements that have to be integrated during the planning and design of specific activities and; monitoring mechanism to manage the issues pertaining to environment safeguards. It will also clearly specify the expected role and responsibilities of various agencies involved in project delivery.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2013</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:

An Occupational Health and Safety (OHS) Plan will also be developed and would be integrated into the Bidding Documents of the proposed road works.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2013</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:

The safeguard instruments such as EMF, EA, EMP and Design reports to be cleared and disclosed as per the agreed disclosed policy.</td></tr>
<tr><td>Resp:</td><td>Status:</td><td>Stage:</td><td>Recurrent:</td><td>Due Date:</td><td>Frequency:</td></tr>
</table>

<table>
<tr><td rowspan="8">development through this ecologically sensitive stretch from some stakeholders remains.
5. Risk of delays in obtaining forestry clearance

Social:
1. 79 households are expected to be impacted by the widening of the Narayanghat-Mugling road. Inadequate attention to address these resettlement issues poses a high risk.
2. The issue of land ownership of a few households in the declared Right of Way due to the gazette notification of 1977 poses a risk</td><td>Both</td><td>In Progress</td><td>Both</td><td>☐</td><td>31-Dec-2013</td><td></td></tr>
<tr><td colspan="6">Risk Management:
Strengthening of capacity of agencies to implement EMF/EMP provisions.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2018</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
Extensive consultations with key stakeholders, including Department of National Parks, Department of Forests, NGOs, concerned multi-lateral/donor agencies, Local Communities have been/are being carried out to identify environmental concerns and risks, particularly those related to Barandabhar Protected Forest. Feedback from this process, will be used to strengthen the project design.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2013</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
Verification through supervision consultants on the implementation of agreed EMF/ECOPs provisions before clearing IPCs and completion certificates.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
Not Yet Due</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2014</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
Readiness for implementation before negotiations/award of works to be checked.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
Not Yet Due</td><td>Stage:
Both</td><td>Recurrent:
☐</td><td>Due Date:
31-Dec-2013</td><td>Frequency:</td></tr>
<tr><td>Program and Donor</td><td>Rating</td><td colspan="5">Moderate</td></tr>
<tr><td>Description:
1. The project is fully financed by the Bank and is not affected by financing of other projects by the government</td><td colspan="6">Risk Management:
The Bank actively participates in donor coordination fora coordinated by Government as well as coordinates bilaterally with development partners. Through this fora, the WBG</td></tr>
</table>

<table>
<tr><td rowspan="2">or donors.
2. There are several donors (e.g. EC, ADB, USAID, GIZ, etc.) supporting GoN’s Trade Integration Strategy and donor coordination and duplication of efforts have been a challenge in the past. However, a donor coordination group has been established (lead by Germany), which has improved coordination.</td><td colspan="6">will further improve coordination of its interventions with other development partners and contribute to discussions around division of labor, sector selectivity and aid effectiveness.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☑</td><td>Due Date:</td><td>Frequency:
Quarterly</td></tr>
<tr><td>Delivery Monitoring and Sustainability</td><td>Rating</td><td colspan="5">Substantial</td></tr>
<tr><td rowspan="2">Description:
Political uncertainty poses a risk to the sustainability of the regional trade and transport agenda. However, as noted previously, trade combativeness ranks high on the government's agenda and has buy-in from most political parties, which will help ensure sustained program implementation integrity, progress, and performance.</td><td colspan="6">Risk Management:
Extensive consultations with a range of stakeholders have built strong support for the project, which will help in terms of longer-term sustainability, irrespective of the political leadership.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Both</td><td>Recurrent:
☑</td><td>Due Date:</td><td>Frequency:
Yearly</td></tr>
<tr><td colspan="7">Overall Risk</td></tr>
<tr><td colspan="2">Implementation Risk Rating:</td><td colspan="5">High</td></tr>
<tr><td colspan="7">Comments:
Given the serious nature of the three main risks – namely, capacity issues, weak coordination among the key sectors, and lack of sustained leadership due to the political situation in Nepal - the project implementation risk is considered High.</td></tr>
</table>

Annex 5: Governance and Peace Action Plan

South Asia: Nepal-India Regional Trade and Transport Project

1. The Governance and Peace (GAP) Action Plan seeks to address critical operational concerns related to project management of the Nepal-India Regional Trade and Transport Project. The objective of the GAP Action Plan is to ensure good governance, conflict-sensitivity, transparency and accountability, and responsiveness of the coordinating and implementing agencies. The Action Plan is informed by the various workshops conducted on project coordination, and social and environmental assessments during project preparation, as well as lessons learned from other Bank-funded projects in Nepal and elsewhere. The GAP Action Plan will be strengthened, as necessary, based on lessons learned throughout the implementation of the Project.

2. The key governance risks involved in the project relate to the following:

- Weak capacity and complex implementation arrangements may adversely affect project implementation;
- The project processes may not detect and address problems related to transparency and accountability and may not facilitate full information flow (compliant with Nepal's Right to Information Act);
- Weaknesses in procurement management system could result in mismanagement of bidding;
- Weak or ineffective complaint and grievance handling mechanism may affect transparency and contribute for corrupt and manipulative practices;
- The implementation of the Resettlement Action Plan (RAP) and the Environment Management Plan (EMP) pose a risk in terms of timeliness of their implementation.

Key Governance Issues and Mitigating Measures

3. Both the PCO and the World Bank will work to ensure that adequate mechanisms are put into place to improve project-level governance and to mitigate risks. The mitigating measures designed to address these risks will be mainstreamed into the project management and implementation. Some of the measures indicated below address the GAP as well as broader project management purposes of communication and outreach, stakeholder management and core project monitoring.

