

Nepal's excise systems and the legal frameworks: agendas for reform

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Abstract

Following Nepal's accession to the World Trade Organization (WTO) in 2003, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) in 2004, and implementation of the South Asian Free Trade Area (SAFTA) in 2006, the Government of Nepal has pursued a policy of mobilising excise taxes to compensate for revenue losses resulting from the reduction and abolition of customs tariff rates and other obligations of WTO membership. The principal objective of this article is to analyse the existing system of excise administration in Nepal and identify ways in which the administrative burden may be reduced for both taxpayers and the government. The study identifies an urgent need to shift from the current physical control system to a self-removal system, as well as a need to rationalise the country's excise legislative provisions, in line with international practices.

1. Introduction

Excise tax was a major source of tax revenue in Nepal until the late 1990s. The number of items that attracted excise was nearly 100 in 1990-91, which reduced to seven items in 2000-01. During this process, the contribution of excise to Nepal's revenue base decreased significantly. The share of excise duty to GDP, total tax revenue and indirect tax was 1.1 per cent, 15.1 per cent and 18.1 per cent respectively in the fiscal year 1989-90, which decreased to 0.8 per cent, 8.4 per cent and 10.5 per cent respectively in the fiscal year 1994-95.

Following Nepal's accession to the World Trade Organization (WTO) in 2003, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) in 2004, and implementation of the South Asian Free Trade Area (SAFTA) in 2006, the Government of Nepal has continued to adopt a policy of mobilising excise taxes. The purpose of the policy is to compensate for the revenue losses resulting from the reduction and abolition of customs tariff rates and other obligations of WTO membership. To this end, excise tax was imposed on additional goods in 2004-05, and since then has become more important to revenue generation in Nepal. The share of excise duty to GDP, total tax revenue and indirect tax increased to 2.2 per cent, 15.1 per cent and 20.2 per cent respectively in the fiscal year 2009-10.

Excise duty is imposed on the consumption of selected goods, such as alcoholic beverages and tobacco products. A licence is required to engage in manufacturing, importing, selling and storing of excisable goods. Likewise, the *Excise Act 2002* prohibits importing excisable services without having a licence. Excise commodities are subject to physical control and supervision at all stages of production, distribution and selling. A self-removal system has recently been implemented for many items to reduce the burden on tax administration and taxpayers. However, alcoholic beverages and tobacco, which represent 56.8 per cent of total excise revenue, are still subject to physical control and supervision.

Nepal's excise sector has a high level of informal economic activity through the production of illegal liquor and unauthorised importation of cigarettes and liquor. The compliance rate of medium and small

enterprises working in this sector has been low, and excise taxpayers have been over-burdened with complicated administrative procedures, such as registration, preparation and submission of regular returns and payments.

The principal objective of this article is to analyse the existing system of excise administration and identify ways in which the administrative burden may be reduced for both taxpayers and for the Government of Nepal. The study is an analytical study based on macroeconomic theory of the public sector. The required data were collected through both primary and secondary information, with the primary information collected through interviews/discussions with key informants, seminars and workshops, and focus group discussions with the help of an advance checklist. The secondary information was collected by reviewing published and unpublished reports, particularly from government organisations. The main institutions and publications from which secondary information was collected are: national plans and mid-term evaluation reports of the National Planning Commission; economic surveys, budget speeches, Red Books and other periodic publications of the Ministry of Finance; quarterly economic bulletins, annual economic reports, periodic publications of the Nepal Rastra Bank; annual reports, Excise Act, Liquor Act, Excise Directive, and various published and unpublished reports of the Inland Revenue Department (IRD); and various published and unpublished reports of the Federation of the Nepalese Chamber of Commerce and Industries, Nepal Chamber of Commerce and the Confederation of Nepalese Industries.

2. The nature of excise duty

Excise regimes raise revenue by imposing taxes on specific goods and services. Unlike value added tax (VAT), they are generally levied only on specifically defined goods, in particular on three product groups: alcoholic beverages, mineral oils and tobacco products (www.oecd.org).

When first introduced, the main purpose of excise duties was to raise revenue, but recently an alternative philosophy has emerged, recognising the application of excise duties as a means of influencing consumer behaviour. The case put forward in relation to alcohol and tobacco products is that drinking and smoking are health hazards and increased excise duties help to reduce consumption. For mineral oils, reasons for determining consumer behaviour reflect a mixture of energy conservation, transport and environmental issues. Over the last decade, environmental issues have played an increasing role in determining the nature and application of excise duties to, in particular, road fuel (www.oecd.org).

As well as influencing consumer behaviour, excise taxes are recognised as an economically efficient way of correcting negative externalities. Put simply, this means that when consumption of these goods does harm to others and there is a cost to the economy from that harm, then some of that cost is recovered from the consumer. The cost of the harm is included in the price of the excise good (the drink, the cigarette, the car, the fuel, etc.) and the consumer is then making an informed decision on what and how much to consume. It also affects a wide variety of social conditions. For example, it has been estimated that a 1 per cent increase in the price of alcohol decreases the rate of wife abuse by 3.1 per cent to 3.5 per cent; a 10 per cent increase in the excise tax on beer would reduce severe domestic violence against children by 2.3 per cent; a 78 per cent increase in the beer tax would reduce highway fatalities by 7 per cent to 8 per cent; a 10 per cent increase in the price of alcohol would decrease drunk driving by 7.4 per cent for men and 8.1 per cent for women; a 10 per cent increase in the beer tax would reduce rapes by 1.32 per cent, robbery by 0.9 per cent, murder by 0.3 per cent, and assaults by 0.3 per cent (Cnossen 2005).

The Protocol to Eliminate Illicit Trade in Tobacco Products was adopted by the parties to the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) in November 2013. This treaty is aimed at combating illegal trade in tobacco products through control of the supply chain and international cooperation. Parties have committed to establishing a global tracking and tracing system to reduce and eventually eradicate illicit trade. The new Protocol will help to protect people across the globe from the health risks of tobacco and provide significant revenue increases for the governments.

Table 1 presents the contribution of excise duty as a percentage of total tax revenue and GDP in selected countries of three economic regions of the world comprising SAARC, OECD and ASEAN.

