Export Diversification and Competitiveness: Nepal's Experiences

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Nepal's policy regime has not been very instrumental in improving trade competitiveness. Although policy measures have been announced from time to time to identify new exportable products and encourage diversification of export markets, these have hardly been executed. The challenge for Nepal is complicated by the legacy of the past. Against this perspective, this paper a) examines the export scenario of Nepal and reviews the past studies on the country's export potential; b) illustrates Nepal's competitiveness of the export sector; and c) suggests measures for promoting export diversification and competitiveness. Based on the estimation of the real effective exchange rate (REER), this paper shows that the country is gradually losing its competitiveness. Although various studies have demonstrated that Nepal possesses competitive advantage in herbal products, woollen carpets, tea, garments and pashmina, among others, a comprehensive case-by-case analysis of home and host countries trading environment, supply and demand conditions, cost of production, capacity to innovate, as well as its forward and backward linkages should be conducted to translate the export potential to the actual trading opportunities.

I. BACKGROUND

Trade policymakers in developing countries have for several decades been confronted with a serious dilemma. On the one hand, classical trade models show that countries should specialize in and export goods in which they have comparative advantages (Bhagwati and Srinivasan, 1983). The notion is that by being more specialized in production and exports, resource allocation will be more efficient and each country will increase its welfare and growth. On the other hand, by specializing and exporting a relatively narrow range of products, countries increase their degree of vulnerability to external shocks. Consequently, policymakers have to find ways to respond to this important trade-off between efficiency and vulnerability.

The prediction of classical trade models that specialization is efficient relies partly on the assumption that there is no uncertainty. Several authors have shown that in the

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presence of uncertainty and risk aversion, diversification may be a better policy option than specialization according to comparative advantage (Turnovsky, 1974; Ruffin, 1974). In rural economies characterized by these market imperfections and no social safety nets, diversification provides a mechanism to protect agents against income fluctuations. As a result, though there are good theoretical arguments for specialization based on comparative advantage, in practice policymakers in developing countries are interested in diversifying their production and export structure to reduce vulnerability to external shocks.

Trade in general, and export diversification and competitiveness in particular, is important for least-developed countries (LDCs) such as Nepal for a number of reasons. Firstly, it is basically the major principal mechanism for achieving the benefits of globalization. Two, the continuing reallocation of manufacturing activities from industrial to developing and LDCs such as Nepal provides many opportunities for expanding trade both in goods and in services. Three, the growth of trade is firmly supported by regional trading arrangements, such as the South Asia Free Trade Agreement (SAFTA) and the Bay of Bengal Initiative for Multisectoral Technical and Economic Cooperation (BIMSTEC) and multilateral trading arrangement such as the World Trading Organization (WTO) in the Nepalese context.

With the initiation of market-oriented economic reforms in the early 1990s, Nepal increased its integration into the world economy. The principal components of the reform programs included liberalization of trade and industrial policies and rationalization of the foreign exchange regime. The core elements were reduction and restructuring of import duties and introduction of full convertibility for current account transactions.

Even though Nepal is one of South Asia's most open and trade dependent economies, it has not been able to fully exploit the potential for export growth since its exports are focused in a few products (such as readymade garments, carpets and pashmina to overseas countries) and markets (with India's share in Nepal's total exports being about 64 percent in 2007/08). Though trade is considered to be an engine of growth for economic development, market and product concentrations of exports have led to volatile export growth in Nepal. It is against this background that this research is conducted. Section II provides a review of literature on export competitiveness and diversification while Section III highlights the export performance of Nepal and also reviews the studies on Nepal's export potential. While Section IV examines Nepal's export competitiveness, Section V deals with trade potential at the bilateral level. The last part of this paper prescribes some policy measures for promoting export diversification and boosting competitiveness.

II. LITERATURE REVIEW

Export diversification is generally taken to be a positive trade objective in sustaining economic growth. Diversification makes countries less vulnerable to adverse terms of trade shocks by stabilizing export revenues, makes it simpler to channel positive terms of trade shocks into growth, and generates learning opportunities that lead to new forms of comparative advantage (Ghosh and Ostry, 1994).

Three developments frame diversification opportunities in the new global economy: (a) the increasing spread and importance of global production chains; (b) rapid growth of

new sources of demand in large emerging economies, such as Brazil, China and India; and (c) the growing importance of trade in services driven by rising incomes and the outsourcing of more and more services activities (Brenton *et. al*, 2007).

Hence, export diversification has often been proposed in the literature and in the policy debate as a key development strategy for developing countries. Most of the contributions, however, acknowledge that giving factual content to this diversification strategy is not easy (Piazza and Sdralevich, 2004). Weak trade capacity, defined as the institutional capacity to compete in, and gain access to, foreign markets, is acknowledged by many researchers and policy-makers as one of the obstacles to the diversification efforts of the poor countries towards nontraditional goods (as opposed to traditional, often primary, exports). Trade capacity is the aspect of non-price external competitiveness that is directly related to trade: it describes the availability of trade-oriented infrastructure, institutions, know-how, necessary to export competitively on foreign markets, and the ability to gain access to those markets through bilateral and multilateral negotiations and participation in multilateral trade organization. Paucity of trade capacity has been singled out by the international community as one of the major hurdles to development, as illustrated by the emphasis of the Doha ministerial declaration on the role of trade-related technical assistance and capacity building. The guidelines on trade capacity devised by the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD) stress that efforts should be directed towards strengthening the capabilities of developing countries' policy making in three areas: a) formulation and implementation of a trade strategy, b) strengthening policies and institutions devoted to export performance, and c) effective participation in rule making shaping international trade (Bonaglia and Fukasaku, 2003).

Diversification can be attained through various ways. It could take the form of a movement into the production of higher value-added activities in existing export sectors. It could also be achieved by moving into the production of new export activities. Furthermore, it often occurs through the development of new export markets. The choice of diversification method and strategy will depend on each country's structure as well as an assessment of which of these methods will provide maximum benefits to the economy.

With respect to services, they are the fastest-growing component of international trade. In recent years, technology advances have had a significant impact on this sector since many services can now be marketed and delivered online. Yet, the service sector is diverse and fragmented and, thus, difficult to reach. Promoting trade in services proffers developing countries the opportunity to diversify trade and contributes to employment generation and economic development. Developments in information and communication technologies are growingly allowing cross-border services trade, transforming services exports into a more and more important component in the balance of payment (BoP) and a principal source of economic growth. For some countries—especially small, landlocked countries and island economies with limited opportunities for agricultural or industrial diversification—the service sector is one of the few development options.

With regard to competitiveness, it can be defined as a firm's ability to stay in business and attain some desired goal with respect to profit, price, rate of return, or quality of its products; and to have the capacity to exploit the existing market opportunities and create new markets (ADB, 2003). There has been considerable interest during the last decade in pinpointing the factors that can improve competitiveness, which

is thought by many to be an important piece of the growth and development puzzle. There is a complex interaction among a number of factors—or the "drivers of change"—that are globalization, technology, and competition. These factors are raising a whole spectrum of new challenges and opportunities in an irreversible process of rapid change. The Asian financial crisis that started in 1997 has added more variables to the equation. Though it led to disruption to the region, it demonstrated the need for an improvement in corporate and banking governance.

