

Survey Report on The Share of Kathmandu Valley in the National Economy



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July 2012

Contents

FOREWORD

EXECUTIVE SUMMARY

1. INTRODUCTION	1
2. OBJECTIVE	2
3. METHODOLOGY	2
3.1 Coverage and Study Period	2
3.2 Stratification	2
3.3 Measuring Economic Activities by Expenditure Approach	3
3.4 Estimating the Share of Kathmandu Valley in the National Economy	5
4. LIMITATIONS	6
5. FINDINGS	7
6. SUMMARY AND CONCLUSION	10
ANNEXES	

Acronyms

AMPI	Annual Manufacturing Production Index
AMPPI	Annual Manufacturing Production Price Index
CBS	Central Bureau of Statistics
CME	Census of Manufacturing Establishments
DRI	Department of Revenue Investigation
FCGO	Financial Comptroller General's Office
HH	Household
KLB	Kathmandu, Lalitpur and Bhaktapur
NEA	Nepal Electricity Authority
NLSS	Nepal Living Standard Survey
NPISH	Non-profit Institutions Serving Households
NRB	Nepal Rastra Bank
ROW	Rest of the World
SSME	Survey of Small Manufacturing Establishments
TIA	Tribhuvan International Airport

Foreword

Economic activities are generally concentrated in urban areas due to the high density of population, infrastructure facilities and concentration of government service outlets. Economic activities in the Kathmandu Valley is observed to be high but the share of such activities taking place in the Valley is not known. Against this background, this study has been conducted with an objective of estimating the share of the Kathmandu valley in the national economy.

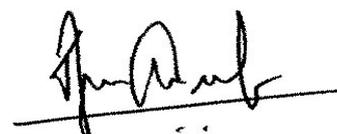
This survey estimates the total value of economic activities in Kathmandu Valley using the expenditure approach of national income accounting. It has used both primary as well as secondary data of the fiscal year 2010/11. In addition to the aggregate economic activities, the survey also estimates the share of financial services as well as the consumption of some major items like food, petroleum products and electricity in the Valley.

I believe that this survey will provide valuable insight for understanding the macroeconomic performance particularly, consumption, investment and trade structure of the Valley and will serve as a basis for the formulation of regional policies and programmes. Moreover, this survey can be a useful reference for conducting regional level or area specific income accounting in other parts of the country.

This study report would not have been in this shape without invaluable support from various agencies and individuals. In this regard, I would like to extend my sincere gratitude to Honorable Governor Dr. Yuba Raj Khatiwada, Deputy Governors Mr. Gopal Prasad Kaphle and Mr. Maha Prasad Adhikari for their valuable remarks during the presentation of the first draft of this report. I am also grateful to the Executive Directors and Directors of various departments of Nepal Rastra Bank, representatives from Central Bureau of Statistics, FNCCI, CNI, Nepal Chamber of Commerce and Central Department of Statistics, Tribhuvan University for their constructive comments.

My special thanks go to the entire survey team led by Deputy Director Dr. Dilli Ram Pokhrel with the support of Assistant Directors Mr. Shashi Kanta Prasad Chaudhary, Mr. Guna Raj Bhatta and Mr. Ash Bahadur Thapa for their untiring effort to bring this survey report in this form. I would also like to thank Directors Mr. Narayan Prasad Paudel and Dr. Shankar Prasad Acharya for their support and inspiration to the survey team.

August 2012



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Executive Summary

In the context of wide range of economic activities that has been taking place in Kathmandu Valley, the aggregate values of such activities and their share in the national economy remained unknown. This survey attempts to fill this gap by estimating the value of total consumption, gross capital formation and net exports of the Valley and its share in the national economy based on the data of fiscal year 2010/11.

The survey uses the secondary information of Nepal Living Standard Survey (NLSS) -III and primary information obtained from the Field Survey. Taking the physical outline of three districts of Kathmandu Valley (Kathmandu, Lalitpur and Bhaktapur) as a separate economic territory, the survey estimates two scenarios - Reference and Alternate Scenario. The '**reference scenario**' is based on the published data sources and field survey while the '**alternate scenario**' also incorporates the underestimated data (consumption of electricity and petroleum products) obtained from the field survey and takes into account the temporary population of the Valley which is assumed to be 4 million against the official estimates of 2.5 million.

Using the expenditure approach of national income accounting, the survey estimates that the total value of economic activities (consumption, gross capital formation and net exports) in the Valley is Rs. 316 billion, which accounts for 23 percent of GDP under reference scenario.

The survey estimates the Valley's total consumption of Rs. 328 billion, which is 26 percent of the national level consumption and 24 percent of GDP. Moreover, the shares of private and public consumption expenditure of the Valley stand at 23 percent and 50 percent of the national level consumption respectively. Of the total consumption expenditure of the Valley, food item alone accounts for 26 percent, which is 12 percent of national level consumption.

