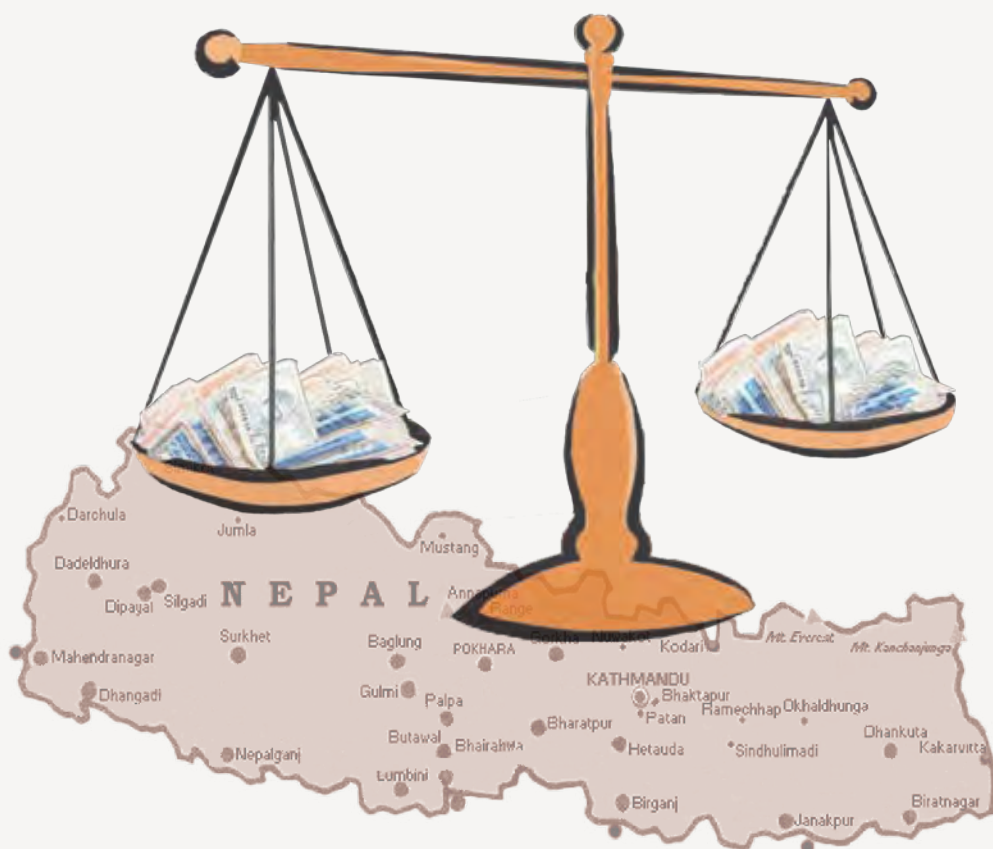


# Key Elements of a New Fiscal Regime in Federal Nepal



**D.K. Srivastava**



Forum of  
Federations  
[www.forumfed.org](http://www.forumfed.org)

# Key Elements of a New Fiscal Regime in Federal Nepal

D.K. Srivastava  
Madras School of Economics  
Chennai, India

Prepared for the Forum of Federations  
February 2011

© Forum of Federations 2011  
ISBN: 978-0-9809150-7-5

Key Elements of a New Fiscal Regime in Federal Nepal  
By D.K. Srivastava

For more information about the Forum of Federations and its publications,  
please visit our website: [www.forumfed.org](http://www.forumfed.org).



Forum of Federations  
700- 325 Dalhousie  
Ottawa, Ontario (Canada) K1N 7G2  
p. 613-244-3360  
[forum@forumfed.org](mailto:forum@forumfed.org)

Financial support for this publication is provided by the Swiss Agency for Development and Cooperation (SDC)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

**Swiss Agency for Development  
and Cooperation SDC**

# Contents

Abstract	5
Acknowledgments	6
Acronyms and Abbreviations	7
List of Tables	7
List of Charts	8
1. Introduction	9
2. Emergence of the Second Tier: Organization of Provinces	11
3. Assignment of Resources and Responsibilities	16
4. Vertical and Horizontal Imbalances	22
a. Vertical Imbalance	22
b. Horizontal Imbalance	23
5. Fiscal Transfers: Institutional Arrangements and Design of Transfers	29
a. Institutions	29
a1. Financial Commission	30
a2. Local Bodies Fiscal Commission	30
a3. Natural Resources Commission	32
b. Design of Fiscal Transfers	34
b1. Equalization Transfers in Canada	35
b2. Equalization Transfers in Australia	36
b3. Swiss Fiscal Transfer System	37
b4. Finance Commission Transfers in India	39

6. Administrative Restructuring and Capacity Building	45
a. Provincial-Level Administration	45
b. New Institutions of Fiscal Federalism	46
c. Accounting and Auditing in the New Fiscal System	46
d. Restructuring of the Central Government	47
i. Information and Data: Bureau of Statistics	47
7. Fiscal Federalism and Economic Growth	47
a. Decentralization and Growth: Perspective from Literature	48
b. Growth Experience in Nepal: Recent Years	49
c. Size of Government and Fiscal Parameters in Nepal	51
d. Fiscal Federalism and Growth in Nepal: Prospects	53
8. Concluding Observations	55
Annex 1: Equalization in Canada	60
Annex 2: Equalization in Australia	62
Annex 3: Revenue Sharing and Grants in India	65
Annex 4: Glossary	67

## Abstract

Nepal is undergoing a major transition toward introducing a system of democratic and federal governance. The transition toward fiscal federalism will have two inter-linked phases: Phase 1 will consist of structural changes dealing with reorganization of the country into provinces, assignment of resources and responsibilities to the different tiers of government, and institutional arrangements for dealing with the emerging vertical and horizontal imbalances. In Phase 2, the design of fiscal transfers, administrative restructuring, issues of cooperation and coordination among provinces and between the centre and the provinces, and capacity building will need to be put in place.

The basic innovation in the fiscal order will be the delineation of provincial governments in terms of their geographical boundaries, responsibilities and resources. Given the present indications, we expect that both expenditures and revenue resources are likely to remain highly centralized, although there would be some reduction in the present degree of centralization. Given the assignment and regionally imbalanced spread of economic activities, there is likely to be a high degree of vertical and horizontal imbalance, at least in the medium term. These imbalances will need to be resolved by a mechanism of fiscal transfers. In this context, the recommendations of the Constituent Assembly Committee on Natural Resources, Economic Rights and Revenue Allocation for the Establishment of a Financial Commission and Natural Resources Commission will have a critical role to play. A good deal can be learned from the systems and methodology of transfers in well-established federal systems like those of Canada, Australia and India, among other countries.

The success of the federal system of governance will depend not only on the successful delivery of public services such as defence, and merit services such as education and health, but also on laying the foundation for stronger and regionally better balanced economic growth. The key challenges will be to provide reasonably efficient provincial-level administration, create capacities in the Financial Commission and the Natural Resources Commission, and set up machinery for collection and compilation of data, the design of fiscal transfers, and mechanisms of inter-provincial and centre-province cooperation and coordination.

## Acknowledgments

I would like to thank the Forum of Federations for giving me an opportunity to study the economy and government finances in Nepal in this crucial phase of transition toward fiscal federalism. I particularly benefited from interactions with George Anderson, Werner Thut and Rupak Chattopadhyay of the Forum of Federations in the initial stages of discussion. While in Nepal, I received considerable support from Irina Shmakova, Vickal Deep Khadka and other members of the team at the Forum of Federations' Nepal Country Office, and I had useful discussions with Wolf Linder.

In addition to this, I had fruitful and instructive discussions with: Ram Sharan Mahat, former finance minister and member of the Constituent Assembly; Hari Roka, member of the Constituent Assembly; Bipin Adhikari, constitutional expert; Budhi Karki, senior lawyer, Support to Participatory Constitution Building in Nepal project, UNDP; Khem Prasad Dahal, acting auditor general, Office of the Auditor General; Mahesh S.J.B. Rana, president of Corporate Forum Nepal; Shiva Bahadur Rayamajhi, secretary, Local Bodies Fiscal Commission; Santa Raj Subedi, joint secretary, Ministry of Finance; Ganga Prasad Sharma, joint secretary, Ministry of Finance; Shahid Parwez, programs/project implementation officer, Nepal Resident Mission, Asian Development Bank; Puspa Raj Kandel, Faculty of Management, Tribhuvan University; Bhola Nath Chalise, former secretary, Government of Nepal; Uttam Narayan Malla, director general, Central Bureau of Statistics; Madan Kumar Dahal, Central Department of Economics, Tribhuvan University and the head of the Nepal Economic Association; and participants in roundtables held on August 12 and 13, 2010, on various issues relating to the transition to fiscal federalism in Nepal, both held at the Radisson Hotel in Kathmandu.

Needless to say, while I have benefited considerably from these discussions, any errors, whether of facts or perception, are entirely mine.



D.K. Srivastava

## Acronyms and Abbreviations

<b>ADB:</b>	Asian Development Bank
<b>ARC:</b>	Administrative Restructuring Commission
<b>CA:</b>	Constituent Assembly
<b>CAG:</b>	Comptroller and Auditor General
<b>CBS:</b>	Central Bureau of Statistics
<b>CCI:</b>	Council of Common Interests (Pakistan)
<b>CGC:</b>	Commonwealth Grants Commission
<b>DDC:</b>	District Development Committee
<b>DFID:</b>	Department for International Development (Britain)
<b>FCGO:</b>	Financial Comptroller General Office
<b>ILO:</b>	International Labour Organization
<b>LBFC:</b>	Local Bodies Fiscal Commission
<b>MCPM:</b>	Minimum Conditions and Performance Measures
<b>NDC:</b>	National Development Council (India)
<b>RTS:</b>	Representative Tax System
<b>VDC:</b>	Village Development Committee
<b>WEC:</b>	Water and Energy Commission

## List of Tables

Table 1:	Development Regions and Zones of Nepal
Table 2:	List 1: Expenditure Responsibilities
Table 3:	List 2: Assignment of Revenue Resources
Table 4:	Main Sources of Central Tax Revenue: Relative Importance
Table 5:	Revenue of Local Bodies Relative to National Revenue
Table 6:	Central Revenue Mobilization: Region-wise Profile
Table 7:	Public Expenditure According to Regions and Ecological Belts
Table 8:	District-wise Share of Population in Total Population: Selected Districts
Table 9:	Central Revenue Mobilization: District-wise Share: Selected Districts
Table 10:	Criteria and Weights for Unconditional Block Grants Used by LBFC



Table 11: Criteria-based Sharing of Central Taxes with Provinces in India: Four Recent Finance Commissions

Table 12: Alternative Versions of the Gadgil Formula

Table 13: Economic Growth Rates of Nepal and Neighbouring Countries

Table 14: Sectoral GDP Growth Rates in Nepal

Table 15: Sectoral Composition of GDP in Nepal

Table 16: Composition of Government Expenditure in Nepal

Table 17: Government Expenditure and Revenue Relative to GDP in Nepal

## List of Charts

Chart 1: State Restructuring Plan: Constituent Assembly Committee on State Restructuring and Distribution of State Power

Chart 2: Region-wise Share in Public Expenditure

Chart 3: Share in Public Expenditure Relative to Population According to Ecological Belts

# 1. Introduction

Nepal's interim constitution has provided for a democratic and federal Nepal. At its first meeting, on May 29, 2008, the Constituent Assembly (CA) formally declared Nepal a Federal Democratic Republic. Article 138 of the Interim Constitution expresses the commitment to eliminate "the centralized and unitary form of the state" as a means to end discrimination. The progress since then has been slow, but political parties, members of the Constituent Assembly, academics, think tanks and bureaucrats have constantly discussed and debated about the nature and type of federal structure that Nepal should adopt. The committees of the CA have been working on various related aspects, although there has been a kind of political stalemate holding back further tangible progress for some time. Basic preparations for the key fiscal arrangements have been making progress. Once some of the immediate political issues are resolved, progress toward a federal structure is likely to gather momentum and fiscal federalism will constitute a key component of Nepal's future economic prosperity and its people's welfare.

Federalism as a system of governance, with fiscal federalism as its key component, will provide a new fiscal framework for Nepal. Within this framework, governments at different tiers will work toward providing a more equitable and efficient supply of public goods, such as judiciary and administration, as well as merit services, such as education and health, to citizens in different provinces and stronger, more equitable and regionally better balanced economic growth. Such a system has been adopted by many modern nations, big and small. Nepal will also need to develop its own federal fiscal structure, suited to its special features, in terms of geography, ethnic composition, locational patterns of economic activity, and availability of natural resources.

Political and fiscal federalism will need to evolve at the same time. As political powers are devolved to the provinces, this will create more political space to absorb the competition for power. The new fiscal system in Nepal will inevitably take into account the changing face of modern economies, characterized by globalization, widespread use of information technology, a significant role for markets and the private sector, and the growth of the service sector. At the same time, the new governance structure should unleash the so far dormant growth potential of the Nepalese economy by harnessing the massive hydro-power potential, forest resources, agricultural potential and human capital. In Nepal, not only is average economic growth low compared with that of some nearby Asian countries, but many areas also remain quite underdeveloped. Government capacities are limited and remote areas of the country are underserved. A recent ADB-DFID-ILO study entitled *Development Constraints in Nepal* (2009) observes that "Compared with other countries in South Asia, Nepal's government is small, centralized, and has relatively low capacity to reach beyond the Kathmandu Valley, which constrains delivery of public services to a majority of the population. Many positions in the government, especially in remote districts, remain vacant." The expectation from the federal

system is that it will improve the geographic spread of economic growth and extend the reach of government services more evenly, even to remote areas of the country.

Fiscal federalism can potentially provide the framework for unlocking this potential by ensuring peace and harmony, and providing a means of expression for ethnic and regional preferences and priorities. Fiscal federalism is an idea which asserts that in a multi-tier structure of governance, central and sub-national governments work as economic players, competing, cooperating and coordinating with each other within a set of rules to promote the welfare of the citizens by equitable and efficient delivery of services. In the case of Nepal, provincial governments also would be required to increase economic growth and the per capita incomes of their citizens. In the traditional theory of fiscal federalism (e.g. Oates, 1999), the three main areas are (a) welfare gains from decentralization; (b) assignment of resources and responsibilities between different tiers of government; and (c) fiscal instruments for the resolution of vertical and horizontal imbalances. The modern extensions of the idea of fiscal federalism deal with areas such as fiscal competition among jurisdictions, political economy aspects of fiscal federalism, market preserving fiscal federalism (Weingast, 1995), environmental federalism (Oates, 2001), and the impact of fiscal decentralization on growth.

Nearly 40 per cent of the world's population, in about 25 countries, have adopted federal frameworks of governance. Internationally, many well-established federal countries have continued to evolve and change. In India, for example, the number of states has continued to change over time. In Australia, the new Intergovernmental Agreement has made the entire Goods and Services Tax (GST) revenue distributable among the provinces. It is important to not think in terms of a "frozen" constitution, but rather a framework that provides for change.

This paper looks at the key elements of a new fiscal regime in Nepal, which will facilitate the transition toward fiscal federalism. This transition can be considered in two interlinked phases: Phase 1 will consist of structural changes dealing with reorganization of the country into provinces, constitutional assignment of resources and responsibilities to the different tiers of government, and institutional arrangements for dealing with the emerging vertical and horizontal imbalances. Phase 2 will be the implementation phase after Phase 1 has been successfully completed. In Phase 2, the design of fiscal transfers, administrative restructuring, issues of cooperation and coordination among provinces, and between the centre and the provinces, and capacity building will need to be put in place. The success of the federal structure will depend not only on the constitutional framework, assignment of resources and responsibilities, and an institutional framework for fiscal transfers, but also on delivering economic outcomes that augment the welfare of people by equitable and efficient delivery of services and by increasing overall economic growth, with a better regional balance.

This paper has eight sections. Section 2 deals with the possibilities and issues in regard to creation of provinces in Nepal. Section 3 looks at the issue of assignment of

revenue powers and responsibilities to the different tiers of government. Section 4 examines the nature of emergent vertical and horizontal imbalances. Section 5 argues for the need for suitable institutions, including a Finance Commission to redress vertical and horizontal imbalances, and the design of fiscal transfers to resolve these imbalances. Section 6 looks at the need for creating capacity for the successful operation of the federal system. Section 7 examines the impact of the new fiscal regime on economic growth in Nepal. Concluding observations are provided in Section 8.

