UNEDITED VERSION

Role of commodities in socio-economic development of Nepal

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1. Introduction

Nepal is a least-developed country with a slow-growing economy. Trade has been recognized as an engine of growth at the policy level, and over the last two decades policy measures have been taken to integrate the Nepali economy into the global economy, mainly through economic liberalization. However, export performance has been weak, particularly so in the last one decade. Rising remittances associated with increasing outmigration of workers have helped maintain external sector balance as well as contributed to poverty alleviation, but the absence of a strong tradable sector casts a shadow over Nepal's development prospects. Not only has the size of exports been low, there is also a discernible shift in the composition of exports towards primary products, especially agriculture and forest, from manufactured goods, although the latter still account for well over two thirds of exports. Partly motivated by potential high and immediate socio-economic impacts (notably, employment creation and poverty alleviation) of exports associated with the agriculture and forestry sector in a country where agriculture is by far the largest employer, and partly in view of the export potential of such products, the Government of Nepal's latest trade strategy lays emphasis on the promotion of agro-forest-food exports. Thus, while Nepal is not a commodity-dependent country (in terms of exports) unlike many LDCs, the importance of commodities (mainly agriculture and forest products) in its export basket is increasing, and the current government policy and business climate are likely to encourage it.

In this context, this study report discusses the existing and potential role of commodity exports in Nepal's socio-economic development against the backdrop of key development challenges facing the country, and the constraints to such exports; assesses policies and strategies related to commodity exports; discusses the implications for structural transformation; and provides recommendations for utilizing agro-forest resources for export trade without falling into the commodity export-dependence trap.

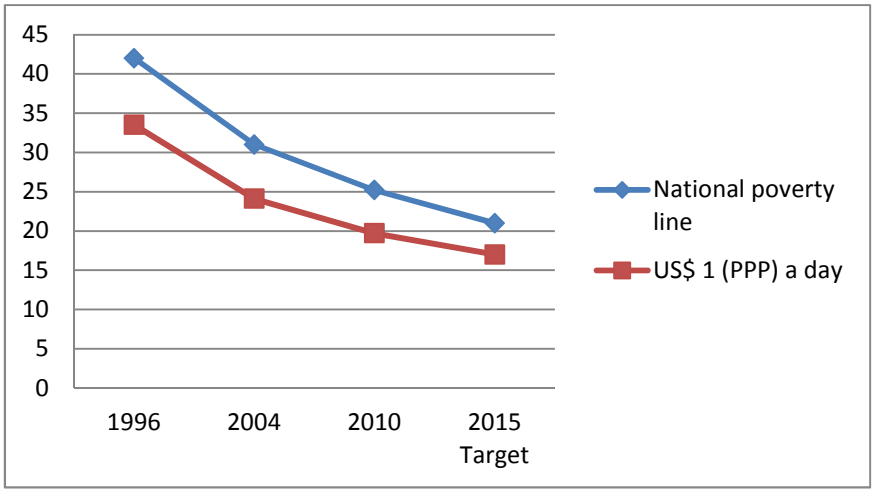
The report is organized as follows. Section 2 discusses the key development challenges facing Nepal, with a focus on progress towards meeting the Millennium Development Goals. Section 3 provides an overview of Nepal's trade performance. Section 4 describes and analyses Nepal's export structure and composition. Section 5 discusses the country's commodity exports. Section 6 discusses and assesses Nepal's commodity-related policies, plans, programmes and strategies. Section 7 discusses and assesses the issue of policy coordination. Section 8 discusses the implications of increasing export dependence on agriculture and forest products—the country's most important "commodity" exports—for structural transformation. Section 9 provides a summary of constraints to Nepal's commodity exports. Section 10 concludes by providing recommendations for priority policy, strategies and actions that need to be taken at national and international levels for leveraging Nepal's agro-forest resources for sustainable development, including economic diversification, employment generation and poverty alleviation.

2. Key development challenges

Some progress towards meeting MDGs

Nepal is making encouraging progress towards meeting Millennium Development Goal (MDG) targets by 2015. It is likely to meet targets related to poverty, net enrolment rate in primary education, maternal mortality ratio, ratio of girls to boys at secondary level, and death rate associated with tuberculosis, among others (GoN and UN 2010; GoN and UNDP 2011). It has already met or exceeded a few MDG targets, e.g., proportion of population using improved drinking water source and under-five mortality rate per 1,000 live births, and the ratio of girls to boys at the primary level. Especially notable is the progress in poverty reduction (Figure 1). The headcount poverty ratio declined from 41.8 percent in 1995/96 to 30.8 percent in 2003/04 to 25.2 percent in 2010/11 (CBS 2011a).[1] Using a uniform poverty line for comparison across years, the headcount poverty ratio has declined by 30 percentage points in the 15-year period 1995/96-2010/11, or by an average of 2 percentage points per year.

Figure 1: Progress in poverty reduction



Source: CBS (2011a); CBS (2006) for national poverty line; GoN and UNDP (2011) for international poverty line.

But deprivation remains pervasive

However, some targets are difficult to meet, for example, targets related to employment, hunger (proportion of population below minimum level of dietary energy consumption), survival rate to

[1] The poverty line is the national poverty line. The poverty rate for 2010/11 is not directly comparable with the rates for 2003/04 and 1995/96 as the consumption basket used to calculate the poverty line in NLSS III is different from the one used in NLSS I (2003/04) and NLSS II (1995/96). The consumption basket was changed to reflect significant shifts in consumption patterns. If the same consumption basket (used in the first two surveys) is used, then the poverty ratio for 2010/11 is much less, about 13 percent. See CBS (2011b).

Grade 5, ratio of girls to boys at tertiary levels of education and of literate women to men aged 15–24 years, percentage of births attended by a skilled birth attendant and universal access to reproductive health, access to sanitation, and environment (GoN and UN 2010; GoN and UNDP 2011). Importantly, there is a need to look beyond the set-piece indicators. Deprivation is still widespread and intense, going by the Multidimensional Poverty Index (UNDP 2011). Those just above the poverty line are extremely vulnerable to slipping below it again (e.g., due to rising food prices). The per capita GNI of US$645 in 2011 is among the lowest in South Asia and barely 60 percent of the income threshold for graduation from LDC status[2]. Ensuring the quality of service and inclusiveness, and sustaining the progress made so far are challenging (GoN and UN 2011; GoN and UNDP 2011).

While remittances have helped, employment creation remains a daunting challenge

A notable failure, and a reason why sustaining progress is challenging, is that Nepal is "highly unlikely" to meet goal of achieving full and productive employment and decent work for all (GoN and UN 2010). A conservative estimate puts the labour underutilization rate at 30 percent (CBS 2008). The urban youth unemployment rate has almost doubled in a decade (1998-2008) to 13 percent. The current labour force participation rate was 83.4 percent in 2008, down from 85.8 percent in 1998. Some 74 percent of currently employed population is engaged in agriculture, which contributes to just a third of GDP. Economic growth is abysmal: GDP growth averaged less than 4 percent during 2000-2010, and per capita GDP growth 1.8 percent. Growth has failed to pick up even after the official end of a Maoist insurgency in 2006; the so-called peace dividend is yet to translate into improved economic performance. The first half of the new millennium witnessed an escalation of an armed conflict while the second half, even after the official end of the Maoist insurgency, has been marred by political instability[3], deterioration of law and order[4], proliferation of other armed outfits, strikes and shutdowns, and worsening industrial relations. These, in addition to the binding constraint of inadequate and poor infrastructure, have hurt the business and investment climate, and partly explain the poor growth performance (ADB et al. 2009).

International migration and remittances have kept the economy afloat during and after the armed conflict. With about a quarter of the adult male population working abroad, international migration has helped ease un/under-employment pressure to an extent. It has played a key role in poverty reduction and raising living standards (CBS 2006; Lokshin et al. 2007). Officially recorded remittances amounted to US$3.5 billion, or 22 percent of GDP, in 2010. In the last one decade, remittances have emerged as the largest source of foreign exchange earnings of the country. In 2009, remittances were greater than all other sources of foreign exchange combined

[2] As the threshold is in nominal terms and as nominal per capita GNI of LDCs and low-income countries increase, so will the threshold.

[3] There have been four governments since the 2008 elections to the Constituent Assembly.

[4] The "rule of law" component of the World Governance Indicators has deteriorated consistently after 2006 (Kaufmann et al. 2010).

(exports of goods and services, foreign aid and a very small amount of private capital inflows, including FDI). Remittances have also contributed to soaring government revenue by financing imports. However, remittances are mostly spent on consumption, and the country has not been able to utilize remittances to increase productive capacity. Along with the increasing dependence on remittances, a seeming de-industrialization process is on. The share of manufacturing in GDP, though never more than 10 percent, has been steadily declining in the last decade, reaching 6.5 percent in 2010/11, which is less than that for LDCs as a group (10.3 percent in 2010). While compound annual growth rate (CAGR) of manufacturing during 2000-2011 has been just 0.3 percent, the CAGR of services, mostly of non-tradable variety and absorbing just 15 percent of the currently employed labour force, was 4.5 percent, causing services to account for over half of GDP in 2010/11. The CAGR of agriculture, the largest employer which contributed 35 percent of GDP in 2010/11, was 3 percent.

A critical challenge facing Nepal is thus: To kick-start the domestic economic growth engine on a sustainable basis and create productive employment opportunities inside the country.

3. Trade performance: An overview

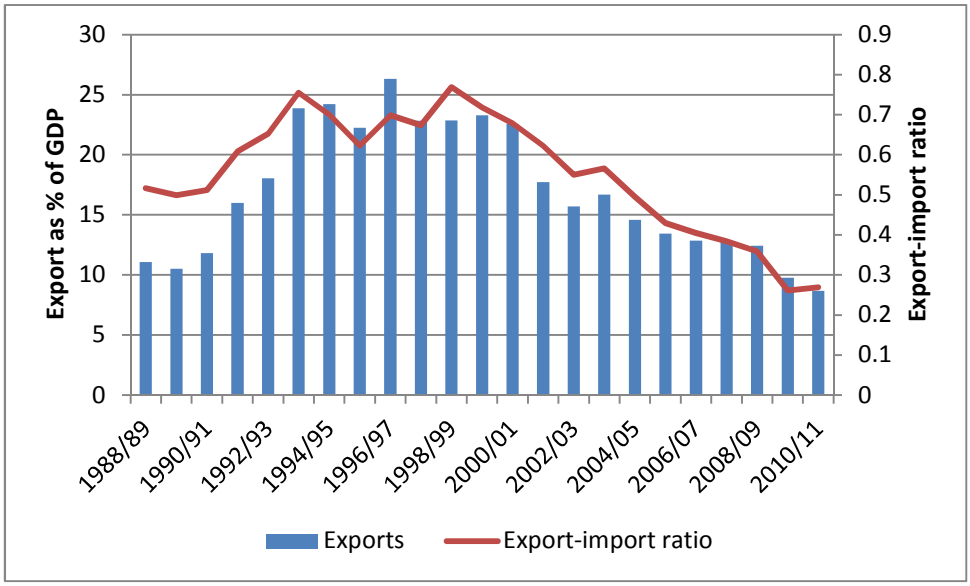
An open economy

The Government of Nepal (GoN) has taken trade as an instrument for inclusive growth, employment generation and poverty reduction. Mainstreaming trade is a development strategy in the ongoing plan document (the Three-Year Plan 2010/11-2012/13). GoN has undertaken economic, including trade, liberalization measures for over two decades. Nepal is a trade-dependent, open economy, with a trade-GDP ratio of 41 percent in 2010/11 (excluding remittances), and simple average tariff 12.2 percent. Nepal obtained membership of the World Trade Organization (WTO) in 2004 and is a member of the South Asian Free Trade Area (SAFTA), which entered into force in 2006.

Poor export performance

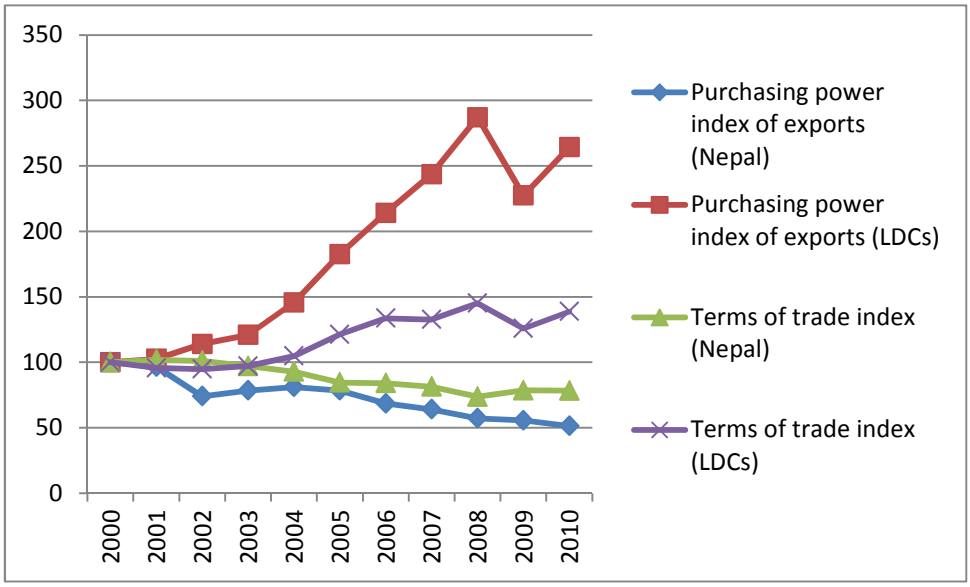
Export performance has been weak, especially in the new millennium (Figure 2). Exports of goods and services fell from 23 percent of GDP in 1999/2000 to 8.7 percent of GDP in 2010/11. This, coupled with rising imports, fuelled by booming remittances, has led to a burgeoning trade deficit. At US$1.6 billion, exports of goods and services were just 27 percent of imports in 2010/11. Merchandise export earnings, averaging 57 percent of export earnings during 2006/07-2010/11, are not enough to pay for petroleum product imports. Two thirds of merchandise trade (export and import) is with India, which surrounds landlocked Nepal from three sides and is the principal transit-providing country. Nepal's terms of trade and purchasing power of exports (merchandise) have been declining even as those of LDCs as a group have been on an increasing trend (Figure 3). Reducing trade deficit is a key objective of Trade Policy 2009.

Figure 2: Export performance



Source: Author's calculation based on Nepal Rastra Bank, "Recent Macroeconomic Situation", various issues.

Figure 3: Terms of trade and purchasing power of exports

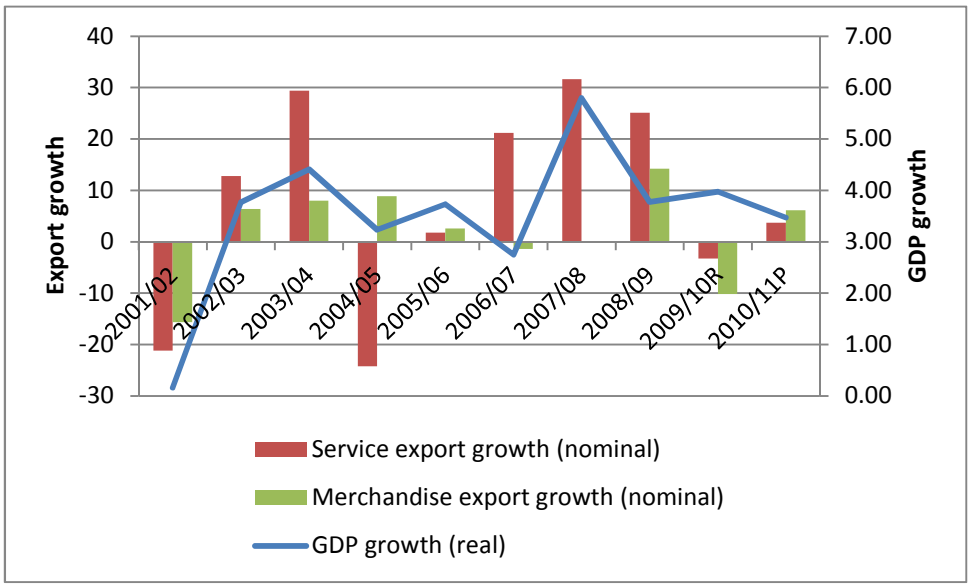


Source: UNCTAD, UNCTADstat

Limited impact of global crisis on the economy

In the wake of the global financial and economic crisis since 2008, there has been some slowdown in export and remittance growth.[5] Total export growth was 4.8 percent during the period 2007/08-2010/11 compared to 6.6 percent during the period 2004/05-2007/08. Despite the positive growth in 2010/11, total nominal export in 2010/11 was still less than that in 2008/09. Merchandise export in nominal terms fell by 10 percent in 2009/10, but its growth had been negative or slow even just before the crisis while it grew by 14 percent in 2008/09 (Figure 4). It recorded a lower 6 percent growth in 2010/11. Services export earnings (tourism accounting for half of them) dipped by 3.2 percent in 2009/10 but grew by 3.7 percent 2010/11. Services exports have been hit harder than merchandise exports, with service export growth falling by over 50 percent in the period 2007/08-2010/11 compared to the period 2004/05-2007/08. Remittance growth rate fell in 2008/09, along with a decline in the number of workers going overseas in 2008/09 compared to 2007/08. While the number of overseas departures rebounded in 2009/10, the growth rate of remittances in 2009/10 and 2010/11 remained lower than in the previous two years. However, in the first six months of fiscal year 2011/12 (beginning mid-July 2011), merchandise exports have increased by 11.2 percent and services exports by 43.2 percent compared to the corresponding period in fiscal year 2010/11. During the period, remittances grew by 37 percent, more than thrice the growth witnessed in the same period in 2010/11.