The gross capital formation of the Valley is estimated at Rs. 63 billion, which is 15 percent of the national level gross capital formation. Of the gross capital formation, the shares of government and private sectors are estimated at 61 percent and 39 percent respectively.

The survey estimates the total value of exports (domestic and abroad) of goods and services (excluding other services except tourism) from the Valley at Rs. 43 billion. The Valley exports 26 percent and 47 percent of goods and tourism services to abroad respectively. Likewise, the total imports (domestic and abroad) of the Valley are estimated at Rs. 118 billion. Of the total imports from abroad, the share of Valley is 19 percent.

In alternate scenario, the total value of economic activities in the Valley amounts to Rs 418 billion, which accounts for 31 percent of GDP. In this scenario, the share of total consumption expenditure of the Valley is 34 percent of the national level consumption. Of the total consumption expenditure of the Valley, the share of food consumption stands at 32 percent, which is 20 percent of national level consumption.

The fact that a high concentration of access to finance and financial services in the Valley comprising 60 percent of total deposits and 44 percent of the total credit mobilization of banks and financial institutions also supports the findings of the survey.

The overall survey findings suggest that about one-third of the country's economic activities are concentrated in Kathmandu Valley (based on alternate scenario). It is expected that the outcome of this survey will provide an important ingredient for regional development plan and economic policy analysis as well as for extending such regional income accounting practices in the other parts of the country. Major findings of the survey are summarized in the following table.

Summary Table
Share of Kathmandu Valley in the National Economy (2010/11)

Particulars of Kathmandu Valley	Amount (Rs. '000)	As % of Respective National Total
Reference Scenario: Computations based on NLSS-III and Population Census 2011		
Total value of economic activities (a+b+c-d)	315588192	23.4
a. Final Consumption Expenditure	327526858	26.1
b. Gross Capital Formation	62550095	15.4
c. Exports*	43281879	25.8
d. Imports*	117770639	18.6
Alternate Scenario: Computations based on 'Reference Scenario plus Difference Factors**'		
Total value of economic activities (e+b+c-d)	417762170	31.0
e. Final Consumption Expenditure	429700835	34.2
Consumption Expenditure on Some Major Items**		
Consumption of food	139154473	19.8
Consumption of Electricity	5261626	29.2
Consumption of Petroleum products	24075749	30.7
LPG	8412695	60.0
Petrol	7510589	45.5
Diesel	6888235	15.5
Kerosene	1264231	37.6
Key Financial Indicators		
Deposits [#]	493020000	60.0
Credit [#]	375722000	44.0
Number of Bank Branches (A-D Category)	588	25.6

Note: Trade includes both domestic and foreign trade.

* Excluding other services except tourism exports and the shares of exports and imports exclude domestic figures.

Includes all commercial banks but not all development banks and finance companies.

**The estimate of private consumption expenditure on electricity and petroleum products using NLSS-III and Population Census 2011 falls short of the value obtained from the field survey and adjusting temporary population. The short values have been considered as 'difference factors'.

1. INTRODUCTION

The national accounts are comprehensive accounting framework for measuring economic activities within and outside the country's territory. Since the national accounts record details of all economic activities and the interaction between different economic agents, it provides a fundamental aggregate statistics reflecting the overall performance of an economy and serves as the building blocks for economic analysis and policy formulation. The System of National Accounts (SNA, 1993 & 2008) provides internationally agreed methodology for compiling and measuring economic activities.

The evolution of national accounting in Nepal dates back to early-1960s when the government commenced GDP (Gross Domestic Product) estimation in the fiscal year 1961/62. Since 1964/65, national accounts statistics have been prepared regularly on annual basis. Currently, the government compiles national accounts on annual basis following the SNA, 1993 format and subsequently, planning for quarterly GDP estimates from fiscal year 2011/12.

In addition to national accounts, many countries estimate regional aggregates of economic activities measuring the size, structure and overall economic performance of that particular region and use them for policy purpose. However, there has been no such estimate of regional accounts in Nepal so far. It is in this context, this study has been conducted as an initial step for estimating regional accounts in Nepal taking Kathmandu Valley as a sample study area. Subsequently, the study can be extended to the other regions having significant contribution to the nation in terms of economic value addition.

As in the national accounts, the system of regional accounts also provides an integrated database for economic activities, interrelationship among various economic agents and other information about sectoral macroeconomic aggregates. Such information/database is highly significant for identifying the extent of regional contribution in terms of economic value addition to the national economy. Likewise, the database on regional aggregates of economic activities serves as an important basis for budgetary allocation while formulating public policy focusing on that particular region. Such information provides guidelines for the policy makers to efficiently allocate resources for reducing/minimizing regional imbalances. Thus, the system of regional accounts provides a number of important implications emanating from understanding regional macroeconomic aggregates to policy analysis.