4. *Capacity constraints.* The project brings together three implementing agencies under the general oversight of the MoCS. In terms of the project's governance arrangements, the GoN has established the National Trade and Transport Facilitation Committee (NTTFC) to provide oversight and guidance to ensure coordinated program planning and implementation. A Secretariat in the PCO will support the NTTFC and a plan will be drafted to ensure increased capacity and sustainability of the NTTFC. As described in section IV (Institutional and Implementation Arrangements), a Project Coordination Office (PCO) within MoCS will serve as the implementing agency and will be responsible for the day-to-day implementation of the Project and for coordinating the relevant implementing ministries/agencies. Each component or key set of activities will also be assigned a dedicated Project Coordinator led by the appropriate

agency. e.g. Department of Roads for the Narayanghat-Mugling road, Department of Customs for the Single Window and Trade Portal, MoCS for the joint laboratories and ICDs. While the Project has been designed to ensure strong ownership among all implementing agencies, continued efforts are required to ensure the project is viewed as a partnership. The complexity of the project and the relative inexperience of the lead agency (MoCS) to carry out a multi-sectoral operation of this scale are issues of concern, and hence much of the technical assistance support under the project is centered on MoCS.

5. **Information disclosure**: Nepal's Right to Information (RTI) regime guarantees citizens the right to information controlled by public authorities to promote transparency and accountability within the public sector. To ensure proactive disclosure of project-related information, the implementing agencies will post all information related to the project on a clearly marked section on their respective homepages. The following information will be made available:

- A general description of the project, its objectives, components, timeline and implementation structure
- Contact details for the complaints handling mechanism
- Contact details for the Project Coordination Office
- Advertisements for procurements funded by the project
- The procurement plan including any updates thereof
- Contract award information for all contracts funded under the project after such award

6. The PCO will keep records, electronic or hard-copies, of all information requests received and documentation provided in response to such requests and will include this information as an annex to the Annual Project Progress Report. The content of the Project Progress Report will be specified in the Project Operations Manual and will, inter alia, cover the following issues:

- Progress against project milestones
- Summary of awarded contracts
- Overview of information requests
- Summary of complaints
- Result of the technical audit

7. *Procurement.* Risks related to implementation of procurement and contract administration procedures, specifically collusion and cartelling among contractors and intimidation of contractors during the bidding and execution of works, need to be managed carefully. Building on the successful piloting of e-submission by the Department of Roads under the on-going World Bank-financed Road Sector Development Project (RSDP), e-submission procedures will be used for all works contracts under the Project. The DoR's e-procurement web portal for e-submission of bids is an on-line facility for acquiring of bids and submission of bids to increase transparency, non-discrimination, equality of access, and open competition in the procurement process. It has helped to reduce collusive and coercive practices, thus promoting fair and competitive pricing in the public procurement. A similar model has been put in use by ten other Government Organizations, and the Public Procurement Monitoring Office has been working on establishing similar e-submission portal for other organizations for public

procurement. TA will be provided to MoCS and DoC to implement e-submission procedures. All procurement will be under the disclosure regime discussed above.

8. *Complaints Handling Mechanism.* An effective grievance redressal system is critical to respond to issues of mis-management, corruption and other problems that may be identified during implementation of the Project. For the expansion and upgrade of the Narayanghat-Mugling road section, the Project will leverage a dedicated grievance redressal system developed by DoR under the Nepal Bridges project which coordinates all relevant departments and offices, employs a formal tracking system for complaints, and generates reports on the status of complaints. The system will have feedback channels (SMS, hot line, on-line complaint box, in addition to written complaints) for beneficiaries/road users to communicate problems related to quality of contract works and condition of roads. As specified in RAP and ESMF, PAPs will be made fully aware of their rights and the procedures for doing so verbally and in writing during compensation, survey, and time of compensation. The PAPs will have access to both locally constructed grievances redress committees specified under ESMF and RAP i.e. Local Consultative Forum (LCF) and courts of law. The PAPs will have unhindered access to the grievance redress office to forward and file their complaints, and can choose to file their complaints to the court if they feel that their grievances have not been addressed appropriately. It will in no case affect the jurisdiction specified in the law enforced to file complaints in the competent court. PAPs will be exempted from all administrative fees incurred, pursuant to the grievance redress procedures except for cases filed in court. Grievance recording register will also be placed at the project in-charge (PIC) office and Consultant's RE office. Project affected people as well as local people can lodge their complaints and feedback at these offices related to assets acquisition and construction related activities.

9. All complaints handling systems under the Project will:

- Establish a dedicated email address managed by the PCO in MoCS for incoming complaints. This email address will be posted on the project website and published in all annual reports;
- Designate relevant personnel to receive and investigate incoming complaints;
- Record all complaints and acknowledge receipt to the complainant (except in cases of anonymous complaints) within two working days;
- Establish a detailed complaints handling procedure to be in the Project Operations Manual;
- Undertake investigations, as may be required, with a view to satisfactorily resolving complaints;
- The number of complaints received and cases investigated and resolved will be reported in the Annual Project Progress Report. The World Bank may request information on specific cases at any time.

10. *Safeguards.* The most significant issues with regard to safeguards are associated with Component 3a of the project, namely expansion and upgrade of the Narayanghat-Mugling road section. Potential non-compliance with Bank environmental and social safeguards policies/guidelines/safeguard instruments due to lack of capacity/coordination pose a governance risk. The EMP, RAP, VCDP and ESMF are discussed in detail in Annex 3. These will be made available at relevant websites for public disclosure and a translated Nepali version of the same will be printed for distribution to concerned stakeholders. The project will put in place necessary administrative and monitoring systems to ensure that these plans are implemented rigorously.

11. *Monitoring and Citizen Feedback.* The Project will put in place a design to institutionalize systems of consultation, monitoring and feedback, within a holistic disclosure of project information that "empowers" beneficiaries and civil society, and encourages greater participation in project planning, implementation and oversight. Proactive disclosure of information and social accountability mechanisms to solicit stakeholder and user feedback will be implemented. For the Narayanghat-Mugling road, third-party monitoring will be used to monitor construction quality and progress. The PCO will seek feedback from Nepal Business Forum on progress on National Single Window and Nepal Information Trade Portal.