Figure 4: GDP and export growth (2001/02-2010/11)



Source: Author's calculation based on Nepal Rastra Bank, "Recent Macroeconomic Situation", various issues.

As exports do not yet play a major role in the economy and as remittances, a pillar of the economy, only saw a slowdown in growth, which quickly rebounded, the impact of the global

[5] Only nominal values in NPR are considered here.

financial and economic crisis on the Nepali economy has been limited. Government revenue, which relies heavily on indirect taxes in general and taxes on imports in particular, continued to grow robustly even with the onset of the global crisis, although the growth slowed down to 11 percent in 2010/11 due to a slowdown in import growth.[6] GDP growth, which spiked to 5.8 percent in 2007/08 after averaging 3.6 percent in the preceding five years, continued to remain sluggish at an average of 3.7 percent during 2008/09-2010/11 (Figure 4). Moreover, as the period since 2008 has witnessed a deterioration in the business and investment climate due to domestic factors (including political instability, strikes and shutdowns, worsening industrial relations, escalating power crisis), it is difficult to isolate the impact of the global crisis on the economy.

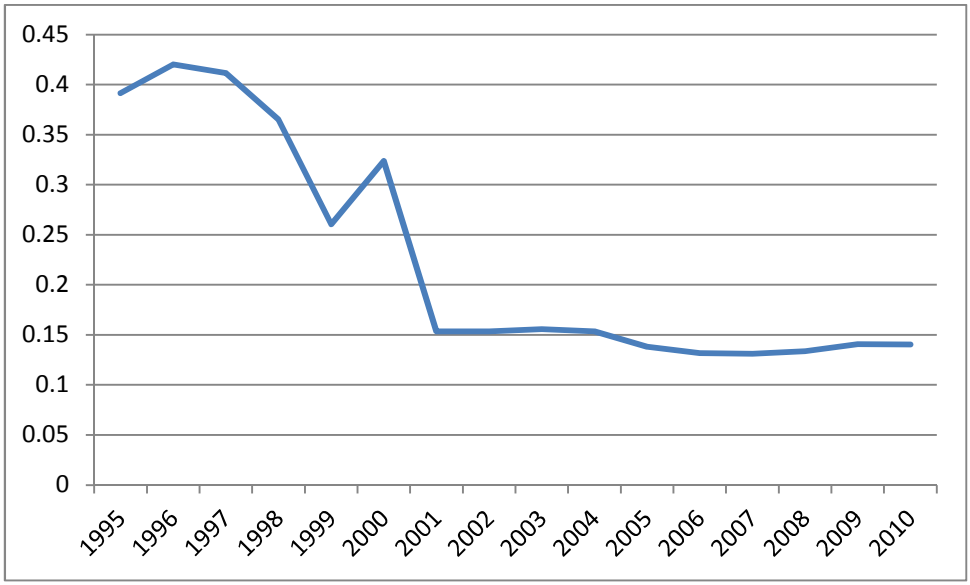
4. Export structure and composition

Export basket is limited

Although the concentration of Nepal's export basket is lower than that of most LDCs and some developing countries, Nepal's export basket is still limited and the level of concentration has remained almost the same in the last one decade (Figures 5-8). In 2010, Nepal exported 118 out of 277 products with export value of more than US$100,000 (at 3-digit level of SITC Rev. 3); the top 20 products made up 72 percent of Nepal's total merchandise exports. Nepal's export basket appears more diversified in terms of the concentration index than in terms of the number of products exported: for example, countries like Bangladesh and Cambodia, which have a higher concentration index than Nepal's, export a higher number of products than does Nepal.

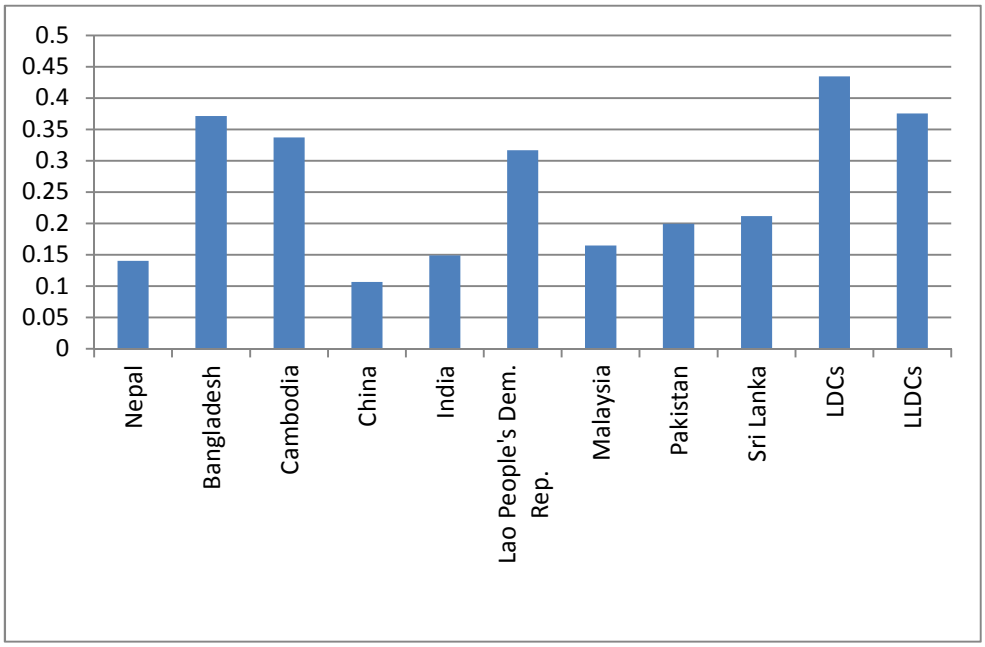
Figure 5: Export concentration index – Nepal

[6] During 2007/08-2010/11, tax revenue averaged 83.5 percent of government revenue, indirect taxes averaged 72 percent of tax revenue, and import-based taxes averaged 46.5 percent of tax revenue. In the four years from 2007/08, total nominal revenue grew by 22.7 percent, 33.3 percent, 25.4 percent and 11 percent respectively. The sharp reduction in revenue growth in 2010/11 was driven by the slowdown in the growth of import-based taxes, mainly resulting from a sharp slowdown in import growth in 2010/11. Data on revenue are from NRB (2011).



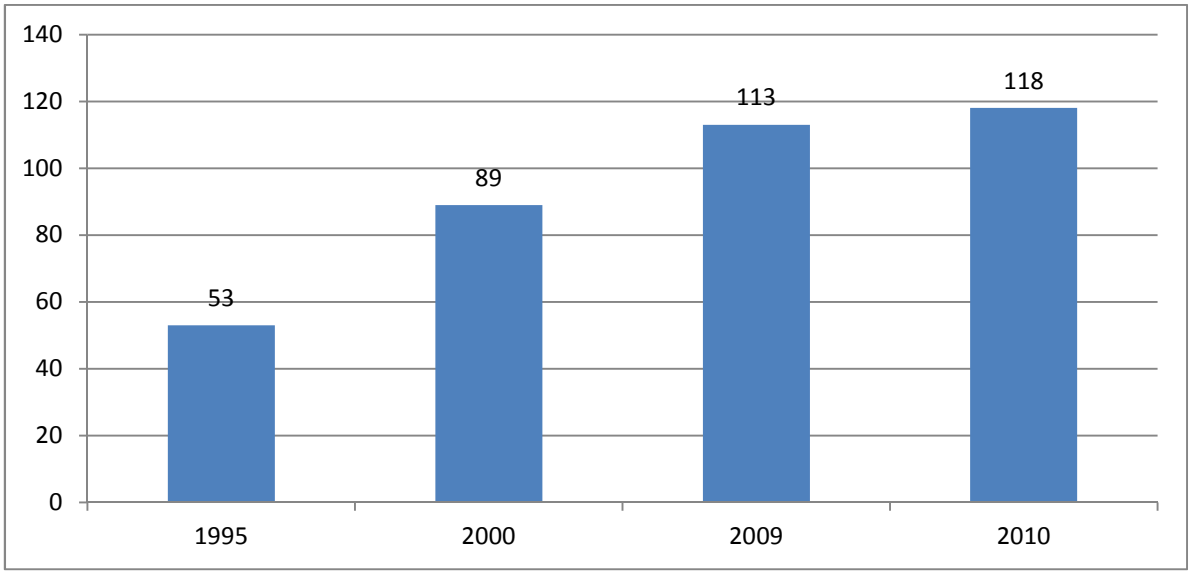
Source: UNCTAD, UNCTADstat

Figure 6: Export concentration index – select countries



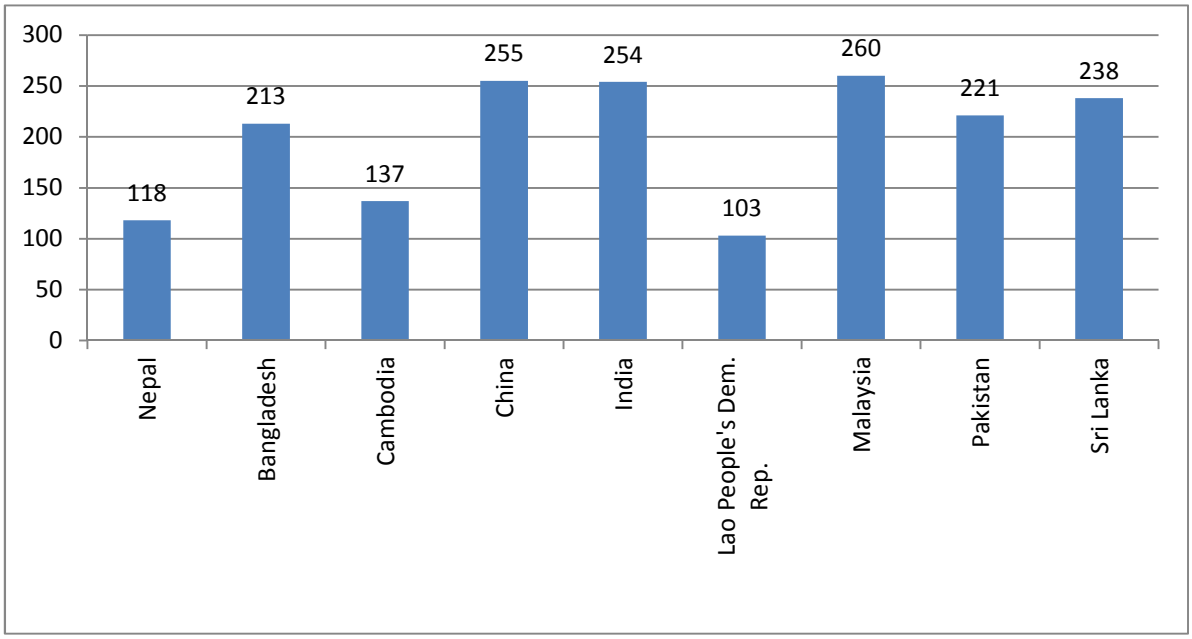
Source: UNCTAD, UNCTADstat

Figure 7: No. of products exported by Nepal (SITC Rev. 3, 3 digit)



Source: UNCTAD, UNCTADstat

Figure 8: No. of products exported – select countries (SITC Rev. 3, 3 digit), 2010



Source: UNCTAD, UNCTADstat

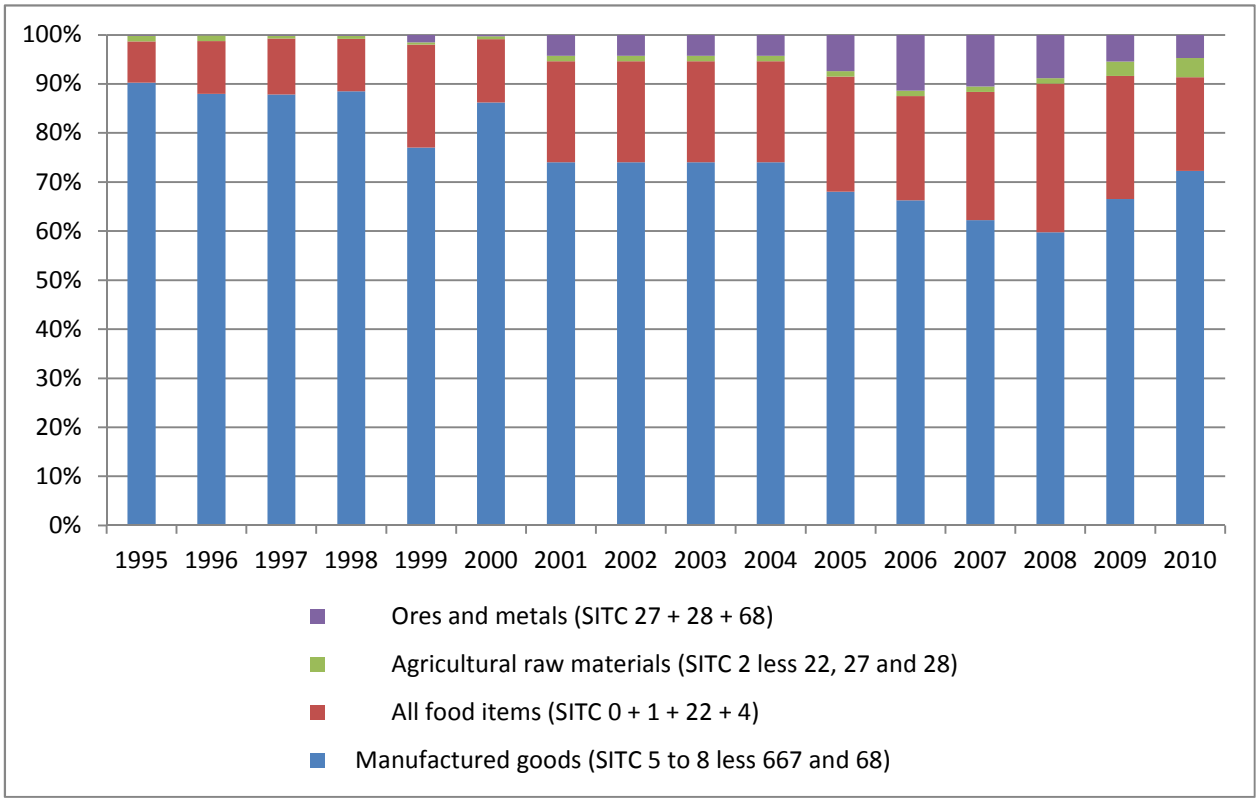
Share of manufactures in exports decreasing

The share of manufactures (excluding resource-based manufactures)[7] in exports is in a declining trend, dropping from 90 percent in 1995 to 72 percent in 2010 (Figure 9), but is still quite large

[7] Manufactured goods here is narrowly defined using UNCTAD's definition: covering SITC 5 to 8 less 667 and 68. The rest are considered "primary commodities", although these also include resource-based manufactures, for example, processed food products like pasta and juice.

compared to LDCs as a group. In 2010, food items (broadly defined, including processed food) were the second most important export category (19 percent of exports) after manufactured goods, followed by ores and metal[8] (4.7 percent) and agricultural raw materials (4 percent).