Governments and policy makers are especially interested in the issue of competitiveness, particularly the policies that can improve it. Governments have established councils and competitiveness committees, have written white papers, and have hosted conferences on the subject. As a result, the idea of national competitiveness has become one of the key themes in the current debate about national economic performance. The key variable for the economic analysis of competitiveness is the growth of labor productivity since this, ultimately, is the main determinant in raising living standards.[1]

"A firm is competitive if it can produce products and services of superior quality and lower costs than its domestic and international competitors. Competitiveness is synonymous with a firm's long-run profit performance and its ability to compensate its employees and provide superior returns to its owners" (Buckley *et al.* 1988, p.176). The ability to compete consists in doing better than comparable firms (i.e., rivals) with respect to sales, market share, and profitability, and is achieved through strategic behavior, defined as the set of actions taken to influence the market environment so as to increase a firm's profits, as well as by other marketing tools. It is also attained through product quality improvement and product innovation—both very important aspects of the competitive process.

Firms compete for markets and resources, measure competitiveness by looking at relative market shares, sales, or profitability, and use different strategies to ameliorate their performance (Lall, 2001). Competitiveness is the essence of a well-functioning market system, and being competitive denotes succeeding in an environment where firms try to stay ahead of each other by reducing prices, by increasing the quality of their current products and services, and by creating new ones. A firm's competitiveness is a function of many factors such as a) its own resources (e.g., the human capital, its physical capital, and the level of technology); b) its market power; c) its behavior toward rivals and other economic agents; d) its capability to adapt to changing circumstances; e) its capability to create new markets; and f) the institutional environment, to a large part provided by the government, including physical infrastructure and the quality of government policies.

National competitiveness has been defined as the "ability of a country to produce goods and services that meet the test of international markets and simultaneously to maintain and expand the real income of its citizens." Again, "National competitiveness denotes a country's ability to create, produce, distribute and/or service products in international trade while earning rising returns on its resources" (Buckley *et al*. 1988, p.177). These definitions are consistent with the term "international competitiveness,"

[1] The different measures of competitiveness are examined at length in Section IV.

which brings to mind the idea that each nation is viewed "like a big corporation competing in the global market place" (Krugman, 1996, p.4).

It was in 2004 that the World Economic Forum introduced the Global Competitiveness Index (GCI), a very detailed index for computing national competitiveness, taking into consideration the microeconomic and macroeconomic foundations of national competitiveness. Here, competitiveness is defined as "the set of institutions, policies and factors that determine the level of productivity of country. The level of productivity, in turn, sets the sustainable level of prosperity that can be earned by an economy" (WEF, 2007, p.3).

The GCI provides a weighted average of a host of different components, each of which demonstrates one aspect of competitiveness. These components are categorized in 12 different pillars. These pillars of competitiveness include: 1) institutions, 2) infrastructure, 3) macroeconomy, 4) health & primary education, 5) higher education & training, 6) goods market efficiency, 7) labor market efficiency, 8) financial market sophistication, 9) technological readiness, 10) market size, 11) business sophistication and 12) innovation.

The 12 pillars of competitiveness are not only related to each other, but they tend to reinforce each other. For instance, innovation (12^{th} pillar) is not possible in a world without institutions (1^{st} pillar) that guarantee intellectual property rights, cannot be undertaken in countries with a poorly educated and poorly trained labor force (5^{th} pillar), and will never happen in countries with inefficient markets (6^{th}, 7^{th} and 8^{th} pillars) or without extensive and efficient infrastructure (2^{nd} pillar).

According to the *Global Competitiveness Report 2007-08*, the United States tops the overall ranking while Switzerland is in second position followed by Denmark, Sweden, Germany, Finland and Singapore, respectively. While India and Bangladesh are ranked 48^{th} and 107^{th} respectively, Nepal's position is at 114^{th}. [2]

III. TRADE LIBERALIZATION AND NEPAL'S EXPORT POTENTIAL

After the introduction of the structural adjustment and stabilization programmes in mid-1980s, trade reforms in Nepal focused on shifting the development strategy from an inward looking import -substitution to export promotion. A host of trade facilitation measures and incentives were introduced, such as introduction of duty drawback and bonded warehouse systems, restructuring and reduction of import duties, abolition of quantitative restrictions and import licensing systems for almost all products and rendering full convertibility of current account transactions.

Moreover, the Trade Policy of 1992 and the Foreign Investment Policy of 1992 put greater emphasis on deregulation, competition and increased reliance on market forces.

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[2] The rankings are calculated from both publicly available data and the Executive Opinion Survey, a comprehensive annual survey conducted by the World Economic Forum together with its network of Partner Institutes (leading research institutes and business organizations) in the countries covered by the Report.

Moving along the long-term vision of developing trade as one of the pillars of the economy, the Tenth Plan's Poverty Reduction Strategy Paper (PRSP) (2002-2007) aimed for Nepal's integration in globalization process and increased participation of the private sector in open competitive and market-oriented trade regime. Subsequently, a number of policy initiatives were planned, such as establishing linkages of imports to industrial development for transformation of domestic trade into market based system, promotion of export through identification of products of competitive and comparative advantages, diversification of export, and improvement in the quality of exportable goods. Further, facilitation of trade by developing and improving required infrastructure, institutional capacity and business services was part of the reform process. These policy initiatives and reforms were all the more demanding in the light of Nepal becoming a member of WTO and two regional trading arrangements—SAFTA and BIMSTEC.

After the implementation of some of these policies, the export sector in Nepal initially grew quite rapidly. However, in recent years the rate of export growth has slowed somewhat or even declined slightly due to an array of factors. Trade remains highly concentrated and Nepal's share of exports in world markets is still very low. Manufactured goods account for close to 80 percent of total merchandize exports. Nonetheless, Nepal remains dependent on a few exports and markets, making it vulnerable to external demand and policy shocks. Three exports—garments, pashmina, and carpets—account for 48 percent of exports outside India in 2007/08. Reliance on a few markets has been growing with the United States, Indian, and German markets comprising 75 percent of its exports in 2007/08. Moreover, despite doubling over the 1990s, Nepal's share of world exports is less than 0.01 percent.

The geographical and commodity concentrations of exports are quite high. The country has not been successful to create backward and forward linkages of international trade that is necessary for self-sustained economic growth. While attempts have been made to address legal/policy discrepancies *vis-à-vis* WTO commitments, structural weaknesses and inadequate levels of resources—financial, human and technological—have undermined Nepal's productive capacities and competitiveness for effective integration into the global trading regimes. Hence, Nepal's economy still remains the least competitive of all the major South Asian economies (Adams and Adhikari, 2005).

Trends in Export Trade

Since a long time Nepal's foreign trade has largely been confined to India primarily owing to close proximity, similar socio-economic condition and availability of transport facilities. The volume of Nepal's foreign trade with India in terms of both exports and imports has been rising due to the increasing demand of different types of industrial raw materials, machinery and petroleum products in order to undertake various types of developmental works and consumer goods to meet the requirements of the growing population. While the share of India in Nepal's total exports and total imports was 58.8 percent and 52.7 percent, respectively, in 2001/02, the corresponding share was 63.5 percent and 63.9 percent in 2007/08. Consequently, India's share in Nepal's total trade moved up to 63.8 percent in 2007/08 from 54.8 percent in 2001/02.

Nepal's trade policies are inextricably related with those of India. This is observed not only from the huge amount of trade with India, but also from the quantity of Nepali

goods exported through the Port of Kolkata. This dependence is considerably greater than that associated with other landlocked countries as the majority of landlocked countries rely on more than one transit country to seek access to port facilities. In Nepal's case, alternative routes to the sea through Bangladesh or Tibet Autonomous Region of the People's Republic of China do not seem viable for large freight movement, though they may be feasible for smaller quantities of specialized freight.

Export Diversification: Countries and Commodities

The leading export partners of Nepal have been India, USA, Germany, People's Republic of China, United Kingdom, France, Italy, Canada, Japan and Bangladesh. This is illustrated in Table 1 which depicts that India, the US and Germany constituted about three-fourths of Nepal's total exports in 2007/08.

