

CHAPTER I

INTRODUCTION

1.1 Background

Today's world is appraisingly hasty on the journey of development. We can say it well that it has begun its way, yet, much is to be accomplished ahead. The earth is one but the world is in many in terms of economic development. Some advanced nations have raised their status centuries earlier and many LDCs and UDCs are creeping and crawling right now. No doubt, the way varies from nation to nation but all have made efforts for the betterment of position in their respective accord. Everybody accepts at present the fact that trade, commerce and industries are the good forces to raise living standard up and push the economy ahead. Trade and commerce are impossible unless industries are there. Because industries are the producers! This is the case especially of manufactured items - processed as well as semi-processed. Hence, in aggregate, industrialization is well approved as the effective vehicle for the upliftment of any economy.

Now it would be beneficial to know first what such effective vehicle, the industrialization, is. In this connection, many recognized institutions and personnel's have defined it variously.

As mentioned in the UNO report 'Process and Problems of Industrialization in UDCs, "Industrialization means development of large industries and arrangement of big and large producing machines in place of small and cottage industries. It is only a part of diverse economic development process which aims at promotion of living standard by raising factors of production".

According to Rajesh Chandra, "Industrialization refers to an increase in the share of the GDP contributed by the manufacturing sector. It is a process that involves a change in the structure, or make-up, of the economy. Industrial growth in itself is

not sufficient for industrialization, because other sectors of the economy may increase their output at the same rate. It is necessary for the manufacturing sector to increase its relative importance in the economy more rapidly than other sector".

Industrial Revolution in Britain is quite noteworthy event in world history. For the first time, it had extensively discarded handicraft and human labour by making use of electric machines for industrial development. Its impact on French economy and consequence resembled in the over-all economic development of European society hint us the same idea that initiate industrialization and raise the pace of your progress. China, USA, Japan, Germany etc have already done out the methodology, successfully. Therefore, it is a proven fact that industrialization helps an economy raise its prosperity. It is simply because every sort of unemployment as well as under-utilization can be overcome by making utmost production that is likely to offer welfare to the far extent possible.

However, in Nepal, the industrialization began with cottage industry during the ancient time. Its trend was rising until the 19th century, when people of high social strata shifted their interest from domestically produced inferior goods to foreign quality products. The World War I had globally receded the industrial journey; hence Nepal did not remain exception. But the trend of Nepalese industrialization was unexpectedly promoted y the World War II as many war-stimulated industries were set up around the war (II). Again the political transition overshadowed the economic issue, hence industrialization as well, by 1950 the hangover of which elongated to 1956 when Nepal adopted plan-based development strategy.

The planned effort for development made in Nepal has stressed upon industrialization a lot. And government has aimed at alleviating remarkably existent poverty via industrialization. But it has been said that our development efforts in terms of planning have all failed and the economic situation of the country is still stagnant, unlike the dynamic one as dreamt on the bed of industrialization. The lack of proper policy incentive, political turmoil and consequent rising terrorism have aggravated the problems in making a sound environment conducive for industrial prosperity and national development.

The greatest merit of industrialization lies in the fact that it reduces pressure on land by opening employment opportunities outside agriculture. It not only reduces dependence on agriculture but also raises productivity of the people. As told by Arthur Lewis in his Growth Model-"Unlimited Supplies of Labour," the labour force having zero marginal productivity can be chanced to offer grand contribution by shifting him/her to industrial workshop from agricultural farm. It not only promotes national welfare by raising national income but also maintains spectral balance in the economy, i.e. balance between industry and agriculture. Good to notice is that these two sectors can go hand in hand well. So, industrialization is Nepal's need as agriculture is her urge- with gigantic belly and narrow arable land, lot of geological heritages and natural gifts.

The point for us always to be in favors of industrialization is that unlike agriculture, industrial production function has the chance to offer increasing returns to scale, or at least, constant returns to scale. In this sense, industrialization can accelerate the pace of development more rapidly than that by agriculture. That is the reason why in the developed countries the contribution of industrial sector has been excessively higher as depicted in their National Income, unlike the case of developing economies.

Moreover, the fuller implementation of the world's grand economic policies like liberalization and globalization has significantly affected industrial practices. In the case of Nepalese economy with fragile base of cottage and small industries, less qualitative product, narrow export base and heavy dependence on import, the impacts of such grand policies happen to be crucial. And at present, we are experiencing the same critical situation. The various policies and programmes aimed for progress are not only supportive to each other but also contradictory. Recently, Nepal has acceded into WTO and it has made several commitments there. For the implementation of them, we have got to be highly elastic on economic concern, against our protectionist policy. So, too, it has been a time to examine what has happened to our industrialization effort at present.

Brain drain has posed over-all crisis and capital-drain has given an unwanted blow to our economic effort. Problem of unemployment, lower level of income and consequent shortness of the living standard of Nepalese people are quite touching issues urging us to make a review of our industrial effort. Making a research or a proper study over the matter, it is expected to help us break the vicious circle of poverty. So, too, this study has been aimed at providing sufficient light on the trend of industrialization in Nepal.

1.2 Statement of the Problem

Industrialization is important for all. It is better to know that industrialization is a trend rather than an event. When one industry and other industry, or one type of industries and another type of industries or industries of several types are established, then we say that industrialization has begun. And when such process of establishment continues, we say industrialization is going on. The point to note is that it is difficult to remark that industrialization has completed or ended. Because, human curiosity is an incurable instinct and so long as it is there people will be trying for newer things. New efforts, new discoveries, new achievements and newness, this is what has always happened in the history of human kind. Therefore, it is pretty axiom that industrialization is an ongoing process.

The issue of our concern here is that we ought to know how far we have come on the way of industrialization in the case of Nepalese economy. It is because unless we have the idea about our accomplishment, we can't guess how much effort we need to make and in what direction.