Figure 9: Nepal's export composition



Source: Author's calculation based on data from UNCTAD, UNCTADstat

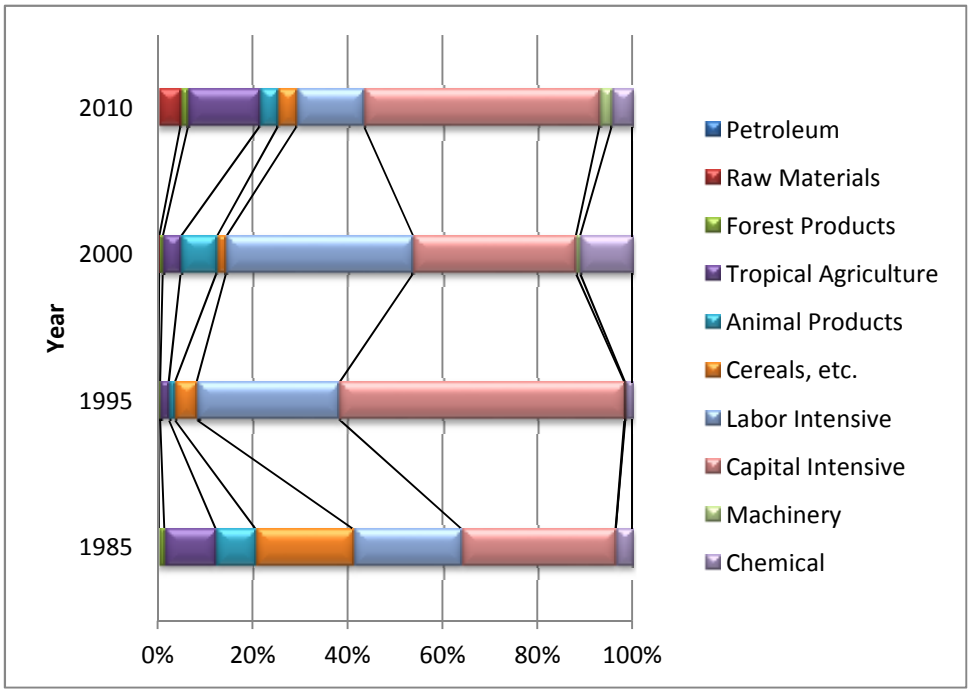
Increasing importance of commodities in the export basket

Analysing Nepal's export basket in terms of the Leamer (1984) classification (Figure 10), we find that during the decade 2000-2010, the share of labour-intensive manufactures decreased (from 39 percent in 2003 to 14 percent), that of capital-intensive manufactures increased (from 34 percent to 50 percent), and the share of tropical agriculture increased (from 4 percent to 15 percent). This also suggests that the importance of commodities in Nepal's export basket is increasing, whereas the reverse was the case during the 1990s when there was a decided shift in the composition of the export basket away from primary products towards manufactured goods. The decline in readymade garments and woolen carpet exports largely explains the declining share of manufacturing in the export basket: exports of readymade garments and hand-knotted carpet, though still among the top five export items in 2010/11, have declined by 76 percent and 50 percent in value terms from their 1999/2000 peaks.[9] The end of global quotas on textiles and

[8] Nepal's ores and metal exports are mainly sand/stone/gravel, copper and aluminum.
[9] Based on data from Trade and Export Promotion Centre (TEPC), Government of Nepal, and Nepal Rastra Bank.

clothing with the expiry of the Agreement on Textiles and Clothing of the WTO in hit Nepal's RMG industry hard. A slippage in raw material quality control and bad press received in Western markets concerning the production process contributed to decline of carpet exports. Despite the decline in the export of carpet, a capital-intensive item as per Leamer classification, the rising share of capital-intensive products in total exports has been driven by the rapid increase in the export of iron and steel articles, which in 2010/11 were the largest export category, with a 16 percent share.

Figure 10: Nepal's export composition in terms of Leamer categories

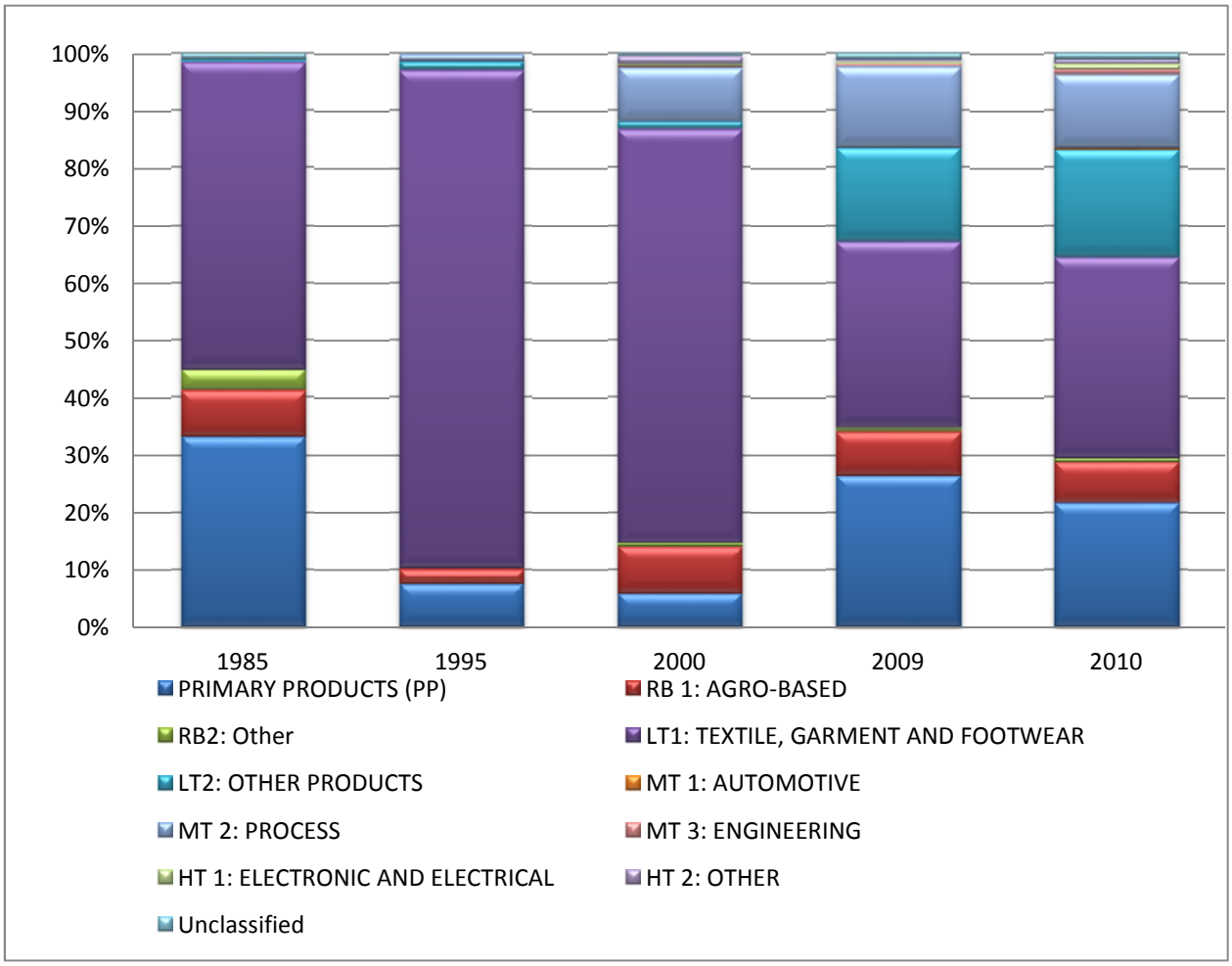


Source: Author's calculation based on UNCOMTRADE, SITC Rev. 2

The change in the composition of the export basket in terms of skill and technological intensity of products, as per the Lall (2000) classification, tells a similar story (Figure 11). The share of primary products (unprocessed)[10] in total exports increased more than three times to 22 percent during 2000-2010. But the share of resource-based manufactures slightly declined (to 8 percent), implying that primary products (mostly agricultural) are increasingly exported in raw form with little or no processing. Within manufacturing, resource-based manufacturing has a 10 percent share. Low-technology products are still the major manufacture exports, although the share of textiles and clothing has decreased sharply. The share of products of medium technology process industries has increased (from 9 percent to 13 percent). However, the shares of other medium technology products (automotive and engineering) and high technology products are negligible.

[10] Primary products according to Lall (2000) classification are defined narrowly compared to the UNCTAD (UNCTADstat) classification. For example, the former excludes agro-based manufactures from the category of primary products whereas the latter includes agro-based manufactures.

Figure 11: Nepal's export composition in terms of Lall classification



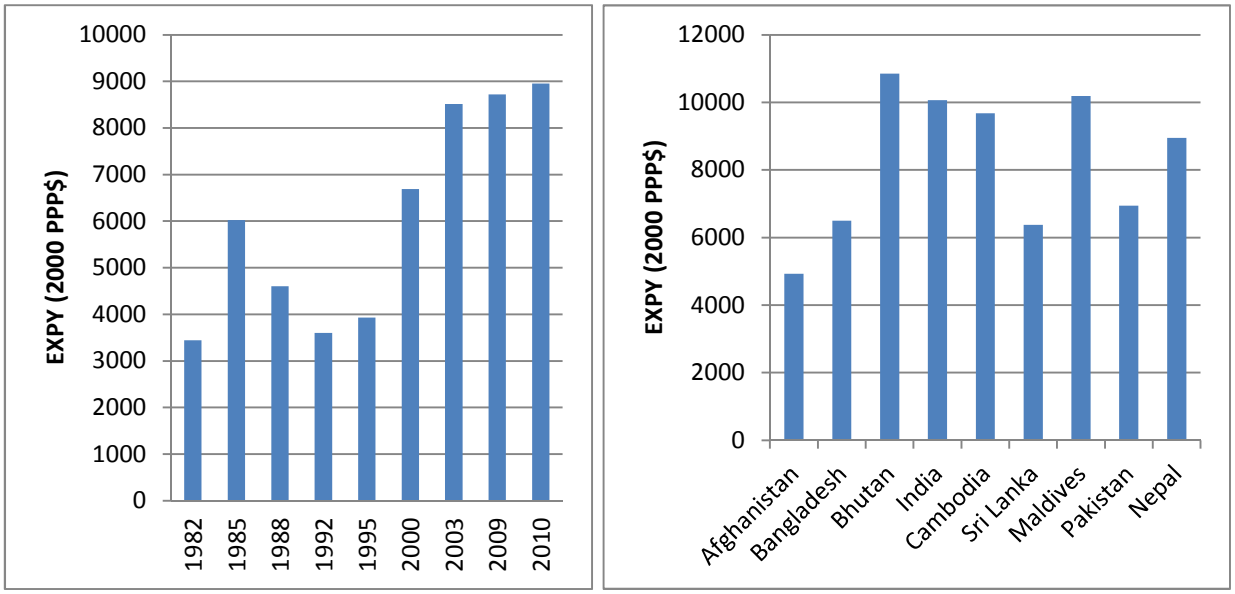
Source: Author's calculation based on UNCOMTRADE, SITC Rev. 2, 3-digit level, and using the classification of Lall (2000).

The sophistication of Nepal's export basket (as measured by EXPY)[11] is low, albeit relatively high given its per capita income (Figure 12). However, the growth in the sophistication of the export basket has been marginal since 2003, the period when manufacture sector performance has been poor and the share of manufactured goods in the export basket has declined, as discussed above. The export sector has been unable to make significant inroads into products in the higher range of sophistication. About 54 percent of Nepal's exports are of products with low

[11] This measure is due to Hausmann et al. (2006) who introduced a measure of the productivity or income level associated with individual products called PRODY, defined as the weighted average of the GDP per capita of the countries that export the product with the weights taken as the ratio of the revealed comparative advantage (RCA) of each country in the product to the sum of the RCAs of the all countries in the product. They measure the sophistication of a country's export basket with EXPY, defined as the weighted average of the PRODY of the products exported by a country with the weights being the share of the product in the country's total exports.

sophistication (PRODY) and low or average connectivity with other products (PATH)[12], implying low potential for future export diversification. Further, Nepal's productive capacity relative to world average, as measured by the diversity and uniqueness of a country's export basket, has remained almost stagnant during the 25-year period 1984-2009 (see Freire 2011; ESCAP 2011).

Figure 12: Evolution of Nepal's export sophistication and comparison with select countries in 2010



Source: Author's calculation based on SITC Rev. 2, 4-digit data from UNCOMTRADE.
Note: In country comparison, 2010 data for all countries except Bangladesh (2007)

Twin key challenges on export front

The challenges facing Nepal with regard to its export sector can be broadly grouped under two clusters. The first challenge, which is more pressing and has to be addressed immediately, is to increase the quantum (volume and value) of exports so as to arrest the burgeoning trade deficit and, more importantly, to create employment and generate income for an expanding labour force, raise economic growth and alleviate poverty. The second challenge is to diversify and increase the sophistication and complexity of the export basket, that is, produce and export a wider range of new and increasingly sophisticated and complex products.

Addressing the second challenge takes a longer time than addressing the first challenge, as it pertains to structural transformation of an economy, and may not immediately address the first

[12] The path associated with a product (i) is the measure of the inter-connectedness of that product with all other products. It is calculated as: Path i = $\sum_j$ □ij where □ij is an outcome-based measure of the proximity between two products. See Hausmann and Klinger (2006) for details. Here, we classify Nepal's export products as having low, medium or high PRODY and path depending on whether they belong to the first, second or third tercile of PRODY and path of all products.

challenge. At times, given resource constraints, among other things, policymakers could face a trade-off between according priority to tackling the two challenges. However, addressing the second challenge is critical for ensuring sustained per capita income growth over the long run: a series of recent empirical researches on structural transformation has consistently shown that development is a path-dependent process, an economy achieves sustained growth and high per capita incomes by continuously producing and exporting new and more complex products rather than producing and exporting more of the same, goods differ in their potential for effecting structural transformation, and thus the type of goods that a country currently exports determines the type of goods it will export in future and its future economic growth rate.[13] Hence, even when strategizing and directing resources to develop the export sector to meet the urgent objectives of immediate income and employment generation and poverty alleviation, policymakers should explore ways to increase the sophistication of exports (which will be discussed more later in the context of the commodities prioritized for targeted export development and promotion by the Nepal government).

5. Commodity dependence

From the above discussion of the composition and structure of Nepal's export basket and its evolution over time, we find that Nepal's dependence on commodity exports is not as high as for LDCs as a group—in 2010, primary products (unprocessed) accounted for about 22 percent and resource-based manufactures about 8 percent of total merchandise exports, the rest being manufactured goods. However, we also find that the share of primary products in total exports has been increasing in the past one decade, coinciding with the woes of the manufacturing sector in the economy.

Nepal's commodity exports are predominantly agricultural (including forest products), which is in accordance with the country's natural resource endowments. The country is relatively poor in mineral and fuel resources[14], agriculture is still the largest employer (about 74 percent of the currently employed labour force is engaged in agriculture as a main occupation) and contributes to a third of GDP, and the climatic diversity within a small compass nourishes a rich biodiversity. Nepal's comparative advantage within the commodity sector lies predominantly in agriculture (including forestry). To simplify analysis without much loss of precision, taking only products belonging to Chapters 1 to 24 of the Harmonized Commodity Description and Coding System as agriculture products, we find that the share of agriculture products (or food products) in Nepal's merchandise exports increased from 13 percent in 2000 to almost 24 percent in 2011.[15] Adding products falling under the WTO's definition of agriculture goods (including,

[13] See, for example, Hausmann et al. 2006; Hausmann and Klinger 2006 and 2007; Hidalgo et al. 2007; Felipe et al. (2010a); Felipe et al. (2010b); Hidalgo and Hausmann 2009; Hausmann and Hidalgo 2010; Freire 2011; ESCAP 2011.

[14] Exploration and development of potential mines other than that of limestone (used as raw materials by cement industry) have been slow despite some potential for natural gas, copper and iron mining, among others.