Kathmandu Valley, located in the central region with about 10 percent of total population and less than one percent of country's area comprising three administrative districts (Kathmandu, Lalitpur and Bhaktapur) including capital city; is a major administrative, economic and financial hub of the country. The Valley's economic activities are largely dominated by the services sector like tourism, finance, trade, education and real estates. In addition, the country's major export industries such as carpet; garment and handicrafts are located in the Valley. With the concentration of major economic activities and better access to information and other basic services, it has become one of the most attractive destinations for employment opportunities and internal migration. Despite the fact that a wide range of economic activities undertaking in the Valley has been significantly contributing to the nation, the actual share of the Valley in national economy estimated on the basis of economic database is still unknown. Taking the above mentioned facts into consideration, this survey attempts to estimate the share of Kathmandu Valley in the national economy as an initial step to regional accounting practices in Nepal. It is expected that the outcome of this survey will provide guidelines to regional policy and development analysis and extension of such practices to other regions of the country in the coming days.

2. OBJECTIVE

The core objective of this survey is **to estimate the share of Kathmandu Valley (Kathmandu, Lalitpur and Bhaktapur Districts) in the national economy**. More specifically, this survey estimates the volume of total consumption, gross fixed capital formation and net exports of Kathmandu Valley from **expenditure approach** and their shares in the respective national figures. Moreover, the survey also estimates the consumption of petroleum products and electricity in the Valley.

3. METHODOLOGY

3.1 Coverage and Study Period

The physical outline of three districts of Kathmandu Valley has been defined as a separate economic territory. This territory covers one metropolitan city; one sub-metropolitan city, three municipalities and 114 Village Development Committees (VDCs). As per the preliminary result of Population Census (2011), three districts in the valley comprise of 656,672 households and 2,510,788 populations. This survey covers the data during the fiscal year 2010/11.

3.2 Stratification

There are 14 explicit strata in Nepal Living Standard Survey-III (NLSS-III) report including Urban-Kathmandu Valley. This stratum covers Kathmandu Metropolitan city; Lalitpur Sub-metropolitan city; Kirtipur, Bhaktapur and Madhyapur-Thimi municipalities only. This classification is not sufficient to meet the purpose of this study, as the economic activities are spread outside the mentioned cities as well. Hence, to cover all the economic activities taking place in the Valley, complete enumeration of three districts of the valley has been done. Moreover, another issue is the separation of urban and rural regions of the valley. For instance, there are some localities like *Jorpati, Dhapasi, Thankot, Budhanilkantha* etc. that actually do not belong to Urban-Kathmandu Valley, but they possess the characteristics of urban areas. Therefore, if these were treated as rural, this would not measure the exact picture of expenditure (problem of under-estimation). Moreover, NLSS-III report presents the consumption estimates of the "urban" but not "rural" area of Kathmandu Valley, which cannot be generalized for the whole region (problem of over-estimation).

In order to address these problems, we first compare the number of households and population per ward of all the urban market centers, emerging market centers and the rests spread over Nepal, and purposively make a demarcation line to separate the nature of these localities. According to this demarcation line, the wards with households number equal to or greater than 400 ($HH \geq 400$) have been treated as urban; between 200 (inclusive) and 400 households ($200 \leq HH < 400$) as semi-urban and less than 200 ($HH < 200$) have been treated as rural area. With this classification, a total of 144 wards fall under urban areas, 166 wards in semi-urban areas and 723 wards in rural areas. Accordingly, the facts and figures of NLSS-III have been treated equivalently as follows:

Strata of NLSS-III	Equivalently treated in this survey
Urban-Kathmandu Valley	Urban areas
Urban-Other Hills	Semi-urban areas
Rural hills-Central region	Rural areas

3.3 Measuring Economic Activities by Expenditure Approach

To estimate the economic activities of Kathmandu Valley, we employ expenditure approach of measuring GDP as per the following general identity model;

$$GDP = C_p + C_g + I_p + I_g + (X-M) \dots\dots\dots (1)$$

Where, C_p = Private consumption, C_g = Government Consumption, I_p = Private Investment, I_g = Government Investment, X = Total Exports and M = Total Imports.

3.3.1 Estimating Private Consumption (C_p)

The C_p is the sum of consumptions of Households (HH) and Non-profit Institution Serving Households (NPISH). The NPISH covers the active NGOs and INGOs working in the Valley during the study period. Estimation of household consumption is based on NLSS-III report. The consumption aggregates in NLSS-III report are constructed by adding the various goods and services consumed by each household together during a period of 12 months. Various components of consumption are grouped together into three main categories: consumption of food items, consumption of housing and consumption of other non-food items. However, the consumption aggregates report has excluded the expenditure on (i) health and, (ii) marriages, dowries, funerals and religious functions.

