

CHAPTER ONE

INTRODUCTION

1.1 General Background of Nepalese Economy

Nepal is a small beautiful country with highest mountain, Mt. Everest and with third highest mountain, Kanchanganga in the world. Nepal has a scenic beauty with high prospects of tourism development. Besides, the country is very rich in water resources, mineral resources, and forest resources. It is a culturally and ethnically diverse country which is able to captivate a number of people in the world to visit Nepal for different purposes. Although Nepal is rich in natural resources, it is one of the poorest and least developed countries in the world with very low per-capita income less than \$ 400 in 2012 and nearly one-fourth of the population is living below the poverty line¹.

Nepal is the agriculture dominated country, providing a livelihood for three-fourth (3/4) of the population and accounting for a little over one-third of GDP. However, the agriculture system of the country is primitive with rarely professionalized. The agro-industrial activity of Nepal mainly involves the processing of agricultural products like pulses, jute, sugarcane, tobacco, and grain. These agro-industrial activities are more labor intensive that cannot compete with the foreign products in quality as well as prices. Agriculture is the mainstay of the economy resulting little contribution to GDP growth of the economy.

Nepal has substantial potentiality of hydropower, with an estimated 42,000 MW of feasible capacity. However, the political instability of the country could not have attracted the foreign investment in a significant amount. Additional challenges to Nepal's growth include its landlocked geographical location, civil conflict and labor unrest, and its susceptibility to natural disaster². Nepal extends for 500 miles along the Himalayas between 26⁰ 25' and 30⁰ 27' north latitudes and 80⁰ 4' and 88⁰ 12' east longitudes. Its northern boundary merges with the Tibet region of the People's

¹ World Bank. "World Fact Book (2013)".

² World Bank. "World Fact Book (2013)".

Republic of China. On the east, it borders with the state of Sikkim and the North Bengal division of India. It touches the Indian states of Uttar Pradesh (U.P.) and Bihar on the southern side and the state of Uttaranchal on the western side of Nepal.³

Nepal has very low per capita income as compared to Asian countries. Two giant countries China and India are the closest neighbors in the north and south who are becoming economically very strong and powerful, but Nepal is economically very weak in trade, tourism, industrialization, technology and other various economic spheres. In the current time, there is a great debate about how to restructure the country and make economically prosperous.

So far as the natural physical divisions of Nepal are concerned, these are divided into three parts as northern highlands, middle hills and lower plains. The northern highlands are by nature more isolated and less populated but very rich in scenic beauties. These highlands are extended towards Tibetan range of China. The middle hilly sides are more populated than northern highlands but consisting heterogeneous classes of people. These lands are more fertile as compared to northern highlands. The south plain area is connected with Bihar and UP of India with high density of population. In the point view of agricultural productivities, it is very important part of Nepal that yields more crops due to its fertile nature of land.

The Human Development Report 2013⁴ has ranked Nepal 157th, just ahead of Afghanistan (175) among the South Asian countries. Sri Lanka, at the 92nd place, topped the region. However, there is something to cheer for Nepal. The portion of the Nepali population living under multidimensional poverty has come down to 44.2 percent in 2012 from 64.7 percent in 2010, according to the report prepared by the United Nation Development Program (UNDP). The main reasons of the reduction of multidimensional poverty are increased wage rate, remittance and government's efforts to reduce poverty.

Introduced in the HDR in 2010, the multidimensional poverty indicator consists of factors such as poor people's experience of deprivation, including poor health, lack of

³ Statistical Year Book of Nepal, various issues.

⁴ UNDP, (2013). "Human Development Report, 2013". *United Nations Development Program*.

education, inadequate living standard, lack of income, disempowerment, and poor work quality. The report shows there has also been some improvement in the income Gini-coefficient. Nepal's income Gini-coefficient in the latest report is 32.8. It was 47.3 two years ago. The HDR 2013 states that child labor is relatively high in Nepal, where more than a third of children in the age group 5-14 are economically active.

Nepal has achieved remarkable growth after it had adopted liberal economic policy since 1990s. There have been economic reforms in the heart areas of the country like industry, trade, foreign investment including foreign direct investment, financial markets and international transactions. This liberal economic policy has been proved successful to foster growth of private sector by minimizing the regulation of the state. The reform and restructuring process in the various economic sectors has been instrumental in making the economy more investment friendly, transparent, market oriented and efficient. As a result, the contribution from the non-agriculture sector reached almost 67 percent from its 49 percent share in early 1990s.

In order to promote its economy and trade further, Nepal presented itself as an active member in the international trade forums. Nepal became a member of the World Trade Organization (WTO) on 23 April 2004. It is a founding member of SAARC and is a party to the South Asian Free Trade Agreement (SAFTA). Similarly, Nepal is also a member of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). In 2011, Nepal signed Bilateral Investment Promotion and Protection Agreement (BIPPA) with India for the promotion and protection of investment to expand Indian investment in Nepal. These initiatives have contributed to further widening the country's trade and economic relations. The Trade Treaty between Nepal and India has permitted Nepalese manufactured products to enter the Indian market with no tariff and quantitative restriction, except four items like vegetable ghee, copper products, zinc oxide and acrylic yarn.