[15] The data for 2000 are taken from UNCOMTRADE via WITS whereas the data for 2011 are taken from Trade and Export Promotion Centre (TEPC), Kathmandu.

notably, essential oils in the case of Nepal)[16] to the set of goods belonging to Chapters 1 to 24, we find that agriculture goods account for 25 percent of total merchandise exports in 2011. If we consider *tanned* hides and skins as commodities, as per UNCTAD's definition of commodities, then agriculture goods account for 26 percent of total merchandise exports in 2011. Other commodities (ores and metals)[17] accounted for 4 percent of total merchandise exports in 2011. This means that Nepal's commodity exports are predominantly food products (Chapters 1-24). It must be noted that Chapters 1-24 include not just primary food products but also processed products, which involve some manufacturing, such as noodles and fruit juices. In fact, while the share of exports under Chapters 1-24 was almost 24 percent in 2011, exports of relatively processed food under Chapters 15-24 was about 7 percent, with primary food products under Chapters 1-14 accounting for the remaining 17 percent. Primary food products are also among the top export products overall (e.g., lentils made up 5 percent of total exports, cardamom 3 percent, tea 2.4 percent in 2010/11). Table 1 shows the top two dozen export products of Nepal and their export shares, with commodities in boldface.[18]

Table 1: Top export products of Nepal, 2010/11

S.N	**Product**	**Share in exports (%)**
1	Iron and Steel articles	15.68
2	Yarns (Polyester, Cotton and others)	8.59
3	Woolen Carpet	7.62
4	Readymade Garments	6.33
5	Textiles	5.73
6	**Lentils**	**5.19**
7	Jute bags and sacks	3.27
8	**Cardamom**	**3.17**
9	Copper and articles thereof	2.60
10	Woolen and Pashmina shawls	2.53
11	**Tea**	**2.40**
12	Dentifrices (toothpaste)	1.52
13	**Hides & Skins**	**1.24**
14	**Medicinal Herbs**	**1.10**
15	**Noodles, pasta and like**	**1.09**
16	Hats and headgears	0.99
17	Cotton sacks and bags	0.99
18	Handicrafts	0.81

[16] The WTO's definition includes some HS codes and headings in Chapters 29, 33, 38, 41, 43, 50, 51, 52 and 53.
[17] We roughly convert UNCTAD's definition of ores and metals under SITC codes into HS sub-headings.
[18] A part of "iron and steel articles" includes items with little processing. A part of "copper and articles thereof" includes unprocessed products, which can be considered commodities.

19	Nepalese paper and paper products	0.71
20	Articles of silver jewellery	0.60
21	**Ginger**	**0.44**
22	**Vegetable fats and oil**	**0.31**
23	**Essential Oils**	**0.13**
24	Others	26.97

Source: Trade and Export Promotion Centre, Government of Nepal

While some 70 percent of Nepal's exports are manufactured goods, the potential importance of commodity exports (primarily agriculture- and forestry-based) mainly stems from two factors: i) high export potential (both in terms of external demand and competitiveness conditions and domestic supply capacity); and ii) high socio-economic impact (in terms of employment, participation of women, impact on poverty and inclusiveness). These explain the prominent place received by agriculture and forest commodities in the country's trade-related policies and strategies, to which we turn in the next section.

6. Policies and strategies

This section discusses and assesses policies and strategies of GoN with a focus on commodity exports and vertical and horizontal product diversification. The last sub-section briefly discusses the state of commodities futures markets in Nepal.

6.1 Trade Policy

Nepal introduced a new Trade Policy in 2009, replacing the Trade Policy 1992. The overall thrust of Trade Policy 1992 was on liberalizing the trade regime. It covered both internal and international trade, but did not identify any products, although one of its objectives was to "diversify trade by identifying, developing and producing new exportable products through the promotion of backward linkages for making export trade competitive and sustainable". The strategies for export trade were broad; the policy lacked concrete strategies for export development and promotion. Success lay mainly in the area of de-licensing and de-control of import and export, tariffication, full convertibility in the current account, and to some extent simplification of trade procedures and documentation. There was little success in achieving destination-wise and product-wise export diversification; exports of key products showing promising growth, such as carpet, readymade garments and pashmina products, could not be sustained; and trade imbalances continued to widen.

Implementation of the duty drawback scheme for the refund of import duty paid on the importation of raw materials and intermediate goods required for the production of exportable products and the bonded warehousing system remained weak. The 1992 policy aimed to establish export promotion zone for export promotion, but not even a Special Economic Zone (SEZ) Act could be enacted. The strategy of periodically testing quality of exportable products was not backed up by specific programmes, with the result that export was hindered by inability

to meet standards-related measures of destination countries. The strategy of formulating an annual indicative export plan and programme on the basis of feasibility in collaboration with the private sector could not be operationalized. The institutional arrangements the 1992 policy sought to set up did not materialize or were not effectively operationalized—for example, the Board of Trade, chaired by a minister, which would have the potential to ensure coordination among related agencies in the implementation of trade policy; and a research-oriented technical wing at the Ministry of Commerce.

As part of Nepal's participation in the Integrated Framework (IF) initiative, a Diagnostic Trade Integration Study (DTIS) titled "Nepal: Trade and Competitiveness Study" was prepared in 2002-2003. Led by the World Bank, the report was prepared by a team of foreign experts chosen by the Bank, with some participation of select Nepali experts as well (Adhikari et al. 2011). Although it was intended to identify the trade-related opportunities and challenges faced by Nepal as well as to propose an action matrix for utilizing those opportunities and addressing the challenges, due to the lack of ownership of the study, not much could be realized in terms of generating resources and implementing the programme envisaged by the study (*ibid*.).

As per the assessment of the Government of Nepal, Trade Policy largely remained unable to address issues of international trade dynamism, Nepal's membership of regional and multilateral trade agreements, trade under bilateral arrangements, complexity of trade procedures, transit, sanitary and phyto-sanitary (SPS) measures and technical barriers to trade (TBT) that emerged as critical barriers to export expansion, and supply-side constraints (GoN 2009). This necessitated the formulation of Trade Policy 2009, which lays particular emphasis on export promotion, in contrast to its predecessor.

The main objective of Trade Policy 2009 is to support economic development and poverty alleviation initiatives through "the enhanced contribution of trade sector to the national economy" (GoN 2009: 3). Its specific objectives are:

- To create a conducive environment for the promotion of trade and business in order to make it competitive at the international level;
- To minimize trade deficit by increasing exports of value-added products through linkages between import and export trade;
- To increase income and employment opportunities by increasing competitiveness of trade in goods and services and using it as a means of poverty alleviation; and
- To clearly establish the interrelationship between internal and foreign trade, and develop them as complementary and supplementary to each other.

It envisages the promotion and development of select goods under its "commodity development programme", classifying them into special focus area and special thrust area. In the first group fall labour-intensive goods already established in export markets, such as readymade garments, woolen carpets and handicraft goods. The second group includes "highly potential export items", mostly agricultural- and forest-based products. The rationale for promoting exports of agricultural- and forest-based products as cited in the trade policy is that agriculture has been accepted as a priority sector of the economy by the Agricultural Perspective Plan and Periodic Plan, and the role of agriculture development in poverty reduction (p 34). Table 2 lists the

identified goods. The special focus area has broadly four goods while the special thrust area has 15 goods. There is some overlap between the special focus area and the special thrust area. Among special thrust area products, emphasis is given to the commercialization of the farming of tea, vegetable seeds, large cardamom, ginger and herbs.

Table 2: Products identified by Trade Policy 2009

Special focus area	**Special thrust area**	
1. Readymade garments, cotton towels	1. Tea	9. Herbs and essential oils
2. Woolen carpets	2. Vegetable seeds	10. Handmade paper and paper products
3. Pashmina and silk products	3. Large cardamom	11. Wood craft products
4. Handicraft goods (Pashmina, woolen products, silver products, metal products, handmade paper)	4. Pulses	12. Coffee
	5. Floriculture	13. Honey
	6. Precious/semi-precious gems and stones, and gold and silver ornaments	14. Oranges (*junar*)
	7. Processed leather (and leather goods)	15. Vegetables
	8. Ginger/dried ginger	

Source: Author's compilation based on Trade Policy 2009 (GoN 2009)

The rationale for the selection of goods for export promotion can be gleaned from the strategy: "Goods that are of comparative advantage, and based on skills, means and resources available in the country will be identified and selected, and promotion of trade in such goods will be supported." (p. 4). Creating employment and income generation opportunities in rural areas and reducing poverty utilizing local resources is the main rationale behind the dominance of agricultural- and forest-based products in the special thrust area.

The trade policy also provides for the identification of new exportable goods in which the country has comparative advantage, with an emphasis on commercial farming, livestock, and non-timber forest products.

Policies for the special thrust area goods stress value addition, processing, forward linkages (using primary goods for the production of manufactures) and vertical product diversification. Even within the special focus area, which includes only manufactures, there is an emphasis on backward linkages by increasing the domestic production of raw materials and inputs, including agriculture and forest products (such as yarn and textiles for readymade garments, wool for woolen carpets, rearing of Himalayan goats (Chyangra) for producing raw materials for pashmina goods, mulberry farming for the production of silk for silk products, hides and skins for leather). There are also policies for value addition and vertical diversification in the identified special focus area manufactured products.

Some working policies pertinent to exports of agriculture, food and forest products, and use of domestic raw materials include: establishment of separate units for food, agriculture and forest products, at major customs posts; construction and upgrading of cold storage to international standards; capacity building of human resources (government and private sector) in the areas of SPS standards and measures and quality certification; initiatives to establish intellectual property rights in the form of geographical indication concerning goods such as tea, coffee and honey, among others; launch of programmes for enhancing the production of raw materials within the country; harmonization of policies on agriculture, forest and other sectors for effective implementation of the trade policy; encouraging primary goods being exported without value addition to be exported with value addition; make available land on leasehold basis for commercial farming of agriculture and forest products, including tea, coffee, fruits, herbs, eucalyptus (spice tree), soap nut and pricklyash. Further, the policy document provides for the establishment of a Product Development Fund with the participation of the private sector and cooperatives in order to provide support for transportation and storage of handicrafts, herbs, honey, tea, milk, fish, meat, vegetables and other semi-processed products. Integrated Technical Centres are to be established in collaboration with the private sector for improving quality standards, product development and diversification of exportable products.

The policy document also provides for launching Product Development Programmes to increase exports of, among others, tea, coffee, vegetable seeds, herbs, agriculture and dairy and NTFP. In addition, special programmes are to be launched to identify and promote additional new exportable products. The policy seeks to utilize Export Promotion Fund in adopting new technologies and improving production processes in producing exportable goods based on domestic raw materials; and also in assisting transportation of exportable agricultural products, forest-based products, handicrafts and goods based on domestic raw materials to international markets. Assistance is to be provided to the packaging, storing and certification of agricultural products for making their production and processing compatible with international demand by utilizing opportunities for diversification in agricultural production. Contract farming and cooperative farming system are to be encouraged by attracting investments in exportable agriculture products. Cooperative organizations are to be encouraged in the exports of agriculture- and forest-based products, among other special thrust area products). No local tax and fees are to be levied on the transportation of special thrust area products. Emphasis is to be provided to commercial farming, livestock farming and NTFP production through supply of irrigation, machinery, fertilizer, seeds, high-breed animals and poultry. Value chain, cost effectiveness and quality control of exportable products are to be improved.

While the trade policy's strategy of mostly promoting those goods that intensively utilize domestically available resources has its merit in terms of addressing immediate concerns of unemployment/underemployment of human resources and poverty, it does not address the question of what potential the production and export of such products has for structural transformation.

6.2 Nepal Trade Integration Strategy 2010

Following the formulation of Trade Policy 2009, the Government of Nepal formulated the Nepal Trade Integration Strategy (NTIS) 2010. The formulation process of the NTIS was inclusive: government agencies, the private sector and donors are generally appreciative of the process and the output, especially compared to similar exercises in the past, for example, the DTIS 2003 (Adhikari et al. 2011). The strategy identifies 19 "priority export potential sectors"—goods and services—and the "most attractive markets" for them, and charts a short- to medium-term course of action for the development of the country's export sector until 2013-2015, focusing on the identified sectors (see GoN 2010a). Among the 19 sectors, 12 are goods (7 agriculture/forest and food products, 5 craft and industrial goods) and 7 services (Table 3).[19] Most of them are also included in the Trade Policy's special focus and thrust areas and have been in Nepal's export basket for decades.

Table 3: Priority export potential products/sectors identified by Nepal Trade Integration Strategy 2010

Agro-food: Large cardamom, ginger, honey, lentils, tea, noodles, medicinal herbs/essential oils
Craft and industrial goods: Handmade paper, silver jewelry, iron and steel, pashmina, wool products
Services: Tourism, labour services, IT and BPO services, health services, education, engineering, hydroelectricity

Source: GoN (2010a).

Most of the seven agriculture (including forest) and food products are found to have medium to high export potential as well as medium to high socio-economic impact when an assessment is made over the set of 12 identified priority goods (Table 4).[20] The full-time equivalent employment generated by the seven agro-food products/sectors totals at least 190,000, with tea

[19] NTIS also identifies five other export potential sectors: transit trade services, sugar, cement, dairy products and transformers.

[20] See GoN (2010a) The current export performance of Nepal in a given product, current world demand and market access conditions for the product, and domestic supply capacity (including quality of products, the productivity and cost of production factors, and the efficiency of domestic supporting industries), are the factors considered in the construction of the export potential index used in NTIS 2010. Likewise, the potential socio-economic impact is measured by a socioeconomic impact index, which is a composite indicator of full-time equivalent employment, participation of women in the sector, impact on poor regions, impact on skill development, impact on water and energy resources and more broadly on the environment.

alone accounting for 100,000.[21] Resource intensity (defined as dependence on electricity and water) was also taken into account while selecting the 12 goods, particularly in view of the acute power shortage. Among the seven agro-food products, the electricity intensity of five products is low and of two products is medium (lentils and instant noodles) and the water intensity of five products is low and of two products is medium (large cardamom and instant noodles). This implies that the expansion of the seven commodities will not be constrained by two critical resource bottlenecks (GoN 2010a).

Table 4: Socio-economic impact of identified agro-food commodities by Nepal Trade Integration Strategy 2010

		Export potential		
		High	**Medium**	**Low**
Socio-economic impact	**High**	-	Tea Medicinal herbs/essential oils	-
	Medium	Large cardamom Lentils	Ginger Honey	-
	Low	Instant noodles	-	-

Source: GoN (2010a).

NTIS identifies four major challenges for developing a successful and competitive export sector as a whole: Ensuring proper market access; building domestic support institutions that can create a more friendly business environment and help Nepalese exporters address the challenges of non-tariff barriers (NTBs); taking steps to strengthen the supply capacity of exporters, especially in sectors where they can enjoy a competitive advantage; and mobilizing foreign aid to assist in developing pertinent capacity. The strategies and actions prescribed centre around addressing these challenges.

Among the 12 identified goods with export potential, NTIS proposes to focus, in the short to medium term, on agriculture (including forest) and food products. In order to build a competitive export supply capacity in agriculture and food products, it is recommended that the initial focus be on setting up a number of Good Agricultural Practices (GAPs), Integrated Pest Management (IPM) and Quality Management System (QMS) for selected agricultural commodities, to be accompanied by Third Party Certification (TPC) programmes to enhance the quality and quantity of supply and lower the current burden of SPS certification for exports. NTIS proposes four sectors that could become initial targets for such programmes: tea, lentils, cardamom and ginger. NTIS also recommends establishing a national accreditation board and affiliation to international accreditation bodies; accelerating the process of accreditation of government and private sector laboratories for product certification by internationally recognized accreditation bodies, and focusing on accredited food testing, including maximum residue levels (MRLs) and microbiology, in the area of SPS measures. It calls for facilitating establishment of specialized laboratories by product associations under public-private partnership approach for special purposes (e.g. collective mark, trademarks, non-destructive assessments, etc.). Some other

[21] Calculation based on estimates in NTIS 2010 (GoN 2010a) and ITC (2007).

proposed actions relevant to agro-food products include: Review and amend SPS-related laws to meet SPS measures in trading partners; developing an enabling environment for food production and processing with focus on: clean air, potable water, proper treatment and disposal of soiled water and solid waste; legislate traditional knowledge and geographical indication (GI) laws, and establish GIs for several export commodities; launch awareness campaigns among businesses on the use of intellectual property protection as a competitive advantage (in particular, collective marks and geographical indications for agriculture products); and create a structured network of trade support institutions to, among others, generate awareness of NTBs (especially standards).

Actions related to trade negotiations with India, Nepal's largest trade partner, include negotiating increased number of Indian border points with the ability to clear all cargo, including SPS-sensitive cargo. Actions to improve the investment environment are also among the cross-cutting actions and include: amending the draft Special Economic Zone (SEZ) bill to, among others, remove the 75 percent export requirement for enterprises based in the zone, though duties and tariffs for domestic production would remain and replace the positive list with a negative list; creating a designated institution—Board of Investment (BoI)—to promote investment in Nepal; establishing a professional one-stop investor facilitation service in the BoI and after-care policy advocacy through the Nepal Business Forum (NBF); and developing an investment promotion action plan for the BoI based on a clear industrial policy. As the primary purpose of establishing SEZs is to promote exports (as mentioned in Industrial Policy 2010, to be discussed later) in the context of an extremely poor export performance of Nepal and as the facilities and concessions granted to firms located in the zones entail cost to the government and represent scarce resources to be utilized most judiciously, the proposal to remove the 75 percent export requirement detracts from the potential of using SEZs as an instrument to increase exports. A dedicated export processing zone (EPZ) or an EPZ located within an SEZ can address this issue, but this not being considered.