12. *Conflict and Peace-building.* The action plan seeks to ensure that project activities do not lead to any tension among communities and PAPs. Proper consultation with communities and awareness promotion activities, as discussed above, will form the central elements of the action plan to address potential conflict risks. The project seeks to pay special attention to women and other vulnerable communities, as discussed in detail in the Vulnerable Community Development Plan. Limited adverse impacts from land acquisition and resettlement are anticipated from the Project, and the upgrading of Narayanghat-Mugling road is expected to benefit many indigenous and vulnerable communities due to improved physical access. Furthermore, past experience shows that indigenous communities demand and support such programs to improve physical access that is vital to public services and economic development.

Governance and Peace Action Plan - Matrix

Anticipated Problem	Actions to be taken	Responsible Agency	Timeline	Warning Indicators
Information Disclosure				
Inadequate attention to right to information laws and public disclosure standards	• A proactive public disclosure system will be established (as discussed in Information disclosure section) • Information will be disseminated through local workshops, group discussions, information campaigns, and participatory community forums. • Consultations and participatory planning with project-affected people, CSOs, and other stakeholders during implementation. • Establishment of Local Consultative Forum (LCF) at VDC to ensure ongoing dissemination of project information to affected households, and structure, regulate and strengthen communication between roadside communities.	MoCS, DoR, DoC DoR DoR, MoCS, DoC DoR	Immediately when needed Periodically Periodically By effectiveness	Delays or non-compliance in implementing GAP measures of Transparency and Accountability
Procurement				
Collusion among contractors, submission of fraudulent information.	• Use e-bidding for receiving bids from contractors, which has shown to significantly increase in competition and has proved to be an effective measure to reducing collusion and coercion among bidders.	DoR, MoCS, DoC	All bids	Substantially smaller number of bids (or one bid) compared to the number of bidding documents purchased.
Complaint Handling				
A weak complaint and grievance handling mechanism may	• Develop grievance-redress mechanisms so citizens and CSOs can lodge complaints about technical, fiduciary and environmental/social impacts. DoR is in the process of developing this system for all of its projects and the entire Department.	DoR, MoCS	By effectiveness	Number of complaints which have not been addressed or responded to

affect transparency and contribute for corrupt and manipulative practices	• Establish Local Consultative Forum (LCF) at VDC to involve affected communities and local government structures in social impact management, grievance resolution and monitoring.	DoR	By effectiveness	
Social and Environmental Safeguards				
Non-compliance of social and environmental safeguard provisions	• Apply the Environmental and Social Management Framework (ESMF) to identify and mitigate possible adverse social and environmental impacts of project activities, including the up-gradation of the Narayanghat-Mugling road segment, and construction of ICDs in Kathmandu and Birgunj. • Verification through supervision consultants on the implementation of ESMF before clearing IPCs and completion certificates.	DoR, MoCS	By Negotiations	Number of cases of non-compliance with ESMF
Monitoring and Citizen Feedback				
Inadequate monitoring of project activities	• Proactive disclosure of information and social accountability mechanisms to solicit stakeholder and user feedback will be implemented. • Use third-party monitoring for the Narayanghat-Mugling road • Seek feedback from Nepal Business Forum on progress on National Single Window and Nepal Information Trade Portal.	DoR MoCS Third-Party DoC, MoCS	By effectiveness By Year 2 Quarterly	Lack of reporting through the established monitoring and feedback systems.

Annex 6: Economic Evaluation

South Asia: Nepal-India Regional Trade and Transport Project

1. The main objective of improvements to the performance of trade corridors is to increase trade. The economic evaluation of a corridor project attempts to determine whether the reductions in cost of current trade and the generation of new trade are worth the investment cost that is needed to bring them about. Even though the development objective of the project might be expressed in terms of export growth, the economic evaluation should also take account of the reduction in import costs and generation of additional import volumes as well as the cost reduction and generation of exports. Trade includes domestic as well as international trade, so the impacts of cost reduction and volume generation of domestic trade should also be included in the economic evaluation.

2. Changes in corridor costs are expected to serve as a stimulus for the reorganization of economic activity outside of the transport sector. From the change, a manufacturer could change the source of inputs or destination of exports or relocate production thereby reconfiguring the typology of supply chains. A retailer may centralize their operations to serve a larger market area or farmers may change their crops to a more marketable combination. In a network setting such location decisions can then become much more complex to model. These are all examples of what is normally treated as induced traffic in transport projects.

3. It is important also to acknowledge that corridor projects are incremental in nature. As is the case with the current project between India and Nepal, a network already exists in which case an assumption is made that the project will not necessarily be radically transformational. Under such circumstances three objectives of the economic evaluation of a corridor project are to:

a) optimize the design of each of the project components,
b) ensure that the package of project components is the most appropriate in achieving the project objectives, and
c) ensure that the benefits of the sum of the optimized components is worth the investment and other costs that must be incurred to achieve them.

4. The relative importance of each of these three objectives for any particular corridor project can help determine what corridor components are included in the economic evaluation and what evaluation method or methods are used to estimate the net economic benefits of the project. Corridor projects typically include many more components than a single investment project (such as highway development project), and even more than a typical policy oriented project (such as a railway restructuring or a port reform project). The evaluation of corridor improvement projects can be either for the package of investment and policy components, for each of them separately, or both.

A. Economic Analysis of Main Project Components

5. Where a corridor is already well developed and economic rigidities are not very strong cost benefit analysis can be used to assess likely impacts. For instance, in transport

infrastructure projects, the World Bank in TRN 19[12] recommends that wider economic benefits should not be used to justify scheme that would otherwise fail in transport terms. As such it is important to test the economic viability, of each component of the project. Granted of course that it is possible that the benefits of the package of measures for the corridor as a whole will be greater than the sum of those of the individual components. Hence the economic evaluation of the present project was executed as a two-step process, to test the economic feasibility of each of the components, mainly the infrastructure components followed by an assessment of the project as a whole. This was done for the three project components: a) the Mugling-Narayanghat Road, b) the container freight station in Kathmandu and c) the proposed laboratories across the country.

a) Improvement of Mugling – Narayanghat Road

6. The 276 km stretch of road from Birgunj to Kathmandu, which forms part of the SAARC Regional Road Network (SAARC Road Corridor 2), is the most important trade route in Nepal, so delays along this route have transport time and cost implications for Nepalese trade. Sections of this road, including the 33 km of the Narayanghat-Mugling section, are too narrow to accommodate existing (and projected) traffic passing through them. Moreover, once construction of the Integrated Check Posts (ICPs) is completed by India, more traffic is expected to pass through the Raxaul-Birgunj border post at a faster rate, causing even greater congestion than at present along the Birgunj to Kathmandu route.