TABLE 1: Major Export Trade Partners of Nepal

	(Rs. in million)							Percent Change	
Countries	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08P	2006/07	2007/08
India	27956.2	26430.0	30777.1	38916.9	40714.7	41728.8	38626.4	2.5	-7.4
Bangladesh*	237.2	411.3	421.3	290.9	234.3	521.5	4664.4	122.6	794.4
U.S.A	9377.8	12686.5	9696.0	7570.7	6993.4	5571.3	4598.9	-20.3	-17.5
Germany	4043.2	3555.3	3567.0	3121.8	2843.8	2573.7	2332.1	-9.5	-9.4
U.K	808.8	1070.7	1677.1	1050.0	1184.1	998.7	1066.3	-15.7	6.8
France	473.5	454.0	581.8	617.8	1297.5	904.0	1001.2	-30.3	10.8
China P.R**	1101.4	1717.7	2425.2	2017.9	1004.4	1202.8	944.5	19.8	-21.5
Canada	306.0	383.7	546.4	528.7	644.6	593.7	713.7	-7.9	20.2
Italy	566.6	530.9	589.4	582.8	712.3	684.3	583.8	-3.9	-14.7
Japan	492.8	474.2	525.6	535.0	572.1	559.5	488.1	-2.2	-12.8
Sub-total	45363.4	47714.4	50806.8	55232.6	56201.2	55338.2	55019.3	-1.5	-0.6
Others	1581.4	2216.2	3103.9	3473.1	4032.9	4044.9	5768.2	0.3	42.6
Total	46944.8	49930.6	53910.7	58705.7	60234.1	59383.1	60787.5	-1.4	2.4

P= provisional.
* The significant rise in exports to Bangladesh in 2007/08 is attributed to the upsurge in exports of wheat.
** Includes Overland trade with Tibet, an Autonomous Region (TAR), Hong Kong and Macau.
Sources: Nepal Rastra Bank and Trade and Export Promotion Centre.

A glimpse of Nepal's total exports from 2001/02 to 2007/08 reveals a mixed picture. Exports have been steadily growing except for 2006/07 when exports fell by 1.4 percent in comparison to the previous year. In terms of country-wise diversification of exports, it is only in the case of India where exports have been consistently growing, except for in 2007/08 when exports declined by 7.4 percent in comparison to the previous year.[3]

[3] In 2007/08, the dismal performance in the exports to India was attributed to the decline in the exports of vegetable ghee, textiles, chemicals, rosin and readymade garments.

Excluding India, exports to other countries (on an individual country basis) have shown a fluctuating trend. The rise in exports to India in the previous years could be ascribed to the long open border, the preferential trade treaty and special payments regime between the two countries and slowdown in exports to other key destinations, among others (Karmarcharya, 2005).

Nepal's exportable products to India include zinc sheet, threat, polyester yarn, jute goods, vegetable ghee and textiles, among others (Table 2). Manufactured exports are concentrated in garments, carpets, and *pashmina* that have constituted the bulk of exports to other countries (Table 3).[4] The other major commodities exported overseas include pulses, Nepalese paper & paper products and silverware & jewelleries.

TABLE 2: Exports of Major Commodities to India

	Rs. in million							Percent Change	
	2001/02	**2002/03**	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08P**	**2006/07**	**2007/08**
A. Major Items	**12356.9**	**10821.3**	**14718.0**	**20426.4**	**20746.0**	**24827.3**	**22638.4**	**19.7**	**-8.8**
Zinc sheet	13.3	970.6	2785.3	1663.2	2409.0	3579.9	4416.9	48.6	23.4
Thread	846.9	1235.2	1637.4	2213.7	1898.3	4055.9	4134.5	113.7	1.9
Polyester Yarn	1070.4	656.9	1114.5	1896.3	3476.3	2241.0	2617.7	-35.5	16.8
Jute Goods	1630.1	1899.0	1882.6	2693.5	2636.8	2756.8	2582.5	4.6	-6.3
Ghee (Vegetable)	7081.4	3812.3	2959.0	4635.9	3861.7	4136.5	2133.2	7.1	-48.4
Textiles	562.5	878.2	1780.5	2996.6	2154.6	3056.9	2113.9	41.9	-30.8
Juice	452.9	600.1	786.8	1091.3	1139.6	1591.3	1836.4	39.6	15.4
Wire	252.2	150.9	710.9	1221.4	1504.1	1610.7	1546.7	7.1	-4.0
Cardamom	359.9	469.6	451.0	607.0	608.1	848.1	1034.8	39.5	22.0
Chemicals	87.3	148.5	610.0	1407.5	1057.5	950.2	221.8	-10.1	-76.7
B. Others	**15599.3**	**15608.7**	**16059.1**	**18490.5**	**19968.7**	**17047.5**	**15988.0**	**-14.6**	**-6.2**
Total (A+B)	**27956.2**	**26430.0**	**30777.1**	**38916.9**	**40714.7**	**41874.8**	**38626.4**	**2.8**	**-7.8**

P=provisional
Source: Nepal Rastra Bank.

[4] However, in recent years, the phasing out of quota-based trade in textiles from the beginning of 2005 has adversely affected garment exports which were concentrated in the U.S. market. Production has switched to the more competitive economies of China and India. Similarly, the carpet industry, which is another mainstay of the manufacturing sector, has lost over half its market in recent years due to declining demand, price controls, long order cycles, and greater competition.

TABLE 3: Exports of Major Commodities to Other Countries

	Rs. in million							Percent Change	
	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08P	2006/07	2007/08
A. Major Items	**16761.9**	**19849.3**	**18300.4**	**14769.5**	**15215.0**	**13438.2**	**13015.5**	**-11.7**	**-3.1**
Woolen Carpet	6212.5	5320.0	5677.5	5868.7	5838.7	5600.2	5046.8	-4.1	-9.9
Readymade Garments	7833.0	11890.1	9550.0	6124.6	6204.1	5205.5	4746.2	-16.1	-8.8
Pulses	216.0	214.9	280.7	106.5	191.7	488.1	1458.4	154.6	198.8
Pashmina	1245.0	1157.6	1064.2	1049.8	1577.8	931.0	643.4	-41.0	-30.9
Nepalese Paper & Paper Products	200.5	262.0	279.6	239.8	257.0	190.6	346.1	-25.8	81.6
Silverware and Jewelleries	274.1	347.7	368.7	363.2	282.4	325.4	269.4	15.2	-17.2
Tanned Skin	464.7	227.3	309.0	235.8	310.4	275.5	248.4	-11.2	-9.8
Handicraft (Metal and Wooden)	233.8	352.1	626.4	644.2	430.9	196.1	178.2	-54.5	-9.1
Tea	25.9	44.5	113.7	106.7	107.6	114.7	55.8	6.6	-51.4
Readymade Leather Goods	56.4	33.1	30.6	30.2	14.4	111.1	22.8	671.5	-79.5
B. Others	**2226.7**	**3651.3**	**4833.2**	**5019.3**	**4304.4**	**4216.1**	**9145.6**	**-2.1**	**116.9**
Total (A+B)	**18988.6**	**23500.6**	**23133.6**	**19788.8**	**19519.4**	**17654.3**	**22161.1**	**-9.6**	**25.5**

P=provisional.
Source: Nepal Rastra Bank

Export Policy of 1992 and the Three-Year Interim Plan

The Trade Policy of 1992 focused on promoting sustainable trade to enhance the national economy by undertaking open and liberal policies, and by allowing wider participation of the private sector. It also accorded priority to new product development, trade diversification, reduction in imbalances and coordination with other sectors of the economy. These objectives highlighted outward orientation with particular stress on export development. The role and importance of the private sector were also clearly recognized. The salient features of the policy were: (a) minimal role of public sector; (b) undertaking of liberal and dynamic trade policy and procedures; (c) stress on production and export of quality goods and services, (d) simplification of tax procedures, and (e) strengthening of institutional development.