## 2. Emergence of the Second Tier: Organization of Provinces

In Nepal, the first critical step is to determine the federal structure of governance, whose key feature will be the emergence of a second tier of government at the level of the provinces. In Nepal's new governance structure, provinces will be the innovation, and it appears that District Development Councils (DDCs) will be discontinued. Critical for the federal experiment's success will be for the provinces to deliver stronger growth and better public and merit services to their residents. The comparative advantage of the provinces will be that they will be bigger than the DDCs and they will express regional goals more effectively. While the districts deal mostly with recurrent expenditures, the provinces will have larger revenue bases and will deal with recurrent and capital expenditures as well as broader investment and economic policy.

Various political parties, academics and other stakeholders have considered different ways of organizing the country into provinces. In Nepal, the basis for a federal structure is being discussed and has yet to be decided, but the proposed federal structure will probably have at least three tiers of government and could potentially also have union territories and autonomous areas. Different levels of government will have autonomous responsibilities protected by the constitution. State restructuring is being talked about on the basis of ethnic, linguistic, economic, geographic and topological considerations. Different suggestions offer alternative organizational structures, ranging from three to about 15 provinces (Sharma and Khanal, 2009).

The Committee on State Restructuring and Distribution of Power of the Constituent Assembly has recommended an organization of the country with 14 provinces (see Chart 1). Different political parties have also suggested their own state-organization structures, either in terms of concrete proposals or broad generalities. Sharma and Khanal (2009) provide a review of some of the 50 such proposals presented by different authors, organizing these models in terms of objectives, principles/criteria, data and level of information, geographical delineation, and the proposed tiers of government.

Two issues are important in state restructuring in Nepal: ethnicity and economic viability. Nepal has not only a large number of ethnic and caste communities but also considerable regional differences in the availability of natural resources and concentration of economic activities. Considering Nepal as a whole, using information provided by the Central Bureau of Statistics, based on census data, the main ethnic groups are Chhetri (15.8 per cent), Brahmin (hills) (12.74 per cent), Magar (7.14 per cent), Tharu (6.75 per cent), Tamang (5.64 per cent) and Newar (5.48 per cent). Figures in brackets are each group's respective share of the total population. But in sheer number, there are many ethnic groups. The organization of the country in terms of provinces is therefore not a straightforward exercise. Apart from ethnicity, state organization has also been suggested on a linguistic basis. This was the basis used in India when the restructuring of states was worked on in 1956, although some of the larger states were not carved out entirely on this basis.

A sense of the regional heterogeneity in Nepal may be obtained by looking at regional and zonal differences. There are three ecological zones – mountains, hills and plains. There are five development regions, 14 zones and 75 districts. Table 1 provides information about the development regions and zones. It has been observed that in Nepal, poverty moves from south to north and productivity increases from west to east. Pyakuryal, Dahal, Nepal, Adhikari, and Gautam (2009), Sharma and Khanal (2009), and Bhurtel (2009) provide insightful discussions of some of the relevant issues in this context.

Table 1: Development Regions and Zones of Nepal

Development Regions	Zones
Eastern Region (Purwanchal)	Kosi
	Mechi
	Sagarmatha
Central Region (Madhyamanchal)	Bagmati
	Janakpur
	Narayani
Western Region (Pashchimanchal)	Dhawalagiri
	Gandaki
	Lumbini
Mid-Western Region (Madhya Pashchimanchal)	Bheri
	Karnali
	Rapti
Far-Western Region (Sudur Pashchimanchal)	Mahakali
	Seti

Source: Central Bureau of Statistics, Government of Nepal

The disparity between development regions' shares of gross domestic product is high. A 2009 ADB-DFID-ILO study of development constraints in Nepal looked at the country's regional economic disparities. Data indicate that the Central Development Region accounted for about 42 per cent of GDP in 2001, while the Mid-Western and Far-Western Development Regions together accounted for only about 18 per cent. Similarly, the Eastern and Western development regions accounted for only about 21 per cent and 19 per cent of GDP, respectively. This means that in terms of economic size as measured by GDP, the Central Region is more than five times as large as the Far-Western Region. Measured in 2000 U.S. dollars, the per capita GDP of Nepal was reported in this study to be \$225 U.S. At the lower end, the per capita GDP of the Mid-Western Region was close to \$175 U.S. while that of the Central Region was nearly \$275 U.S. Production in most sectors is concentrated in the Central Development Region – the exceptions are agriculture, fisheries and forestry; trade, hotels, and restaurants; and finance and real estate. Disparities are more sharply pronounced when comparison is made in terms of per capita district incomes. In a recent study on poverty and inequality in Nepal, Acharya and Sangraula (2009) observed: "Equally appalling is how asymmetrically economic opportunities are distributed across regions and across different ethnic, language and caste groups." They also observe that the average per capita income of Kathmandu is more than double than that of Annapurna which is the second richest region.

In the Eastern Region, infrastructure and economic activities have been developing at a fast rate. The Eastern Region is geographically diverse with plains, hills, and mountains. The plains in the Tarai area are suitable for agriculture, the hills are suitable for cash crops, and the mountains can provide medicinal herbs and hydroelectric-power potential, as well as mineral resources such as copper, iron and precious stones. The region has been successful in developing agro-based products such as tea, cardamom, ginger and medicinal herbs. Cities in the eastern Tarai, such as Biratnagar, serve as economic hubs. In terms of infrastructure, the region has a regional police office, an appeals court, a regional administrative office and medical colleges, as well as transportation, electricity and telephone services. The Western regions are less developed. The Central Region has more developed cities and a service-centric regional economy. Whatever criteria are used for setting provincial boundaries, some asymmetry in levels of development and economic activities among the provinces seems unavoidable.

The Madhesi parties have been demanding a single Madhes province across the plains. The Maoists have proposed 14 predominantly ethnicity-based provinces. The Nepali Congress and Communist Party of Nepal (Unified-Marxist Leninist) still do not have a roadmap outlining the organization of provinces. However, they have given broad indications, including being explicitly opposed to organizing provinces on an ethnic basis. If ethnicity and/or linguistic identities are used as the basis of organization of provinces, the rights of the minorities in these provinces will need to be protected, and equal opportunities for their participation in economic activities will need to be

provided for. The proper management of linguistic and ethnic diversity in each province will require careful attention.

Of all the proposals, the one made by the CA's Committee on State Restructuring and Distribution of State Power, although by no means a finalized proposal, is a relevant starting point (Chart 1 on facing page). In this proposal, some of the existing districts are bifurcated, which will have implications for the administrative reorganization, the collection of data and other related aspects.

With regard to the organization of provinces, some of the basic issues being discussed are:

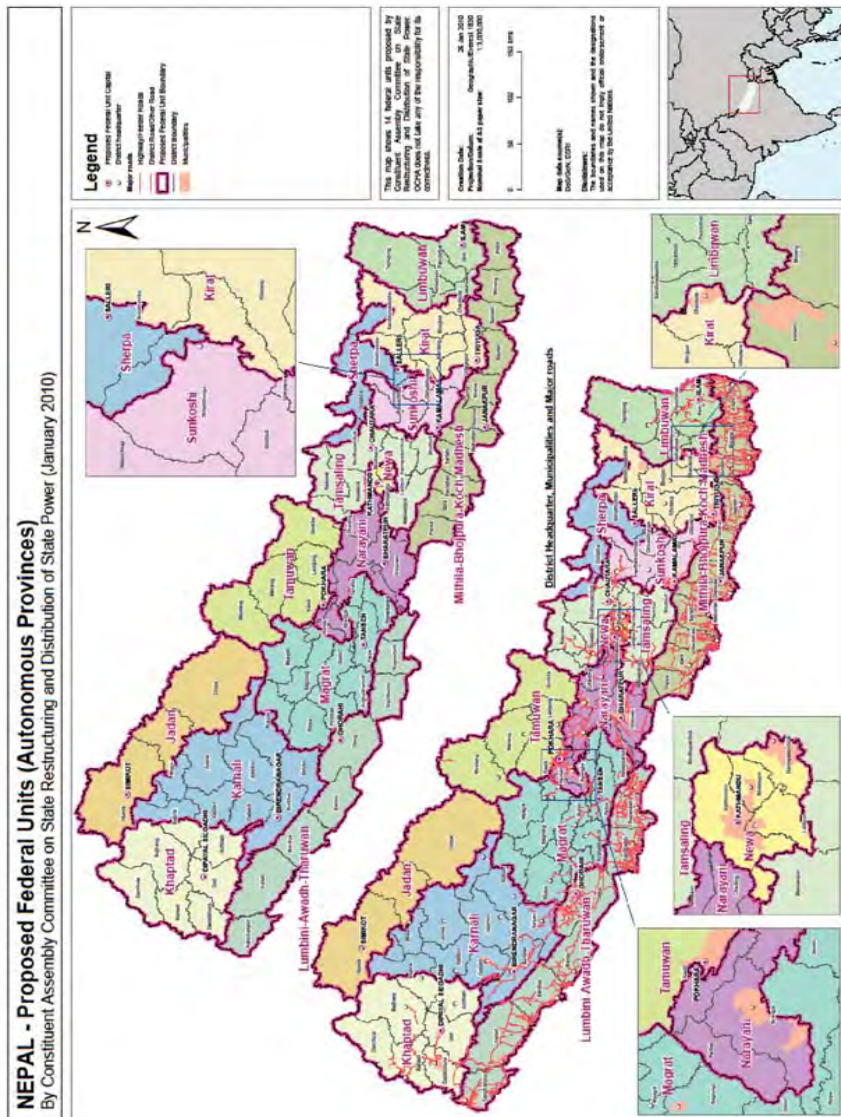
- a. Whether too many provinces will prove to be economically viable, implying that several may become extremely dependent on the centre.
- b. Many of the Madhesi communities are asking for one single Madhes State, which some fear will be too large compared with other provinces.
- c. If the organization is on an ethnic basis, whether the rights of other minorities will be protected.
- d. The larger the number of provinces, the greater will be the cost of administering them.

Eventually, the CA will have to make a decision on this issue, which may be best resolved by consensus. It is relevant to recall that many countries have taken considerable time to decide on the organization of their provinces. The number of states in India, for example, has evolved over a long period through constitutional amendments. However, adequate provision for such amendments needs to be made in the constitution as it is difficult to anticipate all the issues that may emerge and the way provincial economies will evolve. The process of reorganization of provinces is often preceded by long periods of discussion, debate and sometimes conflict, with the people of a region who are asking for the creation of a province by carving out areas from one or more provinces, making the political and economic case for such reorganization.

Along with the provinces, the third tier of the government will be a key constituent of Nepal's new fiscal scenario. It appears that the District Development Committees (DDCs) will be dissolved. The municipalities in the urban areas and the Village Development Committees (VDCs) in rural areas will be the governance units of the third tier of the federal structure. DDCs and VDCs have so far had only limited success as the elections to the local bodies have not been held for nearly eight years.



Chart 1: Restructuring Plan: Constituent Assembly Committee on State Restructuring and Distribution of State Power





### 3. Assignment of Resources and Responsibilities

The theoretical framework of fiscal federalism provides some guidance for determining the assignment of resources and responsibilities for the different tiers of government in a federal structure. The theory of assignment (see, for example, Musgrave, 1959, and Oates, 1972) argues that the central government should have the basic responsibility for macroeconomic stabilization and income redistribution. This is the case because the monetary and external functions are best handled by the central government which, in turn, provides the basic instruments for handling the macro-stabilization issues related to upswings and downswings of economic cycles and inflationary pressures. The central government is also in an ideal position to provide public goods that are to be provided for the entire country. These public goods are “national” public goods such as defence or issuance of currency.

In the case of assignment, the basic issue is to determine taxes that are best suited for use at the different levels of government. More revenue resources are generally assigned to the central government. Such an arrangement provides economies of scale in the collection of taxes and uniform laws and tax rates throughout the country. But this should be supplemented by other important considerations for the successful operation of the federal arrangement. Some of the relevant considerations that should be kept in mind are the following:

- (a) **Revenue adequacy:** This implies that provinces as a whole should not be excessively dependent on transfers from the centre for fulfilling their responsibilities. Provinces should be given tax and non-tax sources that have reasonable revenue potential in relation to their assigned responsibilities.
- (b) **Avoidance of interprovincial competition:** Taxes can be a source of interprovincial competition. If a province reduces its tax rates relative to other provinces, or offers numerous exemptions, it would lead to distortions in resource allocation, as investors seek provinces with low tax rates. In a federal setting, such distortions may result in inefficiencies, as taxpayers or companies seek out provinces where they can obtain relatively favourable tax treatment. Higher excise taxes in one province would lead purchasers to bear unproductive travel costs to purchase the taxed items in provinces with lower tax rates. It may also lead to a “race to the bottom,” in which provinces attempt to out-compete each other by lowering rates or increasing exemptions. This would cause lower overall revenue and the goal of adequacy of resources for the provinces would remain unfulfilled. However, many of these potential problems can be prevented with suitable frameworks of interprovincial cooperation and harmonization. The literature on the subject of assignment points out that for provincial and

local governments, assignment of taxation powers on mobile units should generally be avoided. Analysis shows that on efficiency grounds, decentralized governments should tax mobile economic units with benefit levies (Oates and Schwab, 1991; Oates, 1996). Such economic units should pay for the benefits received from the public services provided by local governments.

- (c) **Need for maintaining a country-wide common market:** An economy-wide market is conducive to efficient resource allocation and taxation should not become a cause of hampering the free movement of goods and services from one province to another. That is why interprovincial sales of goods and services are usually assigned to the central government and are handled in a way that tax barriers are not encountered when goods and services cross provincial borders.

In the assignment of tax bases, the degree of mobility of the tax base is an important consideration. Highly immobile tax base components such as property are more easily assigned for taxation to local bodies. Sales tax on goods and services, or the Value Added Tax (VAT), can be assigned to provincial governments. In a federal context, the Value Added Tax often takes the form of a concurrent VAT with some provision for harmonization among provinces. A concurrent VAT implies that the power to levy the value-added tax is exercised simultaneously by both the central and provincial governments. It implies that the power to tax the common tax base of value added in the production and sale of goods and services vests both with the central and provincial governments. In exercising such options, it is important to ensure that interprovincial sales of goods and services are zero-rated, i.e. they are not subject to the provincial VAT if the final sale or consumption takes place in another province. It is also important that a degree of harmonization in the rates and other legal provisions is ensured. Given the administrative capacities that would be required, it may be best if the central government administers the concurrent VAT in Nepal on behalf of the provincial governments as well. Similarly, there may be some scope for the provinces to be given a role in income tax, which can have a central and a provincial component. But in this case as well, the central government could continue to administer the tax and allow the provincial component of the tax to “piggyback” on the central income tax. Alternatively, the provinces could be assured of a share in the federal income tax in the constitution and the share could be decided by an apex body like a Finance Commission. In India, for example, the value added in the production and sale of goods and services is taxed by the central and state governments and income taxes are shared with the state governments through constitutional provisions.

While some guidelines are available from the theoretical literature and empirical experiences of other federal countries with regard to assignment issues, a decision on this matter in the case of Nepal must be taken in its specific context, given current expenditure and revenue-raising practices. The successful operation of the new fiscal federal order in Nepal will require a clear delineation of responsibilities and resources of the three tiers of government. This is best done under the new constitution by spell-

ing out the subjects under different lists. The CA has already constituted a Committee on Natural Resources, Economic Rights and Revenue Allocation under Rule 66(8) of the Constituent Assembly Rules, 2008, to make recommendations with respect to the following jurisdictions:

1. Natural resources.
2. Allocation of economic resources.
3. Measurement to allocate economic resources.
4. Financial relations between different levels of government.
5. Financial equalization among the federal and provincial governments.
6. Establishment and administration of mechanisms such as the Common Financial Fund.
7. Other necessary matters relating to the jurisdiction of the Committee.

The Committee on Natural Resources, Economic Rights and Revenue Allocation of the Constituent Assembly has come out with a draft preliminary report, completed in 2009, containing recommendations concerning the assignment of resources and responsibilities within the three-tiered structure of government.

The recommended jurisdiction of the different areas of responsibility and revenue powers will no doubt be extensively discussed. Generally, in federal systems, greater responsibilities are given to provincial and local governments as they are supposed to better reflect the priorities and preferences of the citizens under their jurisdictions. The suggested division of responsibilities by the CA's Committee on Natural Resources, Economic Rights and Revenue Allocation does assign a good deal of responsibility to the federal government. As Nepal has been used to central dispensation of responsibilities through the line ministries and the district-level administration, this aspect of the transition is going to take considerable adjustment and time.

