

## NEPAL'S DEVELOPMENT CONTEXT AND THE ROLE OF TRADE FACILITATION

### A. Nepal's Development Context<sup>1</sup>

1. Nepal needs faster and sustained growth in order to reach lower-middle income status. With per capita income of \$757<sup>2</sup> in fiscal year (FY) 2016, Nepal is classified as a low-income country, a landlocked developing country (LLDC),<sup>3</sup> and a least developed country (LDC).<sup>4</sup> While poverty has declined, it remains high. Poverty incidence declined from 41.7% in FY1996 to 21.6% in FY2016.<sup>5</sup> In 2015, it ranked 144th out of 190 countries in the United Nations' Human Development Index. Nepal aims to graduate from the LDC status by 2022 and become a middle-income country by 2030.<sup>6</sup> To achieve its aspirations, Nepal will require sustained rapid growth.

2. Nepal's economy has grown at a smaller pace than its South Asian neighbors. Nepal's gross domestic product (GDP) growth during FY2002–FY2010<sup>7</sup> averaged 3.8% per year and it declined slightly to 3.6% per year during FY2011–FY2016. Growth since the beginning of 2000s has been slower than the average growth of 4.8% per year recorded during FY1991–FY2000 (Figure 1). Nepal's growth (3.8%) has been slower than the average growth of 6.6% per year seen in other South Asia Subregional Economic Cooperation countries since 2002. The dip in growth during FY2011–FY2016 was largely the result of twin shocks<sup>8</sup> that Nepal suffered during the calendar year 2015 with growth declining from 6.0% in FY2014 to 3.3% in FY2015 and further to 0.4% in FY2016. Growth also suffered on account of poor monsoon during the past two years.

3. Services sector has come to be the mainstay of Nepalese economy. In terms of the share in output, service sector has overtaken agriculture to be the largest sector of the economy. Since FY2001, services sector (with transport, storage, and communications; education; and wholesale and retail trade among the largest contributing service subsectors) accounted for 62% of the growth, followed by agriculture at 28% (Figure 2). Industry sector accounted for the rest (construction subsector contributed the most, and manufacturing accounted for only 1.9% of the growth).

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<sup>1</sup> This supplementary appendix aims to provide a discussion of Nepal's development context, the challenges it faces in improving its long-term prospects, and how customs modernization and improving trade facilitation in general can help address Nepal's development challenges. This appendix does not delve into the important challenges faced in the short-term such as those from the twin shocks in the calendar year 2015 or the business cycle fluctuations.

<sup>2</sup> Per capita income is measured as gross national income (GNI) per capita income in current prices. Nepal's gross domestic product (GDP) per capita for FY2016 was \$745 in current prices. ADB, Nepal Resident Mission (NRM) Economic Database.

<sup>3</sup> United Nations Conference on Trade and Development. List of land-locked developing countries.

<http://bit.ly/LandLockedDevelopingCountries>.

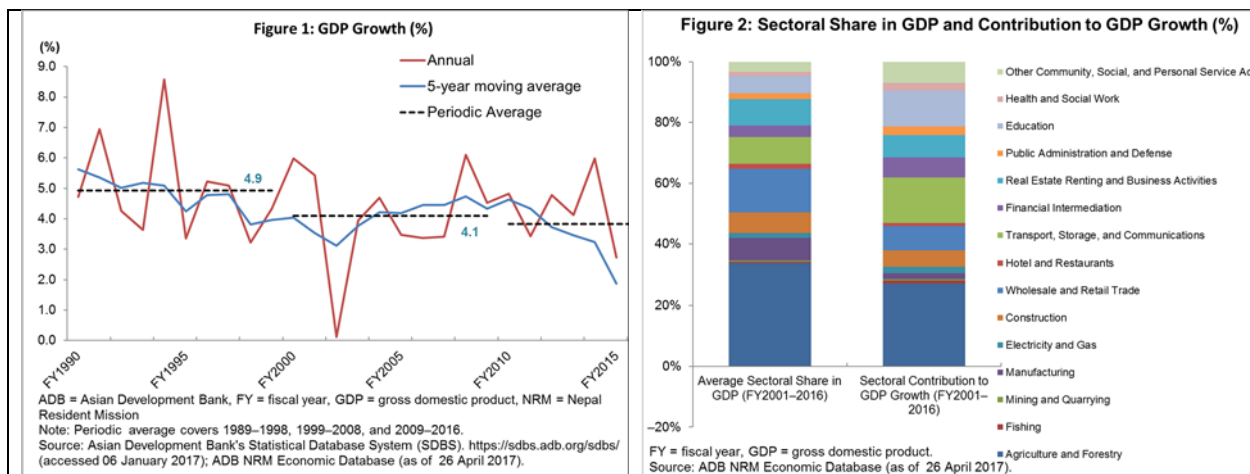
<sup>4</sup> United Nations Committee for Development Policy. 2016. *List of Least Developed Countries (as of May 2016)*. <http://bit.ly/LeastDevelopedCountries>.

<sup>5</sup> Poverty incidence reported is measured at the national poverty line. Government of Nepal, National Planning Commission. 2016. Approach Paper –The Fourteenth Plan FY2016/2017 –FY2019/2020. Kathmandu.

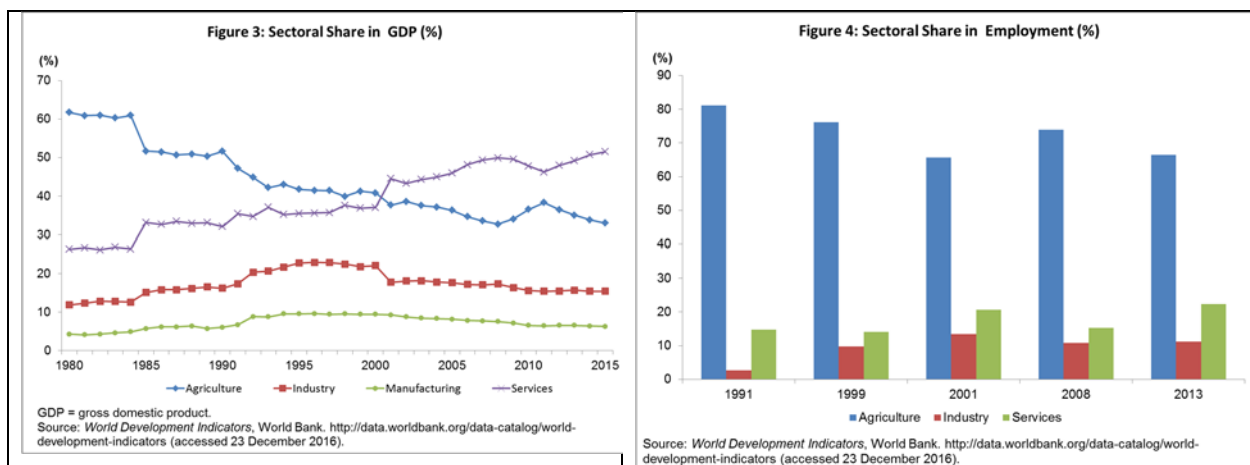
<sup>6</sup> Government of Nepal. 2016. *Envisioning Nepal 2030: Proceedings of the International Seminar*. [http://npc.gov.np/images/category/Envisioning\\_Nepal\\_2030\\_Proceeding.pdf](http://npc.gov.np/images/category/Envisioning_Nepal_2030_Proceeding.pdf).

<sup>7</sup> Nepalese fiscal year (FY) runs from 16 July of a given calendar year to 15 July of the following calendar year. FY2002 refers to fiscal year 16 July 2001–15 July 2002. Wherever data refers to fiscal year, it is explicitly stated. Growth figures reported in this section are calculated using GDP at market prices.

<sup>8</sup> The first shock was a massive earthquake in April 2015 (which had a negative impact on the FY2015 growth and beyond that) that resulted in heavy loss of life and assets. This was exacerbated by the second shock in September 2015 in the form of major disruption in cross-border trade that lasted until February 2016 and significantly impacted supply chains across the country. Normalcy started returning to cross-border trade since then. A more comprehensive discussion of Nepal's current macroeconomic situation can be found in ADB, NRM. 2016. *Macroeconomic Update: Nepal*. 4(2). <https://www.adb.org/sites/default/files/institutional-document/191526/macroeconomic-update-nepal-aug-2016.pdf>



4. Structural transformation, i.e., shift of resources from low productivity to high productivity sectors, has not happened in Nepal. A key stylized fact observed from development experience around the world is that economies grow by shifting resources from low productivity to high productivity sectors. In the course of this shift, both output and employment structures change. In Nepal, while the share of agriculture in GDP has declined, the share of industry and manufacturing in GDP has also declined (Figure 3).<sup>9</sup> The share of manufacturing in GDP declined from 9.5% in the mid-1990s to 6.5% in 2015. There has been a commensurate increase in the share of services sector in GDP. In terms of employment, however, agriculture continues to account for nearly two-third, services nearly a quarter, and the rest is by industry (Figure 4). Manufacturing accounts for only 6% of employment.