Whenever industrialization is concerned, a weight full importance is placed on it mainly on the ground that its establishment provides employment opportunity to the people, its products avail foreign exchange to the nation and a planned considerate industrialization resolves regional imbalance along its potential anomalies. Despite that many other variables like capacity utilization, returns to scale, efficiency etc. associated to industry are significant, this study deals with establishment, employment situation and regional scatterness of industries in

Nepal, only. It is because the continuously diminishing peace and hence industry environment in Nepal for the last ten years of Maoists' Rebellion must have severely affected the three aforesaid variables. Before 1992 also, Nepal's protectionist industrial policy was not in position to attracting foreign capital, hence, limited industrialization was realized in fragile national initiative. So, even employment in industries was too less. Regionally, industries were biased, favouring the city centers like Kathmandu, Biratnagar and Pokhara or at least areas of infrastructure access. Poorest of people were in remote areas with hand-to-mouth problem despite busy schedule in and around agriculture business. It makes it essential to observe the trend of industry establishment, employment situation in them and their number in different parts of the country mainly in the light of new industrial policy and instable politics. So it is very imperative to carry out this study so as to retain the relevance as well as contribution of industrialization in Nepal's upcoming context.

Nepal, a least developed country in the world, is also managing to have industries as a driving force of its economy. Especially after the establishment of industrial council in 1936 A.D, industries began to appear in Nepalese territory. Large and Small, Medium and Cottage, several types of industries in terms of size as well as product we have had at the moment. Yet, we are leading the list of countries in the world in terms of development right from the back. Then it is obvious that Nepal's effort for development via industrialization has been not much successful. How much Nepalese economy has come up on the way of industrialization at present? What category of industries is becoming prominent in terms of size? And in terms of quantities? Does industrialization in Nepal have any resemblance of the British industrialization or American or Japanese industrialization? And so on. A number of questions can be posed with severe concern. The answer to these questions will give us a glimpse of Nepal's industrial status. Identifying the items of comparative advantage, domestic need and also the industrial structure mutual to domestic manpower at first, we may make appropriate modifications to the existing shortcomings. And then only Nepalese economy will never be able to have industrialization as a force to drive its tempo of development.

1.3 Objectives of the Study

This study will be directed with the following objectives:

1. To evaluate the establishment trend of industries in Nepal.
2. To examine the employment situation in Nepalese industries.
3. To analyze the scatterness of industries across the country.
4. To provide suggestions for improvement on the basis of major findings of the study.

1.4 Significance of the Study

The trend of industrialization in Nepal is a matter of concern to each and every individual and institution having interest in its economic development. And the point to note is that economic development, more or less, determines any nation's overall development. It is because the government can sufficiently invest in development infrastructure, provide trainings to its people and enlarge employment opportunity, thereby raising standard of living there. This study at hand, which is going to concentrate on the issue of industrial process in Nepal, happens to be significant to scholars, traders, producers, the government and the general public. It is because the macroeconomics and the microeconomics go hand in hand. In the lack of knowledge about its trend, how can a trader here make his demand or assure his supply? How can a producer residing in Nepal decide about his investment pattern? How can a government make its plan for development with specification of sector as well as amount? How can a scholar accomplish his/her study successfully regarding economic efforts and capacity of Nepal? Believing that each section of the community as such will benefit from the macro-level analysis on the establishment, employment and scatterness trend of every type of Nepalese industries as per NSIC 1992, this study has been carried out.

Even if we view the temporal context of 21st century, it is sufficiently justifiable to notice Nepal's industrial identity. It is because many developed countries of the world have already claimed their success in term of economics and we have been given the veil of LDC. Not only that, it is an urge to notice our industrialization's

extent if we consider our socio-cultural context. It is blamed that Nepalese values are anti-developmental. However, despite such incentives to hymns and prayers rather than investment and industrious life, we have certainly managed some degree of industrialization. And it is better we had an awareness of it and how much our way of life changed in terms of profession or business-whether our forefather's agricultural profession has been modified anymore etc.

1.5 Limitations of the Study

1. Due to unavailability of data even at the proper authority, it has been managed to limit the study to almost a decade that ranges from 2056/57-2063/64
2. Due to the lack of time, no industry is analyzed with specificity. All the study will be offering a general apparatus of industrial profile existent in the Nepalese territory.
3. Secondary data are used, and due to extensiveness of the scope, no field level analysis has been managed.
4. The major data source for the study is the annually up graded statistical publication of the Department of Industry, Department of Small and Cottage Industry and FNCCI. Hence, the conclusions drawn from the study may or may not be consistent with the one based on other data as major sources.

1.6 Organization of the Study

This study is divided into 5 different chapters. There are,

i. Introduction

This chapter contains the brief introduction of the subject matter i.e. background of the study, statement of problem, significance of study, objective and limitation of the study.

ii. Review of Literature

This chapter is an explanatory section of the thesis. It reviews the literatures regarding the price and brief sketch of previous research work.

iii. Research Methodology

This chapter acknowledges the research methodology used in this study. It consists of research design, sources of data, data processing procedure, tools and techniques of analysis used.

iv. Data Presentation and Analysis

This chapter is truly an analytical section of the thesis. In this fourth chapter, data presentation and analysis with the help of selected tools and techniques have been included.

v. Summary, Conclusions and Recommendations

This is the final part of the study. This chapter consist summary of the overall study, conclusions from the analysis of data and put forward recommendations to improve the existing situation.

CHAPTER II

REVIEW OF LITERATURE

The history of craft and commerce in Nepal traces long back as it is believed to have begun since Kirantees' rule in the country centuries earlier. From different literature related to history, we get to know that the craftsmanship and its business flourished along the rules by different dynasties in the land. Over the passage of time and with the growing exposition to outer world, automatically, Nepal's trade link got a shape in the international forum. As a result, industries were encouraged and industrial ventures were undertaken in the country. It would be better to review that history of Nepal's industrial venture by breaking it into two major subgroups.

Conceptual Review

Review of Related Studies

2.1 Conceptual Review

2.1.1 Historical Evolution of Nepalese Industries

To quote the ancient history, industries in Nepal began to appear after the Banepa-Kuti trade route was opened in 639 A.D. Due to encouragement to producers of cotton and woolen clothes, paper, food, copper and wooden crafts, ceramic pots and statues, etc., Nepalese economy had realized a grand support for the time being. King Mahendra Malla had emphasized on protectionist policy for cotton mills in the country. Even after the unification of Nepal kingdom, King Prithivi Narayan Shah had followed the same model of policy. His emphasis on the use of domestic products, export of herbs, and shift of dwellings if they are on the mines-land, restriction of the inflow of foreign products, learning skill and technique from abroad etc. clarifies it. But the growing inclination of the rich and sophisticated families towards the cheap and qualitative foreign products caused a trend of decline of cotton producing industries in Nepal by the beginning of the 19th century. This is simply because of negligence towards industrial aspect of the economy during the early ninety years of Rana rule. The global recession caused

by World War I and the growing trade link between British-India government and Tibet through Chumbi valley route speeded the downturn of Nepalese industries by hampering Kathmandu-Kuti trade.