Table 1: Excise duty as percentage of total tax revenue and GDP in selected countries

| S.N. | Region/country | Excise duty as percentage of total tax revenue | | Excise duty as percentage of GDP | |
|------|----------------|--|------|----------------------------------|------|
| | | % | Year | % | Year |
| 1. | SAARC | | | | |
| | • Nepal | 14.3 | 2012 | 2.2 | 2012 |
| | • India | 16.3 | 2012 | 1.6 | 2012 |
| | • Bangladesh | 0.7 | 2012 | 0.1 | 2013 |
| 2. | OECD | | | | |
| | • Germany | 6.3 | 2013 | 2.3 | 2013 |
| | • France | 5.4 | 2013 | 2.5 | 2013 |
| | • Japan | 6.2 | 2012 | 1.8 | 2013 |
| | • USA | 3.7 | 2013 | 0.9 | 2013 |
| 3. | ASEAN | | | | |
| | • Malaysia | 8.1 | 2012 | 1.3 | 2012 |
| | • Singapore | 4.0 | 2012 | 0.6 | 2012 |
| | • Philippines | 7.3 | 2011 | 0.9 | 2011 |

Source: OECD 2014a, Ministry of Finance, Government of Nepal 2013b; Unnayan 2013; National Board of Revenue, Bangladesh 2013; Supreme Audit Institute of India 2013; IMF 2013; Republic of Singapore 2013; Department of Revenue, Malaysia 2013.

Table 1 indicates that the share of excise duty in total tax revenue is the highest in India and the lowest in Bangladesh among all three economic zones. Among selected OECD countries, the share is the highest in Germany and the lowest in the USA. In terms of GDP, the share of excise is the highest in Germany and France and again the lowest in Bangladesh.

3. Excise duty in Nepal

Historically, the political foundation of modern Nepal was laid in 1778 with Prithvi Narayan Sah's conquest of the Kathmandu Valley, known as the unification of the Nepalese state in the history of Nepal. In 1886, the autocratic Rana rule emerged with the advent of Jung Bahadur Rana, the first Rana prime minister of Nepal. The Rana rulers ruled over the country for more than a century simply with the functioning of general administration and hardly spared any thought for systematic socioeconomic development of the country, except for a few cases of sporadic attempts, such as the founding of the first undergraduate college in Kathmandu Valley in 1918 and the setting up of the first commercial bank in 1937.

Before 1951, during the Rana regime, the excise duty was collected on a contract basis. The '*Rakam Bandobasta Adda*' was responsible for excise administration which was set up during the reign of King Surendra. Under this office, a handful of contractors levied different excise duties in different parts of the country based on tradition and their own interest. There was no uniform excise rate and the excise duties were not linked to the fiscal policy of the country. The main items attracting excise duty during the period were *Raksi* (local liquor), pig hairs, leather, *ganza*, opium and hashish. There was no excise duty on industrial products. The basic purpose and philosophy behind the imposition of excise duty was to collect revenue (Pant 1985).

After the overthrow of the Rana regime in 1951, Nepal initiated strategies more aligned with planned development. The first budget was introduced in 1952. The contract system to raise excise duty from

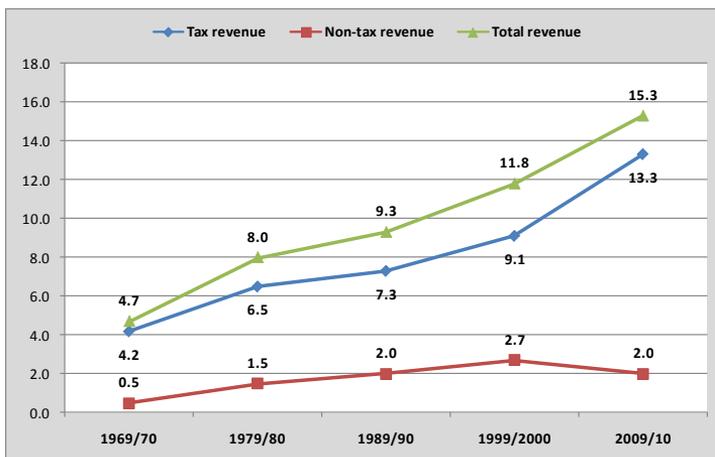
hashish and cannabis was terminated and the licensing system was introduced. The contract system on other products was, however, continued. Historically, the Civil Code 1854 had provided the legal basis for imposing excise duty on items including liquor, mining of iron, animal bones, hashish, cannabis, and timber.

The first systematic attempt at planned development in Nepal was initiated on 9 October 1955 when late King Mahendra issued a Royal Proclamation regarding the necessity of a Five Year Plan for the country. The Department of Customs and Excise was established in 1955. The *Excise Act 1959* authorised the government to impose an excise duty on domestic industrial products like matches, sugar and liquor. The contract system of low-grade production and distribution of liquor was particularly significant. The *Liquor Act 1975* was promulgated which gave legal basis to introduce a distillery system in the production and distribution of liquor. The Excise Act was revised in 2002 expanding its scope, under which the government is now authorised to impose excise on the service sector as well as on the import of goods on a selective basis.

A separate Department of Excise was established in 1965 by dividing the Department of Customs and Excise. The purpose was to make the excise administration more effective and efficient in order to raise revenue from different kinds of domestic products on a selective basis. The Department established field offices in various parts of the country. The Department was then abolished in 1998 and its responsibilities were transferred to the newly created IRD. The IRD currently has 23 field offices and is responsible for national excise administration.

The major problem for low-income aid-dependent countries like Nepal is the great difficulties experienced in raising resources/revenue to finance important development expenditures. While they need to raise more revenue in order to reduce their budget deficit and fight poverty, the collection of more revenue through direct taxes is a difficult task because of the low level of per capita income — which is said to be the major cause of the low level of savings and investments — and the quality of tax administration is weak. In this regard, developing countries have not been as successful as developed countries in designing progressive tax structures which would place a smaller burden on the poorer sections of the society.

Figure 1: Growth of public revenue as percentage of GDP, 1969-70 to 2009-10



Source: Government of Nepal 1989, 2011a, 2013b.

Tax revenue contributes three-fourths of total revenue in Nepal and non-tax revenue comprises one-fourth. Figure 1 reflects that there has been a continuous increase in the collection of government revenue in Nepal. The revenue to GDP ratio has increased from 4.7 per cent of GDP in 1969-70 to 15.3 per cent of GDP in 2009-10.