Nepal's total foreign trade reached Rs 814.14 billion in 2014/15. The share of export and import in total foreign trade are 11.2% and 88.8% respectively (MOF, 2015). Nepal has trade relations with more than ninety-three countries of the world. Kolkata and Haldia ports are the only sea ports available for Nepal with India for transit. The two countries have agreed to open Vishakapattanam as another point for transit.

However, this point is yet to be operationalized. Dry-port facilities are available in Biratnagar, Birgunj and Kakarbhitta customs⁵.

Nepal is geographically as well as economically attached to India. Nepal is industrially backward even if required natural resources are available. The available natural resources are underutilized in the production of industrial goods. Nepalese economy is highly dependent on India for almost all imports and for little exports. Nepal's economic variables are subject to fluctuations resulting from changes its relation with India. Nepal has no direct access to abroad due to its landlockedness situation. The open boarder with India sometimes brings the complications in the relation between these two countries. Nepal has signed different agreement with India, for example BIPPA in 2011 to promote economic relations with India. However, Nepal has not been able to grasp satisfactory benefits economically due to the scarcity of export promotion. Firstly, Nepal has no sufficient industries for export, limited to vegetable fat (vanaspati ghee), noodles, foot wears and some others. Secondly, Nepalese imports are extremely higher than exports leading huge trade deficit every year.

In FY2014, GDP is now expected to exceed the ADO 2013 forecast and grow by 4.5% on the favorable monsoon, restored supplies of chemical fertilizers, and a timely budget. Remittances will sustain expansion in services, but growth in industry will remain constrained by persistent power shortage and long-standing structural bottlenecks, including a distorted labor market, deficient skills, investment lacking in research and development, inadequate infrastructure, and low productivity.

Prices in FY2014 will be under pressure from hikes in administered fuel prices, continued inflation in India transmitted through the currency peg, and higher import prices as the Nepal rupee depreciates. The ADO 2013 Update raises the inflation forecast to 10.5%. The current account balance forecast is greatly improved from the April projection as greater remittance inflows and tourism income offset rising imports. The increase in the number of migrants to the Gulf and higher incentives to remit money as the rupee weakens are expected to accelerate remittance growth greatly in FY2014

⁵ <http://www.nepalembassy.in/economyataglance.html>.

The agricultural domination in Nepal has continued till the present time. Though Nepal is agriculture dominated country, the agricultural sector has no significant contribution to GDP growth due to the dependence of this profession on monsoon and lack of arable land. In FY 2011, the growth of agriculture productivity was 4.1 percent, which increased from 1.3 percent in 2010 as the favorable weather prevailed. The paddy production contributed 17 percent of agriculture value added in 2012 due to the improvement in weather. However, after 2012, the agricultural performance in the national economy remained weak. The reasons behind it are: heterogeneous rainfall, which caused floods in some parts and lack of rainfall in other parts; timely unavailable of fertilizer; and defective seeds (the defective seeds of maize had adverse impact on maize production).

Nepal Economic Update 2011 emphasized that the performance of industrial sector is found to be unsatisfactory, which is of great concern of the economy with reference to economic growth. The growth of industrial sector in FY 2011/12 was found to be 1.4 percent only as compared to overall average growth rate of 1.2 percent of the previous three FYs. In 2011/12, the contribution of industrial sector to GDP was found to be declining to 14 percent from 17 percent of previous ten years. This poor performance was mainly due to lethargic manufacturing sub-sectors that were found growing only by 0.3 percent during the last decade. Another reason of poor performance of the industrial sector was the negative growth of 0.3 percent. Additionally, the other responsible factors causing the poor industrial performance were the electricity, gas and water sub-sector which declined by 4 percent in FY 2010/11. The remittance inflow was softer; whereas there was tight credit situation and low budgetary spending. The new monetary policy to regulate the commercial banks to postpone investment in real estate also hampered the construction industries in the country.

Nepal has the great challenge of underdeveloped infrastructure facilities. This problem has weakened the public investment program of government and the administrative services on behalf of government have proven to be ineffective. Every economic plans of Nepal aim to improve the infrastructure but the improvement of it is not found to be satisfactory so as to accelerate economic growth. Nepalese economy is agriculture dominated economy with large number of unskilled labor force, yielding low level of GDP. This low level of GDP undoubtedly has caused low

economic growth in the country. Government of Nepal is launching various developmental and economic programs via deficit financing. But this deficit financing has caused the deficit in current account bringing the adverse impact on balance of payment situation.