7. The heaviest traffic load is on the Narayanghat-Mugling-Kathmandu road section which carry 90 percent of Nepal's trade, and parts this road are neither in good condition, nor safe. Traffic from Birgunj, Biratnagar and Bhairahawa converges near Narayanghat. The approximately 144 km stretch of road between Narayanghat and Kathmandu therefore carries the heaviest traffic load in Nepal dominated by trucks carrying domestic and international trade traffic, and has been identified by the private sector as the most important stretch of road for trade traffic in Nepal.

8. The expected economic impact of improving the road was investigated in 2011 using HDM4[13]. The cost-benefit analysis is based on an assumed service life of 20 years. Based on the analysis NPV (at 12% discount rate) is estimated as US$ 16.4 million and the EIRR at 19.2 percent.

9. The estimates suggested that personal travel time savings account for nearly half of total discounted benefit, and accident reduction savings for a further 10 percent. The remaining 40% of benefit is for VOC, the bulk of that however – some 90% - are the time-related benefits stemming from reduced depreciation costs, and variable cost savings of truck and bus operations.

[12] World Bank (2005) TRN-19 *Projects With Significant Expected Restructuring Effects*, World Bank.
[13] The Highway Development Model Version 4 (HDM4) is a typical cost benefit based transport tool. Details can be found at http://www.hdm-ims.com/hdm4.htm

Table 1. Cost-Benefit Analysis

COST BENEFIT TABLE Naryanghat-Mugling HDM-4 analysis							
USdollar rate=	72.6		length (km) =	33.0		NPV (NPR m)	580.69
			NPR million =	2,071.15		EIRR	15.7%
cost NPR m	2,071.15	switch =	1.00			NPV (US$m)	$ 7.743
cost US$ m	$ 28.528	equals	$ 864.49	$000/km			

Year	Net Capital Costs	Recurrent Costs	MT Vehicle Operation	MT Travel Time	NMT Travel & Operation	Accident benefits	Net Benefits
2010							
2011	-1035.573						-1035.573
2012	-1035.573						-1035.573
2013	297.000	0.000	265.651	116.876	0.008	16.493	696.027
2014	0.000	-32.400	135.832	121.645	0.001	17.481	242.560
2015	-405.000	0.000	87.215	126.771	0.000	18.534	-172.481
2016	0.000	0.000	164.755	132.958	0.002	19.653	317.368
2017	0.000	0.000	180.881	138.988	0.002	20.845	340.716
2018	0.000	0.000	195.520	145.080	0.002	21.898	362.500
2019	297.000	0.000	210.632	151.446	0.002	23.012	682.092
2020	0.000	0.000	176.604	157.995	0.001	24.189	358.788
2021	0.000	0.000	183.905	162.988	0.001	25.136	372.030
2022	0.000	0.000	190.622	168.134	0.001	26.123	384.879
2023	0.000	0.000	186.713	173.371	0.001	27.151	387.235
2024	-405.000	0.000	116.596	177.993	-0.001	28.222	-82.190
2025	297.000	0.000	296.809	184.978	0.003	29.338	808.128
2026	0.000	0.000	258.941	190.730	0.001	30.502	480.174
2027	0.000	0.000	274.587	196.773	0.001	31.714	503.076
2028	0.000	0.000	289.411	203.003	0.002	32.977	525.393
2029	0.000	0.000	304.239	209.423	0.002	34.294	547.957
2030	0.000	0.000	319.063	216.035	0.002	35.667	570.766
2031	297.000	0.000	333.759	222.841	0.002	37.098	890.700
2032	0.000	0.000	260.342	229.573	0.000	38.590	528.505
NPVs	(1,862.11)	(25.83)	1,461.77	1,127.93	0.01	172.05	580.69

Source: MMM Group (2011) Update of Feasibility Study Report for Upgrading of Narayanghat to Mugling

10. The HDM based cost-benefit analysis, and tests of the sensitivity of outcomes to fairly major changes in important parameters, both indicate that the level of economic benefits is reasonably secure and the project could be financed.

b) ICD/Container Freight Station in Kathmandu

11. The project will finance a Container Freight Station or ICD in Kathmandu to provide space for trucks to park for loading and unloading goods. Presently there is no such a facility and transloading of cargo from one truck to another is typically carried out in the open, often by the road side. In the long-term, when Nepal and India are able to negotiate a through bill of lading for Nepalese trade, goods can be cleared in Nepal rather than at border points in between saving clearance and transloading time at the borders.

12. The selection of a site in the Kathmandu valley for a container freight station was performed using the following criteria:

- Highway accessibility for external domestic regions and international border access;
- Highway accessibility related to urban distribution connections within Kathmandu;

- Ease of procurement of the site in terms of planning permissions and negotiating rights;
- Location site suitability for proposed functions (size, terrain);
- Land Value; and
- Environmental and social issues/risks.

13. Economic analysis of the proposed CFS/ICD indicated that the facility would offer two important operational benefits: a) it would improve operations by reducing congestion in central Kathmandu, b) it would reduce the turn-round time for trucks and improve vehicle utilization and c) it would provide a more secure environment for cargo transfers between large and small trucks used for distribution. Eventually it is also expected that the facility can become a customs clearance point, providing for expedited movement through the border.

14. Economic analysis of the CFS/ICD was based on the following expected benefits: (i) freight journey time savings; (ii) passenger journey time savings; and (iii), improvement in product quality and a reduction in pilferage of goods. Economic costs were calculated based on a 30-year projection period, excluding construction period of three years. The EIRR was estimated at 54 percent with a corresponding NPV of US$126.9 million.

c) Laboratories

15. The Government of Nepal has requested IDA to finance the improvement of trade-related laboratories for testing of products by the various border agencies. Currently various Government departments in Nepal have a separate testing laboratories. This places a great strain on traders and transporters as they have to visit multiple laboratories for multiple inspections at different locations if they are dealing with multiple products and sometimes even for the same product. Many of these laboratories are not located near border points or near each other.