Under Rana regime, the reign of Juddha Shumsher recorded some traces of industrial development in the country. One cotton mill was established in Birgunj and Biratnagar each. The establishment of the Department of industry by 1940 A.D. carried out training programmes to villagers on weaving, and running cottage industries. Then, in government assistance, several cotton industries were established in different parts of the country, too. Steps were taken about infrastructural as well as administrative development. The National Industrial Exhibition 2001 B.S. held in Lainchaur had provided a praiseworthy incentive for cottage industries in Nepal. However, due to discontinuity of the trend and policy by later governments, the flourishing cottage industries in Nepal started withering. Along the advent of democracy in 1950 A.D., the protectionism gradually weakened and so did the softly growing industries.

However old the history of cottage and rural industries on the Nepalese land be, the history of organized industry in Nepal began only from 1936 A.D. when for the first time Nepal Company Act came into force. The Act could give way to the establishment of Biratnagar Jute Mill in the same year in collaboration of Indian capital. An industrial council under the name of 'Udhyog Parishad' established in the same year provided further incentives for industries. Luckily, say, the Biratnagar Jute Mill could earn supernormal profit as the jute products got unexpected market caused by the abruptly begun World War II. Its impact fell on others that were going to come up. As a result, many industries including Birgunj Juddha Match Factory were established. During the war too, the war-created shortage induced many large and small industries, mainly of consumptive nature like hydroelectricity, clothes, paper, furniture, soap, etc. Even after the war, there was high demand of goods in the market (national and international) as an effect of which some thirty-five industries were set up. Some of these closed before conduction while most of these failed later, as their management was not sound,

established hurriedly without considering the basics of industrialization in the light of war. Obviously, these industries could not face the competition created by the inflow of foreign, qualitative goods. Thus, the history of Nepalese industrialization associates itself to war element.

After the war, Nepalese industrialization got to face political feedback. By the democratic set up in 1950 A.D., no new industry could come up until 1956. Instead, many companies closed down with failure, and a few were still running in losses. Potential entrepreneurs felt disincentive. In the absence of labour act and company act, frequent lock-outs and strikes occurred in the factory. Mainly the following were responsible to the downturn of industries in Nepal during the transitional phase of early democracy.

1. Lack of interest in company affairs by the shareholders.
2. Lack of labour act.
3. Lack of transportation facility.
4. Lack of training centers and technicians.
5. Lack of industrial research agency.
6. Unscientific ways of industry establishment, e.g. mere war-stimulated.
7. Lack of efficient managers and entrepreneurs.
8. Lack of industrial credit facility.

Thus, the first two decades of organized industrial development effort in Nepal ended almost without any glorious achievement, except some experience in the field. While the other countries of the world aimed at growth, adopting protectionist policy after the war (II), Nepal more than spoiled the invaluable time by indulging in transitional instability of politics on the one hand and continuously losing its productive units on the other.

After 1956 A.D., Nepal practiced plan-based economic development. Naturally, industrial efforts were made in planned order since the first periodic plan (1956-61). Now it is already five decades of planning experience Nepal has made and certainly industrial journey of the country has forwarded.

The first five-year plan (1956-61) had general objectives in industrial sector like restoration of sleeping industries plus expansion of some new ones. Allocating some 7.5 percent of the total outlay to industry, the plan recorded some praiseworthy actions in the field. For example, the first industrial policy of Nepal 1957 was formulated to create an industry-friendly environment in the country. To institutionalize this, Industrial Development Center was also set up in the same year which, later, was renamed as Nepal Industrial Development Corporation (NIDC) in 1959. The NIDC was mainly aimed at providing financial and technical assistance to private industrialists and entrepreneurs. Moreover, the Factory and Factory Workers' Welfare Act was also announced in 1959 to remove the confusions inherent in company laws, so as to attract workers to the industry and make its growth. Also, the first industrial policy 1957 was changed in 1961 with a view to provide additional facilities to private industries. As an assistant action, Tribhuvan Highway linking Kathmandu and Indian border plus Kathmadnu-Hetauda Ropeway Service was also carried out. Thus, the first plan set a sound base for industries, both at policy and institutional ground, though having no any specific target in the field.

The second plan (1962-65) aimed at implementing the incomplete projects of the first plan and encouraging private sector to establish new industries, mainly the ones that would reduce the problem of unemployment by utilizing indigenous raw materials and earn foreign exchange either through export promotion or import substitution.

With the economic and technical assistance of different country-friends, large industries like Janakpur Cigarette Factory and Birgunj Sugar Mill were established. Even private sector contributed a lot to industrialize the country during the period. The establishment of two industrial estates namely, Balaju and Patan, with the help of NIDC, the Federal Republic of Germany and the government itself was the most glorious achievement made in industrial sector during the second plan.

In fact, the concept of 'industrial estate' holds a very significant place in the historical evolution of Nepalese industries. The concept kindled by the periphery of the first periodic-plan itself was implemented throughout many other planning that followed, with the establishment of different industrial estates in the country one after another. Such industrial districts or clusters have functioned as SOC in a sense, generating infrastructure in large scale, so as to attract private sector too in the industrial stepping of the nation. The following tables avail in detail about those industrial estates.

Table No: 2.1
Status of Industrial Districts- 1

(Fiscal Year 2063/64)

S.N.	Name of industrial district (ID)	Date of estd.	Total area in Ropani	Area of land development in Ropani	Area of land rented in Ropani	Total investment of the ID (Rs. in million)	Investment the industrialist (Rs. in million)	No. of industries in operation	No. of industries under construction
1	Balaju Industrial district	1960	696	696	525	13.2	2000.0	65	14
2	Hetauda industrial district	1963	2829	2829	1541	25.5	3214.7	44	5
3	Patan industrial estate	1963	293	293	218	14.3	408.1	86	1
4	Nepalgunj industrial estate	1973	233	233	167	9.6	125.0	21	4
5	Dharaj industrial estate	1973	202	202	380	7.7	162.9	16	4
6	Pokhara industrial estate	1974	501	501	338	14.7	500.0	52	6
7	Butwal industrial district	1975	434	434	58	11.0	9987.3	43	3
8	Bhaktapur industrial estate	1978/	71	71	50	13.5	246.2	24	4
9	Birendranagar industrial estate	1980	90	90	-	7.4	5.0	12	6
10	Dhankuta industrial district	1984	63	-	20	5.6	-	-	-
11	Rajbiraj industrial estate	1986	294	196	3403	35.5	25.0	4	-
Total			5706	5445		158.0	7674.2	367	47

Note: 1 Ropani is equivalent to 5476 square feet. The central office of ID office has 41 staffs.