NTIS identifies the need to strengthen the government's capacity to coordinate and manage trade-related technical assistance (TRTA) and Aid for Trade (AfT) and implement NTIS, and recommends actions for strengthening the National Institutional Arrangements (NIAs) under the Enhanced Integrated Framework (EIF) to mobilize aid for trade. The National Implementation Unit, located at the Ministry of Commerce and Supplies (MoCS), and the Technical Committees of key line ministries, are to formulate and secure funding for proposals to implement NTIS-identified actions as well as to identify, formulate and secure funding for small, quick-win technical assistance proposals.

In its product-specific action matrix, NTIS recognizes the need to achieve horizontal and vertical product diversification, value addition and processing with regard to the identified agro-food commodities. For example, in the case of cardamom, it strategizes exploring avenues for product diversification, catering to spice, essential oil, cardamom paper, incense, colour extraction industries. It sees high potential for diversification into ginger-based products (jam, jelly, candy, sauce, oleoresin). At present, in general, even simple drying of ginger is not done in Nepal. In the case of herbs and essential oils, NTIS identifies the need to initiate R&D efforts towards processed products such as perfumes, food flavouring elements, and fragrances, and introduce a policy to intensify the use of raw herbs in the production of essential oils and herbal products. Product diversification opportunities in the tea sector are to be explored based on taste and

quality preferences. In addition, of the five craft and industrial products, three (handmade paper, pashmina and wool products) have high existing or potential backward linkages in terms of utilizing domestic agro-forestry resources.

Although there is emphasis on enhanced value addition, processing and product diversification of exportable products in the actions and strategies in NTIS 2010, the methodology employed for product/sector identification does not explicitly take into account the possibilities the selected products hold (or do not hold) for future product diversification and enhanced export sophistication. Since GoN has adopted the strategy of focusing on the identified products over the medium term, successful implementation of NTIS would imply an increase in share of commodities and commodity-based products (agriculture- and forest-based products) in Nepal's merchandise exports. This points to the need for assessing and formulating strategies to mitigate the vulnerability and address the challenges associated with such dependence.

6.2.2 Trade Policy and NTIS implementation

Since the launch of Trade Policy 2009, followed by formulation of NTIS 2010, the export sector, including commodity-related, has received increased attention in the government's periodic plan document and annual policies and programmes (to be discussed later).

Through its annual budgets, GoN has taken steps to support agriculture and forest products with export potential identified by Trade Policy. Interest subsidy is provided on loans through the state-owned Agriculture Development Bank to tea, cardamom and coffee farming, cold storage and floriculture. A 25 percent subsidy on the cost of machinery equipment is provided to processing industries established by tea, coffee, herbs, honey, junar (orange), ginger and milk producing cooperatives. There is also a 50 percent capital subsidy for small farmers' cooperatives to purchase machinery and equipment for processing cardamom, ginger, tea, coffee and honey. Budget has been allocated for establishing a laboratory with international accreditation to facilitate commercial processing of herbs. Government has the policy of bearing expenses associated with registering collective trademarks of products such as tea and coffee produced in Nepal. Budget has been allocated for the control and treatment of disease in cardamom farming, setting up of cardamom nursery and establish cardamom development farm in the eastern part of the country. The 2010/11 budget speech promised a special facility for exporters of agriculture products tea, coffee, cardamom, herbs, off-season vegetables products, but this is yet to be implemented. The government is also attempting to make available the latest drying and packaging equipment and facilities to increase the quality of exportable cardamom.

GoN has also been providing budgetary support to NTIS implementation since its launch. The support falls under Priority 2 in the annual national budget. In 2010/2011, NPR 30 million (about US$400,000) was allocated to support activities in the tea and coffee subsector (establish collective trade marks), in the cardamom subsector (fund high yielding seeds, nursery development, and drying), in the pashmina and jewellery subsector (lab establishment), and to establish a cold warehouse at the Tribhuvan International Airport (WTO 2011). In the budget for 2011/2012, NPR 50 million (about US$650,000) was allocated to support the following proposed activities: cardamom (funding or high yielding seeds, nursery development and drying); ginger (distribution of high yielding rhizomes to farmers); medicinal herbs (establishment of a collection and processing centre); export promotion (running a trade fair in Kathmandu and capacity enhancement or medicinal herbs processing); tea and coffee (support to collective trade

marks); small and cottage industry (product development for herbs, tea, honey, precious stones, natural fibres and bamboo); and laboratory and quality control (purchase equipment and upgrade laboratory in Department of Plant Resources and Department of Food Technology and Quality Control) (WTO 2011; GoN 2011a).

A cash incentive programme for exports was introduced in 2010/11 and continues in 2011/12, with a budget of NPR 300 million (about US$4 million)—about eight times more than the budget for NTIS implementation. The budget for the export cash incentive scheme, under which exporters are entitled to 2 percent to 4 percent of their convertible currency export earnings based on the rate of value addition,[22] remains mostly unspent due to, among other things, procedural rigmarole. The programme is not confined to NTIS/Trade Policy-identified products only. The Department of Industry is entrusted with assessing cash incentive claims and recommending incentive rates. The ineligibility of exports to India[23], which absorbs about two thirds of Nepal's exports, for cash incentives means that the bulk of Nepal's exports are excluded from the scheme. As of mid-April 2012, following assessment of claims, the Department has recommended cash incentives to 18 export-oriented firms, including producers of coffee, lentils, pulses, carpets, noodles, leather and yarn, out of 65 export-oriented firms that have filed applications for cash incentive.[24] Some 70 percent of the firms thus recommended are agro-food exporters, most likely because *domestic* value addition should be naturally high for agro-food products, including unprocessed ones.

Simplifying the procedures for granting the cash incentive could increase the utilization of the scheme, but that would have to be balanced against the need to encourage as much domestic value addition as possible. If the scheme is extended to exports to India, the difficulty surrounding the value addition issue could possibly be addressed at least in the case of exports to India by basing assessment of claims on the Certificate of Origin issued by government-designated bodies to exporters.[25] Quite apart from procedural issues, however, it is not clear whether provision of the incentive will actually induce the exporters concerned to export *more*. In the presence of critical domestic supply-side constraints to exports addressing which requires provision of facilities in the nature of public good or service (e.g., strengthened laboratories; quality inputs; research and extension), using the budget allocated for the cash incentive scheme to alleviate these constraints in a targeted manner is an option worth exploring as exporters/producers are unable to overcome the constraints individually. In addition,

[22] It covers only exports to countries other than India. The cash incentive is 2 percent, 3 percent or 4 percent depending on whether the rate of value addition is 30-50 percent, 50-80 percent or above 80 percent.

[23] Exports to India do not earn convertible currency.

[24] Based on conversation with Mr Ram Sharan Chimoriya, Spokesperson, Department of Industry. Also see "Cash incentive to 18 industries", *Arthik Abhiyan*, 24 April 2012, p 1.

[25] Such certificates specify the level of value addition, which is necessary to secure duty-free access to the Indian market. As per the Nepal-India Trade Treaty, most primary and agriculture products originating in Nepal enjoy duty-free and quota-free access to the Indian market (and vice-versa), while manufactured goods produced in Nepal also enjoy such facility subject to rules of origin, including 30 percent domestic value addition at the minimum.

policymakers should also be mindful of the possibility that, since exports of agriculture and forest products in raw form are likely to qualify for 4 percent cash incentive by virtue of them being produced/naturally growing within the country, the scheme may create a bias against production and export of *processed* agro-forest products, including agro-forest-based industrial products.

A project to support the NIAs for the EIF and the NTIS with a budget of US$905,200 was approved by the EIF Board on 15 March 2010 for funding through the EIF's Trust Fund (WTO 2011). The project identified four key results: i) enhancing the capacity in the Government of Nepal to formulate, manage, implement, and monitor TRTA and aid for trade using an SWAp; ii) further mainstreaming trade into national development strategies; iii) implementing NTIS priorities; iv) delivery of aid for trade in accordance with the NTIS recommendations; and v) coordination of aid for trade according to Paris Principles (ibid.). In addition, the Government of Nepal has a number of EIF Tier 2 projects under preparation. A first Tier 2 project in support of the ginger industry has been finalized, and part of the project has already been approved for funding by the STDF (ibid.). The government has issued a public notice for Expressions of Interest for Tier 2 project development on its website (ibid.). The MoCS is making moves towards creating a Trade Trust Fund/SWAp for trade, which is aimed at pooling/consolidating AfT resources *à la* the SWAp adopted in health and education funding. Such a fund has been felt necessary to ensure sustainability, ownership and transparency (Adhikari, Kharel and Sapkota 2011).

A Board of Investment was formed in 2011, as recommended by NTIS. It is preparing an inventory of priority new projects in primarily agriculture, tourism, hydropower, exports and infrastructure. GoN has announced 2012 and 2013 as investment years. A draft Standards Act and a draft Certification Board (establishment) Act have been prepared. While the construction of two SEZs is progressing and GoN has announced its plan to develop six more, the SEZ Bill is still pending in parliament.

In mid-2011, 13 donor support actions were ongoing for NTIS cross-cutting issues, while funding for 10 technical assistance actions were being planned (WTO 2011). The donors supporting NTIS implementation are bilateral partners (EU, Finland, Germany, India, UK/DFID, China, and US/USAID), multilateral partners (ADB, World Bank), and implementing partners FAO, IFC, IMF, ITC, OIE, UNESCAP, UNIDO, and WHO), as well as the EIF and a private Indian tourism company (ibid.).

Besides the Trade Policy and NTIS, there are sectoral policies (and strategies) for addressing different aspects of promoting exports of commodities and commodity-based products, mainly agriculture and forest products—for example, production and productivity, commercialization of farming, competitiveness, agro enterprise development, value chain development, value addition and processing, and industrialization.

6.3 National Agriculture Policy and Agro Enterprise Promotion Policy

The National Agriculture Policy (NAP), introduced in 2005/06, provides overall guidance for Nepal government's agriculture-related policies, plans and programmes. The NAP incorporates

the major features of the 20-year Agriculture Perspective Plan (APP), launched in 1995, and takes into account the changed context since then such as additional economic liberalization measures and Nepal's membership of the WTO and regional trading agreements, notably SAFTA. The APP's five interrelated objectives are to: i) increase factor productivity; ii) alleviate poverty and significantly improve living standards through accelerated growth and expanded employment opportunities; iii) transform subsistence agriculture into commercial agriculture through diversification and exploiting comparative advantage; iv) expand opportunities for overall economic transformation by fulfilling the precondition of agricultural development; and v) identify immediate, short-term, and long-term strategies for implementation and provide clear guidelines for preparing periodic plans and programmes in future.[26]

The NAP envisions transforming a subsistence-oriented agricultural system into a commercial and competitive one, and thereby achieving sustained agricultural development, bringing about improvements in living standards. In order to contribute to food security and poverty reduction by achieving high and sustained economic growth through a commercial and competitive agricultural system, the policy sets three specific objectives: i) increase agricultural production and productivity; ii) make agricultural products competitive in regional and global markets by developing the foundations for a commercial and competitive agricultural system; and iii) conserve, preserve and utilize natural resources, environment and bio diversity. The second objective indicates the importance accorded to agricultural export-oriented trade.

As per the NAP, agricultural production and productivity are to be increased through the development, extension and utilization of appropriate agricultural technologies by taking into account local potential and comparative advantage. Emphasis is also laid on commercialization and diversification of agriculture. Special priority is to be accorded to agricultural pocket areas producing high value and low weight products, especially in remote regions. Agriculture resource centres are to be established and strengthened to provide, among others, quality resources and materials for producers of local seeds, plants and breeds, and especial technical assistance in the areas of agro product collection, processing, storing and transportation.

The specific policies related to the second objective include:

- Develop large production pocket areas, where production of agricultural products with comparative advantage is to be accorded priority. These pocket areas are to be provided with integrated facilities such as those pertaining to technical assistance, agricultural roads, rural electrification, irrigation, agro credit and market arrangements.
- Extend livestock insurance and gradual provision of insurance for fowls and seeds of select crops and high value agricultural products.
- Encourage organic farming. Provide support for quality certification of exportable agricultural products produced in organic farming areas.

[26] Nepal Agricultural Research Council (2010), cited in WTO (2011).

- Regulate and provide accreditation to private sector laboratories and processing services.
- Strengthen agricultural and animal quarantine services to ensure the quality of agricultural produce and win confidence in it in local and external markets (exports).
- Update regulation of agricultural products in keeping with international agreements and national needs.
- Effective operationalization of Agro Enterprise Promotion Committee to support agricultural commercialization and thereby effect import substitution and promote exports in the agricultural sector, while fulfilling the commitments at the WTO and regional trade agreements.
- Formulation of commodity/product-specific and subject-specific policies, which provide incentives, in order to attract investments from the cooperative and private sectors in commercial production, processing and marketing of agricultural products.
- Formulation and implementation of Agro Enterprise Development Policy for, inter alia, establishing linkages between domestic and export markets and attracting foreign investment in agriculture. (An Agro Enterprise Promotion Policy was introduced two years later.)
- Provide support to the development and expansion of agricultural wholesale markets and local bazaars with the participation (by sharing in the cost) of and management by private and cooperative sectors in order to ensure markets for commercial production of agricultural products.
- Provide incentives and facilities (including capital-related) at the recommendation of Agro Enterprise Promotion Committee, to enterprises and entrepreneurs that are providing markets to domestic farmers through contract farming and whose products are substituting imports or are being exported.

The Agro Enterprise Promotion Policy (AEPP) was introduced in 2006/07 in line with the second objective of the NAP, discussed above. Its objectives are to: i) assist in making agricultural production market-oriented and competitive; ii) contribute to domestic market and export promotion by developing agro enterprises; and iii) contribute to poverty alleviation by commercializing agriculture. It recognizes the roles of government, private, cooperative and non-governmental sectors for its implementation.

Its specific policies most relevant to trade (import substitution and exports) include:

- Establish and develop growth centres for commercial production and development of specific crops/products, based on geographical, technical and economic feasibility.
- Develop and implement programmes in specified special production areas for the production of special agricultural products in “appropriate” quantities and quality, in coordination with the development of special economic zones (established under the Industrial Policy 2010):
    - Commercial crop/commodity production area

    - Organic/pesticide-free production area
    - Agro product export area
- Ensure, in an integrated manner, a range of facilities and services (such as those related to production materials, technology, technical assistance, agricultural roads, rural electrification, irrigation, agro enterprise credit, insurance, arrangement of markets, communications system, appropriate agricultural mechanization and processing) in the specified production areas.
- Establish and develop Business Service Centre with the involvement of government and non-governmental sectors to provide business services such as collection, processing, storing, transportation and pricing of agricultural production materials.
- Customs duty rebate of 75 percent for 10 years from the date of establishment of an agro enterprise when it imports necessary equipment such as thresher, sprinkler, weeding machine, harvester, chilling van, cooling vat and milk processor.
- Encourage cultivation of herbs on public lands and other areas based on feasibility.
- As an incentive, arrange for exemption from land ownership ceiling in order to make the production of products accorded national priority commercial, competitive and export oriented.
- Develop and expand information system related to agricultural markets and agro enterprises with the collaboration of the private sector, cooperatives and local bodies.
- Certify the quality of organic agricultural products—organic certification.
- Strengthen and make efficient the system of certification of seeds, plants, animals and birds, and agricultural and food products imported and exported.
- Encourage the establishment and development of accredited independent analytical laboratories for quality certification by the government and the private sector, and assist in enhancing their capacities.
- Accord agro industry as a priority industry at the national level, and provide it with facilities accordingly. (The Industrial Policy 2010 lists agro industry as a priority industry.)
- Encourage the use of local raw materials by industries operating in Nepal. (This most probably means that agro enterprises operating in the country are to be encouraged to use local raw materials (e.g., agricultural produce), in an attempt to foster backward and forward linkages.)
- Provide assistance in the form of appropriate technologies for the establishment of export-oriented and market-oriented agro enterprises based on agricultural production pocket areas /agricultural growth centres.
- Mobilize Nepali diplomatic missions for obtaining information on export markets and export promotion.
- Conduct research on foreign market demand to promote exports utilizing comparative advantage, and transfer and disseminate information and technology.