Table 2: Growth of direct and indirect taxes, 1979-80 to 2009-10

| Types of taxes | Share of taxes as percentage of total tax revenue | | | | Share of taxes as percentage of GDP | | | |
|---|---|--------------|--------------|--------------|-------------------------------------|------------|------------|-------------|
| | 1979-80 | 1989-90 | 1999-00 | 2009-10 | 1979-80 | 1989-90 | 1999-00 | 2009-10 |
| Direct Taxes | 16.6 | 19.7 | 27.0 | 26.7 | 1.1 | 1.4 | 2.4 | 3.6 |
| Income Tax from Public and Semi-public Enterprises | 2.3 | 3.3 | 6.6 | 0.7 | 0.2 | 0.2 | 0.6 | 0.1 |
| Income Tax from Private Corporate Bodies | 0.1 | 0.0 | 4.0 | 7.8 | 0.0 | 0.0 | 0.4 | 1.0 |
| Income Tax from Individuals and Remunerations | 4.1 | 9.3 | 10.5 | 9.9 | 0.3 | 0.7 | 0.9 | 1.3 |
| Land Revenue | 3.7 | 1.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 |
| House and Land Registration | 4.3 | 5.2 | 3.1 | 3.5 | 0.3 | 0.4 | 0.3 | 0.5 |
| Urban House and Land Tax | 0.4 | 0.3 | 0.4 | 0.0 | 0.03 | 0.02 | 0.03 | 0.0 |
| Vehicle Tax | 0.1 | 0.4 | 1.2 | 1.5 | 0.01 | 0.03 | 0.1 | 0.2 |
| Tax on Interest | 0.0 | 0.2 | 1.2 | 1.6 | 0.0 | 0.01 | 0.1 | 0.2 |
| Other Taxes | 1.5 | 0.0 | 0.0 | 1.6 | 0.1 | 0.0 | 0.0 | 0.2 |
| Indirect Taxes | 83.4 | 80.3 | 73.0 | 73.3 | 5.4 | 5.9 | 6.7 | 9.8 |
| Customs Duties | 39.8 | 36.9 | 32.6 | 22.5 | 2.6 | 2.7 | 3.0 | 3.0 |
| Excise Duty | 14.1 | 15.1 | 9.4 | 15.6 | 0.9 | 1.1 | 0.9 | 2.1 |
| Sales Tax/VAT | 26.2 | 22.7 | 30.9 | 35.1 | 1.7 | 1.7 | 2.8 | 4.7 |
| Entertainment Tax | 0.6 | 0.5 | 0.0 | 0.0 | 0.04 | 0.03 | 0.0 | 0.0 |
| Hotel Tax | 0.9 | 1.4 | 0.0 | 0.0 | 0.06 | 0.1 | 0.0 | 0.0 |
| Air Flight Tax | 0.6 | 1.2 | 0.0 | 0.0 | 0.04 | 0.09 | 0.0 | 0.0 |
| Contract Tax | 1.2 | 2.3 | 0.0 | 0.0 | 0.08 | 0.17 | 0.0 | 0.0 |
| Road & Bridge Maintenance Tax | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.03 | 0.0 | 0.0 |
| Other taxes | 0.0 | 0.0 | 0.0 | 0.1 | | | | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 6.5 | 7.3 | 9.1 | 13.3 |

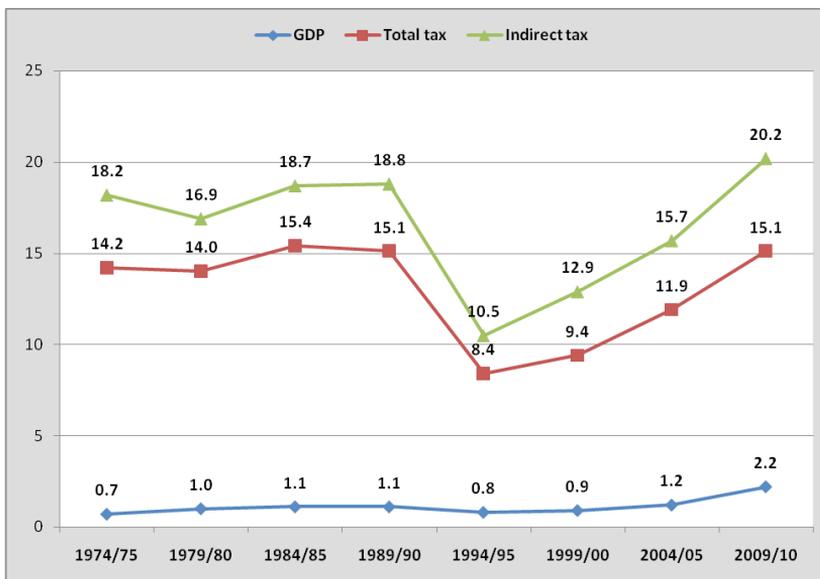
Source: Government of Nepal 1989, 2011a, 2013b.

Nepal’s tax structure is highly dominated by indirect taxes, which tend to be stagflationary. Nepal collects a substantially higher share of its revenue from customs, sales and excise duties, the share of indirect tax revenue to total revenue and GDP tends to be very high, and numerous concessions and deductions apply to direct taxes. Therefore, a shift from the present dependence on indirect to direct taxes is considered necessary. This would lead to a decline in prices of mass consumption items and an increase in demand, and a reduction in demand for luxury goods due to the imposition of direct taxes, which would be beneficial on balance of payments. Both would have a positive effect on growth in the economy. It should also be noted, however, that the efficiency and quality of tax administration is very weak and irregularities in tax collection are widely prevalent (Prasad 2008).

3.1 Share of excise in revenue structure and GDP

The total revenue from excise duty has been continuously increasing in Nepal since the fiscal year 1974-75, except in the fiscal year 1977-78. The total excise collection was Rs. 119.7 million in 1974-75, which increased to Rs. 26,338.5 million in 2010-11. It shows that the excise revenue in Nepal has increased by around 220 times during the period of 36 years. The growth rate of excise duty has highly fluctuated from -1.0 in 1977-78 to 48.9 in 2009-10 with the average growth rate of 16.8 per cent between the period of 1974-79 and 2012-13.

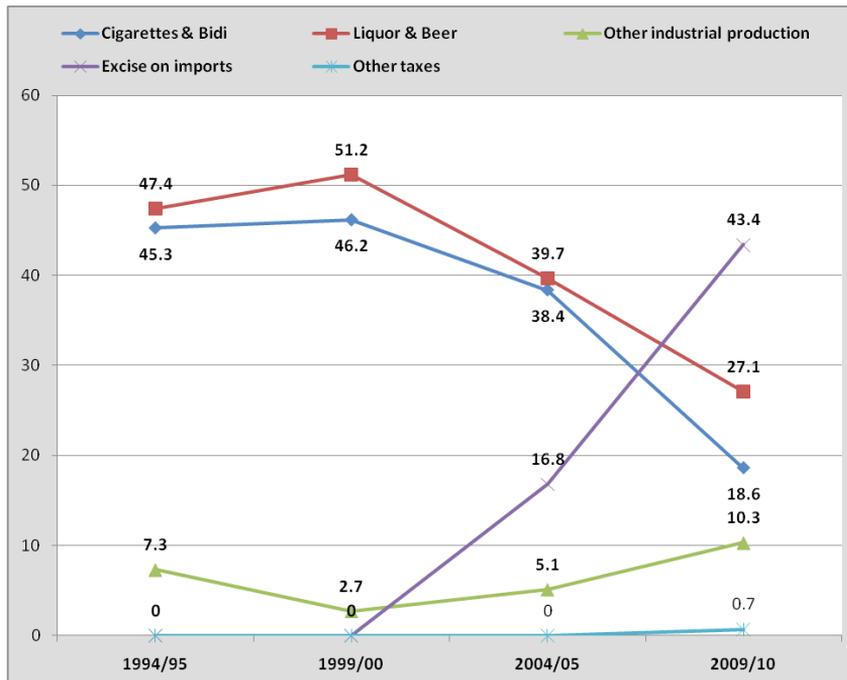
Figure 2: Share of excise in revenue structure and GDP, 1974-75 to 2009-10



Source: Government of Nepal 1989, 2011a, 2013b.