According to NLSS-III report, the most health expenses occur only in response to health shocks. Given that there is a health shock, health expenditure is generally welfare enhancing. But the incidence of health shocks itself is a sign of reduction in welfare. Because of this oddity, expenditure on health is reported separately. However, expenditures on marriages, dowries, funerals, and religious functions are excluded from the report because of the lumpiness of these expenditures on a relatively short time horizon, and for these kinds of expenditures do not accurately reflect household welfare.

Therefore, the nominal household consumption by expenditure category reported in NLSS-III report (page: 36, vol.2) excludes the nominal expenditures on the items mentioned above. Hence, the gross consumption expenditure per household (C_{pHH}) has been computed as:

$$C_{pHH} = \begin{aligned} & \text{Nominal household consumption expenditure reported in NLSS-III} \\ & \text{Plus Expenditure on health;} \\ & \text{Plus Expenditure on marriages, dowries, funerals, and religious functions} \end{aligned}$$

The basis for estimating the value of NPISH consumption is the NPISH Survey 2008/09. This survey was conducted by Central Bureau of Statistics (CBS) during July 16, 2008 through July 15, 2009. The expenditure of NPISH in this survey has been taken as base year and the number of NPISH has been used as an extrapolator to estimate the base year value in the current year. Then, this value has been inflated by the inflation rate of study year to estimate the current consumption.

The problem faced while estimating the consumption of NPISH by this method is the unavailability of the actual number of active NGOs and INGOs working in Nepal. To overcome this problem, the share of active NGOs in the base year (2008/09) has been calculated and the same ratio has been assumed for subsequent years. Then, 6 years' average growth rate of the registered NGOs has been applied to estimate the active NGOs for the year 2010/11. The current active INGOs in Nepal and its share in the Valley have been calculated on the basis of information obtained from the field survey.

3.3.2 Estimating Government Consumption (Cg) and Government Investment (Ig)

Estimation of the government final consumption expenditure in the Valley is based on the annual data of recurrent and capital expenditures obtained from the Financial Comptroller General's Office (FCGO). The annual amount of the government recurrent expenditure has been used as per the FCGO's record. However, the figures of capital expenditure have been adjusted to exclude expenditures on *Land acquisition* and *Investment on share and loan*. The expenditures of VDC's have not been included in the study due to difficulties in accessing the information through a single window.

3.3.3 Estimating Private Investment (Ip)

The private investment expenditures include the investment expenditures of Households, NPISH and Manufacturing Sectors. Since the data on the investment expenditures of households are not readily available, we compute it by using the information given in the NLSS-III report. This report gives information on how many households in a stratum have been engaged in enterprises. These households have been categorized into two groups: registered and non-registered. Since, registered enterprises have been covered in the Survey of Small Manufacturing Establishments 2008/09; only non-registered households have been taken into consideration for estimating the investment expenditures of households. The NLSS-III report gives information on the percent of non-registered HHs with enterprises and mean-annual capital expenditure.

We estimate the investment made by NPISH based on the information given in NPISH Survey Report 2008/09. This report provides information on 'Change in Stock' and 'Gross Addition to Fixed Assets'. Accordingly, the investment of NPISH in the year 2008/09 has been estimated by taking their sum. To arrive at the figure of 2010/11; first, the value of 2008/09 has been extrapolated with the respective growth rates of NGOs and INGOs. Then, the obtained value has been inflated by the inflation rate of the study year.

The investment expenditures of manufacturing sector are estimated on the basis of two reports namely, Census of Manufacturing Establishments 2006/07 and Survey of Small Manufacturing Establishments 2008/09 published by CBS¹.

These reports provide the value of 'Change in Stocks' and 'Gross Addition to Fixed Assets'. So, by summing up them gives the total value of manufacturing investments in the reference year. To arrive at the estimation of the study year, we have made extrapolation on the basis of compound growth rates of annual manufacturing production index (AMPI). Finally, the obtained values have been inflated on the basis of compound growth rates of annual manufacturing production price index (AMPPI).

3.3.4 Estimating Total Exports (X) and Imports (M)

The total flow of goods from/to Kathmandu Valley has been categorized as Domestic flow and Rest of the World (ROW) flow. The major exit/entry points for the flow of goods are: Tribhuvan International

¹ The Census of Manufacturing Establishments (CME) and the Survey of Small Manufacturing Establishments (SSME) are the two primary sources of industrial sector statistics in Nepal. The Central Bureau of Statistics (CBS) collects information of industrial sector on a periodic basis. The CME is carried out in every 5 year and SSME in every 10 year. The CME covers manufacturing activities undertaken by establishments that employ ten or more persons. The SSME covers the manufacturing activities that are outside the purview of the CME.