16. Another key issue in Nepal is that existing laboratories are not internationally accredited and therefore Nepal's trading partners, including India, do not recognize their certifications. This results in traders having to undergo costly and time consuming round of inspections in accredited labs in India. The challenge for the government is to develop laboratories that not only meet the international standard ISO 17025 but also to achieve international accreditation of laboratories to international standard ISO 17011.

17. Improving trade-related laboratories is therefore expected to lead to time savings for importers and exporters who would be able to get service in one location and obtain quicker turn-around times. This can be extrapolated into savings for the economy at large, especially through specific supply chains that are most subject to testing, such as agriculture (plant, animal).

18. However, economic analysis of the proposed network of multi-agency laboratories yielded a negative NPV. Analysis is ongoing for laboratories at specific locations, particularly in Kathmandu and a couple of other locations in agricultural product exporting zones. Depending on the results, the project will finance only laboratories in these locations. Not all the laboratories would need to be multi-agency or multi-functional.

B. Economic Evaluation of the Project

19. Cost-benefit analysis in corridor projects involves estimating the cost and time savings of implementing a proposed project rather than not implementing it. The cost savings typically include those of operating and maintaining vehicles as well as reductions in the cost of deterioration and loss of goods in transit. The time savings include those related to vehicle operations (such as reductions in vehicle transit time) and the inventory costs of goods in transit and kept in storage to cover the risk of delays in transit and uncertainty of delivery times. Where feasible, the time savings are converted into equivalent cost savings. These cost and time savings are compared with the infrastructure and investment and maintenance costs needed to achieve them. This comparison is usually through comparing the stream of all cost and time savings and investment costs and either discounting the net annual costs to a net present value or calculating an internal rate of return for the stream of annual net costs. Other evaluation methods are available but not used much in corridor studies.

20. Several recent studies have highlighted the importance of reliability and confidence of traders in the times and costs of transport in a corridor. To take account of these in the economic evaluation of a corridor, measurement of the variability of time and cost was included. This is easier stated than applied, since variability if time and cost does not figure in the standard measures of economic benefit of a project – net present value or internal rate of return. However, as explained below a model that has been applied in similar projects financed by IDA was adopted.

21. The model is suited to situations where reduced uncertainty in time and cost through the implementation of the corridor components is considered important. This is certainly the case here. Such a model was used on the east Africa Trade and Transport Project as well as the CEMAC Trade and Transport Project, both in Africa. In the former case, the evaluation of the corridor development took account of six sub-components of the project, including infrastructure investments, trade promotion components and policy changes. The economic evaluation was based on target reductions in times and costs and their uncertainties and not on modeled estimates of the impact of the project sub-components. The Project Appraisal Document provides tables that show the benefit attributable to each of the five measures that derive from the six sub-components, and the distribution of these benefits between the four countries involved in the Project. The relationship between the six sub-components and the five measures is shown in another table in this document.

22. The impact of separately changing the values of four input parameters (operating costs, traffic volumes, value of time and investment costs) by +20 and -20% was assessed. The base internal rate of return of 28% was found to vary from 14% (reducing value of time by 20%) and 46% (reducing investment costs by 20%).

23. The same model as employed in the EATTFP is used to estimate the expected economic impact of the NITTFP. Several assumptions were made in utilizing the model.

Model to estimate Impact of Project

24. The economic evaluation of the project is based on a supply chain approach which provides a convenient conceptual framework to disentangle logistics costs deriving from the sequence of transit operations, and subsequently assess the impact of policy, regulatory or infrastructure investment measures. A quantitative supply chain model is developed identifying the impact of cost, delays and uncertainty in lead time. The shipper in Nepal bears the costs of transport and transit from/to the port in India and to/from warehouse or factory (of both containerized and bulk cargo).

(b) Arvis, Raballand and Marteau (2010)[14] use a supply chain model originally proposed by Baumol and Vinod (1970) to develop a logistics costs model for a corridor. The model, which has been used on other World Bank-financed regional trade and transportprojects,[15] is developed from the perspective of the shipper and seeks to determine the total logistics costs associated with the time, cost and reliability performance of a corridor. This end-user supports costs directly or through fees paid to agents providing services such as freight forwarders or transport operators. The model also takes into consideration whether the transport services industry are competitive or cartelized. This is very relevant in Nepal where the transport markets tend to be cartelized.

(c) Based on the model total logistics costs can be estimated as follows:

Logistics costs	=	Transportation Costs	=	Costs incurred by trucking firms
	+	Moving inventory costs	=	representing tied up capital and
	+	Delay Hedging Costs	=	induced costs to hedge unreliability inventory and warehousing costs, or shift to faster more expensive mode of transportation

(d) **Transport costs**: For modeling purposes transport costs are decomposed into fixed and variable costs. Typically transport costs are estimated for containers. However, in the case of Nepal bulk shipments are also included as they are an important logistics flow.

(e) **Moving Inventory Costs:** For simplicity, the evaluation is based on a time linear formula based on the operational value of time and the mean lead time in transit. Optimal inventory management faces constraints from:

- Unpredictability and uncertainty in shipment delivery time; and,
- The level of demand, whether predictable or random. Volumes are typically lower in a landlocked country such as Nepal compared to the gateway country, in this case

[14] The model is described in detail in Arvis, J. F., Raballand, G. and Marteau, J. F. 2010. The Cost of Being Landlocked: Logistics Costs and Supply Chain Reliability. Washington, DC: World Bank.

[15] See for example East Africa Trade and Transport Project (P079734) and CEMAC Trade and Transport Project (P079736). Washington, DC: World Bank.

India. .This leads to their higher inventory costs in Nepal as traders have to maintain higher inventory levels.

(f) Again for simplicity, the value of the optimal inventory is assumed to be equal to the buffer levels necessary to satisfy demand in between successive shipments.