The data reveal that there is no consistent pattern during the study period. The share of excise duty decreased significantly during the late 1990s. In recent years, however, it has been increasing, mainly due to the introduction of excise duty on the import of all types of vehicles and motorcycles, frequent increase in the rates of excise duty for most products, and increases in the volume of the production of major excisable products. The share of excise duty to GDP, total tax revenue and indirect tax was 0.8 per cent, 8.4 per cent and 10.5 per cent in the fiscal year 1994-95 respectively, which increased to 2.2 per cent, 15.1 and 20.2 respectively in the fiscal year 2009-10.

Figure 3: Composition and trends of excise duty



Source: Government of Nepal 2011a, 2013b.

Figure 3 illustrates that there has been a significant contribution of excise duty from cigarettes, *bidi*, liquor and beer. However, their share of total excise revenue has decreased significantly since the 1990s due to the increase in excise from imported vehicles and motorcycles.

With the enactment of the *Excise Act 1958*, excises were imposed on industrial products on the basis of specific rates. Initially, excises were imposed on sugar and matches and it was extended to other commodities in subsequent years. By 1985-86 the number of commodities the subject of excise duty reached approximately 60. Specific duties were converted into *ad valorem* rates in 1982-83. Currently specific rates, as well as *ad valorem* rates, are levied on commodities (see Table 3).

Figure 4 reflects that there has not been a clear trend regarding the number of commodities imposed excise duty in Nepal. In the fiscal year 1961-62, excise duty was imposed on only five items, with this increasing to 41 by the fiscal year 1983-84 and to 100 by the fiscal year 1990-91. After 1990-91, the number of commodities imposed excise duty started to decline and reached to 7 in the fiscal year 2000-01.

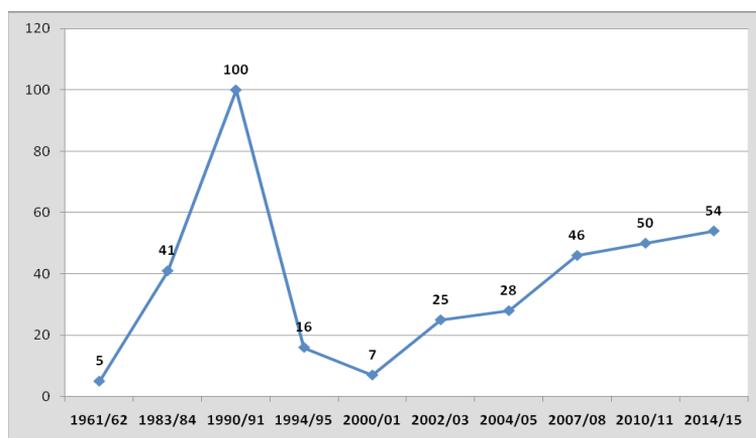
Table 3: Excise tariff for 2013-14

| S.N. | Details of goods and services | Unit | Rate of excise duty |
|------|---|-----------------------------|---------------------|
| 1. | Liquors: | | |
| | I. Wine and brandy: | | |
| | 1. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 2. 30 U.P. strength (containing 39.94% alcohol) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | II. Whisky: | | |
| | 1. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 2. 30 U.P. strength (containing 39.94% alcohol) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | III. Rum and TAFIA: | | |
| | 1. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 2. 30 U.P. strength (containing 39.94% alcohol) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | IV. Gin and GENEVA: | | |
| | 1. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 2. 30 U.P. of power (39.94% alcoholic) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | V. Vodka: | | |
| | 1. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 2. 30 U.P. strength (containing 39.94% alcohol) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | VI. Linkers and Cordials: | | |
| | 1. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 2. 30 U.P. strength (containing 39.94% alcohol) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | VII. Ready made others wine: | | |
| | 1. 15 U.P. strength (containing 48.5% alcohol) | Per litre Per L.P. litre | Rs. 719 Rs. 848 |
| | 2. 25 U.P. strength (containing 42.8% alcohol) | Per litre Per L.P. litre | Rs. 538 Rs. 716 |
| | 3. 30 U.P. strength (containing 39.94% alcohol) | Per litre Per L.P. litre | Rs. 501 Rs. 716 |
| | 4. 40 U.P. strength (containing 34.23% alcohol) | Per litre Per L.P. litre | Rs. 254 Rs. 423 |
| | 5. 50 U.P. strength (containing 28.53% alcohol) | Per litre Per L.P. litre | Rs. 125 Rs. 250 |
| | 6. 70 U.P. strength (containing 17.12% alcohol) | Per litre Per L.P. litre | Rs. 22 Rs. 72 |

| Cigarettes (all kinds of cigarettes made from tobacco): | | | |
|--|---|-----------------------|----------|
| 2. | 1. In up to 70 mm length | | |
| | i. Without filter | Per M | Rs. 294 |
| | ii. With filter | Per M | Rs. 657 |
| | 1. In more than 70 mm up to 75 mm length (with filter) | Per M | Rs. 839 |
| | 2. In more than 75 mm up to 85 mm length (with filter) | Per M | Rs. 1075 |
| | 3. In more than 85 mm length (with filter) | Per M | Rs. 1463 |
| 3. | Motor vehicles: | Price per cent | |
| | a. Cars, Jeeps and Vans (customs headings 8702 and 8703) and their chaises (customs heading 8706) | Price per cent | 60 |
| | b. Microbuses (11–14 seats) (customs headings 8702 and 8703) and their chaises (customs heading 8706) | Price per cent | 55 |
| | c. Double cab pick-up (customs heading 8702) and their chaises (customs heading 8706) | Price per cent | 60 |
| | d. Three-wheeler auto rickshaw (customs heading 8703) and their chaises (customs heading 8706) | Price per cent | 55 |
| | e. Single cab pick-up (customs heading 8704) and their chaises (customs heading 8706) | Price per cent | 50 |
| | f. Delivery van (customs heading 8704) and their chaises (customs heading 8706) | Price per cent | 30 |
| | g. Minibuses (15-25 seats) (customs sub-heading 87021020) | Price per cent | 35 |
| | h. Minibuses (15-25 seats) (customs sub-heading 87029020) | Price per cent | 35 |
| | i. Customs heading 8702 including (15-25 seats) minibus chaises (customs heading 8706) | Price per cent | 35 |
| | j. Buses and trucks (customs headings 8702, 8704 and their chaises (customs heading 8706) | Price per cent | 5 |
| | k. Motorcycle (customs heading 8711) | Price per cent | 40 |

Source: Inland Revenue Department, Government of Nepal 2014.