The export policy recognized the need for a conducive formulation of macro–economic policies. The strategies included, among others, the following: (a) making the Nepalese currency partially convertible, ultimately leading to its full convertibility; (b) delicensing of exports except those banned or under quantitative restriction (QR); (c) implementation of duty drawback system by devising suitable mechanisms; (d) setting up of the EPZ; (e) exemption from all charges and income tax on exports; (f) simplification of procedures; and (g) strengthening of export capability through proper development of infrastructure, backward and forward linkages, and institutional and manpower development, and improvement in product marketing and promotion activities.

However, despite many measures undertaken (such as reforms in foreign exchange rules and regulations, simplification in the export process, construction of dry ports, and setting up of specialized committees for promotion of major export items, among others), these efforts were inadequate as adumbrated in the Three-Year Interim Plan (2007/8-

2009/10). The Three-Year Plan acknowledges that export trade of Nepal has been unable to make a contribution to the economy to the desired extent due a host of factors such as the inability to carry out legal and institutional reforms to the desired extent, incapability to integrate export–oriented industries with other sectors of the economy such as agriculture, forestry and tourism, among others, the reduction in the competitive capacity of Nepal's readymade garments after the expiry of the Multi-fiber Agreement, deterioration in the quality of major exportable products (such as carpet and pashmina) and lack of diversification in the products (NPC, 2007).

The four-fold objectives of the trade sector as delineated in the Three-Year Interim Plan include the following: a) to help alleviate poverty by ensuring that the gains from trade gets to the people through the maximum utilization of domestic physical and human resources; b) to mobilize trade for attaining the goal of economic development through the development and promotion of goods with competitive advantage and pinpointing areas of comparative advantages with the involvement of the private sector; c) to help alleviate poverty by taking advantage from the opening of the service sector under the WTO agreement; and d) to reform and build up commercial, physical, institutional infrastructure to reap the benefits emanating from the changes in the bilateral, regional and multilateral trade and transit system. Time will only tell whether these objectives will be attained or not.

Nepal's Export Potential: Review of Past Studies

A number of studies have analysed Nepal's comparative advantage horizons based on various indicators. In the first place, Karmacharya (2000) estimated the revealed comparative advantage (RCA) indices for various products based on aggregated SITC 6 digit levels. The top products arranged in ascending order of their RCA values were: hand-knotted woolen carpets, large cardamom, lentils, bran of rice, men's or boy's cotton shirts (knitted or crocheted), niger seeds, women's or girls' blouses, cotton and men's or boys' cotton shirts (not knitted).

The *Nepal Trade and Competitiveness Study* pinpointed the following as the "areas of opportunity": (a) lentils; (b) spices (cardamom and ginger; (c) leather and leather products (hides, skins, blue chromes); (d) hand-knotted wool carpets; (e) polyester yarns; (f) garments and pashmina; (g) niger seeds; (h) stone-carved Buddhas; (i) specialty teas; and (j) fragrant grasses and oils (Ministry of Industry, Commerce and Supplies, 2004).

Another report prepared by UNIDO (2002) accorded more priority to industry rather than export advantages, although the two are interlinked. According to this report, Nepal has revealed comparative advantage in the following areas: (a) lentils, spices, seeds; (b) leather and leather products; (c) fibers, yarn and textiles; (d) apparel and clothing; (e) cardamom and ginger; (f) niger seeds, (g) hides, skins and wet blue chromes, (h) carpets; and (i) pashmina.

Adams (2005) examined export screens that demonstrated, in different time periods, which of Nepal's exports were talking an upward trend and which were faltering. The export screens identified seven high productivity export categories based on export promotion industries: (a) garments and textiles; (b) carpets; (c) wood and paper products; (d) value-added agriculture; (e) handicrafts and leather products; (f) technology-based products and service exports; and (g) other emerging exports.

Another research suggested five sectors for export diversification based on the criteria of RCA (SAWTEE, 2007). These include tea, herbs, leather, tourism and information and communication technology (ICT).

A study undertaken by the IMF concluded that Nepal's comparative advantage rested on labor and resource intensive industries such as hydropower, tourism, carpets, some yarns and textiles, paper products, and agro-processing (vegetables, spices and herbs, tea, honey, flower and leather products) (IMF, 2006). Opportunities also existed in educational and health services, information technology, and financial services such as those being outsourced to India.

Finally, a recent study assessed the potential for future export growth of fourteen sectors in Nepal (ITC/TEPC, 2007).[5] Among the 14 sectors considered, the export potential was highest for cardamom, tea, pulses, silk and pashmina products and cut flower, followed by gems and jewellery, hand-made paper, leather, ginger, coffee and medicinal plants and essential oils. Honey, wooden handicraft, and mandarin oranges possessed the lowest export potential. These are all depicted in Table 4.

TABLE 4: Assessment of Export Potential

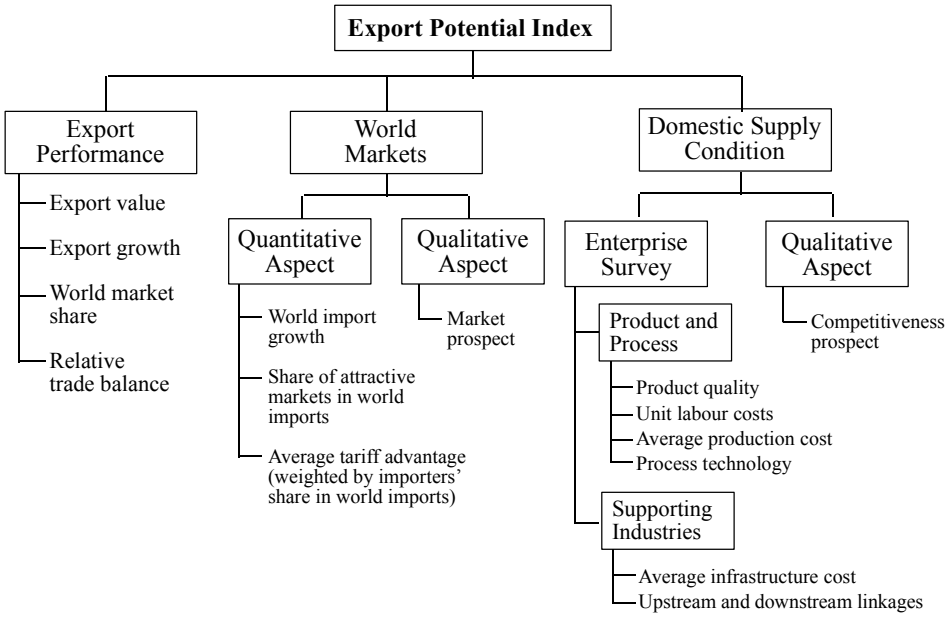
Sector		Export Potential					
		Export Value (US$ 1,000)	Index 1: Export Performance	Index 2: World Market	Index 3: Domestic Supply Conditions	Average 3 Indices	Assess-ment
1.	Cardamom	11,694	4.2 (H)	3.2 (H)	3.8 (H)	3.7	High
2.	Pulses	11477	2.8 (H)	3.9 (H)	3.1 (M)	3.3	High
3.	Tea	5,169	3.5 (H)	3.0 (H)	3.4 (H)	3.3	High
4.	Cut Flowers	211	2.9 (H)	3.5 (H)	3.1 (M)	3.2	High
5.	Silk & Pashmina Products	22,131	3.1 (H)	2.9 (M)	3.5 (H)	3.2	High
6.	Gems and Jewellery	7,393	2.9 (H)	3.4 (H)	3.1 (M)	3.1	Medium
7.	Hand-made Paper	944	3.2 (H)	3.3 (H)	2.6 (L)	3.0	Medium
8.	Coffee	169	2.3 (L)	2.7 (M)	3.6 (H)	2.9	Medium
9.	Ginger	2,518	3.3 (H)	2.4 (L)	3.0 (M)	2.9	Medium
10.	Leather	5,697	2.9 (M)	3.2 (H)	2.5 (L)	2.9	Medium
11.	Medicinal Plants & Essential Oils	1,979	2.3 (L)	3.0 (M)	2.9 (M)	2.7	Medium
12.	Honey	49	1.5 (L)	3.0 (M)	3.2 (H)	2.6	Low
13.	Wooden Handicrafts	350	2.2 (L)	2.3 (L)	3.0 (M)	2.5	Low
14.	Mandarin Oranges	0	1.2 (L)	2.7 (M)	3.2 (H)	2.3	Low