Table 2: List 1: Expenditure Responsibilities: Salient Features  
(Committee on Natural Resources, Economic Rights and Revenue Allocation)

Concurrent Jurisdiction	
Central, Provincial and Local Governments	Planning, Social development, Registration, Environment, Wetland areas
	Irrigation, Drinking Water, Agriculture, Watershed areas
	Education, Health, Electricity, Industries
	Mines and minerals, Tourism, Sports, Wildlife areas

	Protection, development and management of heritage sites
	Promotion of language/culture
<b>Central and Provincial Governments</b>	Police, Investigating institutions/academics
	Airport, Railway
	Bio-diversity
	Land management, consumption policy
<b>Provincial and Local Governments</b>	Alternative energy
<b>Central and Local Governments</b>	Family planning
<b>List 1: Exclusive Jurisdiction</b>	
<b>Central Government</b>	National security and Army, International Trade
	Telecommunications (regulation, management)
	Currency, currency policy, banking and insurance
	Immigration/foreign affairs, international treaties or agreements.
	Statistics, population, quality, standards and measurement
	International border and security, civil aviation, post office
	Secret service
	Intellectual property, labour security, labour relations and trade unions

Source: Report by the Committee on Natural Resources, Economic Rights and Revenue Allocation (2009)

Table 2 provides a delineation of broad areas of responsibilities as recommended by the CA's Committee, grouped into four categories: concurrent jurisdiction of the central, provincial and local governments, concurrent jurisdiction of the central and provincial governments, concurrent jurisdiction of provincial and local governments, and concurrent jurisdiction of the central and local governments. Concurrent jurisdiction means that more than one tier of government will have the power to make laws on the concerned subjects. Generally, if a conflict arises, it is the central law that will prevail. In the CA's proposals, given the large list of areas under concurrent jurisdiction, along with several important areas under central jurisdiction, a centralized and integrated form of federalism is likely to emerge. For its successful operation, considerable interaction between the central and provincial authorities will be necessary. The centre may even ask the provinces to administer some of the central laws. The reorganization

of civil services and the building of administrative capacity at the provincial level will depend to a high degree on the division of responsibilities among the central, provincial and local governments. In addition, there are some exclusive responsibilities for the central government. Issues of interstate cooperation are to be handled by the central government to ensure that provincial borders do not fragment the country into small markets. One country-wide integrated market should be provided and provinces should work together rather than at cross purposes.

The suggested assignment of resources is summarized in Table 3.

Table 3: List 2, Assignment of Revenue Sources (Salient Features)

<b>Federal and Provincial</b>	Excise duties
<b>Federal, Provincial and Local</b>	Service charges, royalties and other income to be generated from natural resources, punishment and fines
<b>Provincial and Local</b>	Entertainment tax, registration fees for land and housing
<b>Federal</b>	Customs duties, Value Added Tax, individual income tax
	Casino, carbon service
<b>Provincial</b>	Vehicle tax
<b>Local</b>	Land tax (land revenue), property tax, business tax

Source: Report by the Committee on Natural Resources, Economic Rights and Revenue Allocation (2009).

At the Ministry of Finance, exercises have also been carried out concerning the scheme of assignment of responsibilities and revenue sources and management of the transition. While an official view may not be available, in broad terms, the idea is that the central government should oversee national planning, highways, railroads, national and international trade and business, air transportation, other international matters, communications management and development, currency and multi-purpose projects. The provincial governments should look after agriculture, public health and sanitation, disabled people, local governance, irrigation and river management at the provincial level, provincial security (police), public administration at the provincial level, public transportation at the provincial level and provincial planning. Areas under concurrent jurisdiction are economic and social planning, social security, education, hydro power, population management, public security, public administration and planned development.

Table 4 shows the relative importance of the various sources of central tax revenues. It is clear that most of the important sources of revenue, such as customs duties, Value Added Tax and income tax, will remain with the central government, resulting in considerable centralization of tax revenue. This high degree of centralization is not unexpected in federal arrangements where the central government is given greater

taxation powers to ensure uniform legal arrangements, harmonized tax rates, and an integrated common market throughout the country. In the assignment of resources, it is important to keep in mind that unnecessary tax barriers should not be created at provincial borders and it is possible for producers and consumers to participate in a country-wide integrated market.

Table 4: Main Sources of Central Tax Revenue: Relative Importance

	2002-03	2003-04	2004-05	2005-06	2006-07
<b>Total Tax Revenue (Rs. million)</b>	42,587	48,181	54,105	57,431	71,127
<b>Taxes on income and profits</b>	8,132	9,514	10,466	10,940	15,732
<b>Taxes on property</b>	1,414	1,705	1,799	3,029	3,248
<b>VAT/sales tax</b>	13,460	14,479	18,885	21,611	26,096
<b>Excise taxes</b>	4,785	6,227	6,446	6,508	9,343
<b>Taxes on international trade</b>	14,236	15,555	15,702	15,344	16,708
<b>Others</b>	560	701	807	-1	0
<b>Share of taxes in Total Tax Revenue (%)</b>					
<b>Taxes on income and profits</b>	19.10	19.75	19.34	19.05	22.12
<b>Taxes on property</b>	3.32	3.54	3.33	5.27	4.57
<b>VAT/sales tax</b>	31.61	30.05	34.90	37.63	36.69
<b>Excise taxes</b>	11.24	12.92	11.91	11.33	13.14
<b>Taxes on international trade</b>	33.43	32.28	29.02	26.72	23.49

Source: Based on Table R4, ADB (2009)

In terms of taxation powers, some of the views being considered are that the central government may be assigned income tax, customs fees, VAT, excise duty (alcohol, tobacco), stamp duty and electricity royalties, whereas provincial governments may be assigned payroll tax, the surcharge on excise duty, inheritance tax, entertainment tax, tax on vehicles, land revenue, royalties from mines, electricity duty on power consumed within a province and royalties from hydroelectric power plants located within the province, rental tax, and royalties on forestry resources. The local governments may be assigned property tax, rental tax, alcohol and tobacco, local roads, local entertainment, local city development, and local royalties from electricity, mines and pollution.

As discussed in the next section, the assignment schemes under the CA's Committee recommendations, as in other discussions on this subject, are likely to result in considerable vertical imbalance. Vertical imbalance refers to the generation of surplus revenues relative to needs for one tier of the government (central government) and

excess of needs relative to the assigned resources for one or more tiers of government (provincial and local governments). This is, however, not unexpected. Further, vertical imbalance is often needed if the horizontal imbalances, i.e. imbalances in the fiscal capacities of the provinces, are also large and need to be corrected through a system of transfers of resources from the central government to the economically weaker provinces.

A key issue regarding the assignment of powers will be whether provinces will have the power to borrow, and whether they can borrow independently from the domestic market or international sources. Sub-national borrowing raises issues of sustainability and some framework is often needed to keep sub-national borrowing within prudent limits. In India, for example, constitutional provisions give the power to parliament to control not only the borrowing of the central government but also of state governments under certain conditions. In all likelihood, all external borrowing by provincial governments will be handled through the central government. However, there must be rules or principles that should be set up to facilitate external borrowing by provincial governments through the central government. Such borrowing should be distributed across the provinces so as to maintain a rough balance in the access to external resources in the form of loans and grants. Further, the terms and conditions on which the external loans are passed on to the provinces should be similar to what is proposed by the original donor: it is likely that loans through programs that are not commercial in nature, like a poverty alleviation program would be given on soft terms while borrowing for a power project would be handled more on commercial terms.

There are similar issues related to the access of local bodies to borrowing, particularly borrowing involving access to external assistance. Sub-national borrowing is, however, linked to issues of sustainability and optimal use of borrowed resources.

## 4. Vertical and Horizontal Imbalances

The central challenges in the operation of the new fiscal order in Nepal would be emerging vertical and horizontal imbalances caused by initial economic conditions and the assignment of resources and responsibilities.

### a. Vertical Imbalance

To determine the likely vertical imbalances, it is useful to look at the present position of revenue and expenditure centralization relative to the local governments. As shown in Table 5, local bodies raise less than six per cent of national revenue. Table 4 shows that most significant tax sources are likely to continue with the central government. If the provinces get a portion of excise duties, the share of the provincial and

local governments together may still be not substantially more than 10 per cent of the combined tax revenues. Thus, revenue centralization after the emergence of the provincial governments is likely to decline but revenue collection may still remain highly centralized. With the creation of the second tier of government, given the indications for revenue assignment, revenue will continue to be generated largely by the central government. At least, in the initial phase, a high degree of revenue centralization is likely in Nepal.

Table 5: Revenue of Local Bodies Relative to National Revenue

(Amounts in Rs.'000 - Share in %)			
Fiscal Years	2004-05	2005-06	2006-07
<b>Total Local Revenue (excluding grants)</b>	3,525,313	3,628,361	4,980,322
<b>Shares in total local revenue</b>			
District Development Councils	30	37	40
Village Development Councils	15	12	14
Municipalities	55	51	46
<b>Total National Revenue</b>	68,875,000	70,765,000	86,686,000
<b>Share of local revenue (excluding grants)</b>	5.12	5.13	5.75
<b>Share of Local revenue (including grants)</b>	10.85	13.48	17.07

Source: Adapted from Table 14, Appendix 3, ADB (2009)

In terms of expenditures as well, the degree of centralization is likely to be large, though less than the extent of revenue centralization. However, the responsibilities of the different tiers of governments have to be supported by revenue resources. As the revenue and resource bases of Nepal are unevenly distributed, sharing of revenues and resources will be one of the contentious issues in federal Nepal and it needs to be handled cautiously and judiciously.

## b. Horizontal Imbalance

The federal fiscal arrangements will also have to contend with considerable horizontal imbalance. This is because of the present pattern of concentration of economic activities and distribution of population across regions. The differences in per capita revenues generated among the provinces are likely to be large. Table 6 gives an idea of the relative contribution of the different regions in raising the central revenues. The share of the Central Region (77.83 per cent) stands out. This includes the contribution of customs duties. Even if this is taken out, the share of the central region will be high, followed by the Eastern Region. This pattern will be reflected in the provinces in these regions.



Table 6: Central Revenue Mobilization: Share by Region

FY 2006-07	(Rs. '000)	( % Share)
Eastern	8,823,834	9.87
Central	69,563,050	77.83
Western	8,334,111	9.32
Mid-Western	1,797,835	2.01
Far-Western	858,296	0.96
<b>Total</b>	<b>8,937,7126</b>	<b>100.00</b>

Source: Based on data from Nepal: Regional Development Strategy, ADB (2009)

Table 7 shows that in regard to public expenditure also, the share of the Central Region is relatively high followed by that of the Eastern Region. Relative to concentration of revenues, the horizontal imbalance in public expenditure is somewhat less but still quite high.

Table 7: Regional and Ecological Belt Distribution of Public Expenditures (2007-08)

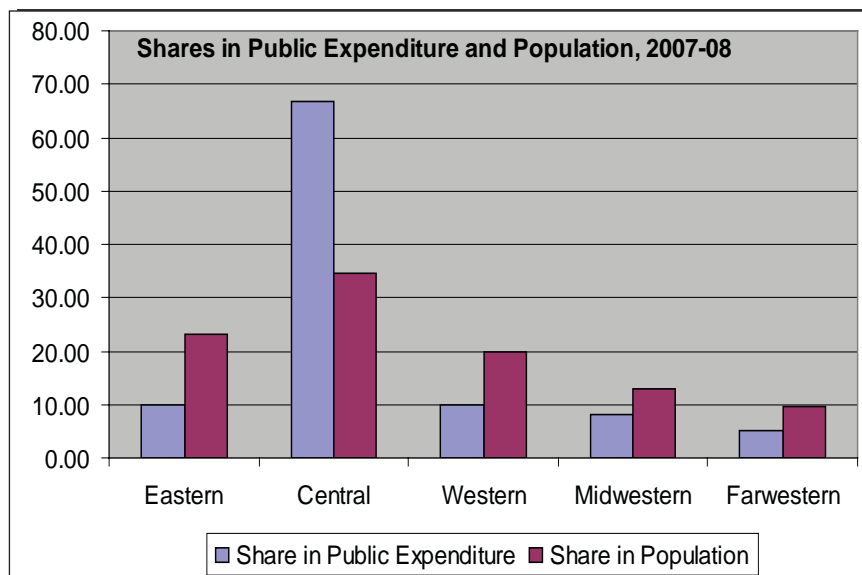
Development Region	Rs.'000	% Share	% Share of Population
Eastern	15,946	9.88	23.1
Central	107,831	66.83	34.7
Western	16,249	10.07	19.7
Mid-Western	13,109	8.12	13.0
Far-Western	8,214	5.09	9.5
<b>Nepal</b>	<b>161,349</b>	<b>100.00</b>	
<b>Ecological Belt</b>			
Mountain	8,701	5.39	7.3
Hill	123,178	76.34	44.3
Tarai	29,470	18.26	48.4

Source: ADB (2009)

Chart 2 shows that the share of public expenditures for the Central Region is higher than that of population. For the remaining four regions, the share of population is higher than that for public expenditures. This indicates considerable disparity in terms of per capita public expenditures. In 2007-08, per capita public expenditures amounted only to Rs.2658 per person in the Eastern Region (lowest of all regions) compared with Rs. 11595 per person for the Central Region (highest of all regions). The corresponding

amounts for the three Western Regions (Western: Rs.3125, Mid-Western: Rs. 3856 and Far-Western: Rs. 3286) are also quite low.

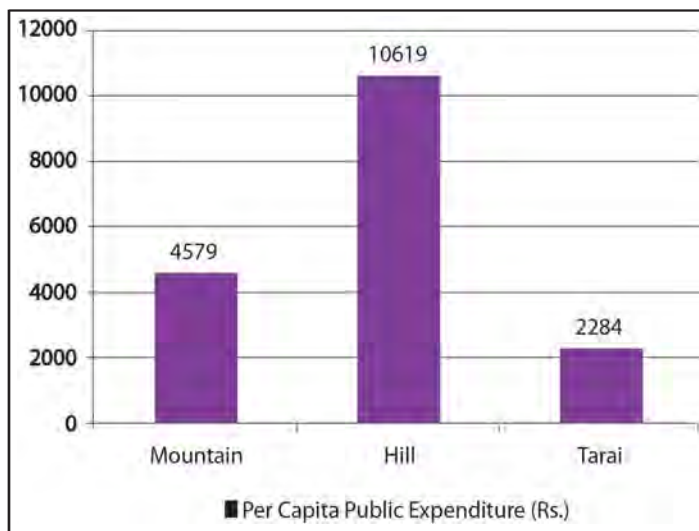
Chart 2: Share by Region of Public Expenditures



In the new fiscal order, these disparities will need to be corrected both by generation of additional economic activities in the under-developed areas and by more equitable distribution of public expenditures. Tables 8 and 9 show a similar pattern at the level of districts. Population is far more evenly distributed than economic activities, as reflected by the district-wise shares of revenues, even after discounting the share of customs duties.

Similarly, the per capita incomes of the central hills and western mountains are about 2.5 times higher than that of the Far and Mid-Western Regions. Physical and human development indices for the regions and for different ethnic groups also reflect inequality.

Chart 3: Share of Public Expenditures relative to Share of Population: Mountains, Hills, and Plains



Correcting the horizontal imbalance will be the major challenge of the new fiscal order. Both the central and provincial governments will have to play important roles in reducing these horizontal imbalances. Given that resources will continue to be concentrated largely with the central government, its policies will also have to change in the new fiscal order. Provincial governments will have to adopt suitable measures for the economic development of the areas under their jurisdiction, increase their fiscal capacities and show adequate revenue-generating efforts with respect to revenue sources assigned to them.

Competition among provinces to attract investment and initiate new economic activities will also be a key factor. Provinces with more natural resources and better economic policies and programs would, of course, tend to prosper more than those with a lower natural resource base and incompetent development efforts. Availability of skilled manpower will also be a key factor in the regional pattern of economic growth. Most qualified and dynamic individuals will congregate in the province(s) that can provide the most attractive benefits while other provinces may lack the trained manpower to provide even minimum services such as health, education and engineering. Utilizing natural resources will not only benefit individual provinces, but will also increase the growth rate of the country as a whole.

Table 8: Share by District in Total Population: Selected Districts

		Share	Cumulative Share (%)
1	Kathmandu	4.673	4.673
2	Morang	3.642	8.315
3	Rupandehi	3.060	11.375
4	Jhapa	2.972	14.347
5	Dhanusa	2.900	17.247
6	Sarlahi	2.746	19.993
7	Sunsari	2.702	22.695
8	Kailali	2.664	25.359
9	Siraha	2.472	27.832
10	Saptari	2.463	30.295
11	Nawalparsi	2.431	32.726
12	Bara	2.415	35.141
13	Mahotari	2.391	37.532
14	Raulahat	2.355	39.886
15	Parsa	2.148	42.034
16	Kapilbastu	2.082	44.116
17	Chitwan	2.039	46.155
18	Dang	1.997	48.152
19	Makawanapur	1.696	49.848
20	Banke	1.667	51.515

Source: Based on Data from Nepal: Regional Development Strategy, ADB (2009)

Table 9 shows that in Nepal, as in many other countries, uneven distribution of economic activity has caused wide regional disparities in the fiscal capacities of local bodies. In the 2006/07 fiscal year, seven districts contributed almost 85 per cent of total central revenue. This is indicative of a high concentration of economic activities, although these figures do include taxes on international trade, which currently contribute about 24 to 25 per cent of central tax revenue (see Table 4). A large proportion of these are collected in a few districts. Although these revenues may be collected at border points, the final consumers can be anywhere in the country. Sixty-eight districts collected less than 15 per cent of the total revenue in the same year. The revenue collected by local bodies is only about six per cent of total national revenues. Even with tax restructuring and improvements in tax collection, the revenues collected by the

sub-national governments would still be among the lowest relative to GDP with other federal countries. The high level of fiscal centralization is likely to continue even after the emergence of the provinces, until the administrative set-up at the provincial level becomes fully functional and economic activities gather momentum in the provinces.