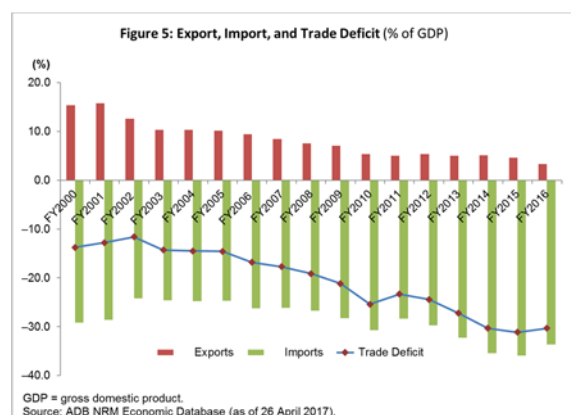


5. In terms of services being the dominant sector in GDP and agriculture in employment, Nepal is not different from other South Asian countries. However, what makes Nepal different is the single-digit share and the declining share of manufacturing in GDP and more so because Nepal is a low-income country and is still at an early stage of development. Manufacturing sector plays a key role in structural transformation due to its ability to generate backward and forward

<sup>9</sup> Nepal witnessed two periods of growth in manufacturing in the mid-1980s and then in the 1990s on account of policy reforms, establishment of industrial zones, and investment infrastructure. Since the late 1990s, share of manufacturing in GDP has shown a steady decline.

linkages, to exploit economies of scale, and to shift labor from rural to urban sectors.<sup>10</sup> With lackluster growth in manufacturing, lack of decent and well-paying jobs in other sectors, Nepalese continue to exit the domestic labor market and look for opportunities abroad. The transformation that seems to have happened has taken place between domestic and foreign labor markets.<sup>11</sup> Indeed, as discussed later, remittances play an important role in Nepalese economy.

6. Mirroring the decline in the share of manufacturing sector in GDP, goods export–GDP ratio in Nepal also show a secular decline. Due to the high dependence on imported goods, trade



balance in small and low-income economies typically tends to be negative. Nepal is no different and historically its trade balance has been in deficit. With import growth outpacing exports, deficit has increased over the years. Merchandise trade deficit in Nepal has increased over the years. Since FY2000, trade deficit has more than doubled from 13.8% to 30.3% in FY2016 (Figure 5).<sup>12</sup> However, another aspect that stands out is the secular decline in the ratio of exports to GDP ratio from 15.4% in FY2000 to 5.1% in FY2014.<sup>13</sup> This decline is also a reflection of the declining share of manufacturing in GDP. The low and the declining

share of manufacturing in GDP and employment as well declining merchandise export–GDP ratio in Nepal has happened at much lower levels of per capita income than the experience for other countries suggests. This is likely to create challenges for Nepal in its endeavor to realize its vision of middle-income status by 2030. As discussed later, the role of manufacturing and exports in generating sustained growth is acknowledged in various government plans and strategies.

7. Remittances have helped keep current account balance manageable. In the 1980s and the 1990s, Nepal’s current account balance to GDP ratio averaged –6.4% and –4.5% respectively.<sup>14</sup> However with the strong remittance inflows current account balance switched from a deficit to a surplus and averaged 3.0% of GDP during 2000–2015 (Figure 6). Over this period, personal remittance inflows increased from 2.0% of GDP in 2000 to 11.2% in 2002 and to 31.8% in 2015 (Figure 7).<sup>15</sup>

<sup>10</sup> More recent development experience, however, shows that economies start to generate a higher share of services at lower levels of per capita income as compared to what was the case for today’s developed economies. However, secondary sector, specifically manufacturing, has continued to play a key role in successful structural transformation.

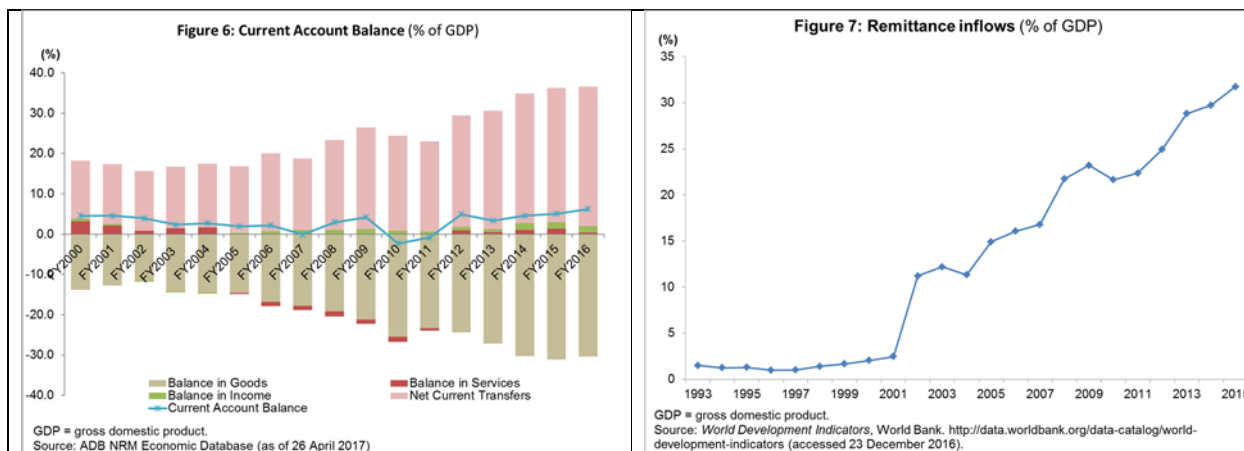
<sup>11</sup> The nature of Nepal’s growth and the lack of structural transformation have also been observed in a recent report by the Overseas Development Institute. Overseas Development Institute. 2014. *Structural Economic Transformation in Nepal*. London.

<sup>12</sup> ADB. NRM. Economic Database.

<sup>13</sup> Goods export–DP ratio in FY2015 was lower at 4.6% and in FY2016 at 3.3%. Lower shares in FY2015 and FY2016 may have been due to the twin shocks that Nepal suffered in the calendar year 2015.

<sup>14</sup> Current account balance to GDP ratios reported here are from the October 2016 release of IMF’s World Economic Outlook. 1980s average refers to 1980–1989, 1990s refers to 1990–1998.

<sup>15</sup> World Bank. World Development Indicators (accessed 23 December 2016).



8. Remittances are the single most important source of foreign exchange earnings for Nepal. Since 2000, remittances have played an important role in stabilizing the current account balance. At their current size of slightly over \$6 billion, remittances are 10 times the size of foreign aid and 2.5 larger than total exports. It is estimated that remittances (domestic and international) account for nearly 25% of income of all households of which nearly two-third is from foreign sources.<sup>16</sup> Remittances have thus played an important role in poverty reduction and in sustaining Nepal's consumption and service-led growth.

9. Remittances bring many benefits but also come with potential economic costs and may not be a reliable source for future growth.<sup>17</sup> One such cost is the appreciation in the real effective exchange rate and the loss of export competitiveness resulting from large inflows—a phenomenon referred to as the “Dutch Disease.”<sup>18</sup> Nepalese economy may already be showing signs of Dutch Disease. Since the remittances began to increase sharply in 2002, real exchange rate has appreciated (Figures 8a and 8b),<sup>19</sup> there has been a relative decline in the industry and the manufacturing sector (the tradables) and the service sector (the nontradable) dominance has increased.<sup>20</sup> According to an estimate, a 10% increase in nominal remittances has led to 0.5% real effective exchange appreciation of the exchange rate in the long run and the subsequent loss of export competitiveness. For the period Q1 1995–Q1 2015, average quarterly increase in remittances was 5.8%, implying a real exchange rate appreciation of 22% due to higher remittances.<sup>21</sup> Reliance on remittances also exposes the Nepalese economy to external shocks

<sup>16</sup> World Bank. 2016. *Nepal Development Update: Remittances at Risk*. Washington, DC.

<sup>17</sup> Millennium Challenge Corporation (MCC). 2014. *Nepal Growth Diagnostic*. Washington, DC.