1.2 Nepalese Macroeconomic Scenario⁶

1.2.1 Performance of Nepalese Economy in Terms of Economic Growth

The growth rate of real GDP at basic price of 2000/01 was 3.8 % in 2002/03. It increased to 4.4 % in 2003/04, but declined to 3.2 % in 2004/05. There was little improvement in the economy and the real GDP was increased to 3.7 % in 2005/06. The fiscal year 2006/07 was not favorable with heavy decline in real GDP to 2.8 %. However, this growth stood up to 5.8 % in 2007/08, the highest growth rate after 2001/02. In 2008/09, it sharply declined to 3.9 % and increased to 4.3 % in 2009/10, but again declined to 3.9 % in 2010/11. In 2011/12, it increased to 4.6 % but again declined to 3.5 % in 2012/13. The growth rate of real GDP was estimated to increase to 5.2 % in 2013/14. These figures clearly indicate that Nepal's real GDP growth rate is fluctuating and very low, unable to mitigate with various macroeconomic bottlenecks like high rate of inflation, high population, high rate of unemployment, low rate of capital formation etc.

There are three main contributing components of GDP: agriculture sector, industry and service sector. The growth rate of agriculture real GDP was 3.1 % in 2002/03. It declined to 1.0 % in 2006/07. However, in 2007/08, it sharply increased to 5.8 %. Thereafter, it declined to 3.0 % and 2.0 % in 2008/09 and 2009/10 respectively. However, in 2010/11 2011/12 it increased to 4.5 % and 4.6 % respectively. In the year 2012/13, the agricultural sector remained unfavorable causing growth rate to decline to 1.1 % due to unfavorable monsoon in Nepal.

The industrial sector also showed fluctuating and unsatisfactory growth in real GDP. The year 2008/09 was extremely unfavorable with negative growth – 0.6 %. It dramatically increased to 4.0 % and 4.3 % in 2009/10 and 2010/11 respectively. Thereafter, it continued to decline. The service sector showed relatively better

⁶ The data used in the analysis are taken from Economic Survey, MOF, Nepal (Various Issues).

performance with highest growth rate 7.3 % in 2007/08. Fiscal Years 2003/04 and 2010/11 showed the lowest growth rate as 3.3 % and 3.4 % respectively.

The Per Capita National Income at constant price of 2000/01 are also fluctuated and remained very low during 2002/03-2012/13. FY 2006/07 represented the highest growth rate of PCI as 6.9 %. The succeeding fiscal years have proven the unsatisfactory growth rate of PCI; and it remained 2.9 % only in 2012/13 and it was estimated to remain 5.4 % in 2013/14. The per capita gross national income continued to increase from \$ 261 to \$ 713 from 2002/03 to 2012/13. The PCI was estimated to remain \$ 717 in 2013/14. The real GDP at basic price of 2000/01 was 429.7 billion. It remained RS 565.8 billion in 2009/10 and increased to Rs 635.9 billion in 2012/13 and was estimated to remain Rs 668.7 billion in 2013/14. The per capita GNI at basic price of 2000/01 was Rs 24152 in 2009/10. It remained Rs 26326 in 2012/13 and was estimated to remain Rs 27762 in 2013/14.

1.2.2 Performance of Nepalese Economy in Terms of Consumption, Saving and Capital Formation with Population

The ratio of gross consumption to GDP was 91.4 % in 2002/03, reduced to 88.3 % in 2003/04 and 88.4 % in 2004/05. It increased to 91.0 %, 90.2 %, 90.2 %, and 90.6 % in 2005/06, 2006/07, 2007/08 and 2008/09 respectively. The ratio of gross consumption to GDP reduced to 88.6 %, 86.0 %, 89.0 % and 89.9 in 2009/0, 2010/11, 2011/12 and 2012/13 respectively. It was estimated to remain 91.1 % in 2013/14.

The ratio of gross saving to GDP was 8.6 % in 2002/03. It increased to 11.8 % and 11.6 % in 2003/04 and 2004/05 respectively. Thereafter, it reduced to 9.4 % in 2008/09. It increased to 11.4 %, 14.0 %, 11.0 % and 10.1 % in 2009/10, 2010/11, 2011/12 and 2012/13 respectively. It was estimated to remain 8.9 % in 2013/14.

The ratio of gross fixed capital to GDP was 19.9 % in 2002/03. Thereafter, it slightly fluctuated and increased to 22.2 % in 2009/10. It further increased to 22.6 % in 2012/13 and was estimated to remain 23.1 % in 2013/14. The ratio of gross capital formation to GDP was 21.4 % in 2002/03. It continued to increase and remained 38.3 % in 2009/10. It fluctuated and declined to 36.9 % in 2012/13 and was estimated to remain 37.1 % in 2013/14.

The gap between gross domestic saving and gross investment was -12.8 % and it continued to increase and remained -26.8 % in 2009/10. Thereafter, it reduced till 2011/12 and increased to -26.8 % in 2012/13 and was estimated to remain -28.2 % in 2013/14.