Table 9: Central Revenue Mobilization: Share by District (Selected Districts)

	Share of District	Share of Population	Cumulative Total of Share in Revenue (per cent)
<b>Kathmandu</b>	41.44	4.673	41.44
<b>Parsa</b>	23.59	2.148	65.03
<b>Morang</b>	6.74	3.642	71.76
<b>Rupandehi</b>	6.70	3.060	78.46
<b>Bara</b>	2.94	2.415	81.41
<b>Lalitpur</b>	2.84	1.459	84.24
<b>Chitwan</b>	2.53	2.039	86.77

Source: Based on data from Nepal: Regional Development Strategy, ADB (2009)

Some of the issues currently being discussed in the context of assignment and sharing of revenues are:

- Whether provinces will have enough revenue-generating powers to suitably develop their economic potential; otherwise, they will remain dependent on the central government.
- Whether the central government will co-occupy most expenditure responsibilities, leaving few if any distinct responsibilities for the provincial governments.
- What will be the status of local bodies: whether they will be fully under the control of the provincial governments, or they will also be able to deal directly with the central government.
- Some people in Nepal have high expectations regarding provincial authority over locally collected revenues and local resources. For example, as almost all customs revenues are collected at Tarai border points, some Taraians are inclined to claim a portion of the customs revenues as well as a portion of the benefits coming from the rivers (hydroelectric power revenue) that pass through Tarai as rightfully belonging to them.

- e. Similarly, some people in Karnali (and elsewhere), which is rich in hydro-electric resources, are voicing a claim that the future stream of revenues generated by potential hydro-power development should be assigned to the region.

Economic interests, such as natural resources or revenue sources in a region, may create friction among different tiers of governments and prompt the inclination to try to monopolize such resources. Such issues are best resolved by institutions like the Financial Commission and the Natural Resources Commission, or through similar institutional arrangements. These are discussed in the next section.

## 5. Fiscal Transfers: Institutional Arrangements and Design of Transfers

### a. Institutions

Given the vertical and horizontal imbalances, institutional arrangements for fiscal transfers will be of critical importance. Such transfers should be designed to resolve these imbalances while keeping the objectives of equity and efficiency as guiding principles. The CA's Committee on Natural Resources, Economic Rights and Revenue Allocation has recognized the importance of fiscal transfers for advancing balanced and equitable growth. It has also emphasized the need for transparent arrangements for deciding on financial equity grants to provincial and local governments "on the basis of expenditure need, and capacity and efforts (for) revenue collection." The 2009 Report of the Committee observes that, "While enacting Acts relating to revenue distribution, the needs of national, provincial and local governments, services to be delivered by governments to the people of the province and at the local level and economic rights provided to them, the capacity to collect revenue, the need to provide for development, address regional imbalances, poverty and inequality, deprivation, emergency work, and assistance to provide for temporary needs etc. shall be included."

The economic and fiscal situation of the centre and provinces would evolve in a fashion linked to the overall development of the economy. Institutional bodies with a constitutional mandate which can periodically examine the emerging contours of horizontal and vertical imbalances would be best placed to make recommendations for fiscal transfers. The CA's Committee on Natural Resources, Economic Rights and Revenue Allocation has suggested setting up two commissions for this purpose: a Financial Commission and a Natural Resources Commission. In both cases, they have suggested a commission with a chairman and two members.

### a1. Financial Commission

The size of the Financial Commission, the qualification or expertise of its members and defining these points in legislative terms, are issues that undoubtedly will be considered. In several federal countries, there are commissions which deal with the issue of sharing of fiscal resources between the centre and the provinces. Australia has the Commonwealth Grants Commission while India, Sri Lanka, Pakistan and South Africa have finance commissions. The composition of the commissions, their mandates and how often they make recommendations may however differ. In India, for example, the Finance Commission is constituted by the president, based on the advice of the central government. The commission has five members, including the chairman, drawn from different fields and specializations such as experience in public life, economics, the judiciary, auditing and accounting, and administration. In Pakistan, the selection of members is based on political choice; members may be experts in various fields, but their selection depends on consensus. In South Africa, the Commission is appointed by the federal government, but some members may be drawn from lists provided by the provinces and municipalities.

In the CA's committee proposal, the Financial Commission would consist of only three members, including the chairman. However, three members, including the chairman, may not be sufficient since several disciplines need to be represented such as an economist, an administrator, a legal expert and a local-level representative, with the chair being occupied by a respected person with adequate experience in public life. Even if the commission is permanent, it would be a good idea to have fixed terms for the members. Every five years or so, the terms of reference of the commission may be reviewed to take account of the changing economic and fiscal situation. It is important for the commission to have a permanent secretariat and an institutional memory in terms of databases that are periodically updated, and methodological and consultative papers that are prepared from time to time. The commission should be able to play a quasi-judicial role in adjudicating between the central and provincial governments in regard to the sharing of resources and dispensation of responsibilities according to the constitution. The provinces and the centre should be asked periodically to submit memoranda to the commission stating their cases and putting forward estimates that can facilitate the assessment of needs and resources. In the design of fiscal transfers, assessment of needs and fiscal capacities will be of crucial importance and sufficient informational tools have to be developed for the collection of relevant data at the provincial level. Consultative papers establishing the methodology of fiscal transfers should be prepared by the commission and circulated for discussion by experts and review by the provinces.

### a2. Local Bodies Fiscal Commission

A similar issue that will also arise relates to determining transfers to local bodies. Such transfers may take place directly from the central government to the local bodies

in the form of conditional and unconditional grants. There would also be a need for sharing of revenues and grants from provincial governments to local bodies within the provinces' jurisdiction.

The present local governance structure in Nepal is as follows: 75 District Development Committees (DDCs); 57 municipalities (one metropolis and four sub-metropolises); and 3,915 Village Development Committees (VDCs).

Nepal has some experience with intergovernmental fiscal transfers between the central government and local bodies (DDCs, municipalities and VDCs). There is a Local Bodies Fiscal Commission (LBFC) that was established in 2000. The commission has 15 members and is chaired by the Minister, Local Development. The Local Bodies Fiscal Commission is an independent and permanent body, with a status higher than a ministry. It is created by the cabinet, headed by the minister of local development and chaired by the vice-president of the National Planning Commission. Its main jurisdictions include revenue assessment, fiscal transfers, accounting and auditing related to local bodies. It also provides recommendations to the central government. Implementation of the recommendations of the Local Bodies Fiscal Commission by the government is mandatory.

The secretariat of the LBFC is located in the Ministry of Local Development. A recent ADB-commissioned report found that in Nepal, the existing intergovernmental transfers from the central government to local bodies are complex and unclear. The LBFC has developed a formula-based approach to determining unconditional grants to local bodies. The distribution formula is based on population, area, internal revenue and the human development index of the respective jurisdiction. These criteria reflect in varying measures needs, costs and incentives, and reflect that local-level data with respect to these indicators are being compiled. A system of formula-based transfers should help to provide predictable, transparent, adequate and defined revenue to sub-national governments that are incentive-based. Formula-based fiscal transfers are a major improvement over ad hoc allocations, which had been the practice earlier, bringing predictability and transparency to the transfer system.

Several criteria are used by the LBFC in providing grants including population, index of poverty and area. A minimum grant goes to all VDCs (15 lakh rupees). In addition, a top-up grant is given based on performance. The LBFC uses the Minimum Conditions and Performance Measures (MCPM) tool to assess the performance of local bodies, which is then tied to the grant assessment. It has been using the MCPM tool for five years, and has applied it to all local bodies (minimum conditions are based on 15 indicators, and have to be achieved by local bodies to get the top-up grant). The top-up grant is designed to serve as a performance-based incentive. The amount of the top-up grant is linked to the score achieved by the local body. Performance indices measure results achieved by the local body under the program. A local body is eligible to get the top-up grant only if gets the minimum score of 36 out of 100. Beyond this minimum,



the higher the score, the higher is the top-up grant. Local bodies do not have to pass all of the requirements. The assessments are conducted as follows: the District Development Committees (DDCs) assess the performance of the Village Development Committees (VDCs) while the Ministry of Local Development assesses the performance of the DDCs and municipalities.

Table 10 gives the criteria and weights for the determination of local body grants. The weights are ad hoc, but more rational ways of determining weights can be worked out by the Financial Commission. Developing an objective basis for the criteria and weights to be attached to them, keeping in mind equity and efficiency considerations, would require extensive discussion and analysis. However, this kind of experience based on a formula-based determination of transfers could be highly useful in providing institutional capacity when a Financial Commission is set up for determining transfers from the central government to the provinces.

Table 10: Criteria and Weights for Unconditional Block Grants  
Used by LBFC

Criteria	Village Development Committees	Municipalities	District Development Committees (%)
Population	60	50	40
Cost Index	30	0	25
Poverty Index	0	25	25
Area	10	10	10
Administrative Expenses	0	0	0
Tax Effort	0	15	0
Total	100	100	100

Source: Local Bodies Fiscal Commission, Ministry of Local Development, Kathmandu, Nepal

### a3. Natural Resources Commission

Organizing the country in terms of provinces would require that issues concerning the division of natural resources be dealt with in a fair and transparent manner. Many new problems would arise in situations where rivers run across the boundaries of several provinces or a mine is partly located in one province and partly in another. Forest management may also create positive benefits for provinces other than the province where the forest may be located. Conflicts among provinces regarding ownership of natural resources and utilization would require setting up a suitable institutional framework, such as a Natural Resources Commission. In this respect, the recommendation of the

CA's Committee for setting up a Natural Resources Commission is an innovative and relevant initiative.

Water and forest resources are abundant in Nepal and offer considerable economic potential that remains largely undeveloped. Considerable inter-provincial cooperation is needed to develop the hydroelectric and irrigation potential of rivers as they cross provincial boundaries. Building reservoirs and dams involves the displacement of people in the affected areas that can include parts of different provinces. One of the more frequently asked questions concerns the right to collect revenue from hydroelectric power resources. Hydro-power resources are highly concentrated in a small number of hill and mountain areas. The provinces that have a major share of water resources may need to be given the right to earn income from their hydroelectric resources, but there may be relevant grounds for sharing the overall revenue with the centre or with the other provinces.

Water and forests each have special features in the management of natural resources in a federal system. Rivers cross provincial boundaries and upstream exploitation of water for power and irrigation purposes has implications for people downstream. In such a context, the issues of who "owns" the river and who administers the related activities, and who gets revenues or royalties from its power generation and water usage – i.e. the central or provincial governments – become significant questions. In the case of forests, the geographical location is easily identified and it is easier to identify people and provinces that may be considered as owning forests and being responsible for their maintenance. The development and maintenance of forests give rise to considerable inter-regional and international environmental issues. While provinces may gain direct revenues from timber and non-timber resources, they also need to be rewarded for their contribution to the environmental cause because of the capacity of the forests to serve as a carbon sink. Forests and water are also interlinked as forests play a role in promoting precipitation. There are also livelihood issues concerning local populations who may have been traditionally dependent on the forests. A natural resources commission can play an effective role because the management of forests, rivers and hydroelectric power potential involves national and inter-provincial issues, and the central and provincial governments have to play significant roles.

There is limited international experience that Nepal can benefit from in this area as most of this experience has been in management of the petroleum and natural gas sectors, and Nepal's problems are more concerned with hydroelectric power, river basin management and forest resources.

Nepal already has a Water and Energy Commission (WEC), headed by the minister of energy, which was created by an administrative order 35 years ago. A National Water Resources Strategy (2002) and a National Water Plan (2005) have already been formulated. A national energy strategy is being prepared. The WEC should play an

effective role in providing needed technical support to the Natural Resources Commission in the federal structure.

While formal international arrangements are limited in these matters, a good example is the Council of Common Interests (CCI) in Pakistan. This council was reconstituted in 2009 with the prime minister as chairman and the chief ministers of Punjab, Sindh, North-West Frontier Province (NWFP) and Balochistan as members, along with some subject ministers of the centre, like the minister for livestock and dairy development and the minister for petroleum and natural resources. In Pakistan, through the 18<sup>th</sup> constitutional amendment, the Concurrent Legislative List has been scrapped. But some of the subjects that until now were part of the Concurrent Legislative List have been shifted to the Federal List (Part II of the Federal Legislative List). In these matters, the federal government would consult the provincial governments through the Council of Common Interests (CCI). Some of the areas in which the CCI may have a significant role to play include electricity, major ports and the constitution and powers of port authorities, all regulatory authorities established under a federal law, national planning and national economic coordination, including planning and coordination of scientific and technological research, supervision and management of public debt, and the census. Therefore, the CCI has a much wider mandate than dealing only with issues of natural resources, which are also to be coordinated by the CCI in Pakistan.

## b. Design of Fiscal Transfers

Fiscal transfers from the centre to the provinces will need to be carefully designed to serve the objectives of equity and efficiency. The mechanism of transfers should also be characterized by stability and predictability. Fortunately, many federal countries have developed reasonably robust designs over the years for transfers and, although the methodologies have kept on evolving, there is a good degree of stability. In most cases, the guiding principle is “equalization,” which serves the objectives of both equity and efficiency. The success of federal fiscal arrangements will depend on putting in place a suitable arrangement for fiscal transfers, with provision for periodic review and revision by an apex institution, which has constitutional backing and autonomy, like, for example, a finance commission. Some guidance may be obtained from the methodologies used in some of the well-established fiscal transfer systems. We will consider the basic features of three such frameworks, in Canada, Australia and India. Both tools for transfers, namely sharing of central taxes and grants, may be used. Canada and Australia offer well-established methodologies for implementing equalization transfers. In Canada, the principle of equalization has been defined in the constitution, thereby ensuring that it remains sacrosanct.

When the time is right, suitable and informed choices can be made for Nepal’s federal fiscal structure. In the case of Canada, fiscal capacity equalization based on a representative tax system approach, supplemented by health and social service transfers, has been attempted. Australia is well known for its two-pronged approach to equalization,

including both fiscal capacities and cost differentials based on standardized provincial budgets, relative revenue factors and cost differences. In India, equalization is attempted through a criteria-based sharing of central tax revenue supplemented by grants. It attempts fiscal capacity equalization and covers some cost differences particularly for the special category states. These systems are briefly described below.

### b1. Equalization Transfers in Canada

Equalization grants in Canada aim at equalizing fiscal capacities. The “equalization’ payments have been mandated in the constitution since 1982, although they were being made earlier as well. Article 36(2) of the Constitution Act commits the federal government to the “principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation.” The case for equalization has been made on grounds of equity (see, for example, Graham, 1964) as well as of efficiency (see, for example, Boadway and Flatters, 1982, and Boadway and Hobson, 1993). Fiscal inefficiency arises when decisions regarding location of economic activity are influenced by net fiscal benefits, i.e. level of public services relative to cost. Fiscal equity requires that the public sector should treat individuals, who are in equal circumstances, equally, implying that comparable individuals are entitled to the same net benefits from the public sector, i.e., to the same level of public services if they are taxed in the same way. The equalization grants have the goal of achieving these results. As Boadway (2001) observes: “Fiscal equity does not conflict with fiscal efficiency: both depend on NFBs (net fiscal benefits) being equalized across jurisdictions.”

The absolute amount of an equalization transfer to a province in Canada is determined by applying the average tax effort to the difference between the standard tax base and the actual tax base for that province with respect to the various revenue sources. This produces an estimate of revenue, which is higher than the actual revenue for provinces that have “below-average” capacity. This exercise is done for all revenue bases used by the provinces. This system of calculating the “notional” revenue performance is called the Representative Tax System (RST), in which each tax or revenue source is considered individually and the “average” or “representative” tax effort

Until recently, this exercise was done for 33 revenue bases, which included tax revenues, royalties and user charges. The system was revised in 2007 and now only five revenue sources are used, namely, personal income tax, consumption tax, property tax and natural resources. These estimates are notional since the provinces do not actually raise the estimated revenues. The objective is to ensure that no province is rewarded for deficiency in tax effort but the deficiency in fiscal capacity be made up for by the transfer. Some relevant additional details are given in Annex 1.