- Establish an Agro Enterprise Promotion Fund by mobilizing funds from agricultural produce markets for bringing about coordination among them, developing infrastructure and enhancing their capacities.
- Arrange for insurance of commercial crop and livestock production, and agro industries.
- Arrange for a high-level Agro Enterprise Promotion Committee, chaired by the Minister for Agriculture and Cooperatives, with the participation of government and private sectors to take initiatives for resolving policy-induced obstacles and difficulties concerning agro enterprises and provide policy reform recommendations to the government.

The implementation of the NAP and the AEPP has been weak. Problems include: inadequate government resource allocation to the agriculture sector in general; inadequate effort in attracting private sector investment in the commercialization of agriculture; poor supply of fertilizers in remote areas despite reinstatement of fertilizer subsidies; failure to develop pocket areas and agro product export areas as desired; inadequate investment in agriculture road development; limited progress on expansion of irrigation facilities; widening gap between research and extension; poor access of farmers and agro entrepreneurs to credit and technical assistance; inadequate research on crops and products with export potential and demand; and lack of significant progress on strengthening standards- and certification-related infrastructure and institutions. Export of processed agro-food products has failed to keep pace with export of unprocessed agriculture products. The One Village One Product programme, introduced in 2006 to also target exportable agriculture products, has not been geared towards overcoming barriers to exports. Organic certification is limited in coverage; while product associations (e.g., tea) are doing it at their own initiative, a national mechanism is still missing. The export-related provisions of the NAP and the AEPP can potentially be operationalized through the implementation of NTIS 2010, and there is some progress in that direction, as discussed earlier.

6.4 Herbs and Non-Timber Forest Product Development Policy

The Herbs and Non-Timber Forest Product Development Policy (HNDP) was introduced in 2004. The long-term vision of HNDP is the conservation of herbs and NTFPs so as to contribute to the national economy, and hence introduce Nepal as a huge depository of herbs and NTFPs at the international level by 2020. Its objectives are, *inter alia*, to encourage the commercial cultivation of valuable herbs and NTFPs; help in adding value to herbs and NTFPs through processing; help in accessing capital, developing infrastructure, acquiring technical knowledge and skills, and market management to make herbs and NTFPs commercially competitive; and earn foreign exchange by exporting herbs and NTFPs. The policies under HNDP include:

- Encouraging both wild collection and cultivation of herbs targeting both national and international markets.
- Establishing herbs zones.
- According priority to participation and benefit of women below the poverty line.
- Encouraging value addition and processing at the local level. Gradually developing infrastructure for processing of herbs and NTFPs.

- Initiating the process of forest certification and organic certification.
- Simplifying certification and taxation processes related to herbs and NTFPs produced by the private sector through cultivation.
- Conducting research to identify medicinal aromatic oil and other properties in plants; and in cases where such identification has already been done, help in their isolation and commercialization.
- Conducting bio-prospecting (including in collaboration with foreign companies).
- Introducing at the international level qualities and use of special herbs found in Nepal.
- Providing concessions to individuals and groups who want to produce, process and sell herbs through cultivation.
- Encouraging collection and cultivation of herbs as raw materials for domestic manufacturing of allopathic and ayurvedic medicines.
- Developing a mechanism to provide international market information to producers, collectors, processors and exporters; and also establishing herbs information centres at national and regional levels.
- Establishing a fully-equipped laboratory at the national level, and gradually establishing such laboratories at regional levels, in order to maintain quality and standards of herbs and NTFPs and promote their international trade.
- Encouraging farmers to go for inter-cropping of agricultural crops and herbs.

The HNDP is not being effectively implemented in the absence of clear targets, strategic programmes, adequate regulatory frameworks and institutional mechanisms (GoN 2010a). The Herbs and NTFP Coordination Committee has not been very effective in the commercialization of herbs (*ibid.*). Nepal's exports of herbs, NTFP and essential oils are based almost entirely on wild collection rather than cultivation; adequate efforts have not been made to domesticate wild varieties of herbs and NTFP in which Nepal has comparative advantage and which is possible so that such varieties could be cultivated and sustainable supply could be ensured (Sharma and Shrestha 2011).

Exports are still mostly in raw form; even export of essential oils entails limited processing. While the number of distillation units/processing facilities has increased significantly in the last 10 years, particularly in two districts in the far-western region of the country that is richly endowed with medicinal and aromatic plants, these facilities have either not been brought into proper use and/or the quality of products obtained through processing remain inferior (Sharma and Shrestha 2011). While importing countries demand specific pest data for each medicinal and aromatic plant for exports, Nepal does not even have basic pest data of listed medicinal plants, and this hinders exports when importing countries demand specific pest data for each medicinal plant to be exported (*ibid.*).

A fully-equipped laboratory for quality certification as envisioned by the policy is yet to be established, and this presents a critical barrier to penetrating especially European markets. The

Department of Plant Resources, Ministry of Forest and Soil Conservation, the central agency authorized to issue quality certification of medicinal and aromatic plants and essential oils, is not fully equipped and capable of certifying quality of products (Sharma and Shrestha 2011), although it has started developing quality standards for medicinal herbs (GoN 2010a). However, with the launch of NTIS 2010, there is reason to hope that the implementation of HNDP will improve—for example, budget has been allocated for purchase of equipment and upgrading of laboratory in the Department of Plant Resources, and the country's largest herb collection and processing centre is being established under public-private partnership with a possibility of foreign aid too.[27]

6.5 Industrial Policy

The Industrial Policy 1992 was in place until 2010, when a new policy replaced it. The thrust of Industrial Policy 1992 was on economic liberalization and de-regulation. In order to facilitate the establishment and operation of industries, the mandatory requirement to obtain licence for the establishment and operation of industry was removed except for a specified few industries (related to security, environment and public health). The Foreign Investment and Technology Transfer Act 1992 complemented the Trade Policy 1992 and Industrial Policy 1992 by liberalizing Nepal's foreign investment regime, notably by permitting foreigners to invest up to 100 percent in all sectors of the economy, except for activities contained in the "negative list", which are reserved for national investors, including cigarette, bidi[28], alcohol production (excluding those exporting over 90 percent of their production); poultry farming; fisheries; and bee keeping. The Industrial Enterprises Act 1992 established the One-Window Committee coordinated by the Director General of the Department of Industries under the Ministry of Industry to provide all government services, including facilities provided under the Act, to domestic and foreign investors through a single institution. The Policy and the Act also provided facilities, concessions and facilities to industries—including duty drawback and bonded warehouse facility for export-oriented industries, in line with Trade Policy 1992.

However, the several of the facilities, concessions and incentives provided by the Industrial Enterprises Act 1992, pursuant to the Industrial Policy 1992, including income tax holidays, were reduced or discontinued in subsequent years, including through the first amendment to the Act in 1997, the Income Tax Act 2001/02, and the annual Finance Acts (GoN 2010b). Originally, income tax was to be exempted for manufacturing industries (other than cigarette, bidi, alcohol, vegetable ghee, plastics and electronic assembly industries), energy-based industries, agro- and forest-based industries (other than sawmill and catechu industries) and mineral-based industries for a period of five years from the date of operation. Additionally, income tax was to be exempted for a period of seven years from the date of operation in the case of all national priority industries, including agro- and forest-based industries. Concessions that were not withdrawn included: fruit processing and fruit-based cider and wine industries with a fixed asset of up to NPR 2.5 million established in 14 specified remote districts being entitled to

[27] "Herb collection centre to be established in Surkhet", *Nagarik (Arthik)*, 13 March 2012, p D.

[28] A bidi is a thin cigarette filled with tobacco and wrapped in a tendu leaf, tied with a string at one end (WTO 2011).

an excise duty and sales tax[29] exemption for a period of 10 years, and fruit-based alcohol industries being entitled to the same exemption for a period of five years, extendable for an additional period of up to three years. Although both Industrial Policy 1992 and Trade Policy 1992 envisioned the creation of SEZs, as noted above, the country is yet to have one and SEZ-related laws are yet to be enacted.

Assessing Nepal's industrial sector performance so far, Industrial Policy 2010 acknowledges that although Industrial Policy 1992 helped develop the bases for encouraging industrial production, it was not successful in increasing industrial employment, production, investment and exports to the desired extent. Efforts such as enhancing the skills of workers, upgrading managerial skills, encouraging new technologies, increasing investment, helping the revival of sick industries, institutional arrangement for providing training to promote entrepreneurship and one-window service for industries made little positive dent to industrialization due mainly to poor implementation. The unilateral trade liberalization undertaken by Nepal in the 1990s, which saw a sharp reduction in tariffs, posed challenges to the country's nascent industrial sector. Stiff competition at the global level as well as the erosion in trade policy space resulting from accession to the WTO in 2004 also called for a review of Industrial Policy. The major problems facing the industrial sector as identified by Industrial Policy 2010 are political instability, industrial insecurity, poor industrial relations, energy crisis, weak industrial infrastructure, shortage of skilled human resources, weak capacity to absorb technology, low productivity, low diversification of exportable products and other supply-side constraints. Industrial Policy 2010 was introduced to address the emerging problems and challenges, utilize the opportunities presented by membership of bilateral, regional and multilateral trade agreements, address the growing importance of service industry, provide special facilities to micro enterprise, and small and medium industries, and to ensure that the facilities accorded to industries by Industrial Policy are not contracted or discontinued by other policies or laws.

The goal of Industrial Policy (IP) 2010 is to contribute to poverty reduction through industrialization by developing a broad and sustainable industrial base. Two of its five objectives are related to export trade and competitiveness, and use of locally available resources and raw materials: i) to expand industrial good exports, along with increase in national income and employment, by enhancing quality and competitive industrial production and productivity; and ii) increase the contribution of the industrial sector to balanced growth by mobilizing local resources, raw materials and skills. IP 2010 remains to be operationalized through an enactment of a new Industrial Enterprises Act, the draft of which has been prepared.

Select specific policies of IP 2010 that are related to trade, competitiveness, use of locally available resources and raw materials, including agriculture and forest, value addition, forward and backward linkages are:

- Assist to increase the export of industrial goods and thereby contribute to foreign exchange earnings and improving the balance of payments.
- Provide additional facilities, incentives and concessions to export-oriented industries, industries established in special economic zones, and priority-accorded industries, among others.

[29] Value added tax (VAT) replaced sales tax in 1997.

- Encourage research and development in biotechnology, among others.
- Special emphasis on promotion of industries utilizing local resources, raw materials, skills, labour and technology.
- Identify and utilize areas of comparative and competitive advantage to strengthen and make sustainable the industrial base.
- Encourage contract manufacturing, outsourcing, contracting-out, franchising, ancillary and buy back activities that contribute to fostering forward and backward linkages.
- Special policies for micro enterprises, cottage and small industries: Establish production development centres and product-specific industrial clusters for promotion of industrial products based on local resources identified as possessing greatest potential, as per the concept of "one village one product".

Select relevant strategies of IP 2010 are:

- Establish special economic zones to encourage establishment of export-oriented industries.
- Provide facilities/incentives to industry based on domestic value addition in order to enhance forward-backward linkages in the economy.
- Additional facilities and concessions to export-oriented industries and industries located in SEZs, among others.
- Prepare an industrial profile of each district and encourage the private sector to establish industrial villages taking into account availability of local raw materials and traditional skills, as per the concept of "one village one product".
- Programmes for providing assistance in the areas of technology, market, skill and research to agro- and NTFP-based industries; livestock, dairy and poultry industries; and industries based on fruits and herbs – in rural areas.
- Develop industries based on domestically available raw materials through coordination between agro industries and exports.
- Introduce special action plan for establishing herbs and fruits processing industries especially in remote and hill regions, through cooperatives.
- Institute institutional and policy reforms and provide incentives for attracting domestic and foreign investment in mineral-based industries, among others.
- Special strategies pertaining to micro enterprises, and cottage and small industries:
    - Conduct the "one village one product" programme as a campaign.
    - Simplify collection, excavation and supply of raw materials required by agro-, forest-, and mining-based industries, among others.
    - Operate business incubation centres especially with a focus on agro- and NTFP-based enterprises. Establish Angel Fund and Venture Capital Fund to help entrepreneurs establish enterprises after the business incubation stage.
    - Establish micro enterprise, cottage and small industrial villages, and product development centres in different regions of the country.

The IP 2010 recognizes the importance of intellectual property rights (IPRs), and provides for creating mechanism for their protection, and incentives for firms to use IPR protections and develop IPR products. It also provides for making the labour law flexible, incorporating the "no work, no pay" principle to check industrial strikes.

The IP 2010 designates a number of goods and services industries as “priority industry”. First among such industries is agriculture- and forest-based industry. The document defines agriculture- and forest-based industry broadly to include both cultivation and processing. It includes fruits, food processing, livestock raising and breeding, dairy, poultry farming (chicken), fish farming and fishing production, silk production and processing, tea production and tea processing, coffee production and processing, herb production and processing, vegetable seed production, vegetable farming and processing, establishment and operation of greenhouse, bee keeping (honey production, processing and bee breeding), floriculture and nursery, rubber cultivation and preliminary processing, cold storage, establishment and management of cooperative, leasehold, community and private forests, commercial farming and processing of cash crops (such as sugarcane, cotton, sweet sorghum, tobacco, jute, cardamom, ginger, oilseeds, spices, pulses), bamboo cultivation and bamboo products, establishment and management of botanical garden, and plant breeding enterprise (including tissue culture).

Export industry is also designated as a priority industry, in line with the objective of the policy to increase industrial goods exports. Other “priority” commodity-based industries or industries predominantly using local raw materials include clinker and cement industry using domestic limestone; pulp and paper industry; sugar; chemical fertilizer; powder milk; mineral-based industry; excavation of petroleum and natural gas excavation and production. Traditional cottage industry is also on the priority list.

The IP 2010 has a provision for facilities, concessions and incentives for certain industries. Income tax discounts are provided to industries located in “very undeveloped areas”, “undeveloped areas”, and “less developed regions” designated by the policy except for those producing tobacco and alcoholic products. An exemption of 5 percentage points on the corporate tax rate is provided to all “special” industries except those producing tobacco and alcoholic products and catechu industry. One concession specifically provided to agro industry is an income tax discount of 40 percent for industry producing cider and wine with a maximum of 12 percent alcohol content based on “established” fruits in “very undeveloped areas” (21 districts) for 10 years from the date of start of transactions. An income tax discount of 90 percent for seven years from beginning of transactions is provided to mineral excavation, cement industry producing clinker and cement using local raw materials, and petroleum and natural gas exploration and excavation, besides hydropower production and distribution. All national priority-accorded industries—including agriculture- and forestry-based industry—can deduct one third more depreciation of fixed assets than the normal rate for income tax exemption purpose. Facilities and concessions with respect to customs duties, excise and VAT are focused on exports as a whole, with no specific provision for agriculture- and forest-based industry or mineral-based industry. There is a provision for providing additional facilities and concessions to priority industries as required. Forests can be made available on leasehold basis to forest-based industry. Special programmes and budget are to be arranged for construction of basic infrastructure (e.g., access roads, electricity) for the development of mineral-based industry. The IP 2010 provides for a host of tax concession and other facilities to industries established in special economic zones, envisioned as especially catering to export-oriented industries. With the effectiveness of the One-Window Committee formed under Industrial Enterprise Act 1992 leaving a lot to be desired, IP 2010 seeks to form a one-stop service centre for the same purpose.

Changes to the Industrial Enterprises Act are needed to incorporate the provisions in Industrial Policy 2010. A Bill to that effect has been drafted. While Industrial Policy 2010 has provided additional facilities and tax incentives to industries compared to what they were already enjoying, it appears to have curtailed some in that it does not explicitly specify them. For example, at least as of 2011, national priority industries, including agriculture- and forest-based industries, were entitled to a rebate of 50 percent of income tax for 7 to 10 years from the date of operation (WTO 2011). Industrial Policy 1992 exempted national priority industries, including agriculture- and forest-based industries, from income tax for seven years—although the facility was withdrawn in subsequent years. The new Industrial Policy does not have an explicit provision for income tax rebate covering all national priority industries, including agriculture- and forest-based industries.