Total population of Nepal was 23.8 million in 2002/03 and continued to increase and remain 26.3 million in 2009/10. It again increased to 26.9 million in 2011/12 and 27.2 million in 2012/13. It was estimated to remain 27.6 million in 2013/14.

1.2.3 Inflation Scenario in Nepal

The inflation rate is measured by price index and GDP deflator. The growth rate of Consumer Price Index (CPI) was 4.7 % in 2002/03 and it jumped to 8.0 % 2005/06 and converted to double digit, 12.6 % in 2008/09. After this period, it remained around 10.0 % in 2012/13. It was estimated to reduce to 9.0 % in 2013/14. The GDP deflator continued to increase from 3.1 % to 7.3 % during 2002/03-2006/07. It reduced to 5.6 % in 2007/08 but increased by three-fold to 16.1 % in 2008/09. It remained double digit in 2009/10 and 2010/11 as 14.4 % and 11.0 % respectively. Thereafter, it reduced and remained 6.2 % in 2012/13 and estimated to remain 7.9 % in 2013/14. The wholesale price index continued to increase and remained 12.6 % in 2009/10. It declined to single digit and remained 9.0 % in 2012/13 and was estimated to remain 8.1 % in 2013/14. The salary and wage rate index was 3.9 % in 2005/06. It converted to double digit (15.3 %) in 2008/09. After this period, it continued to increase and remained 27.4 % in 2011/12, but declined to 9.3 % in 2012/13 and was estimated to remain 13.1 % in 2013/14.

1.2.4 Scenario of Public Finance in Nepal

Government revenue was increased by 11.5 % in 2002/03 and it reduced to 10.9 % in 2003/04, but increased to 12.5 % in 2004/05. In 2005/06, the annual growth rate of government revenue reduced to 3.0 %. After this, it continued to increase as 21.3 %, 22.7 % and 33.3 % in 2006/07, 2007/08 and 2008/09 respectively. After 2008/09, it reduced to 27.2 %, 11.4 %, 23.2 % and 21.1 % in 2009/10, 2010/11 and 2012/13 respectively. Government revenue was estimated to increase by 19.8 % only in 2013/14.

The annual growth rate of total government expenditure was 4.9 % in 2002/03 and increased to 6.5 % and 14.7 % in 2003/04 and 2004/05 respectively. However, it reduced to 8.1 % in 2005/06. Thereafter, it continued to increase and remained 36.1 % in 2008/09. After this period, it continued to decline and remained 5.7 % in 2012/13 and was estimated to remain 25.4 % in 2013/14.

The share of government revenue in GDP was 11.4 % in 2002/03. It continued to increase and remained 14.9 % in 2009/10 and 17.5 % in 2012/13. It was estimated to remain 18.4 % in 2013/14. The share of total government expenditure in GDP was 17.1 % in 2002/03. It slightly increased with fluctuation and remained 21.8 % in 2009/10. It remained 21.2 % in 2012/13 and was estimated to remain 23.3 % in 2013/14.

1.3 Monetary Background of Nepal with Reference to Banking and Financial Institutions

So far as the monetary system is concerned, Nepalese economy consists of rural area and urban area. Urban area is, no doubt, exercises monetized system. All the banking and financial institutions are concentrated in urban areas. The urban areas comprise large number of industries and trading agencies. So, in these areas there is well use and strong practice of money. On the other hand, the rural areas are deprived of banking, financial and trading agencies. Majority of the people of these areas are at subsistence level and they can save rarely from their agricultural occupation. Still, there is practice of barter system in many remote rural areas. But, even in rural areas, people with surplus in their agriculture exercise the monetary system.

Nepal Bank Limited, the first commercial bank of Nepal, was established in 1937 with 51% shares at government level and rest at public level. The operation system of this bank was solely controlled by government. With establishment of Nepal Bank Limited, some branches were also established in different parts of the country. Besides, other government banking institutions such as National Commercial Bank and Land Reform Savings Corporation owned by state were also established in 1966. The former was dealing banking services; whereas later was dealing finance related to land reforms in Nepal.

Two other specialized financial institutions such as Nepal Industrial Development Corporation and Co-operative Bank, which became the Agricultural Development Bank in 1967, were the state-owned development finance organizations. Nepal Industrial Development Corporation was established in 1959 with US assistance to offer financial and technical assistance to private industry. Nepal Industrial Development Corporation was controlled by Board of Directors formed including the private business sector. The Co-operative bank converted to Agricultural Development Bank in 1967, was the main source of finance to petty agribusiness and cooperatives, small farmers' group development projects supported by Asian Development Program

Three foreign commercial banks were established in Nepal in the mid-1980s. NABL bank was co-owned by Government of Nepal and Emirates Bank International Limited of Dubai and some Nepalese people. The second foreign bank was Nepal Indosuez Bank and it was jointly owned by French Banque Indosuez, National Commercial Bank of Nepal and Nepal Insurance Corporation and Nepalese people. The third foreign bank established during mid-1980s was Nepal Grindlays Bank which was co-owned by Grindlays Bank of Britain, local financial institutions of Nepal and Nepalese public.