Some of the important characteristics of the RTS approach to equalization may be noted. First, the equalization approach requires that for a given tax the relevant tax bases are comparable across provinces. This requires that the relevant bases are identifiable and easily measurable. Secondly, the benchmark per capita revenue base is to be determined with reference to selected provinces. In Canada, rather than using the average of all provinces, a five-province average was used. Now all provinces are taken into account. The 10-province benchmark revenue base winds up being higher than the average of the selected provinces.

The objective of fiscal capacity equalization is to make up for deficiencies in fiscal capacities and not deficiencies in tax effort. The Canadian "equalization" is not intended to have the result of equal per capita expenditures across provinces. Actual expenditures could be higher than the average in provinces where the revenue effort is higher and lower in provinces where it is lower than the average. A province may, however, choose to have a lower tax rate, relying more on private sector participation in supplying services. The levels of expenditure for individual items as well as the aggregate also depend on the preferences of the provinces.

## b2. Equalization Transfers in Australia

The heart of the horizontal transfers system in Australia is also fiscal equalization, which is defined by the Commonwealth Grants Commission (CGC) as follows: "State governments should receive funding from the pool of goods and services tax revenue and health care grants such that, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency, each would have the capacity to provide services at the same standard." The Australian equalization system differs from that of Canada because of the reference to efficiency and standardization of services. The Canadian system makes reference only to equalization in terms of fiscal capacity. In Australia, fiscal equalization looks at both revenue and expenditures.

The CGC makes reference to "three pillars" supporting and guiding the application of equalization. These are capacity equalization, internal service standards and policy neutrality. Policy neutrality refers to the consideration that a state's own policies or choices about services should not directly influence the level of grants it receives. The CGC's calculations are based on all-state averages so that these may reflect average efficiency. These are also intended to ensure policy neutrality, being the result of policy decisions of all provinces. There is a clear link between the services provided by the provinces and the revenues raised by them.

The CGC recognizes that since states have differential fiscal capacities and varying demographic, economic and physical circumstances, there will be differences in their revenue-raising capacities and their relative costs of providing services. Relative differences that are beyond the control of individual state governments are called "disabilities." Standards of services as well as the disabilities are measured relative to the position of all the states.

The first step in the equalization exercise is the preparation of the standard budget. The standards are equal to all-state averages in expenditures as well as revenues. The Commonwealth Grants Commission does not consider any exogenous targets or norms. Any departure from the average per capita expenditure needs to be justified on account of cost disabilities.

The equalization budget brings together all expense and revenue categories of state budgets. The per capita expense for each service that the state would incur if it were to provide the Australian average standard of service is calculated. On the revenue side, the per capita revenue that each state would raise if it applied the average revenue effort to its revenue base is calculated. Expenditure assessment adjusts the standard expenses to allow for the effects of disabilities. Disabilities are broadly classified as use disabilities and cost disabilities, according to whether they affect the rate of use or the cost of each unit of service. Use disabilities reflect differences between provinces in the use of services because of factors such as population characteristics and the availability of private services. Cost disabilities are influences that affect the cost per unit of service provided to particular groups or places, e.g. large cities or remote areas. Cultural and communication factors as well as variations in inter-state prices account for some of the cost differentials.

On the revenue side, tax bases are generally measured using the value of transaction in each state that would be taxed under the average tax policy. For example, the value of the payroll tax is the estimated annual value of payrolls above a threshold level paid by private sector businesses and most public sector trading enterprises. Annex 2 gives additional details in regard to the Australian methodology.

### b3. Swiss Fiscal Transfer System

Switzerland's federal arrangements and its transfer system can also be of some value to Nepal. Besides being one of the oldest federal systems in the world, the size of the *cantons* (the second tier of government) is small in Switzerland and many of them are in mountainous regions. Switzerland has a federal government and 26 *cantons*, and there are nearly 2,889 municipalities. The *cantons* have a permanent constitutional status and a high degree of independence. Under the federal constitution, all 26 *cantons* are equal in status. Each *canton* has its own constitution, parliament, government and courts. There are, however, considerable differences among the individual *cantons*, particularly in terms of population and area. The sub-national units (*cantons* and municipalities) account for almost 75 per cent of overall government spending and about 69 per cent of government revenues. In terms of assignment of responsibilities, one notable feature is that the residual powers vest with the *cantons*, not with the confederation. This also applies to taxation powers. All constitutional amendments require a referendum that must be passed by majority of the electorate and a majority of the *cantons*.

The Swiss Confederation's sources of revenue are the personal income tax, the Value Added Tax and various excise duties. Taxes on individual wealth and corporate

capital and expenditures are levied at the cantonal and local levels only. Earnings-related direct taxes, i.e. personal and corporate income tax, are levied at all three levels of the federal system.

The imbalance between the expenditure and revenue sides is corrected by a system of vertical fiscal equalization. In 2004, through a referendum, extensive reforms to the country's fiscal equalization system were approved. These changes were implemented in 2008. The former fiscal equalization system was introduced in Switzerland in 1959. It went through several changes over the years before being replaced by the new system of transfers.

The key feature of the previous system was calculation of the *financial strength index*. This has now been replaced by the resource index. The financial strength index was calculated on the basis of per capita income, tax revenue per inhabitant, average tax burden and percentage of mountainous terrain. The *resource index* is based on taxable income of individual taxpayers, earnings from assets of individual taxpayers and taxable profit of firms. Thus, there has been an attempt to determine the index using information on the tax bases more directly. In all cases, the tax bases are calculated in per capita terms. This approach to considering the tax potential implies that the *cantons* are not able to use their tax policies to influence the transfers.

To allow for easier transition, particularly for financially weaker *cantons*, a hardship relief fund has also been established. The new fiscal equalization reform package was introduced with a view to increasing the *cantons'* autonomy and improving the controllability and effectiveness of fiscal equalization. Three main guiding considerations for the Swiss transfer system are the equalization of financial strength (called resource leveling), the equalization of financial needs (compensation for special burdens) and hardship relief as a temporary interim instrument.

Other components of the current reforms address issues of assignment leading to clearer delineation of responsibilities handled by the confederations and the *cantons*. There is also an attempt to get the incentive structure right in the design of the fiscal transfer system. Earlier, because many vertical fiscal transfers were conditional grants that were calculated on the basis of the costs incurred and relative financial strength, cantons with high subsidy rates sought to receive high federal contributions. This led to distortion of priorities and inefficiencies in the performance of public tasks. In the new system, the Confederation provides global contributions for programs instead of conditional contributions to specific projects. *Cantons* are free to optimize the use of federal funds within the provided resource envelope. A major issue in Switzerland is the handling of inter-cantonal externalities in public services provided by the cantons. Given the small size of the *cantons*, many users of such services are often from other cantons. This leads to the need for spillover compensation. This is primarily a matter for the concerned regional authorities. Under the new system of transfers, the Confederation provides only the instruments required and solutions have to be found between

cantons. The main issue is to avoid free-riding by exercising a contractual obligation at the request of the cantons.

#### b4. Finance Commission Transfers in India

Given that India is a developing economy with significant differences in the levels of development, geographic and demographic features, and the fiscal capacities of the states, the Indian experience with the design of fiscal transfers and the operation and evolution of federalism, is likely to be of considerable relevance to Nepal. The Indian experience may offer lessons to determine not only what can be adopted but also what can be avoided.

The Indian federation has, apart from a central government, twenty-eight states (with three newly created ones), two union territories (UTs) with legislatures, five union territories without their own legislatures, several autonomous regions within states, a three-tiered structure of rural local bodies, and three levels of urban local bodies. The three new states which were created in 2000, Uttaranchal, Chhattisgarh and Jharkhand, were carved out from the parent states of Uttar Pradesh, Madhya Pradesh and Bihar, respectively. As indicated in the Report of the Twelfth Finance Commission, there are 3,723 urban and 243,685 rural local governments in India. Eleven states are categorized as special category states. The core of fiscal transfers in India is based on the recommendations of the country's Finance Commission. As well, grants are also given by the Planning Commission and the central ministries.

The organization of states in India has changed over time. In 1951, when the Indian constitution was promulgated, there were Part A, Part B, and Part C states.<sup>1</sup> In 1956, with the States Reorganization Act, 14 states and seven Union Territories were created. Major reorganizations took place in 1960 (Gujarat and Maharashtra), 1966 (Punjab and Haryana), 1971-72 (Himachal Pradesh, Manipur, Meghalaya, Tripura), 1975 (Sikkim), 1987 (Arunachal Pradesh, Mizoram, Goa), and 2000 (Uttaranchal, Jharkhand and Chhattisgarh). The new states were carved out of the larger older states or by conversion of a union territory to full statehood. This evolution of state organization was possible as the constitution had the necessary provisions for such reorganization.<sup>2</sup>

1 Part A states: (9) Assam, West Bengal, Bihar, Bombay, Madhya Pradesh (formerly Central Provinces and Berar), Madras, Orissa, Punjab and Uttar Pradesh (formerly United Provinces). Part B states: (8) Hyderabad, Saurashtra, Mysore, Travancore-Cochin, Madhya Bharat, Vindhya Pradesh, Patiala and East Punjab States Union (PEPSU), and Rajasthan. Part C states: (10) Delhi, Kutch, Himachal Pradesh, Bilaspur, Coorg, Bhopal, Manipur, Ajmer-Mewara and Tripura. Jammu and Kashmir had special status until 1957. The Andaman and Nicobar Islands was established as a union territory, ruled by a lieutenant governor appointed by the central government.

2 Article 3 of the Indian Constitution deals with the formation of new states. It provides as follows:  
"Formation of new States and alteration of areas, boundaries or names of existing States: Parliament may by law

(a) form a new State by separation of territory from any State or by uniting two or more States or parts of States or by uniting any territory to a part of any State;  
(b) increase the area of any State;



In terms of institutions dealing with centre-state relations, several important bodies play key roles. The most important of these is the Finance Commission, which has a status defined by the Constitution. Others include the Planning Commission, the National Development Council and the Inter-State Council. After the 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments, that gave rural and urban local bodies a constitutional status, the institution of State Finance Commissions was also created.

With regard to transfer of resources, the Finance Commission and the Planning Commission play important roles. In both cases, the design of fiscal transfers has evolved over time. Each Finance Commission, which is set up normally every five years, has developed its own scheme of transfers. Their approach maintained some continuity with the corresponding design of the preceding Commission, but also included the introduction of important changes from time to time.

There is considerable vertical and horizontal imbalance in the Indian federal system. The vertical imbalance arises from the constitutional assignment of tax sources. The sources with high revenue potential have been given to the central government for valid economic reasons. The vertical imbalance is then resolved by transfers from the central to the state governments. These transfers are justified and guided by several basic considerations. As expressed by the Thirteenth Finance Commission in its 2009 report: "Thus, the principle that underpins both vertical and horizontal devolution is that equality of access should be enabled, but cannot ensure that common standards in quality or outcomes in public services are actually achieved. For that to happen it is necessary that the average cross-state level of tax effort assumed actually prevails in the states and that efficiency of delivery is not below the cross-state average. At the same time, we recognize that the Central Government can play a role in incentivizing improved levels of public service delivery across the country."

There has been a remarkable stability concerning the respective shares of the central and state governments for revenue (current) expenditures<sup>3</sup> throughout the periods covered from the First to the Twelfth Finance Commissions. The share in the revenue expenditure has been hovering around the all-period average of 43 per cent throughout the award periods covered by the First to Twelfth Finance Commissions. Correspond-

---

(c) diminish the area of any State;

(d) alter the boundaries of any State;

(e) alter the name of any State; Provided that no Bill for the purpose shall be introduced in either House of Parliament except on the recommendation of the President and unless, where the proposal contained in the Bill affects the area, boundaries or name of any of the States, the Bill has been referred by the President to the Legislature of that State for expressing its views thereon within such period as may be specified in the reference or within such further period as the President may allow and the period so specified or allowed has expired. Explanation I In this article, in clauses (a) to (e), State includes a Union territory, but in the proviso, State does not include a Union territory. Explanation II The power conferred on Parliament by clause (a) includes the power to form a new State or Union territory by uniting a part of any State or Union territory to any other State or Union territory."

3 In India, the term 'revenue expenditure' is used for making reference to current expenditure, which is expenditure that does not lead to formation of capital assets.

ingly, the share of states in the combined revenue expenditures has been about 57 per cent. As far as total expenditures are concerned, the share of the centre has been slightly higher at about the average of 46 per cent while that for states has been at about the average of 54 per cent.

The Thirteenth Finance Commission also took note of the remarkable post-transfers stability in the share of expenditure of the centre and the states, and noted that this was done by expanding the shareable base of the central taxes and adjusting the share of the states in view of the varying levels of the central and state taxes from time to time. The Commission noted: "While in the total revenue expenditure there has been long term stability in the relative shares of the Centre and the states after implementation of the transfers recommended by the Finance Commission, the buoyancy of central taxes has been higher than those of the states and such a trend is expected to continue, given the nature of tax assignment to the Centre and states. Rangarajan & Srivastava (2008) have shown that to maintain constancy in the share of states in post-devolution total tax revenue, this share would need to increase by the margin by which the buoyancy of central tax revenue exceeds the buoyancy of combined tax revenue."

To determine the shares of states in the total sharable pool of central tax revenue, the early finance commissions relied heavily on easily available and reliable data like population figures based on census information. Over time, they started using more elaborate data and examined issues of incentives apart from those of equity. The pool of sharable revenues also changed over time. First, there were only two central taxes that were sharable with the states: the personal income tax and the Union of India excise duties. Later, after a constitutional amendment, all central taxes were made sharable.

The approach of the finance commissions can be summarized in terms of three distinct phases. Until the Seventh Finance Commission, the distribution formulae used for determining the income tax shares were clearly distinct from those for the Union excise duties and were given under two separate articles of the constitution, Articles 270 and 272. Article 270 had provided for mandatory sharing of income tax while Article 272 had provided for the sharing of the Union excise duties at the discretion of the centre. After this phase, a process of convergence between the two sets of formulae began. In the third and current phase, a full convergence was arrived at with the recommendations of the Eleventh Finance Commission. Up to the Sixth Finance Commission, the weight to the criterion based on population was given a very high weight (ranging from 75 to 90 per cent). But the importance of population was brought down giving way to the equalization objective based on the distance criterion (distance of the per capita income of a state from the highest or benchmark income) and criterion like tax effort and fiscal discipline were also used. All criteria use population as a scaling factor so that all considerations are in per capita terms that are scaled by the size of the population to account for the different sizes of the states.

The population criterion gives equal per capita transfers to all states and is the appropriate instrument for determining vertical transfers. The distance criterion, based on the distance of a measure of fiscal capacity, such as per capita income from a higher benchmark per capita income, serves to provide equalization transfers under certain conditions. The criterion based on area or index of infrastructure takes into account cost disabilities while criteria based on tax effort and fiscal discipline are incentive-linked criteria. The axiomatic basis of the criteria-based determination of fiscal transfers is discussed at length in Rangarajan and Srivastava (2008, 2011).

It can be seen that in the Indian system, the equalization principle is also followed by the Finance Commission through a combination of sharing central taxes and grants. The criteria-based sharing of central taxes is the main vehicle for transfers. Table 11 shows the criteria used by the four most recent Finance Commissions in India. It can be shown that these criteria amount to fiscal capacity equalization supplemented by considerations of cost differentials (see Rangarajan and Srivastava, 2008). Annex 3 shows how a combination of some of these criteria provides a vehicle for vertical as well as equalization transfers.

Table 11: Criteria-based Sharing of Central Taxes with States in India: Four Recent Finance Commissions

Criteria	Relative Weight (Per cent)			
	Tenth	Eleventh	Twelfth	Thirteenth
1. Population	20.0	10.0	25.0	25.0
2. Distance /capacity distance	60.0	62.5	50.0	47.5
3. Area	5.0	7.5	10.0	10.0
4. Index of Infrastructure	5.0	7.5	-	-
5. Tax Effort	10.0	5.0	7.5	-
6. Fiscal Discipline	-	7.5	7.5	17.5

Source: Reports of Finance Commissions, Government of India

In spite of some recent finance commissions achieving close to 90 per cent of the needed equalization subject to certain conditions, there are still considerable differences in the level of publicly provided services. There are three main reasons for this: differences in fiscal capacity, differences in own revenue effort and the role played by other channels of transfers. As service levels do not depend only on transfers, but also very heavily on resources raised by the states themselves, differences in per capita fiscal capacity and revenue effort translate into differences in per capita service levels. The second reason is that transfers determined by different channels often work at cross purposes.