Airport (TIA), Tatopani Custom and Thankot. ROW flow occurs via all the three mentioned points; while Domestic flow mainly occurs via Thankot point.

To estimate the total domestic exports and imports, the database received from the Department of Revenue Investigation² (DRI) and Field Survey have been used. In the database of the DRI, there is clear indication of the origin and destination of the goods carried in or out along with their quantity and values. In case of specific items like vegetables and milk, which are not subject to compulsory submission of the bills to DRI check points, a team of NRB officials visited the concerned offices to collect official data and experts' opinions.

For estimating the total ROW exports, data collected from Balance of Payments Division, Nepal Rastra Bank are used. The values of some specific goods have been taken for the purpose. These goods are, in fact, reported to be the native origin of Kathmandu Valley by the Field Survey. Such goods include handicrafts and related items; carpets; pashmina and Gold Star shoes. The values of such goods are summed up in the total exports of the Valley.

To estimate the ROW imports; DRI database, Field Survey results and Experts' Opinion have been used, as the trade data prepared by the NRB are not directly usable for domestic trade. It does not include the destination points of the flow of goods. For instance, for many imports via TIA and Tatopani, Kathmandu Valley is just a 'transit point'. Likewise, the values of imports through other custom points of Nepal to Kathmandu Valley are not readily available. So, DRI database has been used. This database is based on the document of declaration and there is clear indication of destination cities of Nepal. However, for specific items like fruits and petroleum products, which are not subject to compulsory submission of documents to DRI check points, Field Survey data and experts' opinion, have been used.

To estimate the share of tourism sector, the gross value of the revenue generated by this sector has been distributed in the proportion that Kathmandu Valley shares in average length of stay in Nepal.

3.4 Estimating the Share of Kathmandu Valley in the National Economy

The survey estimates two scenarios - 'Reference' and 'Alternate' – of the total value of the economic activities taking place in the Valley and its share in the national economy. The '**reference scenario**' is based on the published data sources³ and field survey. However, in some items (electricity and petroleum products), the estimates of private consumption expenditure using NLSS-III and Population Census 2011 falls short of the value obtained from the field survey and adjusting temporary population. The short values have been considered as '**difference factors**', which are incorporated in developing the '**alternate scenario**'.

² If any party is carrying goods in or out of a place, there is a provision for submitting the VAT bills (for domestic exports/imports) or Pragyaan patra (Document of Declaration for ROW imports) to the Department of Revenue Investigation (DRI) check points where the online entries are made. The database is gathered at the Central Server located at DRI, Pulchowk. On the official request, we received the details of total exports/imports of Nepal for the FY 2010/11 from the Department.

³ The published data sources include various Survey Reports of CBS, Information obtained from FCGO; DRI and NRB.

3.4.1 Difference factors

Difference factor 1: Consumption Expenditure of 'Temporary Populations'⁴

It is assumed that around 4 million people live in Kathmandu Valley as against the official estimates of (Population Census 2011) of 2.5 million. In order to adjust this discrepancy, the difference in population (temporary population) has been considered as '**difference factor 1**'. The consumption expenditure of the temporary population has been estimated on per capita basis (annex 3). Accordingly, annual per capita consumption expenditure on 'food' and 'temporary rent' has been computed for urban and semi-urban group assuming that that temporary population generally reside in the urban/semi-urban areas. The total consumption expenditure of temporary population has been incorporated in the alternate scenario.

Difference factor 2: Difference value of consumption expenditure on electricity

This study uses the mean annual expenditure of the sample households on electricity (NLSS-III) and the total number of households to arrive at the total value of electricity consumption of the Valley. However, this estimate does not match with the actual revenue collected by Nepal Electricity Authority (NEA) in the Valley. In fact, the computed value has underestimated the consumption expenditure of the electricity. Therefore, the difference value has been treated as '**difference factor 2**' in the alternate scenario (annex 1).

Difference factor 3: Difference value of consumption expenditure on petroleum products

The value of total consumption expenditure on petroleum products by households and public transports has been computed on the basis of information of NLSS-III. However, this estimate falls short of the figure computed on the basis of field survey. In fact, NLSS-III has not included the petroleum consumption by the institutional units; which are supposed to be among the major consumers of petroleum products. Therefore, the difference value has been treated as '**difference factor 3**' in the alternate scenario (annex 2).