Nepal Rastra Bank, the central bank of Nepal was established in 1956. It's the then functions were to supervise commercial banks and to guide the basic monetary policy required for the nation. Later on, its functions were increased in accordance with the major aims such as (1) regulating the issue of paper money (2) securing countrywide circulation of Nepalese currency and achieving stability in its exchange rates (3) mobilizing capital for economic development and for trade and industry growth (4) developing the banking system in the country and thereby (5) ensuring the existence of banking facilities and maintaining the economic interests of the general public in Nepal. Besides, Nepal Rastra Bank had also to supervise foreign exchange rates and maintain foreign exchange reserves.

Prior to the establishment of Nepal Rastra Bank, Indian currencies were the prevalent medium of exchange in the country. However, after the establishment of Nepal Rastra Bank, Nepalese currencies are being used all over the country as the medium of exchange.

Nepal Rastra Bank along with commercial banks and different financial institutions are now supplying the necessary money required to individuals and institutions in the country. Two types of money supply are in practice in Nepal: narrow money (M_1) and broad money (M_2). The narrow money (M_1) consists of currency in circulation plus demand deposits, where as broad money (M_2) includes M_1 money plus time deposits or quasi money.

As reported by Economic Survey 2012/13⁷, the narrow money supply grew by 8.6% in FY 2002/03. It increased to 12.2% in 2003/04, but reduced to 6.6% in 2004/05. The growth rate of narrow money supply increased to 14.2% in FY 2005/06. In FY 2007/08, it increased to 21.6% and reached to 27.3% in 2008/09. Thereafter, it continued to fall and remained 18.5% in FY 2011/12.

Likewise, the annual growth rate of broad money supply was 9.8% and 12.8% in the FYs 2002/03 and 2003/04 respectively. In FY 2004/05, it reduced to 8.3%. However, it increased to 15.4% in 2005/06 and slightly reduced to 14% in 2006/07. In FY 2007/08, it increased to 25.2% and 27.3% in 2008/09. And it followed decreasing trend in 2009/10 and 2010/11. In FY 2011/12, the growth rate of broad money supply remained 22.7%. While comparing the growth figures between narrow money supply and broad money supply, the broad money supply is found to be relatively higher.

The ratio of narrow money supply to GDP was 17% in 2002/03 and slightly increased to 17.5% in 2003/04. It remained 17% in 2004/05. The FY 2005/06 experienced narrow money supply to GDP ratio as 17.3% and increased to 18.9% and 19.9% in 2007/08 and 2008/09 respectively. The FY 2009/10 and 2010/11 experienced narrow money supply to GDP ratio as 17.8% and 16.2% respectively and it remained 17.2% in 2011/12.

On the other hand, the ratio of broad money supply to GDP was 50% in 2002/03. It continued to rise to 53% in 2005/06; 54.3% in 2006/07; 60.7% in 2007/08; 63.8% in 2008/09; 68.8% in 2009/10 and it slightly reduced to 67.1% in 2010/11 and increased to 73.6% in 2011/12.

⁷ Economic Survey of Nepal (2012/13)

1.4 Overview of Price and Inflationary Situation of Nepalese

Economy⁸

Measurement of prices in Nepal began from 1973 using the expenditure weightage of the goods and services of the people obtained from first Household Budget Survey (HSB). Prior to that, equal weights were assigned for each and every commodity of the basket.

Economic Survey 2012/13 states that prior to fiscal year 2005/06 or between FY 2000/01 and 2004/05, the Consumer Price Index (CPI) based annual inflation rates were 2.5, 2.9, 4.7, 4.0 and 4.5 percent respectively while the CPI-based annual inflation rate stood at 8.7 percent between the FY 2005/06 and FY 2011/12. In the first eight months of the fiscal year 2012/13, the point to point based inflation rate of food and beverage group remained at 11.3 percent while that of non-food and service group stood at 9.3 percent. The price indices of these groups had increased by 4.2 percent and 9.4 percent during the same period of the previous year.

For the last few years both internal and external factors have been influencing the price rise. Internal factors that have adverse impact on productive activities and supply situation are low agricultural production and productivity, higher imports of agricultural commodities, frequent closures, strikes, load shedding and political instability while price hike in petroleum products and the effect of high food price inflation observed in India are the major external factors. Additionally, open border between Nepal and India, pegging of Nepal's foreign exchange rate with Indian currency, and almost two third shares of Nepal's total trade transactions with India can be mainly attributed to the direct impact of Indian inflation on Nepal (Economic Survey, 2012/13).