The next most important channel of transfers is under the aegis of the Planning Commission. The Planning Commission has been using a formula known as the Gadgil

formula to determine the share of states in the plan transfers. Table 12 gives the criteria and their relative weight under the Gadgil formula. The original formula has been changed occasionally and the present version is referred to as the National Development Council (NDC) revised Gadgil Formula. The Gadgil Formula works in two stages. First, 30 per cent of total assistance money is earmarked for the special category states. This is distributed among these states on the basis of their plan size and past plan expenditures, without using any explicit criteria. The remaining 70 per cent is distributed among the general category states according to a set of criteria with relative weights. A comparison can also be made between the alternative versions of the formula, as it has changed over time. The Planning Commission does not publish the actual shares of states, in either criteria-specific or aggregate terms, as is done by the Finance Commission. The shares may change under each criterion, as more recent data on income, tax effort, etc., become available. However, as far as population is concerned, only 1971 population data is used, as in the case of the Finance Commission.

There is now reasonable evidence that transfers under the Planning Commission are far less equalizing than the Finance Commission transfers. Apart from explicit transfers, there are also implicit transfers to states that take place through central subsidies and tax expenditures, i.e., expenditures implicit in tax concessions and exemptions. In a recent study, Kavita Rao (2009), shows that many such transfers have been regressive, giving larger per capita transfers to higher income states. The initial conditions also make a great deal of difference. However, it has been noted that differences in per capita service expenditures are noticeably less than those in per capita Gross State Domestic Product (GSDP) across states.

Table 12: Gadgil Formula: Alternative Versions

Criteria		Modified Gadgil Formula (1980)	NDC Revised Formula (1990)	NDC Revised Formula (1991)
A.	Special Category States (10)	30% share of 10 States, excluding North Eastern Council	30% share of 10 States, including North Eastern Council	30% share of 10 States, excluding North Eastern Council
B.	Non-Special Category States (15)			
(i)	Population (1971)	60.0	55.0	60.0
(ii)	Per Capita Income	20.0	25.0	25.0
	Of which			

a.	According to the "deviation" method covering only the states with per capita income below the national average	20.0	20.0	20.0
b.	According to the "distance" method covering all the 15 states	-	5.0	5.0
(iii)	Performance of which	10.0	5.0	7.5
a.	Tax effort	10.0	-	2.5
b.	Fiscal management	-	5.0	2.5
c.	National objectives	-	-	2.5
d.	Special problems	10.0	15.0	7.5
Total		100.0	100.0	100.0

- Notes: 1. Fiscal management is assessed as the difference between states' own total plan resources estimated at the time of finalizing Annual Plans and their actual performance, considering the latest five years.
2. Under the criterion of performance in respect to certain programs of national priorities, the approved formula covers four objectives: (i) population control; (ii) elimination of illiteracy; (iii) on-time completion of externally aided projects; and (iv) success in land reform.

The important elements in this formula relate to factors of population, deviation of income from mean income, distance of income from highest income and other factors reflecting fiscal discipline and achievement of national objectives. Due to the very large weight given to the population factor, which allocates equal per capita shares to all states, disbursements under the Gadgil Formula are only mildly progressive. As argued in a later chapter, whatever little progression there is in the plan transfer, it gets disturbed by the inter-state distribution of external assistance.

The main lessons that can be drawn from the Indian experience may be summarized as follows:

- a. The federal system has continually evolved in terms of organization of states, institutions attending to centre-state fiscal and economic relations, and the system of fiscal transfers.

- b. In spite of changes in all these dimensions, there are certain areas where stability and continuity have been maintained. One such area is stability in vertical imbalance after transfers, where the states have maintained a stable share in the combined expenditures of the central and state governments (about 57 per cent for current expenditures and 55 per cent for total expenditures).
- c. Broad-based pool of central taxes is sharable with the states. This allows stability in transfers and facilitates tax reforms at both tiers of government.
- d. Criteria-based sharing can be used for a full-fledged equalization approach to transfers and the weights to alternative criteria can be based on objective considerations rather than being calculated on an ad hoc basis.
- e. It is better to coordinate alternative channels of transfers, which require more reforms in India.

## 6. Administrative Restructuring and Capacity Building

In the new fiscal scenario, the administrative apparatus that is geared toward running a unitary government will need considerable restructuring. In particular, new capacities will be required for provincial-level administration, new institutions such as the Financial Commission and Natural Resources Commission, provincial-level accounting and auditing, and additional mechanisms for data collection and compilation. These changes will need to be undertaken in a cost effective manner.

### a. Provincial-Level Administration

After the provinces are delineated, a new provincial-level administrative cadre answerable to the provincial governments will be required. Some of the available options include staffing these cadres with individuals who are partly reassigned from the central cadre, and recruiting trained people from within the province or from the country as a whole. Arrangements for additional training and reorientation programs will facilitate the transition for officials who may be identified or express a desire for reassignment.

While the responsibilities of one tier of government will increase, those of the other tier will go down. The options include reallocation and reassignment, elimination of posts in the central cadre when the incumbent retires, and hiring of retired staff for temporary periods. The existing district-level officials can be brought into provincial-level services, provided they are willing and acceptable to the provincial governments. In the initial years, administration at all tiers may be handled by people already trained for this purpose from central and local level pools of officials. There is considerable administra-

tive experience at the local level drawn from the line ministries and at the DDC level in respect of the 75 districts. With additional capacity building at the provincial level, administrative arrangements can be expected to become more effective as time passes. Our discussions with several experts in administrative matters indicate that potentially the central government's payroll could be reduced to about one-fifth of its present level because responsibilities will decline and because there is overstaffing today.

## b. New Institutions of Fiscal Federalism

Expertise will be needed to staff the new institutions of fiscal federalism such as the Financial Commission and the Natural Resources Commission. To build such capacity, regular training programs, consultations and interactions with practitioners from across the world will have to be planned. Arrangements will also need to be in place for gathering and providing accurate data and information by an independent agency, to enable carrying out the fiscal transfer exercises.

## c. Accounting and Auditing in the New Fiscal System

The mandate of the Comptroller and Auditor General's (CAG) office is to conduct the audit of all government offices, including public enterprises owned by the government. About 4,000 entities are currently audited annually, including accounts of the district-level entities. Today, the CAG's office has a staff of 450. The post of Auditor General is a political appointment (appointed on the recommendation of the Constitutional Committee to the President) and has been vacant for three years.

In the proposed Concept Paper by the CA Committee for Determining the Structure of Constitutional Bodies, the Office of the Auditor General is envisioned as a Federal Audit Commission with a chairperson and two other members. The mandate of the Office is extended to the local level, and branches may be opened at the provincial level. Regional offices had earlier been set up but were later closed.

Internal discussions are continuing about how to conduct audits at the provincial and local levels, but these matters have not been formally studied. The CAG's office has formed a technical committee, on the recommendation of the Administrative Restructuring Commission (ARC), to discuss the transitional phase. The CAG's office thinks that the audit methodology will remain the same, but they anticipate problems with reporting, accounting system and human resources. The CAG's office also anticipates the need for setting up a standardized and transparent accounting and audit mechanism for resource transfers based on reliable data, as well as the need for uniform standards to be followed by all the provinces. Useful lessons can be drawn from studying the practices of the Auditor General's role and responsibilities that are followed in other federal/regional countries in South Asia and elsewhere.

#### d. Restructuring of the Central Government

One key administrative reform will relate to the restructuring of the central administration in terms of ministerial and departmental responsibilities. As this would involve realignments of responsibilities and, in some cases, outright downsizing, it is important to take explicit and transparent decisions in this regard. There may be resistance from the central bureaucracy against large scale changes because of sheer inertia. However, if the provincial administrative structure and promotion strategy are roughly aligned with those of the central government, many staff members may opt for the provincial cadres, attracted by a faster promotion track or the desire to serve the regions where they may be from. Necessary training and re-orientation of skills may be facilitated centrally. A central clearing house for reassignment of central administrative staff to the provinces may be organized initially.

A conscious effort to ensure that the central government itself does not maintain large bureaucracies dealing with provincial subjects will not only provide vital cost savings but also will put the federal structure on a sound footing. At the same time, there should be some type of central authority to deal with provincial matters.

#### i. Information and Data: Bureau of Statistics

The new fiscal setup would require a reliable and autonomous mechanism for data collection and compilation. The Central Bureau of Statistics in Nepal presently works under the Statistical Act of 1958. It is run administratively by the Secretariat of the National Planning Commission, but technically it is an independent body. There are 529 permanent employees: 139 working at the centre, and 390 in district branches; there are 33 branches looking after 75 districts. Census and national surveys are conducted by the centre.

National income accounts exist only at the national level, and by industries. There will be high demand for provincial-level accounts. Branch offices can be aggregated into provincial offices. Provinces will need to set up their own statistical offices or the central office will need branch offices at the provincial level. A new Statistical Act will provide a sound basis for compilation of economic data in the federal setup. Available information indicates that such an Act is already being prepared. In the collection and compilation of data, there will be additional problems if boundaries of VDCs or municipalities are changed.

## 7. Fiscal Federalism and Economic Growth

At present, some concerns are being voiced in Nepal about the costs of federalism. While this is a valid concern, these costs should be compared with the potential economic benefits of federalism. A federal structure with provinces having meaningful



economic autonomy is likely to lead to stronger and more regionally balanced growth. There is a need for detailed studies assessing the costs of federalism as well as its economic benefits. Given the importance of this subject for Nepal's future with federalism, this section is divided into four subsections dealing respectively with (a) decentralization and economic growth: perspective from cross-country studies; (b) the growth profile of Nepal in recent years; (c) the role of government in accelerating growth in Nepal; and (d) other channels of strengthening growth in federal Nepal.

### a. Decentralization and Growth: Perspective from Literature

There is a good deal of empirical literature that shows evidence of the link between decentralization and economic growth. This link depends on many factors, but the extent of decentralization is an important one. The extent of fiscal decentralization differs considerably between industrialized and developing countries. For example, Oates (1985) looked at a sample of 43 countries and found that the average share of central government expenditure in total public expenditures was 65 per cent in a subsample of 18 industrialized countries, compared with 89 per cent in the subsample of 25 developing nations. In terms of total public revenues, the central government share for this subsample of developing countries was more than 90 per cent. On the whole, developed countries were fiscally decentralized in comparative terms while developing countries were found to be far more centralized. This, of course, does not establish what comes first: growth or decentralization. In a later study, Oates (1999) observed that we may regard intergovernmental structure as part of a larger political and economic system that both influences and is determined by the interplay of a variety of political and economic forces. Fiscal decentralization itself has a real contribution to make to improved economic and political performance at different stages of development. On traditional grounds of efficiency, there is a case for a significant degree of decentralization in public-sector decision-making in developing nations. This case is based both on the potential economic gains from adapting levels of public outputs to specific regional or local conditions and on the political appeal of increased participation in governance. Development policies that are sensitive to particular regional or local needs for infrastructure and human capital are likely to be more effective in promoting economic growth than are centrally determined policies that largely ignore these geographic differences.

Using a large number of indices for a sample of 80 countries, Huther and Shah (1996) empirically examine the relationship between decentralization and growth. These indices encompass a wide variety of measures of economic and political structure and performance: quality of governance, political freedom, political stability, debt-to-GNP ratios, measures of income and the degree of equality in the distribution of income. They find in nearly every case a statistically significant and positive correlation between increased decentralization and improved economic and political performance. In another study, Kim (1995) uses international panel data to estimate a growth model.

In addition to other explanatory variables, he included a measure of fiscal decentralization as an explanatory variable that, in most of his estimated equations, has a significant and positive partial association with the rate of economic growth. Kim's findings support the contention that fiscal decentralization enhances economic performance.

By contrast, in two recent studies, one examining a sample of 46 countries over the period 1970–89 (Davoodi and Zou 1998) and the other, a study of the growth of provinces in China (Zhang and Zou 1998), a negative relationship between economic growth and fiscal decentralization has been reported. The literature therefore, gives mixed results and the answers are likely to be context-specific. If the initial conditions are that there is low growth and evidence of unexploited resource availability, fiscal decentralization is likely to strengthen the growth impulse. It is important to identify forces and channels through which the growth-increasing effects of decentralization in a federal setting will work in Nepal and what can be done to enhance the effectiveness of these channels.

It should be pointed out that the available literature also provides cautions about being over-optimistic about the role that decentralization can play in strengthening the growth forces. For example, Rémy Prud'homme (1995) argues that many premises of the fiscal federalism vision are typically not satisfied in the developing country setting. Decentralized government bodies, he argues, are frequently unresponsive to the needs of their constituencies and manifest widespread corruption.

## b. Growth Experience in Nepal: Recent Years

Nepal has experienced some of the lowest Gross Domestic Product growth rates in the region, in terms of GDP at constant prices. Table 13 shows that not only have the large neighbouring countries, that is China and India, been racing ahead with high growth rates, some of the smaller countries in the region have also achieved comparatively higher growth rates. In the 2007–10 period, the Nepalese economy grew three to 5.3 per cent annually in terms of real GDP growth.

Table 13: Economic Growth Rates of Nepal and Neighbouring Countries

				Forecast (Per cent per annum)	
	2007	2008	2009	2010	2011
China	13.0	9.6	8.7	10.0	9.9
Afghanistan	14.2	3.4	22.5	8.6	7.0
Bangladesh	6.3	6.0	5.4	5.4	5.9
Bhutan	19.7	5.0	6.3	6.8	6.6

<b>India</b>	9.4	7.3	5.7	8.8	8.4
<b>Maldives</b>	7.2	6.3	-3.0	3.4	3.7
<b>Pakistan</b>	5.6	2.0	2.0	3.0	4.0
<b>Sri Lanka</b>	6.8	6.0	3.5	5.5	6.5
<b>Nepal</b>	3.3	5.3	4.7	3.0	4.0

Source: Economic Survey of Nepal (2009-10)

Table 14 shows sectoral growth rates in Nepal in terms of constant prices. It is the tertiary sector that shows the highest growth rates in recent years. Both the primary and secondary sectors show lower and more volatile growth rates. The tertiary sector is more concentrated in urban areas. Its relatively higher growth would give further impetus to migration from rural to urban areas. To avoid congestion in a limited number of cities, development of provincial capitals would lead to a regionally better distribution of population for accommodating these migration tendencies and may uplift overall growth.

Table 14: GDP Growth in Nepal at constant prices (% per annum)

	<b>Total</b>	<b>Primary</b>	<b>Secondary</b>	<b>Tertiary</b>
<b>2001-02</b>	0.16	3.15	0.66	-1.78
<b>2002-03</b>	3.77	3.33	3.09	3.68
<b>2003-04</b>	4.41	4.75	1.48	6.82
<b>2004-05</b>	3.23	3.54	2.91	3.33
<b>2005-06</b>	3.73	1.86	4.37	5.63
<b>2006-07</b>	2.75	0.98	4.02	4.51
<b>2007-08</b>	5.80	5.82	1.64	7.35
<b>2008-09 R</b>	3.95	3.01	-0.27	6.34
<b>2009-10 P</b>	3.53	1.16	3.87	5.49

Source: Central Bureau of Statistics, Government of Nepal

Notes:

Primary sector includes agriculture, forest, and fisheries.

Secondary sector includes mining and quarrying, manufacturing, electricity gas and water supply, construction.

Tertiary sector includes trade and commerce, hotels, transport, storage, communications, financial intermediation, real estate, public administration and defence, education, health and other community, social and personal services.

In terms of sectoral composition (Table 15) at current prices in the 2007/08 fiscal year, the agriculture sector had a share of about 32 per cent in 2007-08. The service

sector in Nepal is growing in importance. In 2007-08, the wholesale and retail trade had a share of 13.6 per cent, real estate, renting and business services a share of 9.9 per cent, and transport, storage and communications a growth rate of 9.3 per cent. Manufacturing still has a small share of only 7.1 per cent. The significance of the tertiary sector in the economy has been rising along with the evolving nature of the economic development process. The share of the tertiary sector in GDP reached 51.4 per cent in the 2007/08 fiscal year. The contribution of this sector is estimated to have grown by 5.4 percentage points to reach 51.5 per cent in the 2009/10 fiscal year. The emergence of fiscal federalism in Nepal will give a further immediate boost to the growth of the tertiary sector as public administration, and health and education services will increase in the new capital cities and other major cities in the provinces.