4. LIMITATIONS

In the context of weak and inadequate database in the country, estimating the aggregate value of economic activities itself is a complex and challenging task. Being an initial effort to regional income accounting practice in Nepal; **this survey is expected to provide a preliminary estimate of major economic activities taking place in Kathmandu Valley, rather than an accurate estimation based on the SNA principles and estimation procedures.** As the disaggregated data and information on all sectors of economic activities are not readily available in the district level, national level data has been used as a proxy in proportion to district level estimation in some cases. Furthermore, this survey does not cover the economic activities of some major units like institutions unit (hospitals, schools and hostels, diplomatic agencies etc.), publications and village development committees (VDCs) due to problem of either lack of data (e.g. publications) or accessing the data sources (e.g. institutions, VDCs). Moreover,

⁴ Temporary populations are those people who are excluded in the definition of 'Population Census Manual'. The Census Manual counts only those people who have been residing in the Valley for 6 or more months. According to Population Census (2011), a total of 2,510,788 people reside in the Valley. But, some informal sources estimate that to be about 4 million. This fact has also been used for projecting the demand for drinking water in the Valley (Gorkhapatra Daily, 2068/12/22). Accordingly, the additional 1.5 million people are treated as 'temporary populations'.

due to complexities in measurement and aggregation, this survey does not incorporate the trade and investment of services sector except the exports of tourism related services.

5. FINDINGS

Overall Economic Activities: Under **reference scenario** (based on published data sources and field survey), the survey estimates that the total value of economic activities taking place in the Valley is Rs. 316 billion that accounts 23 percent of GDP. In the **alternate scenario** (including reference scenario, underestimated expenditure on electricity, petroleum products and temporary population of the Valley), the survey estimates the total value of economic activities in the Valley of Rs. 418 billion which accounts 31 percent of GDP.

Consumption: The survey estimates the Valley's total consumption of Rs. 328 billion, which is 26 percent of the national level consumption and 24 percent of GDP under reference scenario. Of the total consumption expenditure of the Valley, private and public consumption account 79 and 21 percent respectively. Moreover, the share of private and public consumption expenditure of the Valley stand at 24 percent and 50 percent of the respective national level consumption. Of the total consumption expenditure of the Valley, food item alone accounts 26 percent which is 12 percent of national level consumption. **In alternate scenario**, the share of total consumption expenditure of the Valley is 34 percent (Rs. 423 billion) of the national level consumption and 32 percent of GDP (Table 2). Under this scenario, the Valley's consumption expenditure on food amounts to Rs. 139 billion, which is 32 percent of total consumption and 20 percent of national level food consumption.

Capital Formation: The gross capital formation of the Valley is estimated at Rs. 63 billion, which is 15 percent of the national level gross capital formation and 5 percent of GDP. Of the gross capital formation, the share of government and private sectors are estimated at 61 percent and 39 percent respectively.

Trade: Due to complexities in obtaining the accurate data, this survey excludes the value of export-imports of services from/to the Valley except the ROW exports of tourism services. The survey estimates that the total value of exports of goods and services from the Valley is Rs. 43 billion. The Valley exports 26 percent and 47 percent of goods and tourism services to abroad respectively. Likewise, the total imports (domestic and abroad) of the Valley are estimated at Rs. 118 billion. Of the total imports from abroad, the share of Valley is 19 percent. As in the national level, the Valley also has a huge volume of trade deficit of Rs. 74 billion which stands at 24 percent of the total economic activities of the Valley and 6 percent of GDP (Table 1).

Financial Services: High concentration of economic activities in the Valley is also supported by some key financial indicators reflecting greater access to finance and financial services operated in the Valley. Until mid-July 2011, more than 25 percent of the total 2299 branches of banks and financial institutions operate in the Valley. Of which, commercial bank branches in the Valley comprises 35 percent. Until this period, Valley alone comprises 60 percent of total deposits (Rs. 823 billion) and 44 percent of total credit (Rs. 855 billion) mobilized by banks and financial institutions (Table 3). However, these ratios should be carefully analyzed because the credit disbursed from the Valley can also be used in the other parts of the country. Besides, the indicators showing high concentration of access to finance and financial services clearly support the fact that high volume of economic activities has been taking place in Kathmandu Valley.

Table 1

Value of Economic Activities in Kathmandu Valley (Reference Scenario)

Particulars of Kathmandu Valley	FY 2067/68		
	Amount Rs. ('000)	As % of Respective National Total	As % of GDP
Total Value of Economic Activities (A+B+C)	315588192	23.43	23.43
A. Final Consumption Expenditure	327526858	26.05	24.32
<i>Government consumption</i>	<i>68046415</i>	<i>49.72</i>	<i>5.05</i>
<i>Private consumption</i>	<i>259480442</i>	<i>23.60</i>	<i>19.27</i>
Food	85570204	12.15	6.35
Rent	51407502	40.83	3.82
Education	22497305	37.08	1.67
Health	10786515	15.10	0.80
Other Non-food	66447284	26.15	4.93
Other Social Functions	11089863	---	0.82
Nonprofit institutions serving households	11681769	56.54	0.87
B. Gross Capital Formation	62550095	15.37	4.64
C. Net Exports of Goods and Services	-74488760	---	-5.53
Exports of Goods and services	43281879	---	3.21
Exports of Goods	19939337	---	1.48
Domestic Exports	2611748	---	0.19
Rest of the World Exports	17327589	25.82	1.29
Exports of Services (Tourism)	23342541	46.89	1.73
Imports of Goods	117770639	---	8.74
Domestic Imports	48142694	---	3.57
Rest of the World Imports	69627945	18.60	5.17