Figure 4: Number of commodities imposed excise duty in Nepal by fiscal year



Source: Finance Bill/Ordinance 1961-62 to 2014-15, Ministry of Finance, Government of Nepal.

Following Nepal’s accession to the WTO and BIMSTEC and the implementation of SAFTA, the country was bound to reduce customs duties. In order to compensate revenue loss, excise duty was imposed on additional commodities. In this process, excise tax was imposed on 25 commodities in the fiscal year 2002-03, following which there has been continuous increase in the number of excisable commodities.

Currently in the fiscal year 2014-15, the total number of commodities on which excise duty is imposed has reached 54 (as shown in Figure 4) on the basis of volume of production or ex-factory price or both depending upon the excise structure, with ex-factory price including the costs of production and normal profit of the manufacturer.

In 2014 there were 27,879 registered excise taxpayers in the country. The IRD has categorised three tiers of classification of large, medium and small taxpayers: those with an annual turnover of more than NPR 400 million; those with a turnover between 250 and 400 million; and those with a turnover of less than 250 million. Table 4 identifies the number of excise taxpayers based on annual turnover which shows that while 99.9 per cent of all taxpayers are small, more than 80 per cent of total excise is paid by the large taxpayers.

Table 4: Segregation of excise taxpayers according to their transactions, 2014

| Category of taxpayer | Range of taxable income | Number of taxpayers |
|----------------------|-----------------------------|---------------------|
| Large | More than 400 million | 21 |
| Medium | Between 250 and 400 million | 5 |
| Small | Less than 250 million | 27,853 |
| Total | | 27,879 |

Source: Inland Revenue Department, Government of Nepal 2014.

4. Excise administration

Preece (2008) describes the system of excise administration and control mechanisms under three different headings: licensing or registration control mechanism; recording and reporting mechanism; and payment of excise and acquittal of liabilities mechanism. The administrative procedures of excise can be categorised as either physically controlled or self-assessed. The physically controlled system comprises various forced mechanisms for excise monitoring by the government/state, whereas under a self-assessed system, the taxpayers themselves determine the duty liability on the goods and produced commodities are cleared by the taxpayers voluntarily.

The traditional control system is the physical control system. Under this system, excise commodities are subject to physical control and supervision at all stages of production, distribution and sale. In low-income and middle-income countries with poor administration systems, ‘enforced compliance’ is carried out by imposing physical control over the production/manufacturing process. The system is costly for tax administrations as well as for taxpayers. The cost of physical control further increases when the potential for fraud by excise officers is considered.

The self-removal (or self-assessment) system is based on the theory of ‘trust but verify’. To accomplish this, a well-established monitoring system is put in place as part of the production and distribution process and tax authorities audit taxpayer account books periodically. The self-removal system is the modern system of excise administration under which the excisable goods/items are produced, dispatched,

imported and exported without any regulatory or administrative restrictions, controls or hindrances by the government. Under this system, the taxpayers themselves determine the duty liability on the goods and clear the goods. The self-removal system has been implemented in many countries in recent years to reduce the burden on tax administration and taxpayers. In order to implement a self-removal system, tax administrators should adopt modern technologies in order to increase the efficiency of tax collection and minimise tax avoidance and evasion.

The physical control system still prevails in some ASEAN and South Asian countries like Thailand, India and Nepal, especially on alcoholic beverages and tobacco products. India and Georgia are good examples of countries that use intensive controls on tobacco manufacturing. Until 1969, there was a physical control system in India for all excisable commodities wherein each clearance of manufactured goods from the factory was done under the supervision of the Central Excise Officers. Currently, however, the physical control system is applicable to cigarettes and *bidi* only, with a tax administrator in place around the clock in cigarette and large *bidi* manufacturing facilities. Each officer records and reports the daily production and the quantity of cigarettes/*bidis* that leaves the factory. In Georgia, the government strictly supervises the sale, transportation and storage of tobacco products.

The introduction of a self-removal system in 1996 was a watershed moment in the excise procedures in India. Now, taxpayers are allowed to quantify the duty on the basis of an approved classification list and price list, and clear the goods on payment of the appropriate duty. The taxpayers assess their tax return and the department scrutinises it or conducts a selective audit to ascertain the correctness of the duty payment. Even the classification and value of the goods may simply be declared by the taxpayers instead of obtaining approval of the same from the department. In 2000, the fortnightly payment of duty system was introduced for all commodities, which was an extension of the monthly payment of duty system introduced the previous year for small scale industries. The self-removal system is applicable to all other goods except cigarettes produced or manufactured within the country.

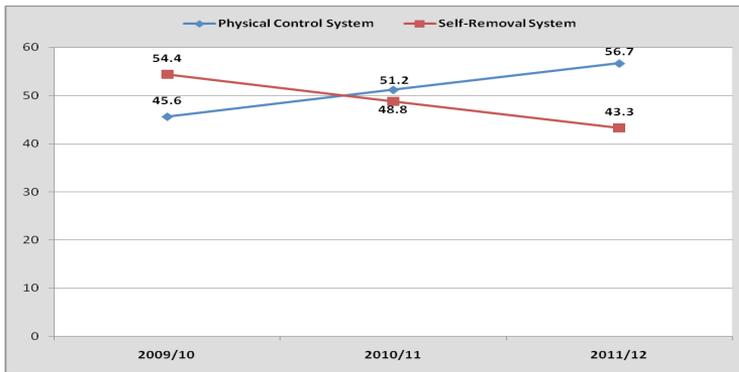
High-income countries, including the OECD countries have, in the past, adopted intensive physical controls on excisable goods. For example, whisky distilleries in Scotland once had official locks on their entrances, exits, and key areas of the production process that were vulnerable to unlawful extraction. Each distillery had a resident excise officer who lived in a provided house adjacent to the distillery, and no activity could take place without the officer being present. Similarly, in the United Kingdom each bonded warehouse used to have a resident officer who unlocked and locked the warehouse.

Currently OECD countries' excise administration is basically based on an accounting system (recording and reporting mechanism) under a self-removal procedure. Indeed, the physical control system of excise administration is essentially outdated in OECD countries. Excise is administered by relying on the taxpayer to submit tax returns and manufacturer's declaration of their production levels and then auditing the taxpayer's books of account. The high degree of compliance with excise taxes that is experienced in many high-income countries is due, at least in part, to the maintenance of a professional relationship between the taxing authority and the taxpayer. The development of such professional relationships should be part of the overall strategy to strengthen tax administration and tax compliance.

5. Excise administration in Nepal

Of the 54 categories of excisable goods in Nepal (in the fiscal year 2013-14), the manufacturing, importing and selling of molasses, alcoholic beverages (liquor and beer) and tobacco products (cigarettes and *bidi*) are administered by way of a physical control system under the Excise Act 2002. Currently, 56.8 per cent of the total excise revenue is collected from these items.