(g) **Inventory to account for unpredictability**: Related to the above, an estimate is made of the inventory carrying costs to deal with the variance in lead time for restocking.. A few simple assumptions are used, namely that:

- A buffer is maintained based on delivery delays not exceeding a defined threshold The cost of dealing with a stock-out arising from unpredictable delivery times and
- A probability distribution of lead time.

(h) Using the above formula, estimates of the costs and cost savings for the case with and without the project were estimated. The estimates are based on very conservative estimates of the likely impact of the project and traffic projections. The main assumptions are the following:

- Gains resulting from implementing the project are estimated only for delays and uncertainty related to imports. Import volumes are more than 80 percent of Nepal's international trade traffic flows. As such any interventions that reduce costs for imports will also reduce costs for exports. In any case, exports face fewer impediments that imports.

(i) Parameters for elements such as the value of time are estimated at very conservative levels, based on empirical evidence form similar projects and elsewhere in the world. The complete formulation of the model is

$$TotalTransitCost = A + O + \alpha \times T_{trans} + \frac{\beta}{\lambda} \times D$$

$$+ (m - w) \times T_{mean} \times V + w \times \left(\frac{\int_{T_h}^{\infty} tP(t)dt}{\int_{T_h}^{\infty} P(t)dt} \right) \times V + w \times \frac{S}{2} \times V$$

Where

O	=	Transit overheads
A	=	The administrative costs of organizing transit operations : internal costs or costs paid to logistics providers (for example to arrange small shipments)
T_{mean}	=	The average lead time (days) of transit operation, for instance: Ex Ship to consignee (imports) Shippers to FOB (exports)
S	=	The average time (days) between identical shipments required by the level of demand for such shipment (replenishment cycle)
α	=	Fixed costs of transportation.
β	=	Variable cost of transportation (e.g. fuel, maintenance)
Dis	=	Average distance covered in the period

λ	=	Load factor of truck
m	=	Moving inventory cost
w	=	Warehouse(d) inventory cost
V	=	Value per shipment
T_i	=	Mean time taken by step i
D_i	=	Distance covered during step i
T_{trans}	=	Usage of transportation vehicle (including waiting time and return)
T	=	Total lead time (random variable)
D	=	Distance covered in transit (one-way)

(j) Using the above formula, estimates of the costs and cost savings for the case with and without the project were obtained. The estimates are based on very conservative estimates of the likely impact of the project and traffic projections. The main assumptions are the following:

- Gains resulting from implementing the project are estimated only for delays and uncertainty related to imports. Import volumes are more than 80 percent of Nepal's international trade traffic flows. As such any interventions that reduce costs for imports will also reduce costs for exports. In any case, exports face fewer impediments that imports.
- Parameters for elements such as the value of time are estimated at very conservative levels, based on empirical evidence form similar projects that have been implemented by the World Bank elsewhere in the world.
- Projections of the volume of trade through the corridor that would be expected even if the project were not to be implemented were estimated. A simple linear growth factor was assumed based on trends over the past several years. The same projections were made for all trade that would benefit from implementation of the project.
- Gains resulting from implementing the project are estimated only for delays and uncertainty related to imports. Import volumes are more than 80 percent of Nepal's international trade traffic flows. As such any interventions that reduce costs for imports will also reduce costs for exports. In any case, exports face fewer impediments that imports.
- Given the importance of bulk shipments in Nepal, the evaluation looked at both containerized and bulk product shipments. Some corridor evaluations have been limited to imports on the assumption that most proposed corridor improvements will apply much more to exports than to imports. Other evaluations have been limited to containerized products, on a similar assumption that most trade promotion measures apply more to containerized and general freight than to bulk products. These might be reasonable limitations of the extent of an economic evaluation but could not be supported under the present project, hence consideration of both.
- Parameters for elements such as value of time are estimated at very conservative levels, based on empirical evidence form similar projects and elsewhere in the world. The reductions in time will result in a reduction in demurrage charge Nepalese importers typically face at Kolkata. Recent estimates by the NITDB put the charges at approximately $68m dollars per year. A reduction in turn-round time for containers is assumed to translate into a proportional reduction in this time. However consistent with the conservative approach and to minimize

the influence of changes in shipping line policies on empty containers, such savings would be additional, and therefore not included in the cost-benefit analysis.

- Changes in freight rates are not modeled due to lack of data. The main savings are therefore assumed to derive mainly from greater utilization of trucks deriving from reductions in time and uncertainties.

The project interventions and their expected impacts are summarized in the table below:

Table 2. Project Economic Impact

Activity	Step	Expected impact
Component 1: Modernize transport and transit arrangements between Nepal and India (US$9m)		
Simplify and harmonize customs and border management procedures, processes and systems, especially to provide for electronic interchange of data	Cargo removal from Kolkata and border clearance at Raxaul/Birgunj	Reduction in cargo dwell time and uncertainty in port and at Birgunj border post and ICD
Introduce a modern and effective transit regime between the two countries.	Transit in India	Reduction in India transit time and uncertainty
Strengthen and modernize the regulation of international trucking services	Trucking services in Nepal	Reduction in trucking costs
Component 2: Strengthen Trade Related Institutional Capacity in Nepal (US$20m)		
Trade Portal and Single Window System Development	Border crossing and destination clearance in Kathmandu	Reduction in border clearance time and reduced costs to traders associated with complying with regulatory requirements
Improve Trade-Related Laboratories	Clearance for exports at border crossing points and in Kathmandu	Reduction in lab test time and uncertainty
Component 3: Improve Select Trade-Related Infrastructure (US$72m)		
Expand and upgrade the Narayanghat-Mugling road section	Road transit	Reduction in road section travel time and uncertainty
Build a CFS/ICD in Kathmandu	Clearance/un-loading in Kathmandu Truck utilization	Reduction in clearance/un-loading time in Kathmandu and improved vehicle utilization
Improve the infrastructure at Birgunj ICD through the extension of the warehouse shed and disabling of unused rail tracks at the Birgunj ICD	Cargo clearance at ICD	Reduction in clearance time and uncertainty at Birgunj ICD

Summary of Cost-Benefit Analysis

27. The analysis was performed for two main transport mode combinations along the corridor: all road transport between Kathmandu and Kolkata and rail between the port and Birgunj and road transport between Birgunj and Kathmandu. The input data for both are indicated below.