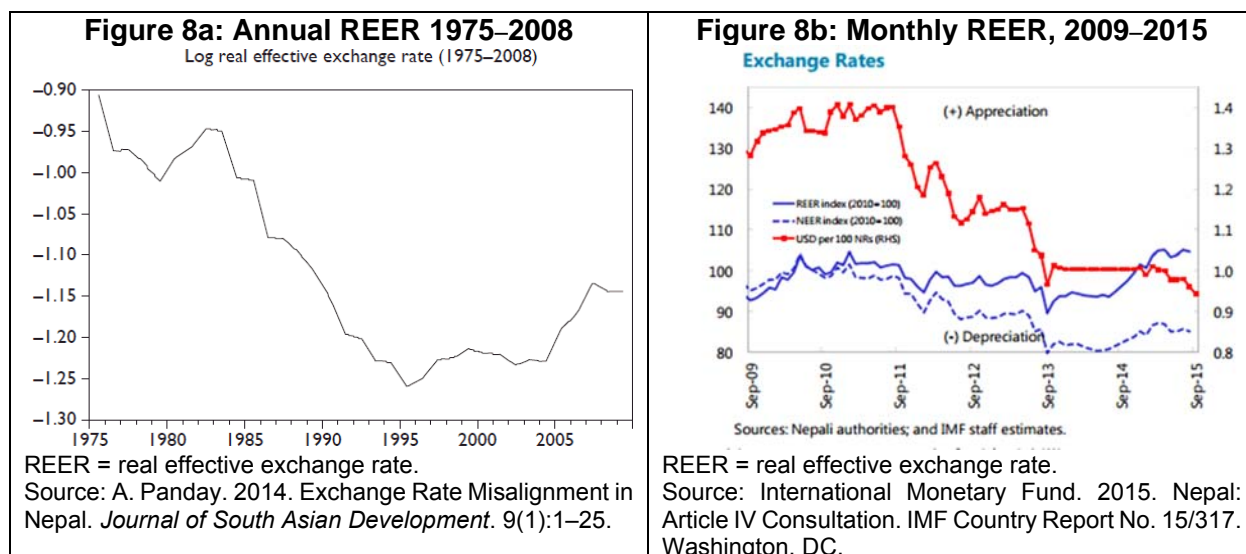
<sup>18</sup> Dutch Disease affects real exchange rate through two channels. An inflow of remittances leads to an increased demand for both tradable and nontradable goods. Higher demand for nontradables lead to an increase in its prices while that of tradables are set in international markets and can be imported to meet the higher demand. This leads to an increase in the relative prices of nontradable goods resulting in real effective exchange rate appreciation (spending effect). Second, as the demand for nontradables increases, resources shift from tradable to nontradable sectors due to higher demand from the latter. This leads to an increase in wages and cost of other factors of production which impinges on the profitability of the tradable sector resulting in a loss of competitiveness putting additional pressure on the real exchange rate to appreciate (resource movement effect).

<sup>19</sup> Nepal's trade-weighted exchange rate was overvalued during 1993–2008. A. Panday. 2014. Exchange Rate Misalignment in Nepal. *Journal of South Asian Development*. 9(1):1–25

<sup>20</sup> Additional factors such as expiration of the Multi-Fiber Agreement also contributed to the decline. MCC. 2014. *Nepal Growth Diagnostic*. Washington, DC.

<sup>21</sup> A. Portugal and E. Zildzovic. 2016. From Evidence to Policy: Supporting Nepal's Trade Integration Strategy: Trade Imbalances and Remittances: Ensuring Macro Stability. *Policy Note 1*. Washington, DC: World Bank.

that may get amplified given the importance of remittances as the single source of foreign exchange earnings and in managing the current account.<sup>22</sup>



10. By providing a steady stream of foreign exchange, remittances helped ease foreign exchange needs that Nepal might have otherwise faced as import growth outpaced export growth. However, for reasons discussed above related to loss of competitiveness and vulnerabilities to external shocks, it is imperative that Nepal diversify its economic base.<sup>23</sup> Tourism and goods export are key candidates to support diversification of foreign exchange earnings for Nepal. In the long-term, diversified sources of foreign exchange earnings are needed and manufacturing sector and exports of goods will have an important role to play.

11. Nepal faces several constraints in its quest to attract investment and stimulate growth. Several growth diagnostic studies have been undertaken for Nepal. These studies use the Hausmann–Rodrik–Velasco framework to identify key constraints addressing which have the greatest potential to increase growth.<sup>24</sup> Summarizing these studies<sup>25</sup>, critical constraints facing Nepal include weak governance and policy uncertainty from prolonged political transition; inadequate infrastructure (transport and energy) on account of chronically weak budget execution, ineffective project implementation on account of lack of procurement, and contract management capacity; poor industrial relations and weak human capital; and inability to address market failures.

<sup>22</sup> Given the size of remittances, a small drop in remittances can potentially have a significant impact on the Nepalese economy. A 10% drop in remittances, for example, is estimated to lead to a 3-percentage point drop in GDP growth. Also, imports are expected to slow down as per capita income and consumption fall. Given that trade-related taxes comprise a big share of government's tax revenue, a 1.5 percentage point drop in revenue is anticipated which would deepen the fiscal deficit. A prolonged slowdown in remittances can adversely impact poverty. This, of course, is a hypothetical scenario but one that underlines the need to move away the economy from its current dependence on remittances. World Bank. 2016. *Nepal Development Update: Remittances at Risk*. Washington, DC.

<sup>23</sup> The need to diversify away from remittances as the single driver of growth is also emphasized in another recent report by the World Bank. World Bank. 2016. *Nepal Development Update: Remittances at Risk*. Washington, DC.

<sup>24</sup> R. Hausmann, D. Rodrik, and A. Velasco. 2005. Growth Diagnostics. Mimeo. John F. Kennedy School of Government. Harvard University. Cambridge: MA.

<sup>25</sup> ADB. 2009. *Nepal Critical Development Constraints*. Manila; Millennium Challenge Corporation. 2014. *Nepal Growth Diagnostic*. Washington, DC: and Overseas Development Institute. 2014. *Structural Economic Transformation in Nepal*. London.



12. It is by now well established that trade causes growth.<sup>26</sup> A recent World Trade Organization (WTO)–Organisation for Economic Co-operation and Development (OECD) report observes that “trade can play a powerful role in contributing to productivity, growth, incomes, and jobs. The evidence is incontrovertible that openness to trade raises national incomes. Trade can also contribute to new and better jobs and improve overall working conditions. It is essential for the transfer of knowledge, technology, and skills—and thus for development.”<sup>27</sup> In relatively small economies like Nepal, trade plays an additional role by providing access to markets overseas and sources of supply to meet consumption and investment needs. In case of LDCs like Nepal, imports are a source of technology and high quality intermediate inputs that help make exports more competitive. Thus, addressing barriers to trade are important in stimulating growth. One such barrier comes from missing public inputs such as adequate provision of soft and hard infrastructure to facilitate movement of goods across borders.

13. While exports currently do not play their envisioned role in contributing to Nepal’s economic development, its potential as key driver of economic growth and inclusive development has been recognized by the country’s authorities.<sup>28</sup> Nepal has, over the years, taken a series of initiatives to promote exports to achieve sustainable and inclusive economic growth, poverty reduction, and improvement in the living standard of the Nepalese people. The Nepal Trade Integration Strategy (NTIS) 2016 aims at: (i) strengthening trade and export enabling environment; (ii) product development and strengthening supply capacity of priority products; (iii) strengthening institutional capacity, trade negotiation and inter-agency coordination; and (iv) building and enhancing trade-related infrastructures. The NTIS 2016 seeks to address the outstanding trade and competitiveness challenges confronted by the country’s export sector.

14. Procedural obstacles refer to the costs incurred by firms in meeting the requirements rather than the requirements per se.<sup>29</sup> For example, inspection of products for microbiological contaminants entails paper work, waiting period, and interactions with officials. Together these are considered as procedures. These can be a burden, more so for new exporters and small- and medium-sized enterprises (SMEs), as it involves information gathering that takes away from the time that could otherwise be devoted to running the business itself. International Trade Centre’s (ITC) business surveys show the significance of procedures. In a recent survey, both SMEs and large firms highlighted costs from limited access to information about processes and regulations more frequently than the cost of actually overcoming regulatory burdens. Among the problems reported, 70% of agricultural exporters and 80% of manufacturing exporters make a reference to procedural obstacles. These vary by sector but are highest for fresh food and processed food (both important exports for Nepal). The same survey shows that most procedural obstacles take the form of time constraints and informal payments. Fixed and variable costs arising out of the

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<sup>26</sup> J. Frankel, and D. Romer. Does Trade Cause Growth? *American Economic Review*. 89(3): 379–399.

<sup>27</sup> World Trade Organization (WTO)–Organisation for Economic Co-operation and Development (OECD). 2015. *Aid for Trade at a Glance: Reducing Trade Costs for Inclusive, Sustainable Growth 2015*. Geneva.

<sup>28</sup> Government of Nepal, National Planning Commission. 2016. *Approach Paper –The Fourteenth Plan FY2016/2017 – 2019/2020*. Kathmandu; Government of Nepal. Ministry of Commerce. 2016. *Nepal Trade Integration Strategy 2016: Executive Summary and Action*. Kathmandu; and Government of Nepal. Ministry of Finance. Department of Customs (DOC). *Customs Reform and Modernization Strategy and Action Plan (CRMSAP) 2017–2021*. Kathmandu.