Figure 5: Excise collection under physical control system and self-removal system (%)



Sources: Ministry of Finance, Government of Nepal 2013b; Nepal Rastra Bank 2013.

Figure 5 reflects that the excise collection under the physical control system increased from 45.6 per cent in the fiscal year 2009-10 to 56.7 per cent in the fiscal year 2011-12. Conversely, the excise collection under the self-removal system decreased from 54.4 per cent in the fiscal year 2009-10 to 43.3 per cent in the fiscal year 2011-12.

Although the government has placed the manufacturing, importing and selling of molasses, alcoholic beverages (liquor and beer) and tobacco products (cigarettes and *bidi*) under the physical control system, very few factories are under the system in any real sense. This is because the government has been unable to recruit excise inspectors for each factory, and the technical expertise of current excise inspectors is lacking due to inadequate training.

Excise payers in Nepal may be categorised in two ways: as being either under the physical control or the self-removal system, and as either industrial producers or transactional excise taxpayers (excise permit holders). There are huge numbers of excise permit holders who pay only an annual licence fee, which is also regarded as excise duty. Indeed, the number of factories that fall under the excise net is small compared to the number of excise permit holders, who are engaged in transactional activities rather than industrial manufacturing.

Table 5: Number of factories under various categories, 2013-14

| S.N. | Category of industry | Number of factories |
|--|---|---------------------|
| Under physical control system | | |
| 1. | Distillery/liquor | 45 |
| 2. | Cigarette | 8 |
| 3. | Beer | 8 |
| 4. | Wine | 7 |
| Sub total | | 68 |
| Under self-removal system | | |
| 5. | Other industrial products | 630 |
| Sub total | | 630 |
| Total industrial excise taxpayers | | 698 |
| 6. | Transactional excise tax payers/excise permit holders | 27,181 |
| Total taxpayers | | 27,879 |

Source: Inland Revenue Department, Government of Nepal 2014.

Table 5 illustrates that out of 27,879 excise taxpayers in Nepal in the fiscal year 2013-14, only 698 taxpayers (25%) are classed as being part of the manufacturing sector, 68 of which are under the physical control system.

Under the physical control system, an excise inspector is posted at the factory for excise purposes, and the manufacturer is required to place raw materials, semi-processed and manufactured goods under the direct supervision of the excise inspector. The excise inspector checks the process of production, the entry of materials, etc. into the plant, and the output, testing the strength as well as the quantity. The inspector pays particular attention to all transfers of the product from the factory to the bonded warehouse or similar facility, and to transfers out of the bonded warehouse — the point at which excise becomes payable. The producer is required to send monthly and annual returns showing details such as production, sales, amount of excise duty paid and product stock, to the concerned department with the certified letter of the tax inspector posted at the factory. The goods cannot be removed from the factory premises and the warehouse without the prior approval of the excise inspector and payment of duties.

The physical control system, which is more expensive than the self-removal system from both an administration and compliance perspective, has not, however, been effective in controlling leakages in excise collection. In any event, the IRD has not been able to recruit a sufficient number of excise inspectors to monitor each factory and consequently only a few factories are under the physical control system. Furthermore, the excise inspectors that have been recruited are generally non-officer level employees who lack the necessary training and education required to effectively monitor and control production and sales. Moreover, one inspector might have to supervise more than one factory and, therefore, it is not possible for the inspector to be at each factory all the time. According to one businessman, two non-officer level tax inspectors are currently responsible for monitoring and controlling around 18 liquor factories in the Nawalparasi district.

It is considered, however, that if one inspector was recruited to monitor each factory, including the smaller ones, the cost of excise collection would be unacceptable, noting also the burden placed on the manufacturer who must provide accommodation, space and other amenities for the excise inspector. During field studies it was also observed that due to the need for excise inspectors to undertake office duties as well as factory inspections, the factory is often required to provide vehicle facilities to meet the excise inspectors' travel requirements. It is evident that the presence of an excise inspector at the factory creates inconvenience for manufacturers and furthermore, according to the business community, inspectors have been known to harass manufacturers both financially and mentally. In this regard, it was pointed out by the taxpayers during the focus group discussions that the cost became particularly high when malpractices in excise collection occur.

Realising all the problems identified above, at present both the tax administration and business community are in favour of replacing the physical control system with the self-removal system, hopefully within a period of between one and one and a half years. The replacement of the physical control system with a self-removal system should have a positive impact on revenue mobilisation. While most stakeholders are in favour of such a change, they recognise the need to improve the system of physical control until such time as the self-removal system is adopted. The potential areas of improvement under physical control system include:

- Recruiting the required number of excise inspectors in the factories
- Modifying the system of keeping raw materials, semi-processed and manufactured foods under the direct supervision of the excise inspector
- Directing more attention to those factories which pay comparatively more revenue to the government and simplifying the processes in other factories

- Simplifying the process of checking all stages, including production, entry of materials into the plant, transfer of the product from factory to bonded warehouse and output
- Training/orientating tax officers in order to reduce malpractices in tax collection.

It is considered that the transformation from the physical control system to the self-removal system should be implemented in two phases: a pilot basis phase and a national phase.

5.1 Phase I (pilot)

During the first phase, the transformation should be implemented in approximately 10 large factories based on the timeframe outlined in Table 6.

Table 6: Time framework to transfer physical control to self-removal system

| S.N. | Activities | Time duration | Responsible agency |
|------|--|-----------------|---|
| 1. | Implementation of ‘Excise Software’ at fully-fledged level | 6 months | IRD |
| 2. | Development of ‘Integrated Tax Software’ | 1 year | IRD |
| 3. | Either recruit calibration technicians with IRD or replace flow meter with sticker system | 6 months | IRD |
| 4. | Uninterrupted internet accessibility at the factory for online networking | 1 year | Factories identified for transformation |
| 5. | Development of specific input-output formulas in the production process | 3 months | IRD and Department of Industry |
| 6. | Adoption of the enhanced/digital tax stamp scheme | 2 years | IRD |
| 7. | Enhance the capacity of tax officers through modern training packages | 1 year, ongoing | IRD |
| 8. | Enhance infrastructure in all factories including computers, printers, internet facilities, etc. | 1 year, ongoing | Respective factories |
| 9. | Enhance the capacity of human resources in all factories through modern training packages | 1 year, ongoing | Respective factories |
| 10. | Development of online networking among IRD, IROs and producing factories | 1 year | IRD, IROs and respective factories |
| 11. | Regular supervision of the factories by the tax officers | ongoing | IRD and IROs |

5.2 Phase II (national)

Following successful implementation of the pilot, the system should be extended to all large factories, followed by medium and then small factories, based on their production capacity, annual turnover and tax paid.