Table 3. Input Data (time in days)

a) Kolkata – Birgunj – Kathmandu (road)

Expected impact (all times in days)	Year						
	Baseline	1	2	3	4	5	6
Reduction in cargo dwell time and uncertainty in port	3.00	3.00	3.00	3.00	2.75	2.50	2.50
Reduction in border crossing time and uncertainty at Birgunj border post	2.30	2.30	2.30	2.30	1.50	1.50	1.50
Reduction in Birgunj - Kathmandu time due to road improvements	2.30	2.30	2.30	2.00	2.00	1.50	1.50
Offloading time in Kathmandu	2.00	2.00	2.00	2.00	1.75	1.50	1.50
Reduction in lab test time and uncertainty	4.00	4.00	4.00	3.50	3.00	2.50	2.50

	Road Uncertainty						
	0	1	2	3	4	5	6
Reduction in cargo dwell time and uncertainty in port	2.50	2.50	2.50	2.50	2.00	1.50	1.50
Reduction in border crossing time and uncertainty at Birgunj border post	1.00	1.00	1.00	1.00	0.60	0.60	0.60
Reduction in Birgunj - Kathmandu time due to road improvements	1.00	1.00	1.00	1.00	1.00	0.50	0.50
Offloading time in Kathmandu	2.50	2.50	2.50	2.50	1.00	1.00	0.75
Reduction in lab test time and uncertainty	1.00	1.00	1.00	0.80	0.75	0.75	0.75

b) Kolkata – Birgunj (rail)

Expected impact (time in days)	Year						
	Baseline	1	2	3	4	5	6
Reduction in cargo dwell time and uncertainty in port	11.00	11.00	11.00	10.00	9.00	9.00	9.00
Reduction in border crossing time and uncertainty at Birgunj ICD	2.00	2.00	2.00	1.80	1.60	1.50	1.50
Reduction in lab test time and uncertainty	4.00	4.00	4.00	3.50	3.00	2.50	2.50
	Rail Uncertainty						
	0	1	2	3	4	5	6
Reduction in cargo dwell time and uncertainty in port	4.00	4.00	4.00	3.20	2.00	2.00	2.00
Reduction in border crossing time and uncertainty at Birgunj ICD	1.00	1.00	1.00	1.00	0.50	0.50	0.50
Reduction in lab test time and uncertainty	1.00	1.00	1.00	0.80	0.75	0.50	0.50

28. Using the cost, time and uncertainty related to each project component as defined by the sequence of movement of cargo along a corridor, estimates of costs and benefits were derived for: a) transporter costs, b) delays and c) uncertainty. The latter two affect importers of goods. As argued above, the impacts can lead to reorganization of activities for specific supply chains, which in turn may feed into regional impacts within the country and the wider region served by the corridor.

29. Based on the model and assumptions, cost savings to Nepal were assessed for the case with or without the project. Most of the benefits of the project (almost 60%) are going to be generated by project interventions that will lower border crossing times and cargo dwell time in the port of Kolkata (Single Window, changes to transit procedures and practices), followed by the cargo handling in Kathmandu (ICD/CFS) and improvements to the road. It is important to acknowledge that the improvement to the road is key to realizing the full impact of the benefits elsewhere along the corridor as any corridor is only as efficient as its weakest link.

Table 4. Summary Estimates of Economic Impact of Project (All amounts in US$m)

Costs			**Year**				
Intervention	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
Transport regulation	0.03	0.33	1.33	1.31			**3.00**
Bilateral transit reforms	0.20	0.95	0.95	0.95	0.95		**4.00**
Trade Portal	0.03	0.56	0.56				**1.15**
Single window	0.23	3.98	3.98	3.98	3.95		**16.10**
Capacity building	0.61	0.51	0.51	0.51	0.51		**2.65**
N-M road	0.62	15.26	16.86	15.13	0.13		**48.00**
ICD, M&E	0.48	4.32	7.32	8.69	0.20		**21.00**
Multi-functional labs	0.07	0.44	1.13	1.36			**3.00**
Total	**2.26**	**26.34**	**32.64**	**31.92**	**5.74**	**0.00**	**98.90**
Benefits							
Component							**Total**
Port	0.00	0.00	15.38	13.80	3.64	2.17	**34.99**
Border post	0.00	0.00	0.00	21.08	20.16	20.96	**62.20**
Nepal transit	0.00	0.00	9.54	4.38	7.40	8.25	**29.57**
Kathmandu	0.00	0.00	0.00	25.04	3.92	4.53	**33.49**
Lab tests	0.00	0.00	0.46	0.83	1.30	1.33	**3.93**
ICD	0.00	0.00	0.11	0.33	0.30	0.31	**1.05**
Totals	**-**	**-**	**25.49**	**65.47**	**36.72**	**37.55**	**165.23**
Net benefits of project	**(2.02)**	**(21.00)**	**(5.09)**	**21.32**	**17.58**	**19.02**	**29.82**
	Discount rate		**12%**				
	EIRR		**30%**				

30. The contribution of the different activities of the project to benefits and the amounts attributable to transporters and shippers/importers is presented below in Table 5. Based on the above, the flows are only for the first six years of the project. The analysis points to procedural reforms as the most significant contributor to the benefits expected from the project. More than a third of the benefits will be due to the project interventions that will improve the efficiency of border management (trade portal, single window, automation of CTD). However, given the interconnectedness of the interventions, the benefits of each are maximized only if constraints elsewhere along the chain are also addressed. The various activities are therefore complementary and important to realizing the development objective of the project.