Table 2

Value of Economic Activities in Kathmandu Valley (Alternate Scenario)

Particulars of Kathmandu Valley	FY 2067/68		
	Amount Rs ('000)	As % of Respective National Total	As % of GDP
Total Value of Economic Activities (A+B+C)	417762170	31.02	31.02
A. Final Consumption Expenditure	429700835	34.18	31.90
<i>Government consumption</i>	<i>68046415</i>	<i>49.72</i>	<i>5.05</i>
<i>Private consumption</i>	<i>361654420</i>	<i>32.89</i>	<i>26.85</i>
Food	139154473	19.77	10.33
<i>Food by usual population*</i>	85570204	12.15	6.35
<i>Food by temporary population (Diff. factor 1)</i>	53584269	7.61	3.98

Rent	85447956	67.86	6.34
<i>Rent by usual population*</i>	51407502	40.83	3.82
<i>Rent by temporary population (Diff. factor 1)</i>	34040454	27.03	2.53
Education	22497305	37.08	1.67
Health	10786515	15.10	0.80
Other Non-food	66447284	26.15	4.93
Other Social Functions	11089863	---	0.82
Nonprofit institutions serving households (NPISH)	11681769	56.54	0.87
Difference Factor 2 (Electricity)	1834015	---	0.14
Difference Factor 3 (Petroleum products)	12715239	---	0.94
B. Gross Capital Formation	62550095	15.37	4.64
C. Net Exports of Goods and Services	-74488760	---	-5.53
Exports of Goods and services	43281879	---	3.21
Exports of Goods	19939337	---	1.48
Domestic Exports	2611748	---	0.19
Rest of the World Exports	17327589	25.82	1.29
Exports of Services (Tourism)	23342541	46.89	1.73
Imports of Goods	117770639	---	8.74
Domestic Imports	48142694	---	3.57
Rest of the World Imports	69627945	18.60	5.17

* The population of Kathmandu Valley reported by Population Census 2011, Preliminary Report (CBS).

Table 3

Key Financial Highlights of Kathmandu Valley

Branches of Banks and Financial Institutions						
Types of Institutions	Kathmandu	Lalitpur	Bhaktapur	Kathmandu Valley Total	Nepal Total	Share of Valley (%)
Commercial Banks	296	67	29	392	1098	35
Development Banks	46	8	5	59	495	12
Finance Companies	105	13	6	124	281	44
Microfinance Development Banks	10	2	1	13	425	3
Grand Total	457	90	41	588	2299	26
Deposits and Credit of Banks and Financial Institutions (Rs. in million)						
Deposits*	432891	46903	13226	493020	823235	60
Credit*	344215	27309	4198	375722	854870	44

Source: Nepal Rastra Bank, * Excludes some development banks and finance companies.

6. SUMMARY AND CONCLUSION

This survey estimates the aggregate value of economic activities (consumption, gross capital formation and net exports) of Kathmandu Valley and its share in the national economy. The survey is based on the secondary information of Nepal Living Standard Survey (NLSS) -III and primary information obtained from the Field Survey conducted by a team of NRB officials. The survey covers the major economic activities undertaken within one metropolitan city, one sub-metropolitan city, three municipalities and 114 VDCs of Kathmandu Valley (Kathmandu, Lalitpur and Bhaktapur districts) during the fiscal year 2010/11. As per the preliminary result of Population Census (2011), Kathmandu Valley comprises of 656,672 households and 2,510,788 populations.

With a view to minimize the chances of underestimation and carry more economic sense, a new demarcation line has been set for classifying the population strata in the Valley, which is different from the NLSS-III. Accordingly, the wards with household number 400 and above have been treated as urban; between 200 (inclusive) and 400 as semi-urban; and less than 200 as rural areas. With this new classification, consumption/investment expenditures of households have been adjusted with NLSS-III findings by treating equivalently 'Urban Kathmandu Valley' as 'Urban' area; 'Urban-Other Hills' as 'Semi-Urban' and 'Rural Hills-Central Region' as 'Rural' area of the Valley.