A move to a self-removal system will also require several legislative changes. For example, there will need to be a legal mechanism to release goods into the market. The focus would also be on the IRD creating a set of ‘standards’ for excise businesses, which, at a minimum, would need to include:

- minimum requirements to obtain a licence – these should be stringent and only available to highly compliant businesses
- minimum level of recordkeeping systems from material purchasing through to sales into the market
- securities, bonds or guarantees to cover duty liabilities
- minimum security levels and features for licensed premises.

5.3 Control mechanisms in wine and cigarette industries

Sticker or tax stamps systems have been adopted by many countries worldwide as a way of ensuring taxpayer compliance by monitoring production and distinguishing licit excisable goods from illicit ones. Products that do not carry tax stickers are considered to be illegally produced or smuggled.

In recent years, some governments (for example, Turkey and Brazil, the State of California in the USA) have adopted a new technology for tax stamps in order to reduce the risks of counterfeit stamps, monitor domestic producers more efficiently, and increase the efficiency in information flow. The system requires manufacturers' compliance since monitoring scanners are placed at production facilities. Monitoring scanners read the tax stamps and electronically transfer the information to the Ministry of Finance. Consequently, the tax administration agency receives live information on the production, in which factories, what the brands are, when the products are produced by which factories, and other useful information for tracking, tracing and enforcement, thereby enabling tax administrators to verify manufacturers' compliance (WHO 2011).

Another alternative is a digital tax stamp. Similar to the banderole stamps, digital tax stamps provide an effective tracking and tracing system to reduce tax evasion. They carry information about the brand and manufacturer's name, the facility where the products are produced, and the time the stamp was produced and purchased, so that the product can be traced back to its source. The main difference between the two high-tech stamps is in the way they operate. With the banderoles, the Ministry of Finance receives all information live as the commodities are being produced. The digital system, on the other hand, requires distributors to place an order via a secure connection to a designated government authority. After the authority verifies and approves the order, the distributor fulfils the order by delivering encrypted codes and authorising digital stamps. However, it is not clear how the authority verifies the order. It is the distributors that print the digital stamps prior to shipping to retail outlets (WHO 2011).

According to the tax officers at IRD, the sticker system has been successful in increasing revenue collection. The cost of stickers is at a reasonable level compared to revenue collection. The cost-revenue ratio of a sticker related to excise duty is around one per cent. Since the sticker is also used to collect VAT and income tax, the cost of the sticker becomes around 0.4 per cent of the total revenue collection. However, there are some problems which need to be addressed, such as the poor quality glue used in the stickers, the lengthy procurement process (compared to the global tender scheme), the problems associated with the initially widespread use of duplicate/fake stickers (although this problem has since decreased considerably), the lack of trained human resources to identify duplicate stickers, and issues related to stickers which are reused several times to evade excise.

The government should also explore the new technology, track and trace (T&T). It allows for comprehensive details about production, sale and duty payments to be recorded in the stamp and be scanned at any point in the supply chain, so the status of goods can be verified and the point when they went 'missing' can be identified if there has been an attempt at tax evasion.

5.4 Control mechanisms in breweries

Another issue is the flow meter system which was introduced in breweries in the fiscal year 2008-09. The flow meter directive has various provisions, including the installation of flow meters, checking quality conditions, calibrating, licensing, repairing, assessment and monitoring, software and networking.

According to tax officers and the business community, the flow meter system has not been successful, the main reasons being:

- Installation of flow meters with inadequate preparation particularly without proper IT networking among factories, IROs and IRD
- Lack of interdepartmental cooperation
- Lack of training of tax officers
- Lack of ownership by the factory and management
- Lack of infrastructure
- Lack of technical human resources with Nepal Bureau of Standards for calibration processes
- Lack of initiation taken by manufacturers for undertaking repairs
- Failure to fully implement excise software.

Therefore, it is necessary to address these problems. It is essential to either recruit calibration technicians with IRD to ensure the proper functioning of flow meters, or replace the flow meter system with a sticker system, which has the benefit of a multi-stage monitoring mechanism comprising tax authorities, police and consumers.

5.5 Revenue leakage

Despite legal and administrative provisions to control leakage, the significant leakage and corresponding loss of revenue is frequently reported. Although it is difficult to quantify the extent of the leakage as there is no national survey conducted on excisable products, the IRD believes that the leakage amounts to more than 40 per cent annually. This significant proportion is attributed largely to the illegal production of low quality liquor at the domestic level, smuggling of foreign liquor and cigarettes in the domestic market, and lack of effective monitoring and follow up. The Auditor General has reported that: the licences of some of the manufacturers have not been renewed for five years and the department does not know their existence, indicating lack of monitoring and follow up; the recovery from tobacco to manufacturers for different brands is grossly underestimated; and the exemption of production loss during the production process is claimed by the manufacturer and is largely not verified by the IRD. Methods of excise evasion are: illicit distillation; selling alcoholic products without a licence; under reporting of production and sales; quantity and quality manipulation by not showing the actual record of raw material imports; local raw materials used in production; and removal of final products (Ghimire 2006).

Apart from excise evasion and leakages in liquor, there has also been leakage in other excisable products, such as self-removal products, and duplicate wine and cigarette imports from Tibet. Therefore, further studies are required regarding the magnitude of excise evasion and leakage in Nepal.

Attention must also be given to the risks of evasion through smuggling or illicit production. Smuggling is easiest for bulk goods of high value but may occur for a wide range of items where borders are long and lightly policed. In these conditions it may be advisable to hold tax rates close to those in neighbouring countries that might be a source of smuggling. Illicit production is a problem mainly in the case of beer, toddy, and distilled spirits. The difficulty of checking these items has caused some countries to refrain from taxing certain popular beverages with low alcoholic content that compete with commercial products at the margin and no doubt has caused taxes on the latter to be kept down (Goode 1986).

There is also a large number of liquor producers outside the tax net in Nepal which is believed to represent approximately 40 per cent of the total liquor production. Illicit production has negative impacts on health due to low quality while also causing a revenue loss. The major reasons behind the non-compliance are connected with traditional liquor consumption behaviour in the country, lack of monitoring and supervision by the concerned authority, a less than effective Illicit Liquor Production Control Committee and lack of public awareness.

6. Excise and Liquor Acts and Rules

Two relevant Acts and two associated Regulations are currently operational in Nepal: the Excise Act and the Excise Duty Rules 2002; and the *Liquor Act 1974* and Liquor Rules 1976. IRD, under the Ministry of Finance, is the government authority responsible for the proper implementation of these Acts and Rules.

The key provisions of the Excise Act 2002 relate to excisable products, collection methods, and exemption of excise duty, deputation of excise inspectors, licensing processes, regulating mechanisms and penalties for wrongdoers. The related regulations, the Liquor Rules 2002 include provisions relating to licences; collection of excise duty; withholding, auction and forfeiture of property and auction sale; power to forfeit product or property; functions, duties and powers of excise duty officers and licensees; and special provisions relating to cigarette and *bidi*, liquors and loaf-sugar and molasses.