Note: Indices range between 1 (lowest ranking) and 5 (highest ranking). By convention, they are considered high (H: 3.2 points or more), medium (M: between 3.1 and 2.7 points), or low (L: 2.6 points or less).
Source: ITC and TEPC (2007), p. 29.

[5] This study compared and ranked those sectors on the basis of three main dimensions: a) the country's current export performance; b) the global markets (especially the international demand and the market access conditions) and its prospects, and c) the domestic supply conditions of the sectors and its competitiveness prospects. The study also made detailed analysis of the individual industries, together with an evaluation of strengths, weaknesses, opportunities and threats (SWOT) and identified the possible target markets for diversification for each industry.

In the aforementioned study, each industry was evaluated along with three main economic dimensions. Nepal's export performance (Index 1) was estimated by taking into consideration some indicators such as the export value in 2004, the world market share, the relative trade balance and the export growth between 2000 and 2004. The features of world markets (Index 2) included indicators such as the dynamism of international demand (growth of world imports between 2000 and 2004) and Nepal's relative access conditions to international markets.[6] Finally, the domestic supply conditions (Index 3) looked into indicators such as the quality of products, the productivity and cost of production factors, and the efficiency of domestic supporting industries. In other words, the competitiveness prospect was also evaluated. These three dimensions (Index 1 to Index 3) were taken together for the overall measure of export potential (Figure 1).[7]

FIGURE 1: Priority for Export Potential: Underlying Dimensions



Source: ITC/TEPC, 2007.

[6] The ITC/TEPC Study, for instance, points out that new markets for pashmina and silk products are Korea, Hong Kong, Hungary, Turkey and Greece. The new markets for cardamom have been identified as Syria, Qatar, Canada and Bangladesh. Likewise, for pulses, the attractive markets would be Spain, Pakistan, United States, Colombia, Sri Lanka, Bangladesh, Netherlands, Israel, Pakistan and Maldives. The new markets for tea would be Russia, United States, United Kingdom, Syria Sri Lanka, Australia, France and Canada. Attractive destinations for cut-flowers would be United Kingdom, Netherlands, Germany, Canada, China, Belgium, France and India.

[7] It should be noted that this study also includes another index (Index 4) comprising of the employment impact which evaluates the significance of industries for direct employment.

With regard to export potential in the services sector, a recent study by SAWTEE (2008) indicated that Nepal had comparative advantage for educational services exports, health service exports and high-end retail services exports.

Constraints to Export Diversification and Boosting Competitiveness

There are certain constraints that have inhibited the country from promoting export diversification and boosting competitiveness. Some of them are presented below.

- The gains from trade and global integration of a country are based basically on the competitiveness of the country's economy, that is, how efficiently it can produce goods and services. While Nepal's lower wage costs are an important competitive advantage, this is offset by the country's lower labor productivity.
- Limitations in infrastructure impede both the production and the distribution of goods and services. Weaknesses in the basic national infrastructure (transport, utilities, telecommunications) are major constraints on investment and operations.
- Nepal faces high transport costs. Lack of investment and inadequate maintenance of facilities, as well as poor administration, characterize the transport system in Nepal. Transit times at Indian ports are also long. High costs and the unreliability of electricity provision are also endemic. Again, administrative procedures are typically very complex and cumbersome, providing opportunities for rent-seeking but discouraging investment.
- Developing productive capacities is the key to export diversification and sustained economic growth. However, building productive capacities poses enormous challenges to Nepal, primarily owing to lack of adequate development finance, low savings and investment rates, low levels of technological development, insufficient managerial skills and lack of skilled manpower, the confluence of which undermines their international competitiveness.
- With a narrow range of goods and destinations to export, Nepal encounters a serious threat of vulnerability in the international market. For instance, the abolishment of textiles quota after the WTO's Agreement on Textiles and Clothing (ATC) expired in December 2004 has not only negatively impacted the garment exports but also the people employed in this sector.
- Acquiring new technology is important to make export qualitative and competitive. Technology transfer mechanisms are weak among the Nepalese exporting firms. Insufficient access to the latest technology in the export promotion activities, costs involved in access to licensing agreements and lack of in-house training program are the broad reasons for weaker technology.
- Although the three-year customs modernization plan effected some improvements in the adoption of transactions values and computerization of some functions, problems remain. These include poor infrastructure and facilities, complicated procedures and excessive documentation which are poorly harmonized with neighboring economies, and weak governance and human resource management. The capacity of the Customs Department is still weak and informal payments are still widespread.

IV. Analysis of Export Competitiveness

Measures of Competitiveness

The concept of competitiveness encompasses various qualitative factors that do not lend themselves readily to quantification. Capacity for technological innovation, degree of product specialization, the quality of the products involved, or the value of after-sales service are factors that may influence a country's trade performance favorably (Durand and Giorno, 1987). However, different quantitative indicators of competitiveness have been developed to measure competitiveness and also to facilitate international comparison.

There are generally two approaches for measuring competitiveness. One method is to employ the large-scale models that are often costly and time-consuming. Moreover, in the case of Nepal, it does not possess the necessary data to construct such models. The other more often used approach is the index number indicator approach designed to measure some change over time or comparison across industries (Esterhuizen, 2006). Further, the indices are employed to either measure the competitiveness of the overall economy or the specific sectors or industries.

Another way of examining national competitiveness is based on the construction of composite indices. For example, the *Global Competitiveness Report* produces two indices, the growth competitiveness index (GCI) and the current competitiveness index (CCI). The GCI aims to measure the capacity of the national economy to achieve sustained economic growth over the medium term. It looks at the macroeconomic sources of GDP per capita growth and generates predictions of the ability of a country to improve its per capita income over time. Analogously, the *Doing Business 2008* presents quantitative indicators on business regulations and the protection of property rights that can be compared across different economies. Regulations affecting 10 stages of a business's life are measured: starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business. Based on the above indicators, Nepal was ranked 111 out of 178 economies, ahead of India that was placed at the 120th position.

Economists also employ other indices to measure national competitiveness. These include indicators pertaining to labor productivity and price competitiveness. The most widely used and well-known measures are the REER and unit labor cost (ULC). For empirical purposes, calculating the ULC is a difficult and arduous task since procuring reliable data on wages and productivity is not easy (ADB, 2003).

Another widely used indicator is Balassa's index of revealed comparative advantage (RCA) defined as the share of a commodity group in the economy's total exports divided by that commodity's share of world exports. The higher the ratio is above (below) unity, the stronger (weaker) that economy's comparative advantage in that commodity group, provided that government policies have not grossly distorted the composition of exports.