<sup>29</sup> Discussion on the procedural costs in this paragraph and the statistics quoted is drawn from International Trade Centre (ITC). 2016. *SME Competitiveness Outlook: Meeting the Standard for Trade*. Geneva. The discussion on procedural costs and the evidence cited therein is in the context of procedures to meet technical regulations, but the discussion serves to highlight the costs that procedures impose (whether they arise from technical regulations or administrative barriers).

procedures ultimately lead to an increase in the product price and a restrained access to foreign markets, and may influence a firm's competitiveness and its ability to export.<sup>30</sup>

15. Trading procedures impinge on the competitiveness of a firm and may serve as entry barriers for firms currently not exporting. One component of trading costs is the cost incurred in clearing goods through customs and moving them across borders. Simplified, harmonized, and modern trade procedures have the potential to lower nontariff trade barriers. The importance of trade facilitation, narrowly or broadly defined, has increased in a highly interconnected world and in an era of global value chains where predictability and timeliness of cross-border supply chains play an important role in determining whether or not a country is able to integrate itself into global production networks. Role of customs in an economy has moved beyond its traditional role as revenue collectors. Today, customs play an important role in creating a friendly investment climate and in supporting the implementation of the economic policies that are aimed towards increasing foreign direct investment (FDI) and enhancing the export potential. Indeed, ease of moving goods across national borders is one commonly looked at indicator of a country's attractiveness as an investment destination. Customs procedures that support growth of an export oriented market economy and encourage investment are known as Custom Procedures with Economic Impact (CPEIs).<sup>31</sup>

16. Trade facilitation has attracted the attention of policymakers due to its win-win nature. With the decline in tariff barriers and with the role of customs administration around the evolving being viewed from a broader perspective of promoting export and investment, trade facilitation has moved up the agenda of policy makers and this culminated in the conclusion of the new "Trade Facilitation Agreement" (TFA) at the WTO Ministerial Conference in Bali in December 2013 and in the adoption of a Protocol of Amendment in November 2014 inserting the TFA into the agreement establishing the WTO. Key provisions of TFA include those related to (i) expediting the movement, release and clearance of goods, including goods in transit; (ii) effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues; and (iii) technical assistance and capacity building in trade facilitation.<sup>32</sup>

17. Sector strategies and action plans call for improving trade facilitation and transforming Nepal's Department of Customs (DOC) into a modern customs organization in support of achieving the government's economic vision. NTIS 2016 implementation framework underlines the role of improved trade and transport facilitation in increasing Nepal's export competitiveness. The recently launched fifth Customs Reform and Modernization Strategy and Action Plan (CRMSAP) 2017–2021 also recognizes the role of trade in economic wellbeing and the importance of trade facilitation in general, and, in particular, customs reforms and modernization to improve export performance. CRMSAP 2017–2021 notes, "(T)he embrace of trade facilitation, especially to improve import and export performance, involves streamlining and simplifying border procedures, in particular for Customs, but also the other relevant border regulatory agencies. These broad principles also embrace moves to modernize Customs administrations such as the adoption of risk management, audit-based controls, maximum use of information technology,

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<sup>30</sup> D. Narjoko. 2015. AEC Blueprint Implementation Performance and Challenges: Non-tariff measures and Non-tariff Barriers. *ERIA Discussion Paper Series*. Jakarta: Economic Research Institute for ASEAN and East Asia.

<sup>31</sup> These are not new and are included in the Kyoto Convention on Customs procedures adopted in 1973. The revised Kyoto Convention (RKC) and the WTO Trade Facilitation Agreement (TFA) also make specific reference to such CPEIs. Examples of CPEIs include, but not limited to, (i) storage procedures—storage warehousing or customs warehousing, (ii) processing procedures—temporary importation for inward processing, temporary exportation for outward processing, (iii) procedures permitting temporary importation/temporary exportation, (iv) customs transit, and (v) drawback

<sup>32</sup> WTO. Trade Facilitation. [https://www.wto.org/english/tratop\\_e/tradfa\\_e/tradfa\\_e.htm](https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm).

cooperation with other border agencies, other administrations, and the private sector and adoption of appropriate international standards.”<sup>33</sup> CRMSAP 2017–2021 also calls for developing CPEIs for export promotion.

18. The program is fully aligned to government’s vision, national plans, and sector strategies and action plans. As discussed above, various government documents have highlighted the need to enable exports and that trade facilitation is one of the key components in realizing its vision. The program thus supports a key component of the government’s strategy to diversify its economic base through export promotion which will be critical to achieving government’s aspirations of graduating out of LDC status by 2022 and becoming a middle-income country by 2030. It is, however, important to note that trade facilitation is one of many supply-side initiatives that would be needed to address Nepal’s critical challenge of promoting manufacturing sector and boosting exports.

## B. State of Trade Facilitation in Nepal

19. Though there has been marginal improvement, Nepal continues to perform poorly in various indicators of trade facilitation. Commonly used indicators of trade facilitation performance include World Bank’s Logistic Performance Index (LPI) and the Doing Business’s Trading Across Borders, OECD’s Trade Facilitation Indicators (TFI), and World Economic Forum’s Enabling Trade Index (ETI). On the “overall” LPI, Nepal was ranked 124th out of 160 countries in 2016, which was a decline from 105th rank in 2014 (Table 1).<sup>34</sup> Nepal’s score on the overall LPI increased from 2.14 in 2007 to 2.59 in 2014 but declined to 2.38 in 2016. Similar pattern is observed on the specific issue of efficiency of customs clearance: while it improved during 2007–2014, Nepal’s score and ranking deteriorated in 2016 (Table 1). Nepal’s score in 2016 for overall LPI and for efficiency of customs clearance is less than the average score of comparator groups. ETI also shows that Nepal ranks low in various indicators of efficiency and transparency of border administration, and the situation has not changed much since 2014 (Table 2). OECD’s TFI show that with a score of 0.8 Nepal is ranked lowest among South Asian countries on the overall TFI.<sup>35</sup> On the various components of TFI, Nepal performs well in terms of information availability, border agency cooperation (internal), and governance and impartiality (Figure 9). On the remaining indicators, however, Nepal’s scores are low.

**Table 1: Nepal’s Score and Rank in LPI**

Panel A: Nepal, 2007–2016				Panel B: Nepal and Comparator Groups, 2016		
		Score	Rank		LPI Overall Score	Customs Score
LPI Overall Score	2007	2.14	(130 out of 150)	Nepal	2.38	1.93
	2010	2.20	(147 out of 155)	Low income	2.40	2.29
	2012	2.04	(151 out of 155)	Lower-middle income	2.51	2.33
	2014	2.59	(105 out of 160)	Central Asia	2.36	2.16

<sup>33</sup> Government of Nepal. Ministry of Finance. DOC. *CRMSAP 2017–2021*. Kathmandu.

<sup>34</sup> “Overall” LPI is constructed from a principal component analysis of six core components. These are efficiency of customs and border clearance, quality of infrastructure, ease of arranging international shipments, quality of logistics services, ability to track and trace consignments, and timeliness of shipments.

<sup>35</sup> The overall TFI is not reported by OECD and is calculated as the simple average of its 11 components. The 11 components are measured on a scale of 0 to 2, with 2 being the best performance on trade facilitation and 0 being the worst. Thus the overall TFI also varies from 0 to 2. Overall TFI score of other South Asian countries in 2015 is: India (1.5), Sri Lanka (1.4), Bangladesh (1.1), the Maldives (1.1), and Bhutan (0.9).



	<b>2016</b>	2.38	(124 out of 160)		<b>South Asia</b>	2.66	2.45
<b>Customs Score</b>	<b>2007</b>	1.83	(141 out of 150)		<b>LDCs</b>	2.37	2.27
	<b>2010</b>	2.07	(131 out of 155)		<b>Landlocked</b>	2.68	2.51
	<b>2012</b>	2.20	(125 out of 155)		<b>LLDCs</b>	2.43	2.27
	<b>2014</b>	2.31	(123 out of 160)		<b>LLDCs in Asia-Pacific</b>	2.29	2.08
	<b>2016</b>	1.93	(149 out of 160)		<b>LLDCs in SSA</b>	2.54	2.45

LDC = least developed country, LLDC = landlocked developing country, LPI = Logistics Performance Index, SSA = Sub-Saharan Africa.

Source: World Bank.

**Table 2: Nepal's Score and Rank in WEF's ETI**

	<b>2014</b>		<b>2016</b>	
	<b>Score</b>	<b>Rank</b>	<b>Score</b>	<b>Rank</b>
<b>Customs services index (0 = worst, 1 = best)</b>	0.36	(103 out of 116)	0.38	(104 out of 117)
<b>Irregular payments in exports and imports (1 = very common; 7 = never occurs)</b>	2.30	(121 out of 134)	2.33	(127 out of 136)
<b>Time predictability of import procedures (1 = fluctuates significantly; 7 = hardly fluctuates at all)</b>	3.31	(106 out of 130)	3.59	(94 out of 136)
<b>Customs transparency index (1 = fluctuates significantly; 7 = hardly fluctuates at all)</b>	0.73	(80 out of 115)	0.73	(81 out of 116)

ETI = Enabling Trade Index, WEF = World Economic Forum.

Source: World Economic Forum.

20. On the other hand, the World Bank's ease of trading across borders ranks Nepal relatively higher at 69th out of 190 economies in 2015.<sup>36</sup> This indicator is based on a combination of measures that look at time taken and cost incurred in exporting and importing. However, if the time and cost components (the latter adjusted for level of development) are looked at separately a different picture emerges. In terms of time taken to export and import, Nepal ranks in the bottom half (except for time for documentary compliance for export, Panel A Table 3). In terms of costs incurred in exporting and importing, Nepal performs well if costs are measured in dollar value (Panel B Table 3). It is this high ranking which contributes to the overall high ranking of 69th out of 190 even though Nepal ranks low on time taken. However, if costs are adjusted to take into account the level of development, Nepal's rank is very different. For example, when countries are ranked using costs measured as a ratio to per capita income or when countries are ranked using costs adjusted for price differential with current purchasing power parities (PPP) Nepal does not perform as well and ranks low (except for cost of border compliance for importing in PPP terms, Panel C Table 3).