6.6 Periodic Development Plan

Nepal has been carrying out development planning exercises since 1956 through periodic plans. Poverty reduction has been the primary objective of the development plans since the Ninth Five-Year Plan (1997-2002). The Tenth Five-Year Plan (2002-2007) was Nepal's Poverty Reduction Strategy Paper itself and was formulated and implemented during the height of an armed conflict. It was followed by the Three-Year Interim Plan (TYIP) (2007-2010), which had an accent on relief, reconstruction and rehabilitation as it was the first plan after the regime change of April 2006. The overall economic growth rate as well as the growth rates of agriculture and industrial sectors have been below the targets set by the various plans. While poverty has declined steadily, this progress is largely an outcome of, as discussed in Section 1, work-related outmigration. Trade-related targets have been missed by a huge margin.[30] The plans are operationalized through annual budgets. Budget for development expenditure has been persistently been underspent, partly due to political instability.[31]

It is only in the ongoing Three-Year Plan (TYP) 2010-2013 that trade mainstreaming has been included as a development strategy, a feature attributable to NTIS 2010. The TYIP 2007-2010 did not have specific programmes for agriculture and forest product exports, although it gave continuity to the One Village One Product programme initiated in 2006 with the aim of expanding production of and adding value to select, mostly agriculture, products with export potential in select areas under public-private partnership.[32] There was little progress on establishment and upgrading of laboratory, and quality certification of agriculture and forest products during the implementation of TYIP 2007-2010. Compared to TYIP, the ongoing TYP has more specific programmes for exports. However, even the current plan lacks sector/product-wise export targets.

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[30] For example, while the TYIP set the target of increasing merchandise exports from NPR 61 billion to NPR 100 billion by end of the plan period, exports barely budged from the initial figure. Consequently, in the face of burgeoning imports, merchandise trade deficit increased to 26.6 percent of GDP by the end of the plan period from 15 percent at the beginning as opposed to the target of containing it at 17 percent (GoN 2011b).

[31] Actual development expenditure was 80 percent of budgeted development expenditure in 2008/09, 71.6 percent in 2009/10 and 73 percent 2010/11. In the first six months of 20011/12, the figure was about 13 percent.

[32] In the first stage of the programme, the selected products are junar (orange), bael, lapsi and rainbow trout. The selected products for the second stage are tourism and orchid.

The goal of the ongoing TYP is "to improve the living standards of all Nepalese people, reduce poverty to 21 percent, and achieve MDGs by 2015 through sustainable economic growth, generating dignified and gainful employment opportunities, reducing economic inequalities, achieving regional balances, and eliminating social exclusions." (GoN 2011b: 17). Its main objective is "to enable people to feel change in their livelihood and quality of life by supporting poverty alleviation and establishment of sustainable peace through employment centric, inclusive and equitable economic growth" (p 17). The plan's macro strategies are: attaining employment-centric, broad-based economic growth; creating infrastructures for development considering the future federal states including regional balance; inclusive and equitable development; support the process of socioeconomic transformation of the nation; making governance and service delivery effective; and mainstreaming trade in development The plan has a strategy of mainstreaming industrialization, trade and service sector "in the national development endeavors", and reducing trade deficit by "developing exportable goods and services having comparative advantage" and optimally utilizing the "opportunities created by the bilateral, regional and multilateral trading systems" (p 18).

The TYP takes agriculture, tourism, industry and trade sectors as prime sectors for achieving high economic growth and employment generation, and accords extra priority to the development of the agricultural sector.

6.6.1 Agriculture

Taking Agriculture Perspective Plan and National Agriculture Policy as the principal policies for agricultural development, the TYP envisions making the agricultural sector competitive through its commercialization and modernization to assist in the realization of food and nutrition security and the millennium development goals.

The objectives pertaining to agriculture are: i) to enhance the contribution of the agriculture sector in food and nutritional security, employment generation and poverty reduction and balance of trade by means of its modernization and commercialization considering the agriculture sector as the backbone of national economy; and ii) to improve the economic status of rural people by increasing the production and productivity of agriculture and livestock commodities in line with the requirements of farmers and other stakeholders. The first objective is most directly related to trade. Given the country's huge and burgeoning trade deficit—in overall trade as well as in agricultural and food trade—the objective of enhancing the contribution of the agriculture sector to the trade balance would imply increasing the exports of agriculture and food products and substituting agricultural imports with domestically produced agriculture and food products.

Select TYP working policies on the agriculture sector that are most relevant to trade, including commodity trade, and competitiveness include:

- Programs for certification of international standard in seed and livestock production and food commodities/products to be exported from Nepal will be carried out by obtaining the accreditation from International Seed Certification Organization and organizations which certify livestock production and other food commodities/products.

- Make available to farmers production materials, machinery, equipment, fuel and energy at concessional rates so as to reduce the cost of production.
- Make agriculture and livestock produce competitive with the view of import substitution and export promotion.
- Emphasis will be placed on identifying and increasing production of potential agricultural produce having comparative advantage.
- Emphasis on provision of agriculture and livestock insurance, concessional agricultural credit, and tax discount for agricultural and livestock based industry and trade.
- Make competitive the production and processing of agricultural and livestock products/commodities. Support processing of crops and products under public-private partnership.
- Commercialize livestock production and increase the access of livestock products to domestic, regional and global markets.
- Strengthen national food laboratory and upgrade it to accredited laboratory of international standard for testing the quality of, certification of and commercialization of food commodities/products, by utilizing new technologies.
- Declare organic zones with the brand promotion of organic products by identifying potential commodities and regions for encouraging organic cultivation of high-value crops targeting international markets.
- Orient agriculture research programme towards deriving maximum benefits that arise from membership of the WTO and regional trade agreements.

The TYP sets quantitative targets for agriculture and livestock production covering food grains, pulses, cash crops (potatoes, sugarcane, oilseeds), fruits, spices (including cardamom and ginger), tea, vegetables, coffee, honey, silk cocoon, milk, meat, egg and fish. Some of these being exported and/or have export potential and have been identified as priority products for export promotion by the Trade Policy 2009 and/or the Nepal Trade Integration Strategy (NTIS) 2010—pulses, cardamom, tea, oranges, honey, coffee, tea and ginger.

Select major programmes for agriculture most relevant to trade and competitiveness are:

- Under fruit development programme, continuity to One Village One Product programme, laying emphasis on development of production of fruits such as oranges, lapsi and bael and orchid, and making it export oriented. Promotion of commercial farming of apple, walnut, apricot, pear, orange, lemon and pomegranate in high-hill region and some mid-hill areas. Transform Nepali coffee into highland organic coffee and making organic tea export-oriented.
- Under vegetable development programme, priority to contract and cooperative farming. Encourage organic cultivation of high-value vegetable crops targeting international markets. Special emphasis on promotion of high-quality cardamom exports.
- Under commercial kit development programme, manage and upgrade the quality of silk and honey production; develop laboratories, develop the capacity of bee resource centre; and conduct export promotion in international markets.
- Establish an insurance fund for expansion of livestock insurance.

- Development of community-based infrastructure for commercialization of high-value crops. Counseling and subsidy for value chain development.
- Develop national capacity for tea and coffee export facilitation.
- Reform of value chain in the production of vegetable, fruits, ginger, fish, milk, yak cheese, meat and decorative flower; increase quality production of high-value agriculture and livestock products; agriculture commercialization and trade project; and development of high-value agriculture products.

Among the expected outcomes of the TYP concerning the agriculture sector are increase in raw materials required by agriculture- and livestock-based industries, increase in foreign exchange earnings from agriculture product exports, and enforcement of standards consistent with WTO agreements in import and export agriculture products.

6.6.2 Forest

The objectives of the TYP pertaining to the forestry sector are: i) to enhance forests' productivity by promoting environmental services through scientific and participatory management of forests' resources; and ii) to support poverty alleviation by generating employment opportunities through promotion of forests' activities and commercialization. While enhancing productivity and promotion of commercialization of forests are mentioned, the export potential of forest products is not taken into account. In fact, forest product exports—despite the export potential of non-timber forest products (NTFP) such as medicinal and aromatic plants, and products derived therefrom—receive scant attention in contrast to the due emphasis accorded to the export dimension of agriculture and livestock products, as discussed above.

The few working policies mostly closely linked to exports are as follows. Certified organic production of NTFP is to be initiated with the development of national standards for forests certification. Gradual preference is to be accorded to process forests certification for sustainable forests management. Special facilities are to be provided to encourage the private sector, cooperatives and communities to engage in the provision of raw materials to environment-friendly enterprises based on forest resources, and in processing, value addition, market extension and export promotion activities for such enterprises. Programmes for production and processing of aromatic and medicinal plants are to be encouraged with public-community-private partnership and a policy of development of a special zone for the production and management of aromatic and medicinal plant species is to be made.

None of the major programmes in the forestry sector highlighted in the TYP are export-oriented. Likewise, the expected outcomes for the sector do not include exports.

6.6.3 Industry

In line with IP 2010, the TYP's objectives with respect to the industrial sector include increasing industrial goods exports to increase national income and employment opportunities, and it places emphasis on maximum mobilization of local resources, raw materials and skills, including agriculture, NTFP and other natural resources. Expanding micro enterprises across the nation is one of its strategies. In order to foster backward and forward linkages in production, the TYP aims to promote options like contract farming and value chain development of agro-based

industry. It seeks to provide additional facilities, concessions and incentives to export-oriented industry, industry established in SEZs, priority industry, and industry located in designated underdeveloped regions. Incentives are also to be provided to industry using local resources, raw materials, skills, labour and technology. Research, exploration and extraction programmes on minerals, including petroleum, feature in the main programmes under industry in the TYP. One of the expected outcomes of the plan in the industrial sector is an increase in exports and a reduction in trade deficit.

6.6.4 Trade

The objectives concerning trade mirror those of the Trade Policy 2009, including identification of new products with comparative advantage for exports and promotion of exports of goods utilizing local raw materials, resources and skills. The strategies include developing trade as an important pillar of the national economy, increasing value addition in exportable products, value chain development and identification and promotion of new export potential goods (both horizontal and vertical diversification), mobilization of foreign aid to increase export competitiveness, and providing incentives, facilities and concessions for exportable products. The TYP explicitly states that NTIS is to be implemented by mobilizing necessary resources. Among the key programmes are development and diversification of products with comparative advantage; institutional reform and development of quality human resources for development and diversification of internationally competitive exports; strengthening of laboratory testing facilities; development of agriculture- and forest-based exportable products; and establishment of Export Product Development Fund.

6.7 Commodity exchange

As dependence on commodity exports increases, the issue of price volatility may become a significant issue. The derivatives market is one avenue of market-based risk management. Nepal got its first commodity futures exchange in 2007, and now has half a dozen commodity futures exchanges. However, while the Securities and Exchange Board of Nepal is the agency responsible for regulating the stock market, a regulatory regime for the commodity exchanges is yet to be instituted. The lack of a regulatory regime is constraining the expansion and functioning of the commodity exchanges.

At present, the commodity exchanges are operating in a settlement-based system, which means that there is no physical transaction of commodities. They trade in only those commodities that are traded internationally, including base metals like copper, precious metals like gold and silver, natural gas, crude oil and agro products like corn and coffee.[33] A warehouse law is essential for physical transactions to take place, but such a law is yet to be enacted, although a draft has been formulated. As a result, domestic commodity (e.g., agriculture) producers are yet to benefit in terms of risk management and better prices.

[33] "The crowded commodities futures market", *The Corporate*, Vol 1, Issue 51, 9-5 January 2012.

7. Policy coordination

Given the multiplicity of government agencies involved in the formulation and execution of trade policy and related sectoral policies, coordination among them becomes a critical issue. Trade Policy 2009 provides for a Board of Trade to be constituted at the central level with the participation of the private sector to provide necessary assistance in the policy formulation for trade promotion, trade facilitation, policy monitoring and inter-agency coordination. The previous trade policy had also made an arrangement for such a Board. As per Trade Policy 2009, the Board is chaired by the Minister for Commerce and Supplies, and has members from the National Planning Commission, Ministry of Commerce and Supplies, line ministries (Industry, Finance, Tourism and Civil Aviation, Education, Health and Population), the private sector and academia. Trade Policy 2009 dropped the Ministry of Agriculture from the Board, despite agriculture products being on the list of products targeted by the policy, whereas the Ministry of Forests, despite being the agency responsible for, *inter alia*, wild-growing medicinal and aromatic plants (also possessing high export potential) was excluded from the Board from both trade policies.[34]

Having a minister head the Board is, in principle, expected to help iron out possible conflicts among government agencies and ensure better coordination in policy formulation and implementation. The structure of the Board theoretically would help ensure interaction between government officials and the private sector also. Inadequate stakeholder consultation was one reason behind the poor national ownership of DTIS 2003. However, the Board has not been effectively operationalized, as it is unable to even meet once every two months as envisioned by the Trade Policy 2009, and inter-agency coordination remains *ad hoc* and generally weak.

Encouragingly, however, the formulation of NTIS 2010 involved considerable stakeholder consultation and coordination between the Ministry of Commerce and Supplies and line ministries, and hence the national ownership aspect of the document is quite strong, particularly when compared to the DTIS process (Adhikari, Kharel and Sapkota 2011). GoN has put in place National Implementation Arrangements for EIF. They consist of a National Steering Committee (NSC) chaired by the Chief Secretary; a National Implementation Unit (NIU) based in the MoCS, with associate members in key line ministries ('extended' NIU); Technical Committees of key line ministries to support the NIU; an EIF focal person to lead the NIU and liaise with development partners and Geneva/WTO/EIF and the Aid for Trade initiative; and a donor facilitator (GoN 2010a). Five Technical Committees have been proposed; one of them is to deal with agriculture, agro-industry, non-timber forest product, and SPS issues. NTIS 2010 plans to strengthen the NIAs. An EIF project at MoCS is supporting the NIAs. However, the NSC has not been able to meet regularly and the Technical Committees remain to be operationalized. Operationalization of the Technical Committees of key line ministries for developing programme and project proposals for implementing NTIS-identified actions would be critical for effective NTIS implementation. The NIAs will also have to be streamlined with the minister-led Board of Trade, when the latter is effectively operationalized.

[34] There is a provision for inducting additional members into the Board as required, however.

8. Implications for structural transformation

As the importance of commodities in the export basket increases, stakeholders, policymakers in particular, must devise strategies and take actions to: i) mitigate the impact of high price volatility (especially in commodities where global competition is acute, e.g., tea); and ii) avoid adverse terms of trade shocks. Nepal should avoid the trap of dependence on primary, unprocessed commodities, and learn from the experiences of other countries (including commodity-dependent ones) in the areas of, *inter alia*, domestic supply management and market-based risk management. A focus on niche products and markets in which global competition is less intense and with high income elasticity should underpin the general strategy towards addressing the above two common risks associated with commodity dependence. Organic farming, for one, appears to be a highly potential source of niche products for Nepal. Importantly, translating policy provisions for product diversification, value addition and fostering backward and forward linkages involving agro-forest commodities for industrialization into concrete programmes and projects and effectively implementing them is critical to moving towards structural transformation.

The products identified by NTIS for targeted export development and promotion have on average low sophistication (PRODY), low connectivity (path) with other products, and low strategic value (Table 5, 6, Figure 13).[35][36] While some of the craft and industrial products have sophistication above the sophistication of the country's current export basket (iron and steel products, handmade paper and silver jewelry), only honey and instant noodles among the agro-food products have sophistication above the current export basket (albeit still in the medium PRODY category). Excluding iron and steel products, the average PRODY and path of NTIS products are lower than those of the current export basket. The strategic value of all agro-food products is lower than the sophistication of the current export basket. The agro-food products on their own do not hold much potential for structural transformation, as indicated by their mostly low path. Note that essential oils comes under Chemicals as per Leamer classification although it is classified as agro-food product by NTIS because it is derived from medicinal plants. The connectivity of essential oils, as represented by path, is much higher than that of other agro-food

[35] The strategic value of a product is a proxy for the spillovers derived from acquiring comparative advantage in that product (Felipe et al. 2010c). It is the increase in the open forest assuming that the country gains comparative advantage in that product (ibid.). The strategic value (SV) of a product j is calculated as:

Mathematically, $SVj = \sum_i \frac{\square ij}{\sum_j \square ij} (1 - xi)\ PRODYi$, for all i, i≠j, x_i=1 if RCA>1

[36] We classify products as high-path, medium-path or low-path depending on whether they belong to the first, second or third tercile of path, as used by Felipe et al. (2010c).

products identified by NTIS. The "open forest" of all NTIS-identified products, which measures the option for future structural transformation, is about half that of the current export basket.[37]

Table 5: Sophistication and connectivity of NTIS-identified products

Product category	**No of products (SITC Rev. 2, 4 digit)**	**No. of products exported**	**PRODY >EXPY**	**Leamer category**	**Avg. PRODY (2000 PPP$)**	**Avg. PATH**	**Avg. strategic value (2000 PPP$)**
Lentils	1	1	0	Tropical Agriculture	4339.02 (low)	105.04 (low)	6582.94
Cardamom/ginger	1	1	0	Tropical Agriculture	3207.49 (low)	104.23 (low)	6245.09
Tea	1	1	0	Tropical Agriculture	1371.40 (low)	86.31 (low)	5557.81
Medicinal herbs	1	1	0	Animal Products	3909.24 (low)	98.21 (low)	5703.57
Instant noodle	1	1	1	Cereals, etc.	13574.83 (medium)	91.50 (low)	6606.48
Essential oils	1	1	0	Chemical	5244.98 (low)	127.73 (medium)	8501.37
Natural honey	1	1	1	Tropical Agriculture	9330.78 (low)	133.60 (medium)	8819.21
Iron and steel products	38	14	31	Capital Intensive (37), raw materials (1)	12116.09	163.28	12163.15
Wool products	11	11	1	Labor Intensive	7240.03	123.39	7113.56
Pashmina products	2	2	0	Capital Intensive (1), Labor Intensive (1)	6495.14	131.21	8054.30
Silver jewellery	2	2	1	Labor Intensive	10869.99	107.32	7337.05
Handmade paper	1	1	1	Forest Products	20158.88	171.62	13975.77

[37] Open forest represents the "option value" of a country's unexploited opportunities, an option set for future structural transformation (Hausmann and Klinger 2006 and 2007). It is the distance-weighted value of all the products a country could potentially produce, where the distance is the relative distance of each product not currently effectively exported to the current export basket. To find the open forest associated with the NTIS-identified products, we consider the identified products as the current export basket, regardless of whether they are exported or not.