Real Effective Exchange Rate

Real effective exchange rate (REER) is often considered as one of the indicators of the export competitiveness of the economy. The REER is the nominal effective exchange rate (NEER) deflated by a similarly weighted average of relative prices or costs. The NEER, on the other hand, refers to a weighted average of several bilateral nominal exchange rates. Both indices are usually calculated as an index number relative to the base year.

The REER is calculated using the following formula:

$$REER = 100 * \prod (S^*_{it} / P^*_{it})^{w^*_i}, \qquad (1)$$

where S^*_{it} = nominal exchange rate index number for currency of country i, P^*_{it} = ratio of the price index of country i to the price index of the home country, with the same base year or that used to calculate the nominal exchange rate index number and w^*_i = normalized weight of country i (Guajardo, 2006).

The calculation of the REER involves the selection of different currency baskets, appropriate weights, a base year and averaging techniques. Two currencies, the US dollar and the Indian rupee, have been chosen. Likewise, the shares of India and other countries in Nepal's total trade have been taken as the weights. The NEER is then deflated by the consumer price index for the rest of the world proxied by the world inflation and Indian CPI.[8] The geometric mean method is employed to take the weighted average as this conceptually yields better results while considering the average of the percentage increase or decrease. In the absence of the export price index for Nepal, real exports (Real X) is obtained by the nominal exports deflated by the Nepalese CPI. The data utilized for computing the REER is provided in Annex 1.

Taking 2000/2001 as the base year, the REER has appreciated by around 6.10 percent in 2006/07. This suggests that the Nepalese economy is gradually losing its competitiveness. It should be noted that the share of trade with India in Nepal's total trade has been steadily rising from about 27 percent in 1993 to about 62 percent in 2006/07. The share of both exports to India and imports from India in Nepal's total exports and total imports, respectively, had sharply risen following the Trade and Transit Treaty with India in 1996, which allowed duty free access to Nepalese exports. Due to the high trade concentration with India and the pegged exchange rate, the Nepalese inflation rate has remained similar to that of India over the years. As a result, the real exchange rate of the Nepali rupee *vis-à-vis* the Indian rupee has not fluctuated much.

However, a note of caution is called for as the estimate of the REER is sensitive to the choice of weights and the base year which might produce quite different results; thus, the result should be taken as only indicative. For example, taking 1998/99 or 1999/2000 as the base years produce opposite results i.e. the real depreciation the Nepalese rupee.

[8] Data for world inflation is taken from IMF (2007).

Thus, in order to ascertain the possible misalignment of the exchange rate of the Nepalese rupee, the REER should be supplemented by other macroeconomic indicators.[9]

It is often argued that in order to benefit from competitiveness, exchange rate could be a useful instrument. But the purchasing power parity debate demonstrates that a policy of real undervaluation attained through competitive depreciation may not work in the long run as the misalignment would be corrected automatically over time depending upon the degree of openness of an economy.

FIGURE 2: REER and Exports

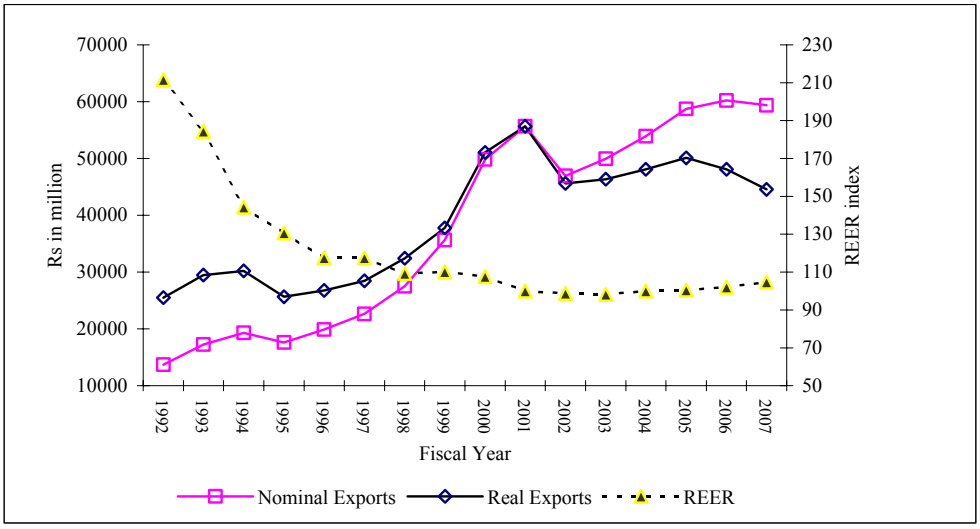


Figure 2 reveals that there is no clear relationship between the real exports (Real X), nominal exports, and REER. The graph reveals that REER may not be a major factor in the determination of the performance of exports in Nepal. A formal test of the stationarity using the Augmented Dickey Fuller test reveals that the logarithm of Real X is non-stationary, while the logarithm of REER is stationary (Ramanathan, 2002). Hence, there is no long term relationship between the REER and export performance in Nepal.[10]

[9] Though the calculation of the REER is ideally done based on a monthly data series spanning several years, in the Nepalese context, the index has been computed on an annual basis due to paucity of data.

[10] The stationarity test reveals that log of Real X is integrated of order 1 i.e. I(1) while that of the log REER is stationary or I(0). Thus, the Granger Causality Test cannot be applied to test the causal relationship between the Real X and REER. The different orders of integration mean that there is no cointegrating relationship between the REER and Real X and hence the error correction model would not be appropriate. It should be noted that for a regression analysis to be robust, ideally the number of observations should be greater than 30. Less than this would result in the so-called small sample bias. For details, see Enders (2004).

Revealed Comparative Advantage

The terms comparative advantage and competitiveness are often meant to describe resource use by different entities such as the firm, industry or a country. Both comparative advantage and competitive advantage (or simply competitiveness) contain two general categories of use: a production context and a trade context. With respect to international trade, comparative advantage denotes a comparative cost advantage in producing commodities and describes observed trade patterns based on country differences in resource endowments, investment patterns, technology, human capital and managerial expertise, infrastructure and government policies.[11] From an *ex post* sense, comparative advantage denotes country specialization in the production and sale of commodities over time and across countries/regions.

In theoretical models, comparative advantage is expressed with respect to relative values evaluated in the absence of trade. Since these are not observed, in practice comparative advantage is measured indirectly. Revealed comparative advantage (RCA) indices utilize the trade pattern to identify the sectors in which an economy possesses a comparative advantage by comparing the trade profile of the country of interests with the world average (Mikic *et. al*, 2007).

Balassa was the first to build a measure of RCA. His analysis demonstrated that observed trade patterns produce estimates of RCA. Balassa's index of RCA can be written as follows (Esterhuizen, 2006; Karmarcharya, 2000):

$$RCA = \frac{X_k^i / X_k^w}{X_t^i / X_t^w} \qquad (2)$$

where X_k^i = country i' s export of good K;

X_k^w = world exports of good K;

X_t^w = country i' s export's of all good (and t denotes total exports); and

X_t^i = world export's of all good

Equation 2 can be rearranged as follows:

$$RCA = \frac{X_k^i / X_t^i}{X_k^w / X_t^w} \qquad (3)$$

Thus, the RCA is the ratio of two shares: the numerator is the ratio of country's total exports of the commodity *i* in its total exports while the denominator is the share of world export of the same commodity in total world exports. The value of RCA ranges from 0 to ∞. A Balassa RCA index with value greater than unity would denote a comparative advantage in that commodity by country i.

In Nepal's case, various studies have identified the export potential/competitive products based on the high RCA and other indicators as discussed at length in Section III.

[11] When applied to the empirical world, however, comparative advantage often becomes somewhat elusive due to the problem in defining undistorted pre-trade relative prices, sorting country differences based on these factors and the presumed absence of government intervention.