The inflation rate in Nepal was recorded at 9.47 percent in April of 2014. Inflation Rate in Nepal averaged 8.38 Percent from 1964 until 2014, reaching an all time high of 30.42 Percent in May of 1966 and a record low of -11.54 Percent in May of 1967. Inflation Rate in Nepal is reported by the Nepal Rastra Bank.

⁸ The presented data are taken from Economic Survey and Nepal Rastra Bank (Economic Bulletin: Various Issues)

⁹Nepalese inflation was moderate to 8.3% in FY 2012, which was reducing from 9.6% in 2011. However, it climbed to 9.9% in 2013, higher than targeted 9.5% by monetary policy 2013. The CPI inflation remained above 10% till December 2012 and declined to 9.8% in January 2013. Overall inflation was found to be higher in all months of 2013. These all data represent that Nepalese inflation is not tolerable as compared with low economic growth. This high inflation rate had adverse impact on all economic activities during these periods.

Overall food and non-food inflation was found to be increased in 2013. The food and beverages inflation rate was 7.7% in 2012, and it increased to 9.7% in 2013. On the other hand, the non-food inflation in 2012 was 9% in 2012, and it increased to 10.1% in 2013 (same inflation was 5.4% in 2011). The rise in food price was caused by the factors like low agricultural harvest, rise in transportation cost of food, and higher import prices of agriculture products along with increased price of fertilizer, seeds and insecticides imported from India. The high non-food prices were due to increase in import prices and domestic currency depreciation in relation to US dollars. Not only these factors are responsible for high inflation in Nepal, but also other factors like domestic structural bottlenecks and supply-side constraints. Under structural bottlenecks, the factors like lack of skilled human resources, weak backward and forward linkage, lack of research and development, deficiency in investment, pressures of trade unions to increase wage without increasing labor productivity, policy inconsistencies and so on are found playing dominant role. Supply side constraints include the factors like transportation constraints, electricity deficiency, shortage of raw materials, high import price of inputs, political movements (strikes and agitations) and others.

1.5 Statement of the Problem

Nepalese economy has been bearing the problem of more or less double digit inflation since 2007. Other neighboring countries like India and China are enjoying double digit economic growth. However, Nepal is suffering from the problem of double digit

⁹ ADB, 2013 (Posted by Chandan Sapkota): <http://sapkotac.blogspot.com/2013/09/nepalese-economy-in-fy2013-monetary.html>

inflation, which has made economy severe ill. This high growth of inflation has caused the economy adversely from different spheres.

Due to the higher inflation, there is rapid fall in value of Nepalese currency. Central bank of Nepal, Nepal Rastra Bank is compelled to pay very high price to gain foreign currency like US dollar, Euro dollar, Pound Sterling and other foreign currencies. Interests for foreign loans are increasing day by day. The per capita amount of loans for Nepalese people has reached to nearly NRs 19,000. By the similar fashion, the balance of payments situation for the economy of Nepal is also adverse that imports are extremely higher than exports.

Nepal is to depend on India for petroleum products. The price of petroleum product is mounting in the international market. As price of oil in international market increases, a higher amount of money should be paid to Indian Oil Corporation with decreasing value of currency due to the inflationary pressure in Nepal. The increases in price of petroleum products have multiple effects on Nepalese economy adversely at micro and macro level. The rise in price of oil automatically causes transportation costs to rise, which in turn, causes price of food and non-food items to increase.

The inflation in Nepal has invited artificial as well as natural scarcity of commodities. Majority of the intellectuals have accused that corruption has been institutionalized from government side as a result of inflation. Additionally, different types of criminal activities and social crimes like murdering for money, theft and dacoit, involuntary and forceful donation, kidnapping etc have become common and uncontrolled in Nepal.

Besides, income inequality in Nepalese society has become widespread due to the higher inflation. Minorities of the people are getting rich, but majority of the people are getting economically worse and they are deprived of even basic needs. These all social and economic evils are claimed to be the outcomes of rapidly rising price level in the economy of Nepal.

In Nepal, different factors are responsible to cause inflation. Excess money supply, political instability, growing population, increasing remittance, shortage of commodities, lack of good governance, rise in oil price, lack of sufficient electricity, slow pace of industrialization, less investment and capital formation, unfavorable

balance of payment situations, increasing expenditure in unproductive activities etc are the dominant factors causing inflationary pressure in Nepalese economy. Broadly speaking, Nepalese inflation is caused mainly by two factors: monetary factors and non-monetary/institutional factors. Over money supply along with the increasing remittance are monetary factors and other factors mentioned above are institutional factors.