Table No: -2.2
Status of the Industrial Districts-2

(Fiscal Year 2063/2064)

S.N.	Name of industrial districts (ID)	Employment of ID Offices	Employment of industries	Total No. of people employed	No. of shades constructed by the industrialists	No. of buildings constructed by ID	No. of shades rented to the industrialists
1	Balaju Industrial district	39	3960	3999	73	49	49
2	Hetauda industrial district	43	4801	4844	378	15	15
3	Patan industrial estate	22	1448	1470	154	49	49
4	Nepalgunj industrial estate	15	619	634	30	20	20
5	Dharaj industrial estate	17	548	565	38	16	16
6	Pokhara industrial estate	21	1380	1401	148	13	13
7	Butwal industrial district	16	1283	1299	87	8	8
8	Bhaktapur industrial estate	15	610	625	44	12	12
9	Birendranagar industrial estate	7	64	71	-	6	6
10	Dhankuta industrial district	1	-	1	-	-	-
11	Rajbiraj industrial estate	12	14	26	-	10	10
Total		208	14727	14935	952	198	198

Note: The Central Office of ID Office has 41 staffs.

About industry, the third plan (1965-70) contributed much on institutional aspect and less on producing units as well as product expansion. For example, the prevailing Audhyogic Byabasayik Ain was amended and stress was put upon the control of establishments that were not beneficial from national point of view. Feasibility study of some lines of industry was also planned. A formal institution of the name 'Industrial Promotion and Productivity Center' was set up in 1966 to help industries flourish well.

Despite that the third plan was more systematic with specific targets, encouraging policies and good programmes, much could not be consolidated. Bansbari Leather Shoe Factory in Chinese assistance, Himal Cement Factory at Chovar, Hari Siddhi Brick and Tile Factory at Lalitpur, and Gharelu Shilpakala Bikri Bhandar were the most prominent industrial establishments of the plan period.

The fourth plan (1970-75) came like a continuity of the third plan on industrial front. New industrial policy (1974) came in the fourth plan that clearly identified the industries to be established in the private sector and the public sector. In this plan, labour-intensive industries were much prioritized. Over the period, some 205 industries were licensed for establishment and operation which comprise import-substituting industries, export-oriented, basic, hotels, agro-, forest-, and mineral-based etc. Private sector established some 32 industries. The plan ended with generality of achievement.

The fifth plan (1975-80) came with new vision on industrial development. Maximum utilization of labour force and regional balance were the major elements of the plan. To materialize them, quantitative increment and qualitative improvement were stressed, optimum allocation of local capital, skill and resources was encouraged, import substituting industries were prioritized etc. However, the plan did not progress as expected. Not the prioritized but less desired goods like liquor, steel utensils and beer increased significantly. The major cause for such a grand failure of planning is the absence of foreign investment despite heavy expectation.

Objectives of the sixth plan (1980-85) were much more similar to that of the fifth plan. Policies adopted were such as provision of repatriation of profits and capital to the foreign investors, establishing export processing zone, etc. Industries were ranked based on priority, with cottage and small industries leading the list. A new industrial policy (1981) was also announced during the sixth plan that encouraged foreign investors to establish medium scale industry. Also, many projects were run in World Bank's assistance. Stress was put on raising capacity utilization of existing industries. In nutshell, the sixth plan period recorded a satisfactory history of industrial development with the registration of large no. of industries, employing thousands of people and training many others.

The seventh plan (1985-90) came with the stress on industrial production growth, fulfillment of the basic needs of people, productive employment opportunities, development of small and cottage industries, etc. Besides government's budgetary allocation, NIDC had targeted to invest some 700 million rupees. Preparation of long run industrial plan, implementation of Industrial Enterprises Act 2044 B.S. and organizational reforms on ministry and department of industry were done too. The production growth of eighteen specific industries could be done at a significant level of 11.2 percent, against the target of 12.7 percent. Overall industrial growth in the 7th plan, however, remained moderate due to relatively inefficient performance made by the public sector undertakings.

The time after 1990 has a distinct dimension in economic history of Nepal. Although there has been a general continuation of planning system apparently, genuine structural changes have occurred in the pattern of development effort. The roots behind all this are the degrading economy during early 1980s plus changing politics during the late 1980s. As a condition to IMF and World Bank's Economic Assistance through structural adjustment programmes aiming to rectify the mass error in the economy, Nepal got to embody liberalization as its economic policy.

Already, two periodic plans have been launched and the third (i.e. Xth plan) is under way after liberalization. Let's see industrial effort made in them:

The eighth plan (1992-97) allocated some 8.8% of the total outlay to industrial sector. The traditional stress upon the idea of private sector role in industrial and overall economic growth was institutionalized during the eighth plan by enacting the 'Privatization Act' in 1994. Since then, many SOEs have been privatized. The following table illustrates this.

Table No:- 2.3
State Owned Enterprises Privatized and Liquidated
(As on FY 2063/2064)