Table 5. Sources of Benefits and Direct Beneficiaries of Project (all figures in US$m)

	Direct beneficiaries			
Source of savings	**Transporters from reduced delays**	**Traders due to reduced delays**	**Traders due to reduced uncertainty**	**Total**
Port processing	1.28	5.10	28.61	**34.99**
Border clearance	34.86	25.64	1.70	**62.20**
Sirsiya ICD	0.00	0.95	0.10	**1.05**
Nepal road improvement	16.42	12.17	0.99	**29.57**
Kathmandu ICD/CFS	5.69	4.19	23.61	**33.49**
Laboratory testing	0.65	3.17	0.11	**3.93**
Total	**58.91**	**51.21**	**55.11**	**165.23**

Sensitivity analysis

31. The various assumptions were tested on their influence on the Economic Internal Rate of Return of the project, which remain above the opportunity cost of capital even if costs increase by 10 percent or the value of time is reduced by 20 percent. In both instances it is at least 18 percent.

Annex 7: Implementation Support Plan

South Asia: Nepal-India Regional Trade and Transport Project

1. The Implementation Support Plan (ISP) for the project is designed based on current capacities of the implementing agencies and the risks described in the ORAF and the GAP Action Plan. It outlines the support from Bank staff and specialist consultants required to strengthen capacity to implement project activities and the planned risk mitigation measures. Given the complexity of a multi-sectoral operation of this scale and the associated safeguards risks, a compressive and resource-demanding ISP is required for effective implementation.

2. *Supervision Strategy.* The Bank's supervision team will include a Washington-based task team leader, and country-based transport, fiduciary and safeguards staff. Additional technical support will be provided in the areas of customs, transit systems, and logistics. A Supervision Engineer will be hired to monitor all infrastructure activities. The supervision strategy for the project includes joint reviews by the Bank and GoN on average every six months. These reviews will include field visits and intensive discussions on project performance, and will be used as a forum for providing constructive and corrective technical guidance. The findings of the joint reviews will also be used to identify gaps constraining implementation and support will be provided accordingly. The costs associated with supervision will largely entail the costs of international and country-based staff and consultant time as well as international and domestic travel.

3. *Technical support to project components*: Apart from routine supervision and monitoring, the Bank and IFC will provide advisory support to the various implementation agencies. Such support will be identified jointly by the Bank and GoN at different stages of project implementation. Advisory support will be provided by a combination of Bank staff and consultants with specific technical expertise in the areas of customs, border management, transit systems, and logistics.

(a) *Expand and upgrade the Narayanghat-Mugling road section*: Country-based senior transport specialists will monitor and review the adequacy of the road design and specifications, the quality of the works and performance of the contractors and supervision consultants. The specialists will perform site supervision and spot-checks of construction and completed works.

(b) *Trade Portal and Single Window System Development:* Washington-based ICT and Customs specialists will review and monitor progress and provide technical advice (e.g. business process reengineering, IT systems, customs administration and procedures, etc.).

(c) *Modernize transport and transit arrangements between Nepal and India*: Bank Group experts will provide technical capacity development related to trade and transit agreement negotiations, legal reform, customs and border management procedures, processes and systems, regulation of international trucking services, etc.

4. *Financial Management:* A Bank financial management specialist based in Kathmandu will conduct two or more FM supervision missions every year throughout the life of the project. FM supervision will cover operational status and capability of financial management systems,

quality of financial reports, reconciliation of financial data, capacity of FM staff, review of audit reports and follow up on implementation of recommendations.

5. *Procurement*: A Bank procurement specialist based in Kathmandu will be a member of the project team throughout the project. The procurement specialist will provide due diligence services for procurement documents and will join selected implementation support missions. The frequency of missions is expected to be at least twice per year. The specialist will review the red flags required to be checked for all procurement under the project; implementation of the procurement risk mitigation framework; and implementation of recommendations provided in the various audit reports.

6. *Environmental Safeguards*: Bank environmental specialists based in Kathmandu and Delhi and an Environment Safeguards Consultant (6 weeks per year) will be members of the project team. Besides supervision of compliance with environmental safeguards, the specialists will provide support on the implementation of the EMP and ESMF.

7. *Social Safeguards*: A Bank social development specialist based in Kathmandu will be a member of the project team. Besides supervision of compliance with social safeguards, the specialist will provide support to DoR on the implementation of the RAP and VCDP. Field visits of the works sites will include consultations with persons affected by the project and assessment of the grievance redress mechanism.

8. The Bank's implementation support requirements are summarized in the following table

Time	***Focus***	***Skills Needed***	***Resource Estimate***
First twelve months	• Overall policy dialogue, project implementation supervision and support management, team management and coordination, and internal reporting. • Ensure the PCO and project coordination mechanism are functioning. • Review terms of reference for consultants selected to implement TA components.	Task/project/team management, Technical Trade/Customs Expertise	$275,000
	• Ensure that project management systems (financial, contract management) are in place. • Monitor resource flows, and individual component-level budgeting.	Financial Management	
	• Ensure institutional arrangements are in place for compliance with EMP, ESMF, RAP and VCDP.	Environmental and Social safeguards	
	• Ensure systems are in place for compliance with disclosure policies.	Governance	

	• Random review of check-list of red flags provided with bid evaluation reports.	Procurement	
12-72 months	• Overall policy dialogue, project implementation supervision and support management, team management and coordination, and internal reporting. • Review monitoring indicators, quality of works. • Technical and advisory support for any needed design and implementation improvements.	Task/project/team management, Technical Expertise	$825,000 ($165,000 per year)
	• Random review of check-list of red flags provided with bid evaluation reports.	Procurement	
	• Review compliance with fiduciary policies	Financial Management	
	• Review compliance with safeguards policies	Environmental and Social safeguards,	
	• Review compliance with GAP Action Plan	Task leadership, Governance	

Skills Needed	***Number of Staff Weeks***	***Number of Trips***	***Location***
Task management Washington-based	35	12	International
Operations Support	17	8	International
Trade Specialist	26	12	International
Customs Specialist	26	12	International
ICT Specialist	26	12	International
Transport Specialist	18		Field-based
Procurement Specialist	18		Field-based
Financial management Specialist	18		Field-based
Environment Specialist	26	12	Field-based
Social Specialist	26		Field-based
International Consultants	26	12	International
Local Consultants	52	12	Field-based