21. Nontariff trade costs worldwide remain high and those faced by Nepal are one of the highest.<sup>37</sup> As a relatively small and a landlocked economy, Nepal faces higher transport cost on

<sup>36</sup> In 2014, Nepal ranked 171st out of 189 economies. The improvement in ranking is partly due to implementation of Automated System for Customs Data (ASYCUDA) World and partly due to change in methodology of how economies are ranked in the ease of trading across borders.

<sup>37</sup> Trade costs reported here are expressed in *ad valorem* equivalents (i.e., they are expressed as a proportion of the estimated value of the good concerned). According to United Nations Economic and Social Commission for Asia and Pacific (UNESCAP), trade costs shown here are to be interpreted as: "trade costs are inferred as being higher when countries trade more domestically than they do internationally, and lower when they trade more internationally than they do domestically. This is because if trade costs vis-à-vis another country fall then some of the production

account of being unable to enjoy economies of scale due to smaller shipments. Average trade cost for low-income economies, least developed countries, and landlocked developing countries in general are higher (Figure 10).<sup>38</sup> But Nepal, which belongs to each of these groups, has a higher trading cost than the average for each of these groups. Estimates show that non-tariff trade costs for Nepal are equivalent to applying a 325% *ad valorem* tariff in the case of manufacturing exports, 523% in the case of agricultural products, and 391% overall.

**Table 3: Time and Cost Incurred in Exporting and Importing, Nepal**

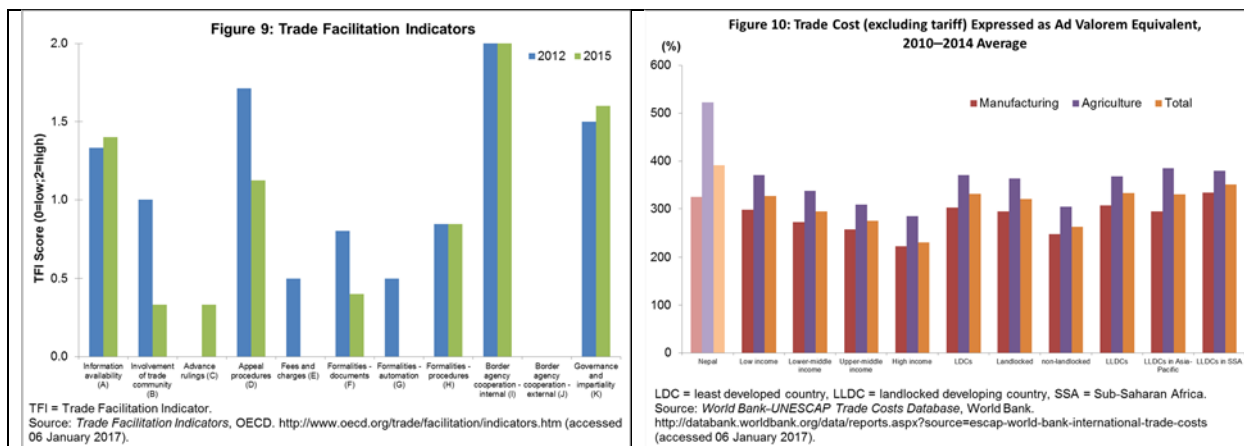
Panel A				
	Rank	2015 Number of countries	Rank	2016 Number of countries
Time to export: Border compliance	118	187	107	187
Time to export: Documentary compliance	71	187	72	187
Time to import: Border compliance	100	187	93	187
Time to import: Documentary compliance	102	187	102	187
Panel B				
	Rank in 2015 based on cost expressed in current \$		Rank in 2016 based on cost expressed in current \$	
	Rank	Number of countries	Rank	Number of countries
Cost to export: Border compliance	78	187	78	187
Cost to export: Documentary compliance	83	187	83	187
Cost to import: Border compliance	47	187	51	187
Cost to import: Documentary compliance	73	187	73	187
Panel C				
	Rank in 2015 based on cost to GDP per capita		Rank in 2015 based on cost expressed in current PPP	
	Rank	Number of countries	Rank	Number of countries
Cost to export: Border compliance	152	179	119	177
Cost to export: Documentary compliance	141	179	113	177
Cost to import: Border compliance	129	179	70	177
Cost to import: Documentary compliance	135	179	104	177

GDP = gross domestic product, PPP = purchasing power parity

Source: *Doing Business Survey 2017 and World Development Indicators*, World Bank.

previously consumed domestically will be shipped overseas.” UNESCAP (2015) observes that “(T)rade costs are multifarious and highly complex”. Trade costs can be broken down into three categories: tariff costs, natural trade costs, and non-tariff policy-related costs. Tariff costs are excluded from the trade costs reported here. Natural trade costs comprise geographical, cultural, and historical factors. Non-tariff policy-related costs, according to UNESCAP (2015), include, but are not limited to, “direct behind-the-border and at-the-border trade costs, the availability and use of information communication technology (ICT) services, the business regulatory environment, international supply chain connectivity, exchange rates movements, and other non-tariff measures such as sanitary and phytosanitary measures, and technical barriers to trade.” Y. Duval and C. Utotham. 2015. *Trade Facilitation in Asia and the Pacific: Which Policies and Measures Affect Trade Costs the Most?* Staff Working Paper. UNESCAP Trade and Investment Division. Bangkok: UNESCAP; and UNESCAP. 2015. *Reducing Trade Costs in Asia-Pacific Developing Countries*. Bangkok

<sup>38</sup> Trade cost reported here is a simple average of bilateral trade cost of Nepal with all other countries in the world. First, average is calculated across bilateral trade cost for each country. Second, the average of each group is calculated using average of all countries in that group. These averages mask substantial variation across sectors and partner countries.



22. Time Release Studies (TRSs) point out areas for reforms.<sup>39</sup> TRSs at two major border points, Biratnagar and Mechi customs,<sup>40</sup> examine time taken from entry of cargo vehicles at the customs territories to the clearance by customs. The process is broken down into two steps: first step is from customs territories to the submission of declaration to the customs offices by the brokers and second is from submission of declaration to clearance by customs. Results show that the average time taken for the first step was significantly higher than the average time taken for the second step.<sup>41</sup> The study also observed that given the staffing levels the average clearance time in the second step for goods using red lane<sup>42</sup> was implausibly low raising concerns about thoroughness of inspections.<sup>43</sup> In light of this, the study concluded that there was a need to review the current risk management practices adopted in cargo clearance.

23. The report identified factors impacting on the release time. The most prominent include: (i) late arrival of original documents from importer to customs agent to process the declaration, (ii) limited use of Automated System for Customs Data (ASYCUDA) functionalities, (iii) lack of adequate legal base to validate acceptance of electronic submission of documents, (iv) lack of proper mechanism for e-payment, (v) non-application of robust risk-based approach to customs clearance, (vi) lack of non-intrusive inspection equipment to conduct physical verification, and (vii) lack of coordination among other government agencies to implement one stop clearance facility.

24. Reforms in area of advance ruling and pre-arrival processing will help reduce the time between entry of cargo vehicles at the customs territories and submission of declaration to the customs offices by broker. Introduction of risk-based clearance system and implementation of post-clearance audit will be important in segregating the low risk and high risk cargoes, and compliant and non-compliant traders thereby allowing customs to offer facilitative services to low risk cargoes and compliant traders, and to focus on high risk cargoes and non-compliant traders

<sup>39</sup> Government of Nepal. Ministry of Finance. DOC. 2017. Time Release Study Report: Mechi and Biratnagar Customs 2017. Kathmandu.

<sup>40</sup> Biratnagar and Mechi are, respectively, the third and the seventh largest customs points by revenue collection.

<sup>41</sup> The average time from entry of cargo vehicles at the customs territories to the submission of declaration to the customs offices by the brokers was estimated at 19 hour 13 minutes for imports and 4 hour 14 minutes for exports at Biratnagar Customs, and 14 hours 9 minutes for imports and 15 hour 26 minutes for export at Mechi Customs. The average time taken from submission to the customs by the customs brokers to granting of final approval for release of goods were found to be 1 hour 53 minutes for imports and 2 hour 18 minutes for exports at Biratnagar Customs, and 2 hour 33 minutes for imports and 1 hour 40 minutes for exports at Mechi Customs.

<sup>42</sup> Goods passing through red lane are subject to detailed examination by the DOC and other government agencies; whereas those passing through green and yellow lanes are released without physical verification.

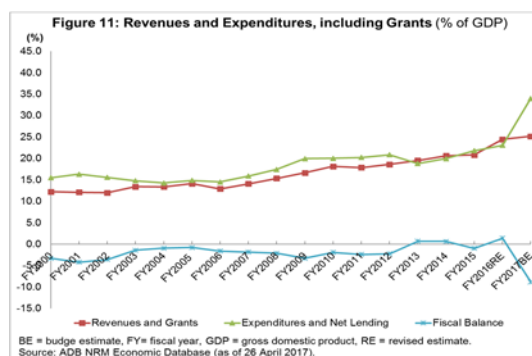
<sup>43</sup> Based on ASYCUDA records, a very high percentage of goods, nearly 74.15% and 42.7% in Biratnagar and Mechi Customs, passed through the red lane.

for greater control. This will allow a compliant trader or cargoes to be released within a minimal time, whereas, for non-compliant traders or cargoes suspected to be high risk, the time will not be shorter, but by properly narrowing them down, the authority may exercise greater screenings of these high risk cargoes to minimize the risk of revenue losses and entry of certain goods such as contraband goods, or those with security, environmental, and health and other risks.