S.N.	Name of enterprises	Method of privatization	Year of sale	Sales proceeds # (in Rs. '000')	Equity in %	
					Mgmt.	General public
1	Bhrikuti Paper Mills	Asset Business sale	& Oct. 1992	229800	70	30
2	Harisiddhi Brick and Tile Factory	Asset Business sale	& Oct. 1992	214830	72	28
3	Bansbari Leather & Shoe factory	Asset Business sale	& Mar. 1992	29854	75	25
4	Nepal Film Development Company	Share sale	Nov. 1993	64662	51	49
5	Balaju Textile Industry Ltd.	Share sale	Dec. 1993	17716	70	30
6	Raw Hide Collection and Development Corporation Ltd.	Share sale	Dec. 1993	3990	-	100
7	Nepal Bitumen and Barrel Ind. Ltd.	Share sale	Jan. 1994	13172	65	35
8	Nepal Lube Oil Ltd.	Share sale	Jan. 1994	31057	40	38*
9	Nepal Jute Trade & Development Company	Liquidation	1993	Liquidation	-	-
10	Tobacco Development Company	Liquidation	Mar. 1994	Liquidation	-	-
11	Nepal Foundry Industry	Share sale	Mar. 1996	14473	51	49
12	Shree Raghupati Jute Mills	Share sale	Aug. 1996	82204	65	35
13	Biratnagar Jute Mills ⁺¹	Lease	Oct. 2002	Mgmt. contract (for 5 years)	-	-
14	Nepal Bank Ltd. ⁺²	Share sale	Mar. 1997	125140	-	59
15	Nepal Tea Development Corporation	Share sale/lease	June 2000	267105 (for 50 years)	65	35
16	Agriculture Project Service Center Ltd.	Liquidation	2001	Liquidation	-	-
17	Cottage and Handicraft Emporium Ltd.	Liquidation	2002	Liquidation	-	-
18	Nepal Coal Limited	Liquidation	2002	Liquidation	-	-
19	Hetauda Textile Industry	Liquidation	2002	Liquidation	-	-
20	Nepal transport Corporation	Liquidation	2002	Dissolved	-	-
21	Butwal Power Company	Liquidation	Jan. 2003	874200+ US \$.075 mln.	75	25
22	Birgunj Sugar Factory	Liquidation	2003	-	-	-
23	Agriculture Tools Factory Ltd.	Liquidation	2003	-	-	-
24	Bhaktapur Brick Factory	Asset Business sale	& 2004	14500+31000 Rent/10 yrs.	-	-

Note: # it includes the price of management share only. Rest of the shares is in the name of other corporation.

A new industrial policy was announced in 1992 which put forth an outward looking vision whereby it was aimed to make the economy more liberal and competitive.

Several other acts related to foreign investments and technology transfer etc. were also formulated during the plan period. Some 1345 medium and large plus 34439 small and cottage industries were established. Less than half of the industrial production growth rate could be realized, however. Industry and mining contributed some 9.2 percent of the GDP. In the field of industrial employment, the eighth plan recorded a praiseworthy achievement by providing 235000 additional employments, the small and cottage industries contributing more than half.

The ninth plan (1997-2002) adopted the similar policies on industrial front, as in the eighth plan. Emphasis was given on low cost economic structure, mainly by the government working as a facilitator more than an actor, identifying the commodities of comparative advantage, and promoting export, etc. Aims were such as raising industrial contribution in GDP, diversification and expansion of internal and external market, etc. However, the contribution of the manufacturing sector could not cross 10 percent of GDP. Industrial production could grow only by 2.6 percent annually, against the target of 13%. And only some 151000 additional employments could be created against the target of 350000. Thus, the ninth plan ended with achievements in industrial field far below the expectation.

The current Tenth Plan (2002-2007) has also adopted the long term development preventative of the ninth plan. The main objective of the long term development is to create acculturated, modern and having competitive capacity human society through the reduction of existing mass poverty. The tenth plan (2002-2007) adopted the similar policies on industrial front, as in the ninth plan. Emphasis was given on low cost economic structure, mainly by the government working as a facilitator more than an actor, identifying the commodities of comparative advantage, and promoting export, etc. Aims were such as raising industrial contribution in GDP, diversification and expansion of internal and external market, etc. However, the contribution of the manufacturing sector could not cross 9 percent of GDP. Industrial production could grow only by 3% annually, against the target of 13.5%. And only some 172000 additional employments could be created against the target of 390000. Thus, the tenth plan ended with, achievements in industrial field far below the expectation. The plan has been poorly implemented and unable to meet to target due to transmission phase in the political scenarios

2.1.1.1 Liberalization vs. Protectionism: An Industrial Viewpoint

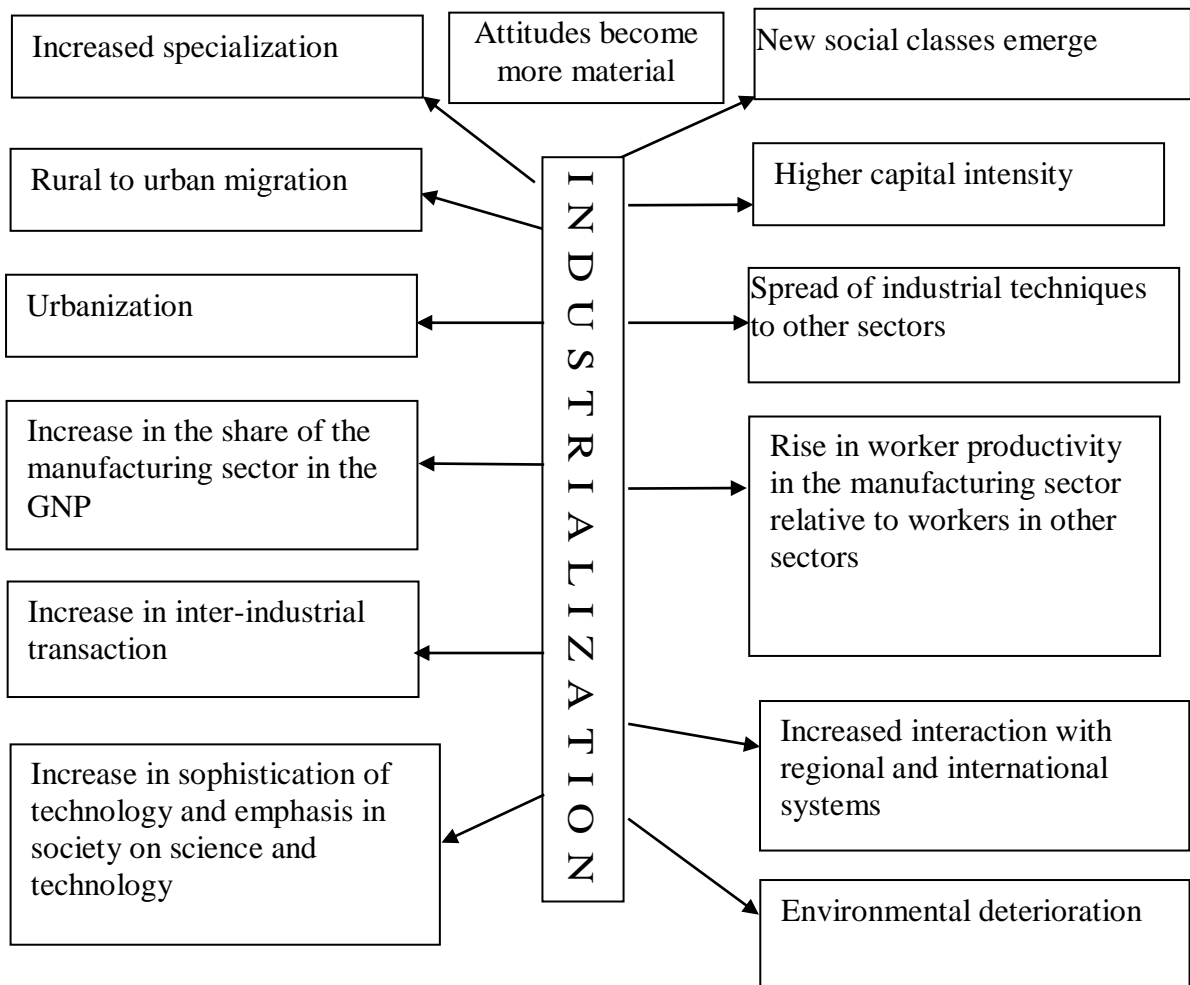
During the early industrial venture, the Nepalese industrial policy was the one of protection. The protectionist policy mostly emphasized on import-substituting industries, high import-tariff etc. In a sense, the protectionism aimed at self-reliance, having less or no type of linkage to the outer world. Thus, protectionism is an inward-looking policy that Nepal adopted for long till 1990. In that period, the economy could not have the merit of comparative advantage as it tried for all at once. As the imports were restricted by high tariff and/or quota, the domestic industries did not consider efficiency aspect. Import restriction had naturally caused export disturbance. In such a muddy climate of inefficiency and marketlessness, neither foreign capital nor domestic private capital could be attracted much. As a result, the evergreen capital-scarce economy of ours could not much consolidate its plans on industry sector, despite some less-frequent foreign assistance. Nepal's unsuccessful isolated effort proved that nothing comes out of nothing. Although the industrial policy was changed time and again and industry was highlighted in different planning, the end-result could not be altered significantly. The root cause behind all this may be mainly referred to the very inward looking industrial policy of the government that ridiculously adopted tariff and non-tariff barriers alternatively.