Similarly, the key provisions of the Liquor Act 1974 relate to the production, sale and distribution, export and import of liquor; licences; powers of officers, penalties, forfeiture and sale of liquor and other goods; rewards and power to frame rules. The provisions of the associated Liquor Regulations 1976 relate to licence applications for production, sale and distribution, exporting and importing liquor; duration and renewal of licences; renewal fees; timing and restriction of liquor sales and distribution; and conditions for non-licence provisions.

Of the 18 articles contained in the Liquor Act 1974, almost all articles are more or less included either in the Excise Act 2002 or the Excise Duty Rules 2002. The Excise Act, in Chapter 7 under the heading of 'special provisions relating to liquors' has eight Articles, which define the various rules very clearly, with several of these special provisions having been derived from the Liquor Act. As there are negligible differences between the Excise Act and the Liquor Act, for the purposes of clarity and simplicity, it is considered appropriate to merge these two Acts and Rules in order to create a single piece of legislation.

7. Conclusions and recommendations

The study has identified two key issues. First, the physical control system is significantly more costly than the self-removal system in terms of both administration and compliance. Second, the non-officer level excise employees lack training and education and are unable to effectively monitor and control excise production and sales. It is therefore considered that an urgent need exists to replace the current physical control system with a self-removal system. In this regard, a phased approach is recommended, commencing with ten of the larger factories. In the meantime, options to simplify the complex arrangements associated with the physical control system should be examined, as well as options for improving control mechanisms relating to alcohol and tobacco, including the adoption of enhanced and digital tax stamps.

In addition, the need has been identified for further studies to be conducted into the magnitude of excise evasion and leakage. Finally, as many of the provisions of the Excise Act, Liquor Act and associated regulations are similar in nature, it is recommended that these be merged, thereby creating a single Excise Act in line with international practices.

References

- Crossen, S 2005, 'Economics and politics of excise taxation', *Tax Notes International*, vol. 38, no. 7, pp. 595-606.
- Due, JF & Friedlaender, AF 1994, *Government finance: economics of the public sector*, AITBS Publishers & Distributors, Delhi.
- European Union (EU) 2006, 'Functional excise system specifications: excise movement and control system', EMCS Information Papers, European Commission, Taxation and Customs Union.
- Ghimire, MP 2006, 'Study on excise duty', Economic Policy Network Policy Paper 18, Ministry of Finance, Government of Nepal and Asian Development Bank, Kathmandu.
- Goode, R 1986, *Government finance in developing countries*, Tata McGraw Hill Publishing, New Delhi.
- Government of Bangladesh 1890, *The Excise (Malt Liquors) Act, 1890*, Government of Bangladesh.
- Government of Bangladesh 1944, *The Excises and Salt Act, 1944*, Government of Bangladesh.
- Government of India 1944, *The Central Excise Act, 1944*, Government of India.
- Government of India 1985, *The Central Excise Tariff Act, 1985*, Government of India.
- Government of Nepal 1989, *Economic survey 1988-89*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2006-07 to 2013-14, *Economic ordinance*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2011a, *Economic survey 2010-11 Statistical Tables Volume II*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2011b, *Budget speech*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2012a, *Excise Duty Act 2002*, Inland Revenue Department Kathmandu, Government of Nepal, Kathmandu.
- Government of Nepal 2012b, *Excise Duty Directive 2012*, Inland Revenue Department, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2012c, *Excise Rules 2002*, Government of Nepal, Kathmandu.
- Government of Nepal 2012d, *Liquor Act 2002*, Government of Nepal, Kathmandu.
- Government of Nepal 2012e, *Liquor Rules 2002*, Inland Revenue Department, Government of Nepal, Kathmandu.
- Government of Nepal 2012f, *Budget speech*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2013a, *Budget speech*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2013b, *Economic survey 2012-13*, Ministry of Finance, Government of Nepal, Kathmandu.
- Government of Nepal 2014, *Budget speech*, Ministry of Finance, Government of Nepal, Kathmandu.
- International Monetary Fund (IMF) 2013, 'Philippines: selected issues', Country Report No. 13/103, IMF, Washington, DC.
- National Board of Revenue 2013, Bangladesh.
- Nepal Rastra Bank 2013, *Quarterly Economic Bulletin*, vol. 48, mid-October, no. 1, Nepal Rastra Bank, Kathmandu.
- Organisation for Economic Co-operation and Development (OECD) 2012, 'Consumption tax trends 2012: VAT/GST and excise rates, trends and administration issues', OECD Publishing, Paris.
- Organisation for Economic Co-operation and Development (OECD) 2014a, 'Dataset: Revenue statistics: comparative tables', OECD ilibrary.

- Organisation for Economic Co-operation and Development (OECD) 2014b, 'Revenue statistics in Asian countries 2014: trends in Indonesia and Malaysia', OECD Publishing, Paris.
- Pant, HD 1985, *Excise taxation in Nepal*, Hari Dhoj Pant, Kathmandu.
- Prasad, KD 1987, *Taxation in ancient India*, Mittal Publications, Delhi.
- Prasad, US 2008, 'Impact of new economic policies on the fiscal sector and its implications on poverty reduction in Nepal', PhD thesis, Centre for Economic Studies & Planning, School of Social Sciences, Jawaharlal Nehru University.
- Preece, R 2008, 'Key controls in the administration of excise duties', *World Customs Journal*, vol. 2, no. 1, pp. 73-92.
- Preece, R 2012, 'Excise taxation of key commodities across South East Asia: a comparative analysis ahead of the ASEAN Economic Community in 2015', *World Customs Journal*, vol. 6, no. 1, pp. 3-16.
- Republic of Singapore 2013, *Economic survey of Singapore 2012*, Ministry of Trade and Industry, Republic of Singapore.
- Stiglitz, JE 2000, *Economics of the public sector*, WW Norton, New York.
- Sunley, ME, Yurekli, A & Chaloupka, FJ 2000, 'The design, administration and potential revenue of tobacco excises', in J Prabhat & Frank J Chaloupka (eds), *Tobacco control in developing countries*, Oxford University Press and World Bank, p. 416.
- Supreme Audit Institute (SAI) of India 2013, *Indirect taxes: central excise and service tax*, Report Number 17, Comptroller and Auditor General of India, SIA of India.
- Tresch, RW 1981, *Public finance: a normative theory*, Business Publication, Texas.
- Unnayan, O 2013, 'Revenue mobilisation and economic growth', *Bangladesh Economic Update*, vol. 4, no. 11.
- World Health Organization (WHO) 2011, *WHO Technical manual on tobacco tax administration*, WHO, Geneva.
- Zhou, LZ, Tam, J & Heng-Contaxis, J 2013, *The introduction of goods and services tax in Malaysia: a policy analysis*, Centre for Public Policy Studies, Asian Strategy & Leadership Institute, Kuala Lumpur.

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