25. Nepal has made progress in adopting automation and introducing reforms but more work is needed to meet Nepal's TFA commitments. Nepal's Parliament approved accession to the WTO TFA and ratified the World Customs Organization (WCO) revised Kyoto Convention (RKC) in January 2017. Other achievements include roll out of ASYCUDA World in 2016, formulation of e-customs master plan, and progress in developing the national single window. Nepal's customs is still oriented toward the traditional role of revenue collection and is yet to transform itself into a modern agency whose role would be to provide an enabling trading and business environment. As the TRSs show, customs clearance procedures are currently geared toward at-the-border controls. Facilities and mechanisms for pre-arrival clearance or post clearance audit are lacking and as a result border points are congested. Resources are stretched thin and unable to focus on high-risk consignments (which is also a finding of the TRSs). Nepal thus needs to move to more modern risk-based approaches of customs clearance. However, it faces several constraints. These include: absence of a legal framework to facilitate inconsistencies in clearance procedures at different border points, institutional structures which are incompatible with modern role of customs, and human resource constraints to implement and sustain new approaches. A gap analysis assessed Nepal's current alignment with TFA to identify gaps and measures that will be needed to meet TFA requirements.<sup>44</sup> To enable Nepal DOC to become a modern, paperless, and a risk-based customs, commitments in six WTO TFA provisions related to post-clearance audit, advance rulings, pre-arrival clearance, expedited shipment, risk management, and trusted traders program need to be met.<sup>45</sup>

### C. Development Financing Needs

26. Nepal has substantial development financing needs. Its low fiscal deficit and surplus in recent years, are reflection of chronic weak budget execution. Nepal is estimated to be facing an infrastructure financing gap of 8%–12% of GDP annually until 2020.<sup>46</sup> Nepal's fiscal deficit has been small and averaged 1.2% in FY2003-FY2016 (Figure 11).<sup>47</sup> More recently, budget showed a slight surplus in FY2013, FY2014, and FY2016. Despite a difficult fiscal year which would have seen reconstruction efforts following the massive earthquake in April 2015, a surplus of 1.4% of GDP was recorded in FY2016.<sup>48</sup> For a country with vast development needs, fiscal surplus is a



<sup>44</sup> World Bank Group. 2015. *World Trade Organization Trade Facilitation Agreement—Nepal Gap Assessment and Implementation Action Plan (Final Report)*. Washington, DC. [restricted distribution].

<sup>45</sup> Nepal's Compliance of the World Trade Organization Trade Facilitation Agreement (accessible from the list of linked documents in Appendix 2) discusses these six WTO TFA and how the program output supports them. In doing so, Nepal will also fulfill several obligations under the World Customs Organization's revised Kyoto Convention (RKC).

<sup>46</sup> World Bank. 2013. *Reducing Poverty by Closing South Asia's Infrastructure Gap*. Washington, DC. Quoted in ADB, NRM. 2016. *Macroeconomic Update: Nepal*. 4(2).

<sup>47</sup> All fiscal deficit data in this paragraph are from ADB. NRM. Economic Database.

<sup>48</sup> Reasons for weak expenditure performance include: (i) lack of project readiness; (ii) delays in project approval and budget release; (iii) delays in procurement; and (iv) overall weak project planning, implementation, and contract

reflection of its chronic problems associated with budget execution.<sup>49</sup> Fiscal deficit for the FY2017 is projected at 8.8% of GDP or NRs229.3 billion.<sup>50</sup> More than half of this deficit is expected to be financed through foreign loans.

27. The DOC collects approximately 37% of total government revenue each year. Of the government's total revenue, 79.1% in FY2015 and 78.2% in FY2016 came from taxes.<sup>51</sup> Of the total tax revenue, 50.6% in FY2015 and 50.8% in FY2016 came from taxes on goods and services. Of the taxes on goods and services, 94.6% in FY2015 and 92.0% in FY2016 came from value-added tax on imports, import duties (excise), and taxes on international trade and transactions (approximately 94% of which was from import duties). Thus, nearly 37.8% of government's revenues in FY2015 and 36.6% in FY2016 came from duties and taxes on imports and other international trade-related taxes and transaction charges.

28. Estimated implementation cost of CRMSAP 2017–2021 is \$94 million. The WTO has recognized challenges in calculating the costs of complying with the TFA and, more broadly, for undertaking trade facilitation reforms.<sup>52</sup> Implementation of the next phase of CRMSAP is to be closely linked to the schedule of compliance with the WTO TFA measures. A costing exercise undertaken for the implementation of CRMSAP 2017–2021, to which the program is aligned, estimates the cost to be around \$94 million.<sup>53</sup> The government has committed \$52 million of its own resources, and the Asian Development Bank (ADB) will contribute \$21 million through this program. Additionally, the World Bank will provide \$16 million, leaving a funding gap of \$5 million. (see footnote 33). Additional government funds allocation and TFAF assistance<sup>54</sup> are expected to close the funding gap.

29. The size of the program, set at \$21 million, is consistent with the DOC's financing needs over recent years. For FY2017, the DOC has a budget of \$19.88 million, including an ADB grant from an ongoing project and earlier tranche releases worth a combined \$8.49 million.<sup>55</sup> The DOC's capital and recurrent expenditures in preceding years have risen from \$9.60 million in FY2014 to \$10.81 million in FY2016, with ADB project and program support accounting for a significant percentage.<sup>56</sup> The DOC, like the rest of the government, has low capacity to absorb funds. It is committed to meet annual budget expenditure targets, particularly to increase capital

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management capacity. In FY2016, trade and supply disruptions may also have affected capital spending. ADB. NRM. 2016. *Macroeconomic Update: Nepal*. 4(2).

<sup>49</sup> ADB. NRM. 2016. *Macroeconomic Update: Nepal*. 4(2).

<sup>50</sup> Fiscal deficit for FY2017 is "budget estimate". However, historically capital expenditure has fallen short of allocation because of inadequate project planning and implementation, actual capital spending and the realized deficit will likely be smaller than projected in the budget. ADB. NRM. Economic Database; and ADB. 2017. *Asian Development Outlook: Transcending the Middle-Income Challenge*. Manila.

<sup>51</sup> Calculated are based on data reported in Annex 2 from Ministry of Finance. 2016. *Budget Speech of Fiscal Year 2016/2017*, Kathmandu. Data for FY2016 are "revised estimate."

<sup>52</sup> For instance, inception costs of customs automation alone may vary from \$550,000 to \$57 million, depending on the country. The difficulty of estimation stems from the fact that trade facilitation reforms are often deeply connected to broader policy objectives, and the costs vary considerably, depending on the type of measures and the country's level of economic development. WTO. 2015. *World Trade Report 2015—Speeding up Trade: Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*, Geneva.

<sup>53</sup> Government of Nepal. Ministry of Finance. DOC. *Customs Reform and Modernization Strategy and Action Plan (CRMSAP) 2017-2021*. Kathmandu.

<sup>54</sup> Development Coordination (accessible from the list of linked documents in Appendix 2).

<sup>55</sup> The budget allocation and expenditures are from the DOC sources. The ADB grants are from (i) ADB. 2010. Report and Recommendation of the President to the Board of Directors: *Subregional Transport Enhancement Project*. Manila; and (ii) ADB. 2012. Report and Recommendation of the President to the Board of Directors: *South Asia Subregional Economic Cooperation Trade Facilitation Program*. Manila.

<sup>56</sup> According to the DOC's Budget Section, the shares of the two ADB project funds (footnote 55) in the total expenditures are 15.9% (FY2014), 20.1% (FY2015), and 28.7% (FY2016).



expenditures by fostering greater procurement capacity, which is a policy condition of the program.

#### **D. Program Impact Assessment**

30. Customs reforms to modernize, simplify, and harmonize trade facilitation procedures as envisaged under the program and fifth phase of the CRMSAP 2017–2021 can generate benefits for the Nepalese economy through various channels. These include: (i) higher trade flows; (ii) lower costs of trading; (iii) diversification of export markets and products; (iv) greater participation in global value chains; (v) an improved business climate which will attract FDI; (vi) make growth inclusive through poverty reduction and benefiting SMEs; (vii) improved customs revenue; and (viii) reduced trade-related corruption. While the impact on trade flows is estimated for Nepal through a modeling exercise, for other potential benefits this assessment relies on the vast literature that uses cross-country databases or country-specific case studies to discuss the possible gains from trade facilitation. Two caveats are in order. First, while this impact assessment discusses gains from improvements in trade facilitation from the aforementioned channels, other factors may reinforce or offset the impact from trade facilitation reform. For example, technological progress, capital accumulation, and labor force changes can have a bigger impact on trade flows than those from trade facilitation improvements.<sup>57</sup> Second, definition of trade facilitation used in the literature varies and may go beyond areas of reforms under the program.