Opposite to this, the industrial policy structurally shifted along the structural change in government by 1990. Privatization Act 1994, Industrial Policy 1992, etc had a grand impact. Now more stress was put on export-promoting industries instead of import-substituting ones. The policy is liberal in that it has embodied the principle that only give and take can strengthen an economic relation between the nations. Thus, the post 1990's industrial policy is of outward-looking nature, attracting foreign investment by widening market for the Nepalese products. By helping to raise quality of the product via increased private sector handling, the privatization Act 1994 has functioned as a spirit to the liberal industrial policy.

Still another new industrial policy 2003 has been proposed that is more liberal with the objective of taking more benefits from the changing scenario in regional,

bilateral as well as multilateral trading system plus making Nepal an attractive land for investment. Raising linkages between domestic and foreign investment, strategic alliance, inclusion of rural women and low income group, and provision of essential law are the major strategies of the proposed industrial policy 2003. Similarly, the concept of Industrial Clusters and Incubation Services for entrepreneurship development are the newer elements of the 2003 proposal.

Industrialization and development are inextricably linked. One must not discard the reality that industrialization earns foreign exchange, provides employment, spatially integrates the economy, and minimizes dependency syndrome apparent in poor and developing countries. Itself an issue of glory, industrialization is further signified by the following chart illustrating the different aspects it.



There is no doubt that the development experiences of developed as well as rapidly growing economies of the world throw sufficient light on the importance of industrialization. It is because their significant achievement in economic concern is not the phenomenon unsupported by industrialization in main.

Nepal's reality remained disappointing after some four decades of planned practice with close-door policy whereas South Korea made a successful experimentation of the very policy. The country could exhaust the production of low-level goods in a few years and raised competence sufficient enough to adopt export-oriented strategy in the second phase of industrialization by the late 1950s. Strong national commitment, focus on comparative advantage items etc. Similarly, backwardness in technology is the fault in our effort plus rugged topography is the hurdle in our situation—this is what we find while trying to assimilate Nepalese industrialization to that of Japan. No or low expenditure in R & D has hindered Nepal's technology, hence, quality of the Nepalese product causing demolition of industries here. Although we can't bring seas in and around our land, we should certainly have valued the significance of R & D as taught by Japan's successful experience in industrialization. It is only with advancement in technology that such a resource-less country like Japan has managed to raise an excellent economic height in the world.

Nepal is still in early phase of its industrialization since Kirantees' rule. No matter policy level change has been brought by 1992 with open-door strategy, via enactment of SAFTA as well as accession to WTO. Yet, Nepal must learn the fact that mere policy can't help unless they are well practiced. Total government should be committed and every citizen should cooperate with active participation for that.

2.2 Review of Related Studies

2.2.1 Review from Books, Reports and Journals

Sri Ram Poudyal's book *'Planned Development in Nepal: A Study'* has the following objectives:

- a. To examine the development performance of the Nepalese economy in raising the growth rate of GDP, developing and modernizing agriculture and industry, and reducing poverty, inequality and unemployment.
- b. To offer a critical and realistic appraisal of the economic situation of Nepal and put the 'development' issue in perspective.

By using descriptive methodology, Poudyal mainly concludes the following:

1. The industries of Nepal have not had any basic structural change during the review period of two decades.
2. Expected industrialization has not occurred. A few modern industries are not the effects of national plans but foreign aid.
3. Mainly cottage and small industries are with us. And food-processing and oil-mills are the dominant types.
4. About 50 percent of the industrial product goes for export mainly concentrated to India.
5. Average capacity utilization of Nepalese industries is low; lack of raw materials, marketing and power problems, lack of working capital and shortage of demand are the causes of it.
6. The capital-labour ratio has been found increasing implying preference of capital biased technology. This is the cause why Nepalese industries have not been able to provide desired opportunity for employment.
7. Export promotion objective has not been achieved. Instead, trade deficit is continuously growing.
8. Regional imbalance in terms of industrialization has not been rectified.
9. NIDC has failed to emerge as a powerful institution for promoting private investment in key industrial areas.