This paper has computed the RCA indices for some major exports of top exporting items in Nepal for 2006 using the data from the *TradeMap*. The results are depicted in Table 5.[12]

TABLE 5: RCA Index for Major Exports in 2006

HS Code	Product	Nepal's exports (in thousand dollars)	World's export (in thousand dollars)	RCA
570110	Carpets of wool or fine animal hair, knotted	98217	1428194	13.91
151620	Vegetable fats & oils & fractions hydrogenated, inter/re-esterifid,etc, refined/not	38594	2960234	2.63
330610	Dentifrices	16656	1984195	1.69
220290	Non-alcoholic beverages nes, excluding fruit/vegetable juices of heading No 20.09	16444	4324675	0.76
620342	Men/boys trousers and shorts, of cotton, not knitted	16224	19025790	0.17
550921	Yarn,>/=85% of polyester staple fibres, single, not put up	14040	380346	7.47
392690	Articles of plastics or of other materials of Nos 39.01 to 39.14 nes	11050	32653800	0.06
621420	Shawls, scarves, veils & the like, of wool or fine animal hair ,not knitted	10584	361729	5.92
380610	Rosin	10424	596958	3.53
620462	Women's/girls trousers and shorts, of cotton, not knitted	10421	19338990	0.10
721041	Flat rolled prod,i/nas,pltd or ctd w zinc,corrugated,>/=600m wide,nes	10310	230873	9.03
291739	Aromatic polycarboxylic acids and their derivatives, nes	8968	1116037	1.62
760410	Bars, rods and profiles, aluminum, not alloyed	8355	1817563	0.93
620630	Women's/girls blouses and shirts, of cotton, not knitted	7215	5132238	0.28
531010	Woven fabrics of jute or of other textile bast fibres, unbleached	6670	117910	11.44
611020	Pullovers, cardigans and similar articles of cotton, knitted	6432	16722620	0.07
711311	Articles of jewellery & pts therof of silver w/n platd/clad w/o prec met	6377	3304965	0.39
611010	Pullovers, cardigans & similar article of wool or fine animal hair, knitted	6239	5571009	0.22
620452	Women's/girls skirts, of cotton, not knitted	5320	3712053	0.29

Source: Calculations based on the data from www.trademap.org

Table 5 exhibits that HS 570110 (knotted carpets) possesses the highest RCA index. Similarly, other major exports with greater than unity RCA values imply that Nepal has comparative advantage in these commodities. This is in confirmation with earlier studies.

[12] As mirror data is employed under 'TradeMap' where data is taken from the figures of the partner country, they do not tally with the official figures.

Although the results suggest that Nepal has comparative advantage in a number of products, the actual data shows a real decline in the exports of these commodities over the years. It should be emphasized that these indices are only relative measures and that the measurement of these concepts need to be treated with caution. Their limitations, that they only serve as *ex post* measures and are static in nature, should be understood. Moreover, competitiveness is a dynamic concept and the values of RCA may change over time.

V. TRADE POTENTIAL AT THE BILATERAL LEVEL

The preceding analysis has identified various products in which Nepal has competitive advantage. This section provides a framework for the preliminary analysis about the actual trade and the type of competition faced by some specific products possessing competitive advantage by analyzing the trade flows at the commodity level. Specifically, it looks at the four major exportable items to the US market (which is the second largest export destination for Nepal) and then calculates the "Indicative Trade Potential Index" (ITP) and "Relative Indicative Trade Potential" (RITP). The analysis is based on the methodology proposed by the ITC in assessing the bilateral trade potential at the commodity level (Helmers and Pasteels, 2006).

Table 6 lists the basic indicators derived from the *TradeMap* for 2006.[13] The actual trade of specific commodities between the US and Nepal in Column A shows that there is potential for increased trade. Column F gives the ITP which is a purely mechanical indicator that is used to identify the products for which there is the highest trade complementarity between the exports of a country and the imports of the target country. The trade potential indicator assumes that the importing country could, in principle, absorb perfectly all imports from the exporter. With such a strong underlying substitution assumption, the resulting figures are only indicative but can nevertheless be used in order to rank the products.

TABLE 6: Trade Flows at the Commodity Level

		Nepal's export to the US (in '000 dollars)	Nepal's exports to the world (in '000 dollars)	Share of US in Nepal's export, in %	US imports from the world (in '000 dollars)	Market share of Nepal in US's import, in %	Indicative trade potential	Relative indicative trade potential in %	Overall assessment
HS code	Product description	A	B	C=A/B	D	E=A/D	F= min (B,D) -A	G=F/B	H
570110	Carpets of wool or fine animal hair, knotted	34343	98217	34.97	562420	6.11	**63874**	65.03	Relatively high ITP and RITP/large market size
620342	Men's/boys' trousers and shorts, of cotton not knitted	14419	16224	88.87	5550775	0.26	**1805**	11.13	high ITP/small current trade/large import market
611020	Pullovers, cardigans and similar articles of cotton, knitted	5756	6432	89.49	8638658	0.07	**676**	10.51	high ITP/large market size
711411	Articles of gold/silversmith and part of silver w/n paltd/clad w/o prec met	55	90	61.11	41892	0.13	**35**	38.89	low ITP/relatively small import market

Source: Calculations based on the data from www.trademap.org

[13] The latest data was available for 2006 only.

Indicators in columns C, E and G in Table 6 express trade values in relative terms, as a percentage of exports of the country and help to complement the assessment of the trade potential. The RITP expresses the ITP in relative terms with respect to the exports which assists in evaluating whether the trade potential is high or low, based on the size of the respective markets. The RITP gives a different result compared to the ITP. The closer the RITP value is to 0, the more Nepal depends for that product on the US economy. From Table 6, it can be concluded that Nepal's exports of pullovers, cardigans and similar articles of cotton (HS Code 611020) depend relatively strongly on the US market than other products. Finally, column H gives the overall assessment of the specific products based on the preceding indicators. The first product presented in Table 6 under HS-570110 is an example of a comparatively successful market for Nepal since more than 6 percent of US's imports are sourced from Nepal. In this context, the trade potential in the short run lies, to some extent, in the stability and growth of the US market. In this respect, the analysis of the historical trends of Nepalese exports over the recent years and future prospects for the Nepalese market are critical.[14]

The small shares of the other products in the US market and the large market size suggest that the emphasis should be given more to the supply side. The existence of a high ITP is a necessary condition for trade to take place between the two countries in the short run. In the medium term, however, a low ITP is not necessarily an indication that no trade potential exists, since the commodity might have been produced in the country but not yet exported. Other indicators, such as average annual growth rates, which reveal important trends in export and import performance, as well as unit values, can also be used for a better analysis.

It is also important to examine Nepal's major competitors with regard to the export target market with additional information on the main competitors. Box 1 exhibits such information that provides the prospects for market diversification for the product 'carpets of wool or fine animal hair, knotted' (HS 570110) based on the *TradeMap* data for 2006.

BOX 1: Prospects for Diversification for Exports of Carpets of Wool or Fine Animal Hair, Knotted (HS 570110)

- Major importers in the world: US, Germany, Italy, Turkey, United Arab Emirates, United Kingdom and Canada.
- Major exporters to the world: Iran, India, Pakistan, China, Nepal and Turkey
- Nepal's exports represents 6.88 percent of world exports; its ranking in world exports is 5
- US import growth from the world< Nepal export growth to the US; US imports represents 38.97 % of world imports for this product; its ranking in world import is 1.
- Major exporters to the US: Iran, India, Pakistan, China, Nepal and Turkey.
- Share of US in Nepal's exports: 34.97%.
- Annual growth of US imports: 3%.

Source: www.trademap.org

[14] The recent decline in the export of carpets shows that current trade regime should also be taken into consideration while analyzing the trade flows. Nevertheless, the example illustrates the concept involved in analyzing the trade potential at a commodity level.