31. Nepalese exports are estimated to increase by 23.0% from improvement in trade facilitation. A modeling exercise using the “gravity model”<sup>58</sup> approach was undertaken for the purposes of this assessment to quantify the impact from improvement in trade facilitation on Nepal’s trade. Results from the exercise show a positive relationship between OECD’s TFI (which was used as a measure of trade facilitation) and bilateral trade. To estimate potential increase in trade, different scenarios of improvement in trade facilitation are assumed. In all scenarios, because the WTO TFA is enforceable, other countries are also expected to see an improvement in their TFA compliance and thus their TFI scores are likely to increase as well. Thus, Nepal will benefit not only from an improvement in its own TFI score but also that of its trading partners. In the baseline scenario, Nepal’s overall TFI score is assumed to increase to 1.3 (as targeted under CRMSAP 2017–2021). In the baseline scenario, it is assumed that high-income countries are fully TFA compliant and that they will achieve the maximum TFI score of 2.0. For all other countries (excluding Nepal), overall TFI score is assumed to increase to the current overall TFI average of high-income countries if their current overall TFI score is below that average. In this baseline scenario, exports are assumed to increase by 23.0%. Imports are expected to increase by 21.6%.<sup>59</sup>

32. Lower trading costs improve the competitiveness of exports directly and indirectly through reduction in cost of importing. Lower cost of importing can help improve consumer surplus. Like tariffs, non-tariff measures add to the cost of goods. Inefficient trade procedures drive a wedge between price received by the exporter and those paid by the consumer, and lead to welfare losses. Trade facilitation reforms and customs modernization can help remove inefficiencies. Non-

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<sup>57</sup> WTO. 2015. *World Trade Report 2015: Speeding Up Trade: Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

<sup>58</sup> The “gravity model” and the computable general equilibrium (CGE) models are the two most widely used methods to estimate the effect of trade facilitation on trade flows. Gravity model has been the workhorse model of empirical trade. Further details about the gravity model are discussed in Estimated Gains in Trade from Improvement in Trade Facilitation (accessible from the list of linked documents in Appendix 2).

<sup>59</sup> Gains in trade from other more ambitious reform scenarios are discussed in Estimated Gains in Trade from Improvement in Trade Facilitation (accessible from the list of linked documents in Appendix 2).

tariff measures increase the cost of importing intermediate goods and can make exports less competitive. In addition to reducing distortion, trade facilitation reforms can lower transit losses, especially for perishable goods. Further, timely delivery makes firms more competitive. Consumers benefit from lower prices because of lower trading costs.

33. Improvements in trade facilitation will lead to a reduction in trading costs. Estimates show that full implementation of the TFA can lead to a 9.6%–23.1% decline in trading costs (i.e., an average decline of 14.5%).<sup>60</sup> Using the lower end of the decline, a 9.6% decline in trading costs from TFA implementation is equivalent to 21 percentage-point decline (from 219% to 198%) in *ad valorem* tariff equivalent of trade costs.<sup>61</sup>

34. Imported inputs play an important role in Nepalese exports. Nearly 90% of Nepalese exporters rely on imported input for their exports.<sup>62</sup> Footwear exporters, for example, import more than 20 raw materials (leather, glue, soles, accessories, etc.). Pashmina exporters source wool and silk from the People’s Republic of China (PRC) and India, and manufacturers of hand-woven carpets import silk, wool, and dyes from the PRC, New Zealand, and Switzerland, respectively. In the case of developing economies and LDCs like Nepal, typically imported intermediate inputs are of higher quality than domestic varieties. Imported inputs improve firm productivity as well as lead to higher quality products that together enhance exporters’ performance. It has been shown that, in Nepal, firms using larger amounts and variety of imported intermediary inputs have higher exports, more destinations, and higher quality (i.e., their exports fetch a higher price) (footnote 62). Access to imported inputs at competitive prices is one of the “problematic factors” faced by Nepalese exporters and measures to reduce trading costs may help make imports cheaper.<sup>63</sup> Trade facilitation, by lowering trading costs, is beneficial not only in promoting exports directly but also indirectly by making imports less costly.

35. Improving trade facilitation procedures to the standards envisaged under TFA can help diversify export basket and export destinations. Gravity modeling exercise discussed above estimates increase in trade of existing products to existing markets, i.e., increase in trade that occurs at the intensive margin. Entry into export markets is costly and lower fixed costs of entry (e.g., from improved trade facilitation procedures) may allow firms to export products and to markets as the revenue may now be enough to meet the costs.<sup>64</sup> Trade facilitation measures, such as those envisaged under the TFA, namely, publishing of information and simplification of documentation, are likely to reduce this one-time cost. Trade facilitation can thus also lead to diversification into new products and markets (referred to as the extensive margin). Estimates show that in a “conservative” scenario, improvement in trade facilitation leads to, on average, an increase of 11.8%–12.8% in the number of products exported by destination for least developed

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<sup>60</sup> WTO. 2015. *World Trade Report 2015: Speeding Up Trade: Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

<sup>61</sup> Calculation is as follows: 21 percentage point=219\*(9.6/100).

<sup>62</sup> G. Arenas. 2016. From Evidence to Policy: Supporting Nepal’s Trade Integration Strategy: Nepal Integration into Value Chains: Stylized Facts and Policy Options. *Policy Note 2*. Washington, DC: World Bank.

<sup>63</sup> World Economic Forum and Global Alliance for Trade Facilitation. 2016. *The Global Enabling Trade Report 2016*. Geneva.

<sup>64</sup> M. J. Melit. 2003. The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity, *Econometrica*. 71(6): 1695–1725.

countries (of which Nepal is one) and an increase of 14.1%–21.3% in the number of destinations by products.<sup>65,66</sup>

36. Trade facilitation can play an important role in integrating Nepal into regional and global production networks. With advances in transportation and information and communication technology, the last two decades have increasingly seen fragmentation of supply chains across borders. Using new data which captures trade in value-added, estimates show that improvement in TFI by 0.1 (on a scale of 0 to 2) could, on average, increase domestic value-added in final foreign demand by 1%–3%.<sup>67</sup>

37. Trade facilitation reforms and lower trade costs can signal an improved business climate and attract FDI. Recent research<sup>68</sup> shows that reducing trade costs between source and host country by 1% leads to a 0.8% increase in bilateral FDI inflows on average. In the case of high-trade cost countries in the Asia-Pacific, reducing trade cost to the average trading cost of developing countries is estimated to increase bilateral FDI flows on average by 20%. For Nepal, average increase in bilateral FDI flows, from reducing its trade cost to the the average trading cost of developing countries, is estimated to be 24%. WTO argues that the “resource-enhancing capacity of trade facilitation, through increased capital inflow, could help in mitigating the cost of investing resources in customs-related infrastructure.”<sup>69</sup>

38. Making it easier and less costly to trade may also make growth more inclusive. Cumbersome customs procedures, and delays and uncertainty may affect rural poor as they export products that tend to be perishable. Small firms are affected more from lack of streamlined and simplified procedures that may find the trading barriers too high. LDCs like Nepal, which have a higher share of agricultural products in their exports and also their firms are likely to be smaller, may have potentially more to gain from improving the trading environment. In addition, improved trade facilitation through automation and simplified documentation helps reduce corruption

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<sup>65</sup> “Conservative scenario” is defined as follows. For the 52 developing countries which have to notify their commitments to the WTO, if the country commits to at least 95% of the TFA articles falling under the respective OECD’s TFI, the corresponding TFI is given the maximum value of 2 (this is based on a mapping of TFA articles between OECD TFI). The 35 developed countries are assumed to fully implement the TFA and their TFI score is set at maximum value of 2. For the group of non-notifying developing countries, their TFI is based on an out of sample prediction from the regression of TFI on GDP per capita for 52 developing and 35 developed countries. “Liberal” scenario is the same as the conservative scenario except that TFI for 52 developing countries is set at 2 if a country commits to at least 75% of the TFA articles that fall under each TFI, corresponding increases are in the range of 12.1%–13.1% and 14.5%–21.9%, respectively. In a “full implementation” scenario (where all countries are assumed to fully meet TFA requirement and thus TFI is set to maximum value of 2), corresponding increases are in the range of 32.9%–35.6% and 39.2%–59.3%. WTO. 2015. *World Trade Report 2015: Speeding Up Trade: Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

<sup>66</sup> Several other studies provide evidence of impact of trade facilitation on diversification. Greater time taken to export has been shown to have a negative effect on the probability of exporting. The study argues that in an era of time-sensitive supply chains, countries would need to address these issues to remain competitive. Second, using the World Bank’s indicators on trading across borders and data on trade between developing countries and European Union, poor trade facilitation has been shown to have a negative effect on export diversification of developing countries. A. Dennis and Shepherd, B. 2011. Trade Facilitation and Export Diversification. *World Economy*. 34(1):101–122; and H. K. Nordås., E. Pinali, and M. Geloso Grosso. 2006. Logistics and Time As a Trade Barrier. *OECD Trade Policy Working Paper No. 35*. Paris: OECD.

<sup>67</sup> On the other hand, improvement in TFI by 0.1 (on a scale of 0 to 2) could increase foreign value-added in final domestic demand or gross exports by 1.5%–3.5%. E. Moïse and S. Sorescu. 2015. Contribution of Trade Facilitation Measures to the Operation of Supply Chains. *OECD Trade Policy Papers*, No. 181. Paris: OECD.