10. Industrial development in Nepal has been very sluggish and the country still heavily depends on import for daily necessities.

The economists and development planners throughout the world have recognized a strongly positive correlation between industrialization and economic development. In colloquial terminology, the two terms are often taken synonymously. When the intellectual elites in developing countries say their countries are underdeveloped, they mean they have too little industries. In the book "Asian Drama: An Inquiry into Poverty of Nations", Gunnar Myrdal holds the objective of inquiring the various causes of poverty in South Asian countries. His descriptive methodology has helped him to say that if some country is evaluated irrespective of its social and political condition then all the effort turns worthless. Hence he has made an attempt to show all the variables responsible to South Asian Poverty. Mainly, he concludes that the deplorability of the South Asian people rose to climax due to anti-developmental social practices, selfish politics and the consequently disrupted economy. And for them, industrialization has become the central pillar of hope to raise their levels of income. In fact, upgrading economies via industrialization has become an old as well as common road map of the countries of the world.

No world economic policy like privatization, liberalization or globalization is meaningful to implement unless industrialization is emphasized and exactly begun. In a competitive environment, how can an economy exist without mass production and efficiencies of scale? Moreover, emphasis on industrial development is that it would also absorb rural underemployed persons to those fields of production where higher productivity is possible without reducing total agricultural output. Yet so far the issue of employment is associated to industrialization, the nature of the latter significantly matters. Only the labour intensive industries provide employment opportunity in a significant scale.

In an article '*A Study on the Nepalese Industrial Sector*' **Mahesh Baskota** has an objective to provide a broad appraisal and analysis of Nepalese industries.

By using descriptive methodology, **Baskota** concludes:

1. Despite 16 percent p.a. growth, Nepalese manufacturing sector is very small; its impact on national output and employment has been negligible. Growing labour force has no chance to expect a vacancy in the industry.
2. Most of the manufacturing units except food processing ones are undigestively capital-loaded. Such biasness towards capital than labour has been attributed to very lower real interest rate on loan, over-valuation of Nepalese currency and prevailing inflation rate. If the overloaded capital is reduced and capital per unit labour is maintained at an appropriate amount, then employment could be raised to a significant scale in Nepalese industries.
3. Also, if ongoing capital-deepening is unchecked, it will be strengthening the aspect of inequality in industrial asset distribution, favouring the capital owners only.
4. Industrial output in Nepal has been very erratic. At least 30-35 percent of the industrial products have registered lower levels in 1978 than in 1973/74. Even among the nearly established industries, output levels seem to be falling.

Finally, Baskota puts a query of severe concern: "If after two decades of socio-economic planning under a politically stable environment we fail to bail out the absolute poor and instead push an increasing number of people to the subsistence margin, then what have we planned for and where have we gone wrong?" Referring to success of many smaller nations, he reminds that there is no reason for Nepalese to be unduly pessimistic. He further adds that industrial sector can take a good lead in promoting an economy, yet, the other sectors like agriculture, population, trade and resource mobilization must share a significant cooperation with it.

The study 'Estimation of Production Function on Nepalese Manufacturing Industry' by Suresh P. Sharma has the following objectives:

- a. To estimate the production function of overall manufacturing industry.
- b. To estimate the production function of different sub-industries.

As a methodology for his study, Sharma has used two types of production function. They are: Cobb Douglas type of production function and Constant

Elasticity of Substitution production function. His tools are highly mathematical where we find him using one production function after another, showing some specific hurdles attached with the former – so as to retain the objective. Not only that, even regression analysis has been carried out of the equations obtained from the expansion of different production functions.

Major conclusions of the study are:

2. The overall industrial sector has been found operating under increasing returns to scale in 1972/73, unlike the situation of decreasing returns in 1965.
3. The labour intensity in the overall manufacturing sector has been found decreased during the review period.
4. The responsiveness of output has been found more labour elastic than capital during the review period. Underutilization of capital has been blamed for this. Also, the artificially created lower cost of capital by the existent interest rate policy has been referred to. Sharma further mentions that it has badly affected income distribution in Nepal – helping the already skewed pattern of it, favouring the capital owners further. Reminding the industrial targets stated in various development plans, he has suggested to urgently having reforms in the instruments like interest rate policy, exchange rate policy, credit policy etc. Because he says, defects in such policies may hamper on export of Nepalese industrial goods causing price-distortion of factor inputs in the domestic market. Mainly, products having no comparative advantage may be encouraged for export. The study also mentions that Nepalese industries lack such training programmes which may be quite helpful to raise labour productivity. Besides, backwardness of Nepalese labourers in terms of education has been mentioned.

In the study '*Rural Industrialization in Nepal*', the authors **Govinda Ram Agrawal** and **Udaya Bahadur Amatya** have tried to make a comprehensive study on rural industries of Nepal. Their methodology is descriptive.

Finding that Nepal is a country full of villages, the authors attempted to evaluate industrial development of Nepal by making a thorough analysis of rural industries

here. 'Rural industries' in their work stand for cottage and small scale industries located in rural areas. Their major conclusions are:

1. The growth of cottage industries in Nepal has been negative; its role on the national economy has been minimal.
2. Government policies for the development of rural industries have been incoherent, unstable and ineffective. Uncoordinated net of institutional infrastructure is terrible.
3. Cottage industries of Nepal have not been effective in generating adequate employment opportunities.
4. Private sector has not been encouraged to invest; there is lack of entrepreneurial capacity.
5. Development infrastructure in rural area has quite poor scenario.
6. In relation to policy, the implementation aspect is fragile.
7. Cottage industries have got low priority in development plans.
8. A few rural industries which are existent, too, have not been much successful in accelerating the process of national development; they greatly suffer the lack of forward and backward linkages.

The study "*Foreign Trade and Industrialization in Nepal*" carried out by **Rajeshwor Acharya** have the objectives as:

- a. To examine the economic cooperation for industrial development of Nepal.
- b. To identify problems and offer solutions for industrial development in Nepal.

By using his descriptive methodology, he draws that the existing public policies for industrial development are defective on the following ground:

- a. Lack of broad, comprehensive and practical insights;
- b. Lengthy and complex procedural formalities;
- c. Lack of sincerity and seriousness for effective implementation;
- d. Lack of accountability and responsibility in public bodies.