Box 1 depicts that Nepal faces competition, both at the global and more importantly at the regional level, especially for the US market, which is the largest importer for the above-mentioned product. However, the export of this product is vulnerable to the negative shocks in the US as a large part of the export of this product is concentrated in that country.

Box 1 suggests that Nepal would do well in terms of diversifying the markets for this product in other major destinations such as Italy, Turkey, and the United Arab Emirates, among others. This type of analysis provides a starting point for the prospects of export diversification, both product-wise and destination-wise, primarily from the demand side. These indicators should be supplemented by looking at other indicators such as trade costs like tariffs, transport costs, regulatory export restrictions, trade policy as well as production efficiency, product quality, consumer preferences, marketability and inward FDI. A similar analysis can be undertaken for different products at the disaggregated level that would provide a preliminary idea about the potential market for diversification.

VI. CONCLUSIONS

Despite economic liberalization and growth of trade in the 1990s, the competitiveness of Nepal's economy is rather low and labor productivity is one of the lowest among its neighboring and competitor countries. There are three factors that are largely responsible for the low price competitiveness and productivity in the economy: a) insufficient mechanisms and incentives for firms to procure new and modern technology, b) poor infrastructure, and c) an unfriendly investment climate. Weak infrastructure, transport and transactions delays, and an unpredictable regulatory framework further weaken price competitiveness. Again, the physical handicap (landlockedness) and the high transit-transport cost associated with it have further compounded the ability of Nepal to produce and trade on the regional and international markets, thus undermining its international competitiveness.

While export diversification broadens the scope for employment creation and poverty reduction, it also increases a country's economic resilience to external shocks, subsequently making income more stable and predictable. It can also promote technological advance and efficiency, and boost labor productivity and incomes. Moreover, successful export diversification is both indicative of and conducive to technological upgrading and knowledge acquisition.

A few suggestions are provided below for incorporation in the export diversification strategy of Nepal together with some measures for boosting export competitiveness.

- Nepal needs to use WTO membership to lock in past trade reforms, improve the domestic trade policymaking process, help exporters contest foreign trade barriers, and supplement the preferential market access it enjoys in key foreign markets. These benefits will help the country better integrate itself into the world economy.
- Export growth, including diversification of markets and higher-valued products, should be a major thrust of trade policy. Trade and industrial policies need to be aimed at promoting structural reforms to improve Nepal's efficiency and international competitiveness and reduce its vulnerability to external shocks that may arise from globalization.

- The improvement in Nepal's trade competitiveness calls for faster, more efficient movement of goods into, out of, and throughout the country. Streamlined cargo-customs procedures, including transit, are important in reducing transaction costs for traders.
- More focus has to be given to the creation of sound monetary and financial conditions that fosters high rates of domestic investment to accelerate growth, without impairing the international competitiveness of firms. Trade, fiscal and competition policies should be employed in an integrated and well-sequenced way to help augment profitability and investment in core industries and increase domestic value-added content of their exports.
- An export-friendly enabling environment should be generated which comprises sound domestic policies and export strategies, adequate infrastructure, provision of effective trade support services and targeted firm-level support. These aspects are, of course, interrelated. At the policy level, the enabling factors include a stable macroeconomic environment, outward-oriented trade and industrial rules, a proactive foreign investment strategy, sustained investment in human capital, comprehensive technology support for small and medium-sized enterprises (SMEs), and an efficient and cost-competitive infrastructure encompassing everything from cargo services to Internet access.
- Since Nepal is primarily a rural-oriented economy, a separate Agricultural Export Diversification Program should be formulated whose aim should be to augment the country's export growth rate and reduce its volatility. The program could consist of the following: a) promotion of private sector entrepreneurship in agribusiness; b) improving agribusiness export and facilitation services; c) strengthening agricultural health and food safety services; and d) rehabilitation of drainage and irrigation systems.
- Any serious "business plan" for trade promotion and export diversification must be based on a realistic assessment of a country's position in the international division of labor, complemented by an analysis of how to develop new areas of competitive advantage. This can be carried out with an assessment of:
    - External opportunities and constraints: how is world demand evolving? What are the most dynamic products? What are the entry conditions for these products in international markets? How are these products to be placed into global commodity chains?
    - Internal opportunities and constraints: what are the strengths and the weaknesses of the private sector? How are government policies affecting the private sector's ability to trade? How is the country placed in terms of producing the most dynamic export products and meeting the market entry conditions? Which interest groups are likely to consider themselves affected by a specific policy?
- Although studies undertaken in the past have revealed that Nepal possesses competitive advantage in herbal products, woollen carpets, tea, garments and pashmina, among others, a comprehensive case-by-case analysis of home and host countries trading environment, supply and demand conditions, cost of production, capacity to innovate, as well as its forward and backward linkages

should be analysed to translate the export potential to actual trading opportunities.

Finally, export diversification has long been a stated policy goal for Nepal. However, no considerable shift has been witnessed in patterns of exports in recent years which implies policy failures in directing new product categories in the export markets. Product diversification efforts must go hand in hand with efforts to secure markets for new products for long-term sustainable economic development.

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ANNEX 1: Data for Computing REER

Year	Exports to India	Exports to Other Countries	Import from India	Import from Other Countries	IC per NRs	US $ per NRs	Global Inflation	Indian Inflation	Nepalese Inflation	REER
					(Base Year = 2000)					
1991	1552	5835	7323	15903	0.5950	0.0313	0.242	0.492	0.433	260.53
1992	1450	12257	11246	20695	0.6058	0.0234	0.313	0.561	0.524	209.53
1993	1622	15645	12542	26664	0.6104	0.0219	0.427	0.606	0.571	174.30
1994	2409	16885	17035	34535	0.6247	0.0203	0.563	0.666	0.622	141.56
1995	3124	14515	19616	44064	0.6247	0.0200	0.682	0.734	0.670	127.44
1996	3683	16199	24399	50056	0.6247	0.0181	0.762	0.776	0.724	115.95
1997	5226	17410	24853	68700	0.6247	0.0175	0.818	0.815	0.783	116.00
1998	8794	18719	27331	61671	0.6247	0.0161	0.866	0.854	0.848	111.04
1999	12531	23146	32120	55406	0.6247	0.0147	0.913	0.895	0.944	109.82
2000	21221	28602	39660	68845	0.6247	0.0145	0.958	0.937	0.976	107.05
2001	26030	29624	54701	60986	0.6247	0.0135	1.000	1.000	1.000	100.00
2002	27956	18989	56622	50767	0.6247	0.0130	1.039	1.024	1.029	98.04
2003	26430	23501	70924	53428	0.6247	0.0129	1.076	1.072	1.078	98.11
2004	30777	23134	78740	57538	0.6247	0.0136	1.115	1.132	1.121	99.66
2005	38917	19789	88676	60798	0.6247	0.0139	1.156	1.200	1.172	100.01
2006	40715	19519	107143	66637	0.6247	0.0138	1.198	1.251	1.265	103.53
2007	41729	17654	115872	78822	0.6247	0.0142	1.244	1.321	1.346	106.10

Sources: NRB, Reserve Bank of India, IMF and computations. The exports and imports data are in million rupees. The exports, imports, CPI and exchange rate figures for Nepal relate to the Nepalese fiscal year (starting from mid-July). The figures for annual Indian inflation are taken from August to July to make it comparable to the Nepalese figures. For example, the annual WPI for 1991 is the average monthly indices from August 1990 to July 1991. In the absence of the comparable data for the world inflation, the average inflation of the current and the previous calendar year's inflation is taken as a proxy for the inflation of the current Nepalese fiscal year.