<sup>68</sup> Y. Duval and C. Utoktham. 2014. Impact of Trade Facilitation on Foreign Direct Investment. *Trade and Investment Working Paper Series*. No. 4. Bangkok: United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) Trade and Investment Division.

<sup>69</sup> WTO. 2015. *World Trade Report 2015: Speeding Up Trade—Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

making it easier for small, informal, and/or women traders who do not have the capacity to handle complex custom requirements. A recent study using World Bank's trading across borders indicators estimates that each additional document required for imports increases poverty incidence by 0.77 percentage points (based on \$1.25-a-day PPP poverty line).<sup>70</sup> An additional day of import or export increases poverty by roughly 0.5 percentage points.

39. Improved trade facilitation can boost participation of SMEs in trade, and lower trade costs that can have positive redistribution effects within the country. SMEs<sup>71</sup> typically account for 95% of the firms in most economies<sup>72</sup> and for about 50%–85% of employment.<sup>73</sup> According to another estimate based on firms in 99 emerging and developing economies, SMEs (defined as those with 5–250 employees) account for almost two-third of formal non-agricultural private employment.<sup>74</sup> However, SME participation in trade is small. Based on survey data for 25,000 SMEs (defined as those with at most 100 employees) in the manufacturing industry in developing economies, direct exports of SMEs account for just 7.6% of total manufacturing sales.<sup>75</sup> Surveys conducted by various international organizations show that “unfamiliar and burdensome customs and bureaucratic procedures” are among the major non-tariff barriers faced by SMEs.<sup>76</sup> Decline in trade costs from trade facilitation reforms will encourage more firms to export. Empirical evidence shows that both large and small firms benefit from trade facilitation, with some studies showing that smaller firms stand to gain more.<sup>77</sup> With SMEs accounting for a large share of employment, improved business opportunities from trade facilitation can benefit those employed in SMEs while generating more employment thus making growth more inclusive.

40. Procedural costs may discriminate and custom modernization can help reduce gender discrimination.<sup>78</sup> In countries where cultural barriers are gender biased, discrimination may arise when trying to comply with a standard or regulation or when obtaining a license to export. This step usually requires interaction of firm managers and owners with national officials.

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<sup>70</sup> C. Nguyen. 2013. Poverty, Inequality and Trade Facilitation in Low and Middle Income Countries. In R. Ratnayake et al., eds. *Impacts of Trade Facilitation Measures on Poverty and Inclusive Growth: Case Studies from Asia*. UNESCAP: Bangkok.

<sup>71</sup> Definition of SMEs vary across countries making it difficult to compare across countries.

<sup>72</sup> WTO. 2015. *World Trade Report 2015: Speeding Up Trade—Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

<sup>73</sup> M. Kuwayama, Y. Ueki, and M. Tsuji. 2005. *Information Technology for Development of Small and Medium-Sized Exporters in Latin America and East Asia*, Santiago de Chile: United Nations Economic Commission for Latin America and the Caribbean.

<sup>74</sup> WTO. 2016. *World Trade Report 2016: Levelling the Trading Field for SMEs*. Geneva; and M. Ayyagari, A. Demirgüç-Kunt, and V. Maksimovic. 2011. Small vs. Young Firms across the World, *Policy Research Working Paper No. 5631*. Washington, DC: World Bank.

<sup>75</sup> The corresponding figure for large enterprises (those with more than 100 employees) is 14.1% of total sales. WTO. 2016. *World Trade Report 2016: Levelling the Trading Field for SMEs*. Geneva.

<sup>76</sup> WTO. 2016. *World Trade Report 2016: Levelling the Trading Field for SMEs*. Geneva.

<sup>77</sup> Firms of all sizes benefit from a reduction in the average reported time taken to export. However, once the current exporting status is taken into account, the share of SMEs in exports grows more than that of the large firms, i.e., exports of SMEs grow faster than that of the large firms. B. Hoekman and B. Shepherd. 2013. Who Profits From Trade Facilitation Initiatives? *San Domenico di Fiesole: European University Institute, Working Paper RSCAS 2013/49*; and H. Han and R. Piermartini. 2016. Trade Facilitation Does Benefit SMEs. *WTO Staff Working Paper*. Geneva.

<sup>78</sup> Procedural costs referred to here are the same as in ITC (2016) which focus more on procedures relating to meet regulatory and standard requirements. They, however, do provide insights into possible gender discrimination from procedures and how addressing procedures may benefit female-owned firms. For example, a WTO report argues that improvements in trade facilitation procedures has significant potential benefits for women traders who do not have the capacity to deal with complex requirements and may not have the resources either to pay various fees and charges. ITC. 2016. *SME Competitiveness Outlook: Meeting the Standard for Trade*. Geneva; and WTO. 2015. *World Trade Report 2015: Speeding Up Trade—Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

Discrimination can take the form of demand for a bribe or a delay in processing the application. ITC Business Surveys show that share of cases due to procedural obstacles is higher in the home country than in the partner country, and that obstacles in both cases are higher for female-owned exporting firms. The survey also shows that the share of cases associated with ‘information and transparency issues’ is higher among female-owned firms than among male-owned firms. It goes to show that female-owned micro firms report a higher share of procedural obstacles due to ‘information and transparency issues’, ‘informal or high payments’ and ‘discriminatory behavior’ than male-owned micro firms. The report argues that procedures that minimize face-to-face interactions such as electronic procedures and single windows, as promoted under the WTO TFA, can help reduce bias against female exporters. It has been shown that diversification opportunities for Nepal lie in textiles and related products, a sector with significant potential for female participation.

41. Reduction in revenue losses is another source of benefits from improved trade facilitation. In many LDCs, revenues collected at the border are a major source of government revenue.<sup>79</sup> Nepal is no different. Nearly 37.8% of government’s revenues in FY2015 and 36.6% in FY2016 came from duties and taxes on imports and other international trade-related taxes and transaction charges.<sup>80</sup> Implementation of the TFA is likely to lower revenue losses through improved valuation systems, improved capacity, efficiency in clearance process, and by preventing customs fraud.<sup>81,82</sup> It will also boost revenue collection on account of trade expansion<sup>83</sup> and improved trader compliance.<sup>84</sup>

42. Trade facilitation can help reduce trade-related corruption. A recent WTO report which examines the benefits of implementing the TFA argues that custom agencies that control corruption are in a better position to avoid custom fraud. Longer processing times and multiple face-to-face contacts at border provide various parties involved incentives to engage in corrupt practices. Thus, a shift from at-the-border to a more modern, paperless, risk-based, behind-the-

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<sup>79</sup> Based on 34 LDCs, duties and other taxes collected at the border account for 45% of the government tax revenue, of which 19% are customs duties. World Customs Organization (WCO). 2014. A Background Paper for a Panel Discussion: Revenue and WTO Agreement on Trade Facilitation. *WCO Revenue Conference Session 4*. Brussels. Quoted in WTO. 2015. *World Trade Report 2015: Speeding Up Trade—Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.

<sup>80</sup> Estimates are based on data reported in Annex 2. Government of Nepal. Ministry of Finance. 2016. *Budget Speech of Fiscal Year 2016/2017*. Kathmandu. Data for 2015/16 is a “revised estimate.”

<sup>81</sup> Customs fraud can take many forms such as under- or over-invoicing, voluntary misclassification, smuggling, and transit/transshipment and origin fraud. This can have significant implications for government revenue. For example, using trade misinvoicing data as reported in annual reports of Global Financial Integrity, between 2002 and 2010, Nepal is estimated to have lost on average 54% of the government revenue due to misinvoicing. The same data, however, shows that misinvoicing declined sharply to 10% in 2011 and disappeared in 2012 and 2013, the latest years for which data is available from Global Financial Integrity. Global Financial Integrity. Various Years. *Global Financial Integrity Report*. Washington, DC

<sup>82</sup> Trade facilitation measures such as post-clearance audit (PCA) can reduce tax and duty evasion. In the case of Taipei, China, following the establishment of PCA, customs authorities recovered \$26 million in evaded duties and fines for the fiscal year 2010/11 which was 10 times more than the cost of implementing the post-clearance audit. Government of Taipei, China. 2012. *Post-clearance Audit*. Paper submitted for the WTO Symposium on Trade Facilitation. 11–12 July. [http://bit.ly/PostClearanceAudit\\_TaipeiChina](http://bit.ly/PostClearanceAudit_TaipeiChina).

<sup>83</sup> For given tariffs, duties, and other trade-related taxes, improved trade facilitation is expected to lead to more trade flows (paragraph 31) thus expanding the tax bases.

<sup>84</sup> In New Zealand, as a result of improved trader compliance, more than 95% of import transactions were deemed compliant based on risk assessment and could proceed without further intervention (Yasui 2014). This share stood at 99.8% in FY2016. New Zealand Customs Service. 2016. *New Zealand Customs Service Annual Report 2015/16*. Wellington; and T. Yasui. 2014. Background Paper for the World Customs Organization Revenue Conference. *World Customs Organization Research Paper No. 33*. Brussels. <http://bit.ly/WCOResearchPaperNo33>.



border customs administration can help reduce trade-related corruption directly by curbing fraudulent practices.<sup>85</sup>

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<sup>85</sup> WTO. 2015. *World Trade Report 2015: Speeding Up Trade—Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*. Geneva.