Nepal was suffering a long spell of double digit inflation during 2008-2012 periods despite the decline in consumer prices across the globe. Even at present time, Nepalese inflation is nearly double digit. The Financial Stability Report of NRB (2014)¹⁰ highlights that the year-on-year inflation, as measured by the consumer price index (CPI), increased by 9.7 percent in mid-Jan 2014 compared to 9.8 percent in the corresponding month of the previous year. The price index of food and beverages group increased by 12.9 percent whereas the index of non-food and services group increased by 6.9 percent. The indices of food and beverages and non food and services had increased by 9.6 percent and 10.2 percent in the same period of respectively in 2012/13.

Nepal's economic growth is slow and, unlike the global trend, inflation has reduced from double digit to single digit but the inflation in food items is still of double digit. The GDP growth of Nepalese economy in 2012/13 was below 4%, where as the neighboring countries like India and China were enjoying above 8% economic growth. There are different reasons for slow economic growth of Nepal like stoppage of vehicular movements, closures of business, industries coupled with the power shortage. These activities have caused falling output and rising prices in Nepal.

Furthermore, the political transition and the policy instability along with the disturbance in implementation of policies have made the economic development process very slow, inefficient and ineffective. The less priority to the concerned output generators relating to economic management have also increased the weaknesses and vulnerabilities in the economy. With unsatisfactory socio-economic development indicators, including very low level of per capita income and highly

¹⁰ Nepal Rastra Bank (2014). "Financial Stability Report".

skewed distribution of income and access to opportunities have caused very slow economic development in Nepal.

Macroeconomic management in a situation of slower economic growth and higher inflation remains a challenging task. Raising the aggregate demand would be an important policy option to address the slow economic development. However, due to high inflation, any attempt at raising the output via increasing aggregate demand could put further pressure on prices.

Likewise, the monetary measures aimed at controlling the over money supply could reduce the inflation. So there is a need for improving monetary policy with the help of credit contraction, increasing reserve ratio of commercial banks, increasing bank rates, open market operation and other monetary measures.

The government's potential role in improving the supply management and ensuring price stability should be transformed into meaningful outcomes. The government and political parties should support and escort in a sound policy environment, encourage the smooth flow of economic activities, discourage non-competitive market behavior and refrain from adding unnecessary costs to the economy, thereby ceasing to act as a watchdog of inflation and slow output in Nepal.

The present study is mainly associated with the exploration of the relationship between money supply and price level in the economy of Nepal aiming at giving the answer the following main research questions.

- Which model for forecasting of Nepalese inflation is suitable?
- Is Nepalese inflation caused by inflow of remittance along with the population growth and political instability?
- Do the money supplies affect price level in Nepal? If yes, then at what extent money supplies affect Nepalese price level?
- Does the relationship between money supply and price level hold *Quantity Theory of Money* in Nepal?
- Is there any short run or long run relationship between money supply and price level in Nepal?
- Is the relationship between money supply and price level robust and stable?

1.6 Importance of the Study

From the national data of inflation, it is observed that Nepalese general price level is rising at a higher rate in every month without delay. Due to the higher inflation, the economy is affected adversely at micro as well as macro level. The rise in price arises by different factors, of which the present study is confined in analyzing the role of money supply to cause inflation in the economy of Nepal. The present study is the empirical analysis on the relationship between money supply and price level in the spirit of *Quantity Theory of Money*. The present study aims at providing the guidelines to policy makers to formulate suitable policy in stabilizing the price in Nepal.

From the policy makers point of view two important aspects are of particular interest. The first aspect is the time it takes for changes in the rate of money growth to work through to the rate of inflation which is long and variable. The second aspect is the market short-run impact of changes in money growth on real variables such as income and employment. These two aspects have important implications for monetary policy.

Since the monetary policy of Nepal has the single objective of price stability in the country. If there is quick response of inflation to a monetary change, it will be fruitful to take a short time anti-inflationary monetary policy to mitigate with the inflation. The monetarists can formulate the policies accordingly so as to control inflation immediately. On the other hand, if there is a slow response of inflation to a monetary change, it is necessary to take a long-time anti-inflationary monetary policy to formulate. In such a situation, quick monetary remedies for inflation do not exist.

According to quantity theorists, the appropriate way for the monetary authority to achieve price stability and avoid economic disturbances is that discretionary policy should be abandoned in favor of a rigid rule whereby the money supply grows at steady figure roughly corresponding to the long-term growth of real output.

The empirical issue of the relationship between money supply and price level is very important for Nepalese monetary authority. The monetary authority can formulate the short-time or long-time monetary policy as an anti-inflationary policy to mitigate with the inflationary pressure in accordance with the findings of the present study. Additionally, the present study would be fruitful to amend the current NRB act setting

new objectives to facilitate in formulating further strong monetary policy to stabilize the price in accordance with the findings of the present study.

Next, if the present study bears of strong association between money supply and price level, then the price stability can be taken as the most important tool for monetary policy objectives. Finally, the present study becomes fruitful to the monetary authority to bring the long-term monetary vision, mission and goal since the present study has used the long-term quarterly data on money supply and price level.