Table 15: GDP: Sectoral Composition (per cent)

	Primary	Secondary	Tertiary
2001-02	37.89	17.05	45.06
2002-03	36.98	17.15	45.87
2003-04	36.42	16.78	46.81
2004-05	35.67	16.65	47.68
2005-06	34.08	16.18	49.74
2006-07	33.02	16.08	50.91
2007-08	32.27	16.23	51.49
2008-09 R	33.19	15.22	51.60
2009-10 P	34.07	14.38	51.55

Source: Central Bureau of Statistics, Government of Nepal

It may also be noted that the savings profile of Nepal has a very special feature. Gross domestic savings constitute only about one-third of gross national savings. The difference is accounted for by the inflow of foreign capital. As ratios of GDP, gross domestic savings were limited to 9.4 per cent in 2009-10. In a nine-year period, (2000/01 to 2009/10), domestic savings declined by 2.3 percentage points from the earlier level of 11.7 per cent of GDP. Gross capital formation, on the other hand, was 36.9 per cent of GDP. Access to foreign funds, both grants and loans, will be another critical issue as external lenders usually prefer intermediation through the central government.

### c. Size of Government and Fiscal Parameters in Nepal

In this subsection, we look at the size and composition of government expenditure in Nepal. Table 16 shows that the size of government, taking into account the share of net expenditures as a percentage of GDP, is fairly small, having been in the range of 17

to 19 per cent of GDP until 2007-08. Only in 2008-09, did this share increase to about 22 per cent. In India, the size of the combined central and state governments (leaving out the local governments) is about 28 per cent of GDP. In many federal countries, the size of the government is larger, because governments at different tiers taken together play a larger economic role and the combined ratio of revenue receipts to GDP is also relatively higher.

Table 16: Government Expenditure and Revenue Relative to GDP at current producers' price (per cent)

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
<b>Recurrent Expenditure</b>	10.6	10.6	10.3	10.5	10.2	10.6	11.2	12.9
<b>Capital Expenditure</b>	5.4	4.5	4.3	4.6	4.5	5.5	6.5	7.4
<b>Principal Repayment</b>	1.4	1.9	2.0	2.3	2.2	2.3	2.0	1.9
<b>Net Expenditure</b>	17.4	17.1	16.7	17.4	17.0	18.3	19.7	22.2
<b>Revenue Mobilization</b>	11.0	11.4	11.6	11.9	11.1	12.0	13.2	14.5
<b>Expenditure Minus Revenue</b>	6.4	5.6	5.1	5.5	5.9	6.3	6.6	7.7

Source: Economic Survey 2009-10, Ministry of Finance, Government of Nepal

Table 16 also shows that the excess of government expenditure over revenue financed by borrowing has been in the range of 5.1 to 7.7 per cent of GDP. The persistence of fiscal deficits is due to less receipt of revenue and foreign grants compared with the level of expenditure. The combination of a high fiscal deficit relative to GDP with a low growth rate leads to un-sustainability of public finances as debt and interest payment liabilities increase, making the imbalances grow further.

Table 17 shows the composition of government expenditures. The share of recurrent expenditures has been about 60 per cent or more. Only since 2006-07 does it seem to have fallen below 60 per cent. Movement toward a federal setup may mean additional pressure on recurrent expenditures as provincial administrations and higher expenditures on education and health are going to be salary-intensive. At the same time, there will be a need to invest in infrastructure and development of power potential. The competing expenditure claims of recurrent and capital expenditure, and their financing in the federal setup, require careful projections and formulation of a strategy that will support growth.

Table 17: Composition of Government Expenditure (per cent of total expenditure)

Descriptions	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
<b>Recurrent Expenditure</b>	61.0	62.0	62.1	60.1	60.4	57.7	56.7	58.2
<b>Capital Expenditure</b>	30.9	26.6	25.8	26.7	26.7	29.7	33.2	33.3
<b>Principal Repayment</b>	8.0	11.4	12.1	13.2	12.9	12.6	10.1	8.6
<b>Income</b>	71.4	80.4	82.3	82.4	77.7	77.5	79.3	77.3
<b>Revenue</b>	63.0	66.9	69.7	68.4	65.2	65.7	66.7	65.3
<b>Foreign Grants</b>	8.4	13.5	12.6	14.0	12.5	11.8	12.6	12.0
<b>Saving (+) /Deficit(-)</b>	-28.6	-19.6	-17.7	-17.6	-22.3	-22.5	-20.7	-22.7
<b>Foreign Loan</b>	9.6	5.4	8.5	9.0	7.4	7.5	5.6	4.5
<b>Domestic Borrowings</b>	10.0	10.6	6.3	8.7	10.7	13.4	12.7	8.4
<b>Change in Reserves</b>	9.0	3.6	2.9	-0.2	4.3	1.6	2.4	9.8

Source: Financial Comptroller General Office (FCGO) and Central Bureau of Statistics, Government of Nepal

It is likely that with the creation of provinces, the size of the overall government may increase by a few percentage points. This will be the outcome of the additional responsibilities and the additional emphasis that provinces may provide to areas that may be presently handled by the central government. All of this will require additional administrative apparatus and additional government employment. The extent of increase in the overall size of the government will depend on the absorption of central and local level government civil servants and genuine additional employment in the provincial administration and related services.

#### d. Fiscal Federalism and Growth in Nepal: Prospects

It is well known that weak economic growth and its unequal distribution are the major causes of political unrest and dissatisfaction in Nepal. Given that both India and China are growing at fast rates, Nepal needs to take advantage of the higher investment potential of the region. Peace and stability would provide the necessary background for exploiting the massive hydro-power potential of the country, which would also require large investments. ADB-DFID-IILO (2009) observes that the cost of the conflict/civil

war, in terms of lost GDP growth in Nepal, has been significant. If GDP had continued to grow at the rate it attained in 1991-2000, the aggregate loss between 2001 and 2007 would amount to about \$3 billion in 2000 prices. Pyakuryal and Uprety (2005) estimated the cost of conflict to the economy at a similarly high level. An Asian Development Bank study estimated a loss of 10 billion to 15 billion Nepalese rupees (\$135 million to \$205 million U.S.) for the three-week strike in April 2006 alone (ADB 2006). Other estimates cited by Pyakuryal and Uprety noted that, in the first nine years of the conflict/civil war, more than 5,100 establishments were partly or fully destroyed and infrastructure worth \$129.6 million was badly damaged. In the new fiscal setup, with peace and stability returning to the country, these costs would be eliminated, creating fiscal space for infrastructure development leading to stronger growth.

To uplift growth rates in the new fiscal setup, infrastructural constraints will need to be overcome. Electricity supplies are inadequate, unreliable and expensive. Nepal's average and peak load requirements have been increasing but its per capita power consumption is still the lowest in the region. In 2005, per capita consumption levels for Nepal were only 14 per cent of those in India and 51 per cent of those in Bangladesh. The low consumption is due to the low coverage and low availability of power, even where electricity connection has been given. The electrification coverage in 2005, at 33 per cent of the population, although similar to that of Bangladesh, is the lowest in the region; it is about 60 per cent of the level in India and Pakistan, and about half that of Sri Lanka (ADB 2002). As discussed in ADB-DFID-ILO 2009, the 33 per cent electrification coverage translates to about 18.1 million people without access to electricity (UNDP 2007). A majority of the unserved people are in rural areas and remote districts.

Another growth supporting area that will receive attention is the need for road links with the new provincial capitals. Provinces are also likely to pay far more attention to developing intra-provincial road networks than is presently the case. Nepal's road network remains considerably underdeveloped compared with other countries in the region. Its road density, in kilometres per 1,000 people, is the region's lowest at 0.6 kilometres of road per 1,000 people compared with 6.5 in Bhutan, 4.7 in Sri Lanka, 3.0 in India, 1.9 in Bangladesh and 1.7 in Pakistan. Given Nepal's difficult topography, there is a need for a higher road density. About 90 per cent of Nepal's roads are concentrated in the lowland Tarai and hill areas. Some villages in the remote areas are up to 13 days' walk from the nearest road (World Bank et al. 2006). In 2007, nearly 57 per cent of the rural population did not have year-round easy access to roads, compared with only 15 per cent in Pakistan, 35 per cent in Sri Lanka, and 39 per cent in India.

Irrigation infrastructure is inadequate and poorly maintained. Due to the erratic rainfall pattern, irrigation is essential for increasing and maintaining agricultural production levels in Nepal. The yields of major crops are much lower than their potential. With agriculture becoming the responsibility of the provinces, greater attention is also likely to be paid to the development of irrigation potential.

In comparison to the potential benefits, the costs of transition should also be recognized. Some of the costs are obvious. The creation of a new tier of governance would require additional administrative capacity. Much of this can come from assigning the present district level officials to the provincial governments and inducting more qualified people from within the provinces, which can be partly facilitated by the retirement profile of the central government employees. New provincial capital cities for each of the provinces will need to be developed along with the secretariat and infrastructure for the provincial assemblies. These costs need to be estimated and then matched against potential benefits, much of which will arise from growth and stability and also additional employment. Growth and stability delivered equitably and efficiently would be the expected outcome of fiscal federalism in the country. Additional employment opportunities in the new provincial capitals, expanded health and educational services, and development of provincial-level roads and communications networks will open up possibilities for attracting new investment in the already economic active regions as well as in more remote places. Natural resources can be better tapped and provinces can develop strategies for cooperation as well as competition for attracting new investment, both domestic and international, through the intermediation of the central government. The existing trend toward congestion of a limited number of cities will be arrested and economic activities will increase on average and will be geographically more equitably distributed. The costs and benefits of federalism should be carefully estimated, not only to examine the net benefits but also to study strategies for maximizing benefits and minimizing costs.

## 8. Concluding Observations

As provided for in its interim constitution, Nepal is headed toward becoming a democratic and federal country. At present, the options for organizing the country into a number of provinces and the contours of such provinces are being extensively discussed by political parties, the members of the Constituent Assembly, academics and other stakeholders. It is on the basis of the recommendations of the CA Committee – which has the task of this restructuring and has prepared a draft plan in this regard – that eventually a suitable plan for delineating the provinces will be adopted, heralding the emergence of the second tier of government. It is likely that starting from the current highly centralized dispensation of public and merit services such as health and education, and the concentration of revenue-raising powers, in the emergent federal structure, there will be considerable vertical and horizontal imbalances. These will need to be resolved by putting in place a reliable and transparent mechanism of fiscal transfers with constitutional backing by a body such as a Financial Commission. The CA Committee on Natural Resources, Financial Rights and Revenue Sharing has already



envisaged such a commission to be complemented by another similar commission to handle issues related to sharing of natural resources.

The key challenges that must be faced in putting in place a suitable system of governance will require the creation of additional administrative capacity at the provincial level as well as a system of data collection and analysis that would provide the basis for assessment of needs and costs for providing public and merit services across the country of comparable standards.

Much of the success of federal fiscal arrangements will depend on how the transfers are designed and implemented. If adequate attention is devoted to designing these transfers – leading to more equitable and efficient results that support higher economic growth for the country and accommodate regional and ethnic preferences and priorities – the new fiscal system will contribute significantly toward Nepal's stability and prosperity.

## References:

- Asian Development Bank (ADB), *Poverty Reduction in Nepal: Issues, Findings and Approaches* (Manila, 2002).
- ADB, *Nepal Quarterly Economic Update* (Kathmandu, August 2006).
- ADB, *Nepal: Critical Development Constraints*, UK Department of International Development and International Labour Organization (2009).
- ADB, *Nepal Regional Development Strategy* (Kathmandu, 2009).
- B. Pyakuryal and K. Uprety, "Economic and Legal Impact of Conflict on State and People in South Asia with Specific Reference to Nepal," *Journal of Social, Political and Economic Studies*: 30(4) (Washington D.C., 2005).
- Barry R. Weingast, "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development," *Journal of Law Economics Org.*, 11, pp. 1-31 (1995).
- Bhim Prasad Bhurtel, *The Political Economy of Federalism in Nepal*, Nepal South Asia Centre (Kathmandu, 2009).
- Bishwambhar Pyakuryal, M.K. Dahal, Govind Nepal, Dadhi Adhikari and Gunjan Gautam, *Fiscal Management and Revenue Sharing in the Federal State of Nepal*, Nepal Economic Association (2009).
- C. Rangarajan and D.K. Srivastava, "Fiscal Federalism in Canada: Drawing Comparisons and Lessons," *Economic and Political Weekly*, 39, No.19, May 8-14, and Working Paper No.18, NIPFP, (New Delhi, 2004).
- Commonwealth Grants Commission (CGC), "State Finance – Report on General Revenue Grant Relativities," *Commonwealth Grants Commission Review* (Canberra, 1999).
- CGC, "Report on State Revenue Sharing Relativities", *Commonwealth Grants Commission Review* (Canberra, 2004).
- Committee on Natural Resources, Economic Rights and Revenue Allocation of the Constituent Assembly of Nepal, *Report of the Preliminary Draft of the Constitution*, Constituent Assembly Secretariat (Kathmandu, Nepal 2009).
- D.K. Srivastava and Pawan K. Aggarwal, "Revenue Sharing Criteria in Federal Fiscal Systems: Some Similarities and Differences", *Public Finance/Finances Publiques* 49(3) (1994).
- D. Kenyon and J. Kincaid, (eds.), *Competition Among Provinces and Local Governments*, pp. 127-145, Urban Institute (Washington, D.C., September 1999).
- Government of Nepal, *Economic Survey*, Ministry of Finance (various years).
- Government of Nepal, *Interim Constitution of Nepal* (Kathmandu, 2007).
- Government of India, *Report of the Tenth Finance Commission* (New Delhi, 1995).
- Government of India, *Report of the Eleventh Finance Commission* (New Delhi, 2000).

Government of India, *Report of the Twelfth Finance Commission*, (New Delhi, 2004).

Government of India, *Report of the Thirteenth Finance Commission* (New Delhi, 2009).

Hamid Davoodi and Heng-Fu Zou, "Fiscal Decentralization and Economic Growth" *Journal of Urban Economics*, 43, pp. 244-57 (1998).

J.F. Graham, "Fiscal Arrangements in a Federal Country", in *Intergovernmental Fiscal Arrangements*, Canadian Tax Foundation (Toronto, 1964).

Jeff Huther and Anwar Shah, *A Simple Measure of Good Governance and Its Application to the Debate on the Appropriate Level of Fiscal Decentralization*, World Bank (Washington, D.C., 1996).

Kavita Rao, *Impact on States of Central Tax Preferences, An Analysis of Important Tax Preferences*, Report Submitted to the Thirteenth Finance Commission, <http://fincomindia.nic.in> (2009).

Oates and Schwab, "The Allocative and Distributive Implications of Local Fiscal Competition," in 1148 *Journal of Economic Literature*, Vol. XXXVII (1991).

Pitambar Sharma and Narendra Khanal (with Subhash Chaudhary Tharu), *Towards a Federal Nepal*, Himal Books for Social Science Baha, (Lalitpur, 2009).

R. Garnaut and V. FitzGerald "Issues in Commonwealth-State Funding", *Australian Economic Review*, 35 (3), 290-300 (2002).

Ram C Acharya and Prem Sangraula, "Income Disparities and Poverty in Nepal: Regional and Ethnic Dimensions," *The Journal of Development and Administrative Studies*, Volume 18, Number 1-2, pp. 103-136, Centre for Economic Development and Administration, Tribhuvan University, Kathmandu, (2009).

Rangarajan and Srivastava, *Federalism and Fiscal Transfers in India*, (forthcoming) Oxford University Press (New Delhi, 2011).

Rangarajan and Srivastava, "Reforming India's Fiscal Transfer System: Resolving Vertical and Horizontal Imbalances," *Economic and Political Weekly*, June 7, 2008, also published as *MSE Working Paper No. 31* (2008).

Rémy Prud'homme, "The Dangers of Decentralization," *World Bank Research Observer*, 10 (2): pp. 201-220 (1995).

Richard M. Musgrave, *The Theory of Public Finance*, McGraw-Hill (New York, 1959).

Robert P. Inman and Daniel L. Rubinfeld, "Designing Tax Policy in Federalist Economies: An Overview," in the *Journal of Public Economics*, 60:3, pp. 307-34 (1996).

Robin Boadway, "Revisiting Equalization Again: RTS vs. Macro Approaches", *Working Paper*, Queens University Institute for Intergovernmental Relations (2001).

Robin Boadway and F. Flatters, "Efficiency and Equalization Payments in a Federal System of Government: A Synthesis and Extension of Recent Results," *Journal of Economics*, 15 (4), 613-633 (1982).

Robin Boadway and P. Hobson, "Intergovernmental Finance in Canada", *Canadian Tax Papers*, No. 96, Canadian Tax Foundation (Toronto, 1993).

Roger Gordon, "An Optimal Tax Approach to Fiscal Federalism", *Quarterly Journal of Economics*, 97, pp. 567-86 (1983).

Sang Loh Kim, Fiscal Decentralization, *Fiscal Structure, and Economic Performance: Three Empirical Studies*, Unpublished PhD dissertation, University of Maryland (1995).

Tao Zhang and Heng-fu Zou, "Fiscal De-centralization, Public Spending, and Economic Growth in China," *Journal of Public Economics*, 67, pp 221-40 (1998).