Using expenditure approach of national income accounting, the survey estimates two different scenarios - Reference and Alternate – of the aggregate values of economic activities taking place in the Valley. The **'reference scenario'** is based on the published data sources and the field survey. However, the computed consumption expenditure based on published data sources (NLSS-III, Population Census 2011) falls short of the value computed on the basis of field survey (such as electricity and petroleum products) and estimated temporary population of the Valley, which is assumed to be 4 million. These short values have been incorporated in the **'alternate scenario'** as difference factors.

Under Reference scenario, the survey estimates the total value of economic activities taking place in the Valley to be Rs. 316 billion that accounts 23 percent of GDP. Likewise, the survey estimates the Valley's total consumption of Rs. 328 billion, which is 26 percent of the national level consumption and 23 percent of GDP. Moreover, the share of private and public consumption expenditure of the Valley stand at 24 percent and 50 percent of the national level consumption respectively. Of the total consumption expenditure of the Valley, food item alone accounts for 26 percent, which is 12 percent of national level consumption.

In alternate scenario, total value of economic activities in the Valley amounts to Rs. 418 billion, which accounts 31 percent of GDP. In this scenario, the share of total consumption expenditure of the Valley is 34 percent of national level consumption and 32 percent of GDP. Of the total consumption expenditure of the Valley, the share of food consumption stands at 32 percent, which is 20 percent of national level consumption. Similarly, the gross capital formation in the Valley is Rs. 63 billion, which is 15 percent of the national level figure and 5 percent of GDP. Of the gross capital formation in the Valley, the shares of government and private sectors represent 61 percent and 39 percent respectively.

The survey finds that the total value of exports (domestic and abroad) of goods and services (excluding other services except tourism) from the Valley is Rs. 43 billion. The Valley exports 26 percent and 47 percent of goods and tourism services to abroad respectively. Similarly, the total imports (domestic and abroad) of the Valley are estimated at Rs. 118 billion, which is 9 percent of GDP. Of the total imports from abroad, the share of Valley is 19 percent.

The survey also estimates the **consumption expenditures of electricity and petroleum products** in the Valley by adjusting some data discrepancies obtained from published sources and field survey. Accordingly, the Valley consumes 29 percent (Rs. 5.3 billion) of total electricity (Rs. 18 billion) and 31 percent (Rs. 24 billion) of total petroleum products (Rs.78.5 billion) consumption in Nepal in FY 2010/11 (Annex I and II). Additionally, **the survey also takes into account the access to finance and financial services in the Valley during the study period.** The ratio of bank branches (35 percent), deposits (60 percent) and credits (44 percent) in the Valley in relation to the respective national level figure also support that there is high concentration of economic activities in the Valley.

The overall survey findings suggest that about one-third of the total economic activities of the country are concentrated in Kathmandu Valley (based on alternate scenario). It is expected that the outcome of this survey will provide an important ingredient for regional development plan and economic policy formation as well as for extending such regional income accounting practices in the other parts of the country.



Annex 1

Consumption of Electricity in Kathmandu Valley (FY 2067/68)

SN	Districts	Amount Rs. ('000)	Share in Valley (%)
1	Kathmandu	3999455	76.01
2	Lalitpur	928957	17.66
3	Bhaktapur	333214	6.33
4	Total (Valley)	5261626	100
5	Total (Nepal)	18003800	
Share of Valley in Nepal (%)		29.23	
Consumption of Electricity as per NLSS-III report		3427611	
Consumption of Electricity as per NEA		5261626	
Difference (Difference factor 1)		1834015	

Annex 2

Consumption of Petroleum Products in Kathmandu Valley (FY 2067/68)

(In Rs. '000)

Petroleum Products	Kathmandu	Lalitpur	Bhaktapur	Total (Valley)	Total (Nepal)	Share of Valley (%)
Petrol	5733297	1217612	559680	7510589	16512366	45.48
Diesel	4909911	920380	1057944	6888235	44548674	15.46
Kerosene	933887	194548	135796	1264231	3365644	37.56
LPG	---	---	---	8412695	14021158	60.00
Total	11577094	2332540	1753420	24075749	78447842	30.69
Consumption of Petroleum Products as per NLSS-III report					11851597	
Consumption of Petroleum Products as per Field Survey					24075749	
Difference (Difference factor 2)					12224153	

Annex 3

Total Consumption of Temporary Population of Kathmandu Valley

(In Rs. '000)

Total Household Consumption on		Food	Rent
Strata	Urban	73151920	48158348
	Semi-urban	5587805	1862602
Per capita consumption (annual)		35.72	22.69
Consumption Expenditure of Temporary Population			
Total per capita consumption (Food + Rent)			58.42
Temporary Population of Valley**			1500000
Total consumption of Temporary Population (Difference factor 3)			87624723

** As stated in Gorkhapatra, dated 2068/12/22, (business page)