The present study would be fruitful in the sense that it would bridge the research gaps associated with the relationship between money supply and price level in the economy of Nepal on the following grounds.

- The present study examines the impact of remittance along with population growth and political instability on price level. The impact of remittance on price is rarely found in economic literature. In this context, the present study bridges the research gap of dependence of price on remittance.
- Observing the economic literature on the relationship between money supply and price level in international context, the present study is not new one. However, it is a cornerstone to Nepalese context that this study analyzes the empirical relationship between money supply and price level intensively applying modern econometric tools. The tools used in the present study bear the robust relationship between the variables under study.
- Many researchers have explored the relationship between money supply and price level applying the econometric tools, but these studies do not include the diagnostic tests of the employed tools. Without diagnostic tests, the relationship between the variables may or may not be robust. However, the present study confirms the robustness of the relationship between money supply and price level through diagnostic test.
- No generalization is made on the basis of single test, but the association between money supply and price level is generalized with the help of different tests.

1.7 Objectives of the Study

The present study tries to empirically test the *Quantity Theory of Money* developed by different economists ranging from classical period to modern era and verify that which theory is applicable in developing countries like Nepal. The effectiveness of the relationship between money supply and price level is tested applying various modern econometric tools and models. The general objective of this study is to explore and examine the state of relationship between money supply and price level in the economy of Nepal in the line of *Quantity Theory of Money*. In order to achieve the general objective, the present study has set the following specific objectives.

The specific objectives of the present study are to:

- (i) Identify the suitable model of inflation forecasting in Nepal.
- (ii) Examine the impact of remittance on inflation.
- (iii) Examine the relationship between money supply and price level and extent of relationship employing the autoregressive distributed lag models.
- (iv) Analyze the relationship between money supply and price level in short run and long run employing cointegration test, vector error correction models
- (v) Examine the Granger causality between the variables.
- (vi) Explore the relationship between the variables using the technique of VAR, IRF and variance decomposition.
- (vii) Examine the robustness of the relationship between the variables through diagnostic and stability tests.
- (viii) Examine the impact anticipated money supply on price level.

1.8 Hypothesis

The following hypotheses have been set in order to study the relationship between money supply and price level in the economy of Nepal.

- (a) Remittance affects inflation to occur in Nepal.
- (b) Money supply affects inflation in Nepal.

- (c) There is direct but non-proportional relationship between money supply and price level.

1.9 Limitations of the Study

The following are the limitations of the present study.

- (a) Present study does not study the relationship between money supply and price level prior to 1976.
- (b) Due to the non-availability of quarterly data on remittance, the present study analyzes the relationship between remittance and inflation using the annual data sets.
- (c) This study analyzes only the relationship between money supply and price level as well as remittance along with population growth and political instability and price level. Study of other determinants of inflation except aforementioned variables is left for future research.

1.10 Scope for Future Research

A number of factors are responsible to cause inflation in Nepal. However, the present study is confined to analyzing the role of money supply, remittance along with population growth and political instability; and anticipated money supply causing inflation. The present study would be beneficial to the interested researchers in the future to identify other factors causing inflation in Nepal as well as other economies. Very new and sophisticated econometric tools are being developed to analyze the relationship between and among the variables. The present study would be fruitful to utilize those econometric tools that are not employed by the present study. Additionally, the present study would be helpful to identify the limitations of the tools used in the present study.

Besides, the future researchers would be benefitted to bridge the research gaps associated with money-price relationship as well as the relationship between and among other variables in micro and macro levels. The future researchers of different fields like economics, commerce and science would understand the tools and techniques used in the present study and employ in their research works within short time.

1.11 Plan of the Study

The present study consists of altogether twelve chapters. CHAPTER TWO is devoted to Literature Review incorporating some theoretical and empirical analysis of previous studies. CHAPTER THREE endeavors Research Methodology adopted in the present work. CHAPTER FOUR analyzes the Forecasting of Inflation in Nepal employing the methodology of ARMA/ARIMA models and ARCH/GARCH models. While, CHAPTER FIVE analyzes the Impact of Remittance along with Population Growth and Political Instability on Inflation of Nepalese economy. CHAPTER SIX is devoted to Unit Root Test of money supply and price level. CHAPTER SEVEN seeks to analyze the relationship between money supply and price level using the techniques of Johansen's Cointegration Test, VECM and Granger Causality Test.

CHAPTER EIGHT utilizes the Distributed lag Models to analyze the relationship between money Supply and price level. CHAPTER NINE employs the technique of VAR of forecasting to examine the money-price relationship. CHAPTER TEN analyzes the money supply and price relationship using the techniques of Impulse Response Function and Variance Decomposition. CHAPTER ELEVEN studies the money supply with Invariance Proposition of Rational Expectations. And, CHAPTER TWELVE is devoted to Conclusions, Recommendations and Policy Implications based on the present study.