Wallace E. Oates, "A Reconsideration of Environmental Federalism", *Resource for the Future*, November 2001, Discussion Paper No. 01-54 (2001).

Wallace E. Oates, "An Essay on Fiscal Federalism", *Journal of Economic Literature*, 37:1120 - 49 (1999).

Wallace Oates, *Fiscal Federalism*, Harcourt, Brace, Jovanovich (New York, 1972).

Wallace Oates, "The Theory of Regulatory Federalism: The Case of Environmental Management," in *The Economics of Environmental Regulation*, pp. 319-31, Edward Elgar (Aldershot, 1996).

## Annex 1: Equalization in Canada

The provinces are indicated by subscript  $i$  and revenue sources by superscript  $j$ . In specifying the equalization grant formula, the following symbols may be used:

$N_i$ : population of province  $i$

$R_i$ : revenue of the  $i^{\text{th}}$  province from a given source

$b_i$ : per capita revenue base (total base:  $B = \sum N_i b_i$ ) of a given source

$a_x$ : all-province average tax rate for a given revenue source

$r_i$ : actual per capita revenue of the  $i^{\text{th}}$  province from a given source

$b_s$ : Per capita standard tax base

The subscripts  $x$  and  $s$  are kept different to emphasize that, as in Canada, in calculating the average tax rate and the standard tax base, the provinces included in the respective exercises may not constitute the same set.

The average tax rate, considering the ten provinces is defined as

$$a_x = \sum R_i / \sum B_i = \sum N_i r_i / \sum N_i b_i \quad (i = 1, 10) \quad \dots (A1)$$

A benchmark revenue base is derived from the revenue bases of all provinces. Until 2007, only five provinces were taken for the calculation of the benchmark revenue excluding Alberta and the four Atlantic provinces. The per capita benchmark revenue base for a given revenue source may be defined as below.

$$b_s = \sum B_i / \sum N_i \quad [i = 1, 10] \quad \dots (A2)$$

Where  $b_s$  may be considered as the per capita benchmark revenue base.

The total equalization entitlement with respect to an individual revenue source is determined by

$$\begin{aligned} E_i &= a_x [b_s - b_i] N_i && \text{if } (b_s - b_i) > 0 \\ E_i &= 0 && \text{if } (b_s - b_i) \leq 0 \end{aligned} \quad \dots (A3)$$

Total equalization payment for all sources for the  $i^{\text{th}}$  province will be summation of such terms for all the revenue sources. After 2007, five revenue sources are being used, namely, personal income tax, business income tax, consumption tax, property tax and natural resources. In the case of revenue from natural resources only 50 % of the provincial revenues are taken into account. This adjustment keeps the national standard from rising excessively after the inclusion of oil-rich Alberta in the calculation of the benchmark fiscal capacity. Equalization operates as a "gross" scheme, i.e., provinces with a positive entitlement receive their entitlement, but nothing is taken away from those

that have a negative entitlement. It can also be seen that the per capita entitlement in respect of any one source can also be written as

$$a_x(b_s - b_i) = a_i(b_s - b_i) + (a_x - a_i)(b_s - b_i)[a_x - a_i > 0, b_s - b_i > 0] \dots (A4)$$

The first term indicates the required correction if only the lack of capacity is made up. The second term indicates the correction where the shortfall in the rate is also corrected in respect of the additional fiscal capacity. If  $a_i = a_x$ , equalization makes up only for the differences in fiscal capacities. If  $a_i < a_x$ , it not only corrects for the differences in capacity, but also provides for the shortfall in the rate in relation to the additional capacity. If, however,  $a_i > a_x$ , the benefit from the adjustment in capacity is only to the extent of the average rate. For an extended discussion, see Rangarajan and Srivastava (2004a).

## Annex 2: Equalization in Australia

A mathematical presentation of the equalization methodology can be provided, using symbols defined as below:

$e_i$  = standardized per capita expenditure of state  $i$ ;

$\gamma_i$  = expenditure disability of state  $i$

$r_i$  = standardized per capita revenue of state  $i$ ;  $\rho_i$  = revenue disability of state  $i$

$o_i$  = per capita special purpose payment of state  $i$ ;

$d_s$  = per capita budget surplus;  $d_i = d_s$  for all states

$N_i$  = population of state  $i$ ;  $\sum N_i$  = population of all states

Subscript “s” indicates corresponding numbers for the all-state averages.

The per capita all-state average grant is given by

$$g_s = e_s - r_s + d_s - o_s \quad \dots(B1)$$

The per capita grant to state  $i$  is given by

$$g_i = e_i - r_i + d_i - o_i \quad \dots(B2)$$

Here,  $e_i$  and  $r_i$  refer to standardized expenditure and revenue for state  $i$ ,  $d_i$  is the standard budget surplus, which is common for all states and  $o_i$  is the given special purpose payment. All standardizations are made in relation to corresponding all-state averages which provide the standard, and the relevant expenditure and revenue terms can be written as

$$e_i = \gamma_i e_s, r_i = \rho_i r_s \quad \dots(B3)$$

For a given state the standardized expenditure and revenue will be the summation of standardized expenditures on different categories and standardized revenues from different sources. The SPPs are considered exogenously determined. The CGC determines first the total grants and derives the untied grants by deducting the SPPs ( $o_i$ ) that are treated by inclusion. Grants inclusive of the SPPs may be written as  $g^*$  and per capita untied grants as  $g$ , where

$$g^*_i = g_i + o_i \quad \dots(B4)$$

There are three ways in which the derivation of the share in GST-HCG transfers can be presented: the standardized model version, the needs version and the normative gap version. For this purpose, we focus on  $g^*_i$ , from which  $g_i$  is derived by deducting the SPP grants.

We may write the state-specific terms as ratios to the all-state averages. Substituting the terms in equation (3) in equation (2), we have

$$g_i^* = \gamma_i e_s - \rho_i r_s + d_s \quad \dots(B5)$$

$$\text{and} \quad g_i = g_i^* - o_i \quad \dots(B6)$$

Thus, the financial assistance to a state is the excess of assessed expenditures over assessed revenues, both written as fractions of the all-state averages plus a budget surplus which is common for all provinces, minus the special purpose grants treated by inclusion.

Substituting  $r_s - e_s = d_s$  in (5), we can write what is known as the needs version of the grant equation. Thus,

$$g_i^* = [(\gamma_i - 1)e_s + (1 - \rho_i)r_s] \quad \dots(B7)$$

This indicates that the essence of the exercise is the departure of the disabilities  $\gamma_i$  and  $\rho_i$  from 1. Further, total grants can be seen as the sum of expenditure disabilities and revenue disabilities. This equation also makes clear the difference between the Australian and Canadian systems. In the Canadian system, only the second term, that is revenue disability, is operative and no consideration is given to the expenditure side disability. This implies that implicitly  $\gamma_i$  is put equal to 1. The revenue disability ( $\rho_i$ ) in Australia is measured by the ratio of states  $i$ 's revenue base ( $b_i$ ) and the average per capita revenue base ( $b_s$ ). Thus,  $\rho_i = b_i/b_s$ . Substituting this in equation 7 and setting  $\gamma_i = 1$ , we have

$$g_i^* = r_s - \rho_i r_s = a b_s - a b_i \quad \dots(B8)$$

This describes the method of determining untied transfers in Canada (see Rangarajan and Srivastava, 2004b for a discussion).

A third way in which the determination of grants can be written is what might be called the normative gap version. This would facilitate comparison with the Indian system also.

The term  $\gamma_i e_s$  can also be written as

$$e_s \gamma_i = e_s + (\gamma_i - 1)e_s \quad \dots(B9)$$

From equation (5)

$$g_i^* = e_s - \rho_i r_s + (\rho_i - 1)e_s + d_s \quad \dots(B10)$$

Substituting  $a.b_i$  for  $\rho_i r_s$ , we can write

$$g_i^* = e_s - a b_i + \beta_i e_s + d_s \quad [\text{where } \beta_i = (\gamma_i - 1)]$$



The term  $e_s$  can be written as  $az$  where  $z$  is a constant [ $e_s/a = z$ ]

$$g_i^* = a[z - b_i] + \beta_i e_s + d_s \quad \dots \text{(B11)}$$

The first term is the term comparable to the distance criterion used in the tax sharing formula in India. The expenditure term is also comparable to the supplementary factors representing factors accounting for more than average costs like area and infrastructure. The term  $d_s$  is a constant and therefore reflects the population term in the devolution formula. Thus, the Australian formula is comparable to the Indian tax-sharing formula, although the relative weights of different terms are determined and derived differently.

## Annex 3: Revenue Sharing and Grants in India

There has been a gradual attempt in the determination of transfers by the Finance Commissions (FCs) in India, to move away from conventional devolution toward revenue-sharing that is guided by three main principles: (i) capacity equalization; (ii) efficiency promoting incentives; and (iii) allowance for cost disabilities.

The principle of horizontal equity is guided by the consideration that as a result of revenue sharing, the fiscal resource deficiencies across states arising out of systemic and identifiable factors, and under normative revenue effort, are evened out. Thus, the revenue-sharing exercise is supposed to provide resources to the states complementary to their own, so that they all may be enabled to provide an agreed common set of public services at comparable standards in terms of quality and quantity to all citizens living in the different provinces. Thus, a citizen of India, no matter which state he resides in, is entitled to and is provided with, the same level of services (state level public goods and merit goods of high priority) throughout the country. This also calls for recognition of valid cost differentials in providing a service in different states. The principle of equity, however, is a compensatory principle as it makes up for resource deficiencies. As such, it also creates a vested interest in continuing with the resource deficiency, rather than making efforts to improve own revenue bases, thereby reducing the differences in revenue per unit of resource base across states. To neutralize this adverse incentive, it needs to be complemented by criteria that either neutralize the effect of deficiencies of tax effort relative to average and/or reward “efficiency,” i.e., efforts to improve the resource bases and deliver services at minimum (efficient) costs. The latter is useful when the overall tax effort is also required to be improved for improving the average level of public services.

The criteria that have received the highest weights in the dispensation exercises of recent FCs are the income-based criteria. Income, however, is represented by per capita State Domestic Product (net or gross). Per capita income or per capita GSDP is taken as a proxy for per capita fiscal capacity. The main criterion used in this context is based on the distance of per capita income of a state from the highest per capita income (or benchmark income.) The properties of distance criteria are discussed in detail in Srivastava and Aggarwal (1994). These criteria attempt to reduce post-transfer differences in the fiscal bases of the states through progressive allocation. Successive FCs (Eighth, Ninth and Tenth) have given increasing weight to the distance criterion.

If per capita income (hereinafter referred to only as income), of the different states is indicated by  $y_i$ , and states are arranged in non-descending order of income,  $y_1$  will refer to the per capita income of say, Bihar, and  $y_{28}$  will refer to the per capita income of Goa. The per capita income (GSDP) of the states arranged in ascending order of per

capita GSDP is denoted by  $y_1, y_2, \dots, y_n$  and corresponding population is denoted by  $N_1, N_2, \dots, N_n$ . In general,

$$y_1 \leq y_2 \leq \dots \leq y_n$$

Under the distance criterion, the share of the  $i^{\text{th}}$  state can be written as:

$$a_i = N_i(y_n - y_i) / \sum N_i(y_n - y_i) \quad i = 1, \dots, 28$$

The per capita share of the  $i^{\text{th}}$  state

$$a_i^* = (y_n - y_i) / \sum N_i(y_n - y_i)$$

The share of the highest per capita income state will be zero in this standard version.

Under the population criterion, the share of a state is given by

$q_i = N_i / \sum N_i$  and per capita share by  $q_i^* = 1 / \sum N_i$  which is constant for all  $i$  implying equal per capita transfers for all states. As such, the population criterion is the ideal vehicle for vertical transfers and the distance criterion can serve the purpose of equalization transfers.

If the vertical fiscal transfer is measured with reference to the richest state, in per capita terms, it may be defined as  $[e - a.y_n]$  (assuming that  $e > a.y_n$ ), where  $e$  is per capita expenditure norm,  $a$  is the average tax-effort, and  $y_n$  is the per capita fiscal capacity of the highest income state. If  $e$  is exogenously or normatively determined, the total transfer to the highest income state is given by

$$N_n[e - a.y_n]$$

Since every state gets at least the amount  $[e - a.y_n]$  in terms of per capita transfers, we may write total vertical transfer as

$$\sum N_i[e - a.y_n] = [e - a.y_n] \sum N_i$$

The equal per capita transfers through population criteria and equalizing transfers through distance criteria imply that a suitable scheme of weights for criteria-based sharing can be used to resolve the vertical and horizontal imbalances (see Rangarajan and Srivastava, 2008 for further discussion). Grants can then be used to provide for cost disabilities.

## Annex 4: Glossary

**Concurrent VAT:** In a federal system, if the value added tax is levied by both the central and provincial governments on the same tax base consisting of the value added in the production and sale of goods and services, it is referred to as concurrent VAT.

**Criteria-based revenue sharing:** When certain objective criteria like need, tax effort and fiscal discipline, reflected by indicators like population, area and index of fiscal discipline, are used to determine the shares of individual provinces in the shareable pool of resources. Transfers are determined in the form of shares rather than absolute amounts.

**Capital expenditure:** Government expenditure that leads to formation of capital assets such as buildings, roads, and machinery and equipment.

**Equalization transfers:** Refers to the principle of transfers that aim to provide comparable fiscal capacities across provinces after transfers if the provinces have comparable tax efforts. Transfers make up for the deficiency in fiscal capacity, but not the deficiency in tax effort. In some cases, differences in per capita costs of providing public services are also taken into account.

**Fiscal federalism:** Fiscal federalism is the system or approach used to apply the principles of federalism in intergovernmental relations in which governments interact with each other by cooperation, coordination and competition to maximize the welfare of citizens.

**Fiscal transfers:** Transfers of resources from one tier of government to another, usually the central government to other tiers, mostly the sub-national governments.

**Horizontal imbalance:** Refers to imbalances in fiscal capacities at the same tier of government, i.e. differences at the provincial level or differences at the level of local bodies.

**Merit goods:** Merit goods refer to goods and services characterized by positive externalities or considered desirable by society. Positive externality implies that the benefit from the use of such goods and services extend beyond the immediate beneficiary. Education and health are examples where it is not only the immediate consumer who benefits but the society at large. These goods and services will be under-provided if their supply depended only on private demand for them. The benefit to society is larger than the sum of the benefits to the individuals. Governments have a significant role in the provision of merit goods and services. They may provide them directly or subsidize their provision by private providers.

**Primary sector:** Primary sectors include agriculture, forestry and fisheries.

**Public goods:** Refers to goods and services characterized by non-excludability and non-rivalry in consumption. The term “goods” applies to both goods and services. Non-

excludability means that consumers cannot be excluded from the consumption of the good and therefore will not reveal how much they are willing to pay for it. Non-rivalry means that the good or service is such that its consumption by one individual does not reduce its supply or availability for another. Defence is an example of a service characterized by non-excludability and non-rivalry. Public goods need to be provided largely by governments and paid for through taxation.

**Recurrent expenditure:** Refers to expenditures that do not lead to the formation of capital assets such as salaries of government employees, pensions and interest payments.

**Secondary sector:** Secondary sectors include mining and quarrying, manufacturing, electricity, gas and water supply, and construction.

**Tertiary sector:** Tertiary sectors include trade and commerce, hotels, transportation, storage, communications, financial intermediation, real estate, public administration and defence, education, health and other community, social and personal services.

**Vertical imbalance:** Refers to surplus resources relative to responsibilities with one tier of government, usually the central government and corresponding deficiencies of resources relative to responsibilities at the lower tiers government, i.e. provincial and local governments.











## **Fiscal federalism as a tool to balance the needs of diverse regions**

### **D.K. Srivastava**

Presently the Director of the Madras School of Economics in Chennai, India, Dr. D.K. Srivastava was a professor at the National Institute of Public Finance and Policy, New Delhi from 1996 to 2005 and has held teaching positions at a number of universities in India and internationally. Having acted as a consultant and economic advisor to the Tenth and Eleventh Finance Commissions, he served as a member on the Twelfth Finance Commission of India in the rank of Minister of State of the Union Government.

Dr. Srivastava has been the chairman/member of several economic, financial and taxation committees constituted by the central and state governments in India and the Reserve Bank of India. Presently, he is a member of the High Powered Committee on Public Expenditure Reform constituted by the Planning Commission of the Government of India.

A specialist in the area of fiscal federalism and macro-econometric modeling for forecasting and policy simulations, Dr. Srivastava is the author of a number of books, reports, and journal articles. His most recent work in the area of fiscal federalism is a book co-authored with Dr. C. Rangarajan entitled *Federalism and Fiscal transfers in India*, published by Oxford University Press.

ISBN 978-0-9809150-7-5