Source: Author's calculation based on proximity and PRODY values calculated by Hidalgo et al. (2007), downloaded from http://www.chidalgo.com/productspace. Trade data from UNCOMTRADE.

Table 6: Sophistication and connectivity – comparison between NTIS products and current export basket

	Export basket (2010)	NTIS products	NTIS Iron and steel	NTIS exl. Iron and steel
Avg. PRODY (2000 PPP$)	12008.96	10424.90	12116.09	7630.75
Avg. PATH	136.04	146.84	163.28	119.68
Avg. strategic value of NTIS products (2000 PPP$)	10380.72			
Avg. strategic value of open forest (of current export basket) (2000 PPP$)	11074.84			

Source: As in Table 5

Figure 13: Sophistication and connectivity of NTIS-identified products

Note: The dashed lines demarcate high, medium and low PRODY/path groups
Source: As in Table 5

However, through value addition, processing and vertical product diversification, there is scope for not just increasing exporting earnings but also producing more complex products based on agro-forestry resources. Not all products are the same: both medicinal plants and essential oils are targeted by NTIS 2010, but essential oils (based on medicinal plants) are far more interconnected with other products than are medicinal plants. On average, processed agro/forestry/food products are more sophisticated and carry greater potential for structural transformation than do primary commodities. Focusing on such products that are relatively "nearby" Nepal current's export basket could offer a feasible path to structural transformation without compromising the objectives of mass employment creation and poverty alleviation. Table 7 compares summary statistics of PRODY and PATH of processed agro products not currently exported by Nepal with comparative advantage but which lie at a near to medium distance from Nepal's current export basket, with the same of non-processed agro products whether exported by Nepal or not.[38]

[38] We follow Abdon and Felipe (2011), who describe products as "nearby" if the distance (density) is less than 0.5 standard deviations from the mean distance, "middle" if the distance is within ± .5 standard deviations from the mean distance, and "far away" if the distance is more than 0.5 standard deviations from the mean distance.

Table 7: Processed vs. non-processed agricultural products

Processed (with near to medium distance to current export basket)						
	No. of products (SITC Rev. 2, 4 digit)	Mean	Median	Std. Dev.	Min	Max
PRODY (2000 PPP$)	39	11742.74	11708.03	4799.96	3919.23	24747.86
PATH	39	135.17	135.49	25.22	74.16	186.34
Non-processed						
PRODY (2000 PPP$)	59	8321.57	6280.79	6256.56	1371.40	33442.19
PATH	59	97.31	102.04	36.25	2.89	159.78

Note: Classification as processed and non-processed broadly follows that adopted by United States Department of Agriculture (www.ers.usda.gov), which excludes fish products. HS codes specified by USDA are converted to SITC codes.
Source: As in Table 5

From a longer term perspective, in order to enhance industrialization, capabilities must be increased to competitively produce more sophisticated manufactured products, using domestic primary agro-forest resources, which are highly connected with other products (e.g., perfumery instead of just essential oils from aromatic plants; ayurvedic medicine from medicinal plants/herbs; dye from cardamom; diverse paper products based on handmade paper made of local plants).

9. Constraints to commodity exports

9.1 External conditions

In the area of market access, non-tariff barriers, mainly SPS-related, are the biggest constraint to Nepali agro-food exports to both developed and emerging economies. Nepal enjoys duty-free and quota-free access to the EU market under the Everything But Arms (EBA) initiative. A trade agreement with India provides for reciprocal duty-free and quota-free market access for most primary and agricultural products as well as duty-free market access for Nepali manufactured products to India subject to rules of origin. In 2010, China announced duty-free market access in over 4,000 HS tariff lines to Nepali products, including agro-food products of export interest to Nepal. NTBs, however, have constrained the utilization of such preferences.

Table 8 presents three examples of SPS measures in destination markets adversely affecting Nepali agro-food exports. While in general tariffs are not much of a barrier to exports of agro-food products of interest to Nepal, some products do face tariff peaks in some markets (e.g., honey in Korea). Price fluctuations (e.g., of tea, ginger, cardamom) are also a source of uncertainty to producers (ITC 2007).

Table 8: Examples of SPS measures affecting Nepali agro-food exports

Product	**Country banning the product**	**Reason for the ban**	**Period**	**Approximate value of exports lost**
Ginger	India	Plant quarantine issues and later trade policy	Disruption occurred in 2004	NPR 1.6 billion
Honey	EU and Norway	Lack of monitoring programmes for pesticides and other residues	Since 2002/03, though partially circumvented by one producer/ exporter	NPR 76 million (approximately NPR 9.4 million for eight years)
Lentils	India	Quality tests and fumigation requirements	For approximately one year in 2003/04	NPR 100 million

Source: GoN (2010a: 21).

9.2 Domestic productive capacity/supply-side constraints

In the absence of proper domestic standards-related regime, and testing and certification infrastructure/institutions, NTBs can be seen as a supply-side constraint too. The lack of monitoring programmes for pesticides and other residues that was cited by the EU and Norway for banning honey imports from Nepal (Table 8) is a case in point. In order to be eligible to export honey to any EU member country as well as Norway (a key destination of Nepali honey exports until 2002), Nepal will have to be listed in the EU as an authorized country for import, under EU Directives 92/118/EEC of 17 December 1992 (GoN 2010a and AEC 2006). Towards that end, Nepal has to submit national residue plans, guaranteeing the monitoring of the groups of residues and substances identified by the EU. Lack of a national residue control plan is also hurting exports to South Korea. While GoN has been supporting the honey sector by providing a 25 percent cost subsidy on beehives and a 50 percent cost subsidy on other tools, equipment and services, failure to put in place an internationally acceptable national residue control plan even a decade after the imposition of the ban has proved to be a critical barrier to honey exports to overseas markets.

In the absence of internationally recognized domestic testing and certification facilities, honey processors have to send samples to overseas countries for testing, which is costly (AEC 2006). NTIS 2010 accords priority to addressing this problem by strengthening (laboratory) testing capacity in the area of MRL and microbiology, and reviewing Pesticides Act 1991 and Pesticides

Rules 1994 "to ensure that crop protection comply with changing and most stringent MRL requirements of trading partners"—by 2012 (GoN 2010a). As of April 2012, the Central Food Laboratory at the Department of Food Technology and Quality Control is in the final stage of obtaining accreditation on 24 parameters from India's National Accreditation Board for Testing and Calibration Laboratories. However, the process of obtaining accreditation for MRL-related testing is yet to begin as the lab's capacity in this area remains to be upgraded.[39] The pace of putting in place the necessary institutional and legal arrangements and infrastructure to effectively address SPS-related barriers to exports, as envisioned by NTIS 2010, needs to be seriously sped up.

Similarly, due to a lack of a national organic certification system, Nepal is unable to benefit from growing global demand for organic produce despite Nepali farm produce being generally considered *de facto* organic. Likewise, in the case of medicinal herbs and essential oils, requirements are stricter for final products (such as cosmetic products, perfumes and pharmaceuticals) than for the raw materials which Nepal currently exports, posing a stiff challenge to adding value to raw materials (GoN 2010c).

Other productive capacity/supply-side constraints include low productivity; scattered, small-scale nature of production (causing inability to meet large orders); inadequate capacity to combat diseases and pests; weak quality consistency/control; inadequate research and extension; inadequate infrastructure (including inland transportation, irrigation, and storage facility); high post-harvest losses (due to, *inter alia,* lack of storage facility and knowledge of basic handling techniques); limited access to agriculture and livestock insurance; limited value added—dominance of unprocessed exports (not even grading, cleaning taking place in some commodities, e.g., cardamom)—little vertical product diversification and failure to establish forward linkages; and inadequate branding and promotion (e.g., potential of intellectual property—collective marks and GIs in particular—has not been tapped).

The Government of Nepal's budgetary allocation for agriculture and forestry remains paltry—on average about 6 percent including irrigation, and 3.5 percent excluding irrigation during 2007-2012). The share of development expenditure allocated to agriculture, forestry and irrigation in periodic development plans has been falling, from 34 percent in the Seventh Plan (1985-1990) to 13 percent in Three-Year Interim Plan (2007-2010) and the ongoing Three-Year Plan (2010-2013). The share allocated to agriculture in the annual budget—a means of operationalizing the period plan—is lower than that in the plan. The budgetary allocation for NTIS implementation has been under US$700,000 per year, as opposed to the over US$4 million allocated for providing "cash incentives" to exporters, which remain mostly unspent for the last two consecutive fiscal years. Resource flows to the agriculture sector from the formal financial sector are also low—for example, less than 2.5 percent of commercial bank credit went to the agriculture sector as of mid-July 2011. In order to increase bank lending to the productive sector, the Nepal Rastra Bank, the central bank, in January 2012 directed commercial banks to

[39] Based on conversation with Ms Jiwan Prabha Lama, Director General, Department of Food Technology and Quality Control, GoN.

individually increase the share of agriculture and energy sectors in their total loan investment to at least 10 percent by mid-July 2014. However, the non-specification of the exact share of loan investment that must go to the agriculture sector may cause ambiguity in the interpretation of the directive.

Besides, there are some cross-cutting issues and constraints concerning the export sector as a whole. The business and investment climate remains poor due to, *inter alia*, political instability, deteriorating law and order situation, and poor industrial relations. Severe electricity shortage, poor road connectivity and poor transport services constitute critical infrastructure constraints. According to the World Economic Forum's *Global Competitiveness Report 2010-11*, Nepal ranks last among 139 countries in terms of infrastructure. Due to both domestic regulatory regime and landlockedness, the time and cost of trading are high: Nepal's performance in the ease of trading-across-borders indicator among the World Bank's *Doing Business* indicators is much worse than its performance in the overall ease of doing business. GoN's tendency to allow choice hydropower projects—with the potential to generate quality and relatively cheap electricity—to be developed as export-oriented ventures even as the economy is starving for electricity makes ending power shortage increasingly difficult.

Trade support institutions—required for, among others, market research, promotional activities, capacity building, information sharing and overcoming NTBs—remain inadequate and weak.

Foreign aid finances on average one fifth of the government's annual expenditure (2007-2011), but aid to building productive capacity remains low, with social services alone absorbing two thirds of foreign aid. As with the overall government budget, foreign aid to agriculture, forestry and irrigation remains low, at 8 percent of total foreign aid to the government on average (2007-2011). Although Nepal is reported to have received aid for trade (AfT) commitments worth about US$986 million (constant 2008 prices) during 2006-2009, up 42 percent from such commitments during the 2002-2005 (the immediate period before the launch of the AfT initiative), disbursements fell by close to 15 percent in the period 2006-2009, indicating that there has been no additionality in AfT disbursement in the case of Nepal.[40] An evaluation of effectiveness of AfT in Nepal concludes that it has only been partially effective, with adherence to the Paris Principles on Aid Effectiveness and the recommendations of the WTO Task Force on AfT leaving a lot to be desired (see Adhikari, Kharel and Sapkota 2011). Due to the broadness of the definition of AfT employed by the WTO and OECD, even aid remotely related to trade is counted as AfT in OECD figures. Consequently, dedicated AfT flows have been very limited, and mostly in the form of software, despite the huge need for hardware support. AfT has not been targeted at addressing supply-side constraints in practice, despite the raison d'etre of the AfT initiative being the failure of previous trade-related technical assistance programmes to address supply-side constraints.

[40] Data based on the Organisation for Economic Cooperation and Development's (OECD) Creditor Reporting System (CRS) database.

10. Recommendations

This section recommends priority policy, strategies and actions that need to be taken at national and international levels for leveraging Nepal's agro-forest resources for sustainable development, including economic diversification, employment generation and poverty alleviation.

10.1 National level

- Increase public outlay on agriculture; increase credit to agriculture and agro-forest resource-based industry; and strengthen and expand research and extension.
- Enhance coordination among government agencies while implementing commodity and product development/diversification programmes. Effectively operationalize the Board of Trade. Implement Industrial Policy, Trade Policy, Nepal Trade Integration Strategy (NTIS), Agriculture Policy, Agro Enterprise Promotion Policy and Herbs and Non-Timber Forest Product Development Policy in an integrated manner. Operationalize the new Industrial Policy (and incentives therein) and ensure predictability in the provision of facilities, concessions and incentives.
- Focus on niche products in which competition is less intense and with high income elasticity.
- Set up project banks for development of commodities and products to attract AfT (e.g., for building/upgrading infrastructure, addressing supply-side constraints (including NTBs), value addition, diversification). Remain firm on alignment of AfT around Trade Policy and NTIS.
- Set up effective monitoring and evaluation mechanism for implementation of NTIS. Measure success also in terms of processed vs. unprocessed exports, and vertical product diversification.
- Establish/strengthen trade support institutions (including market research and export promotion capabilities).
- Prepare a strategy to mitigate the impact of price volatility; and set up a regulatory regime for the nascent commodities futures market, and take measures to develop it beyond the current settlement-based system to enable physical transaction of commodities so that it helps manage risks and provide better prices for domestic commodity (mainly agriculture) producers. Learn from the experiences of other countries in these areas.
- Fine tune export incentives to encourage exports of processed agro-forest products. Weigh providing cash incentives to exporters against providing targeted and focused support (financial or otherwise) for select sectors, particularly in areas where fixed costs

are high and which yield externalities (e.g., support for establishing and upgrading laboratories, processing plants, export promotion etc). Incentivize greater value addition and processing, and accord priority to export-oriented enterprises in the proposed SEZs.

- Align investment promotion activities of Investment Board with identified export potential sectors.
- End the pro-export bias of hydropower policy in practice. Take measures (including incentives) to attract investment into tapping hydropower potential to alleviate domestic power crisis.
- Improve investment climate, starting with industrial relations, and law and order.

10.2 Global level

- Development partners to increase aid for productive capacity development/addressing supply-side constraints (SSCs) in general.
- Development partners to ensure additionality in dedicated AfT and direct it towards addressing SSCs.
- Development partners to support the idea of creation of a vertical fund for AfT at the global level; channelize it into the trade trust fund at the national level; and improve alignment and harmonization (around Trade Policy and NTIS in particular).
- Development partners to provide effective technical and financial support for establishing/upgrading/strengthening laboratories for testing and certification.
- Both developed countries and emerging economies to end arbitrariness and protectionism in application of NTBs.
- Development partners to provide effective technical and financial support to Nepal to benefit from proliferating carbon-labelling initiatives; and help build Nepal's capacity to participate in standard setting.
- Developed countries to encourage transfer of technology for commodity value addition/processing by providing effective incentives to enterprises.
- Developed countries to implement the WTO Hong Kong Ministerial pledge to provide duty-free and quota-free market access to all products originating in LDCs.
- Advanced developing economies (particularly China and India) to:
    - Improve market access conditions (e.g., remove para-tariffs, trade-restrictive NTBs, esp. standards-related; ensure predictability of duty-free market access)

- Improve transit facility (by India)
- Encourage investment and technology transfer to Nepal.

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