Frequent changes in the government policies and lack of coordination among the government agencies have been pointed as responsible to substantiate these policy problems.

As major constraints to industrialization, Acharya notes the following:

- i. Limited natural resources;
- ii. A small domestic market with low purchasing power;
- iii. Landlockedness of the country causing high costs for export and imports;
- iv. Free border with India;
- v. Absence of entrepreneurial and technical skill for modern industry;
- vi. Inadequate development infrastructure.

Acharya has mentioned the following solutions to overcome the aforesaid problems on industrial development of Nepal:

1. Development of cottage and small industries.
2. Strengthening border administration with India.
3. Liberal cooperation of India.
4. Increased role of private sector.
5. Encouragement to foreign investment and regional co-operation.

In the field of economic cooperation, Acharya finds that Nepal has already made many bilateral and multilateral agreements for its industrial and aggregate economic development. However, due to no implementation of such commitments by the concerned agency, Nepal's industrial status has not promoted to any mention worthy scale. To recover this, Acharya suggests establishing a high level 'cell' to monitor and activate the early decisions and urge the completion of mutually agreed projects.

The report entitled '*Strategy for the Development of Industrial Sector in Nepal*' by **Bishwambhar Pyakuryal and Narendra Bhattarai** has the following general objectives:

- a. To identify and assess the present status of the six Ms.
- b. To identify other factors which may affect the development of industrial sector and to study the present status and needs for improvement.
- c. To recommend suggestive measures on the basis of the findings of the study including an effort to make the country's industrial policy, the industrial enterprise act, the foreign investment and technology transfer act, and other relevant acts conducive to the development of the industrial sector in Nepal.

The study is based on both primary and secondary data. For that, questionnaire and interview technique have been used. Two types of questionnaires have been made – one for industries and another for professionals. Along the different statistical tools, the Rinsis Linkert Five-point scale has also been used as a tool for analysis.

The reporters have identified six Ms – Man, Money, Material, Method, Market And Management as the basic variables determining the pace and structure of industrial development. In addition, appropriateness of the industrial policy, Acts and their implementation has been emphasized. It has been said that despite the highlight to industrialization in National Planning continually, achievement in that direction has been no more remarkable. General GDP growth and industrial growth have been almost parallel. And unfortunate enough, population growth also accompanies them hand in hand. In nutshell, net growth rate of the economy does not seem to be existent. And all this defeat of the governmental effort has been attributed to the absence of research and development of technology, landlockedness of the country, smallness of its market and lack of skillful entrepreneurs. Not only that, their study has also identified the problems of capacity utilization in Nepalese industries. And it has been attributed to industrial disputes, trade and transit problems, shortage of raw materials, fuel crisis etc.

Govinda Prasad Regmi's study '*Industrial Growth in Nepal: A Sectoral and Regional Analysis*' have had these objectives:

1. To examine the structure and growth pattern of manufacturing industries both at the individual level as well as broad categories such as consumer goods, intermediate goods, and investment goods industries.
2. To examine regional distribution of manufacturing industries, their structure, regional growth patterns, location advantage and industrial base of the regions.
3. To analyze the sources of finance, their capital structures, profitability rates and capital-output ratios.
4. To examine the partial and total factor productivity trends of manufacturing industries, wage differentials and elasticity of output with respect to inputs such as labour and capital.
5. To examine the contribution of import substitution, export demand and domestic demand in the growth of manufacturing output.
6. To evaluate overall industrial policies along with some of the specific aspects of trade policies.

The study is rich in methodology. It has used many tools and techniques:

1. To study sub-sectoral growth patterns, the industrial sector has been divided into modern manufacturing, cottage industries, mining and electricity as well as use-based categories such as consumer goods, intermediate goods and investment goods industries.
2. Cost-output ratio of industries has been computed. Also, location quotient technique has been implemented.
3. Average capital-output ratio and profitability rate of each manufacturing industry has been computed.
4. Total factor productivity indices have been calculated by using Kendrick's method.
5. Cobb-Douglas type production function has been used to analyze productivity of factors of production.

6. Linear regression model known as Verdoorn's law has been used to estimate the relationships between productivity and employment with output.
7. Chenery's Growth Accountancy Model has been used to measure the impact of import substitution.

From the study, conclusions as follows have been drawn:

1. The industrial base is expanding, mainly in eastern and central Nepal during the review period 1965/66-1986/87 and it has been attributed to higher urbanization and better infrastructural facilities there compared to other regions.
2. The capital output ratio is increasing and the productivity of capital is declining. Average productivity of manufacturing sector is falling.
3. Labour-elastic output has given way to capital-elasticity implying thereby that improved techniques of production crept in Nepalese manufacturing only gradually.
4. There is positive correlation between wage rate and value added per worker.
5. Some manufacturing like cotton textiles, wearing apparel, and metal industries are making more and more capital-formation because of the expansion of domestic as well as export market for their products.
6. Profitability rates are suffering a high degree fluctuation over time.
7. Mainly, public sector industries are running inefficiently in Nepal.
8. The share of manufactured items in total export is increasing.

With all these realities, Regmi mentions that rapid industrialization and diversification of the economy are the only way out for Nepal to better its living standard, coping with innumerable hurdles that are apparent.

In an article by [Dr. Chiranjibi Nepal](#), *'Industrial Development in Nepal: Challenges and Opportunities, Nepalese Economy: Towards Building a Strong Economic Nation State'* find the following objectives:

- a. To analyze the industrial effort made in Nepal;

- b. To assess the environment in Nepal relating to industrial promotion and national development.

Dr. Nepal says that Nepal is preparing for take-off stage of growth by reducing excessive dependence on agriculture and accelerating the pace of industrial development with greater liberalization of trade and investment. Even the strategy of private sector led industrialization has been adopted. Despite the several constraints, His Majesty's Government of Nepal (HMG/N) has been playing a crucial role with its policies and programmes.

Nepal has a high-cost economic structure particularly due to landlockedness fuelled by transit complexity. The rugged topography breaking into high mountain ranges has hindered internal movement, hence, industrial activities. Yet, recent prioritization accorded to the development of transport and power in development plans has softened the extremity of the problem. Entrepreneurship and management problem burning in Nepalese industrial field have also been referred to. The Nepalese tendency of investing in land and conspicuous consumption rather than in industrious business has been severely rebuked. Lower purchasing power of the people standing for limited internal market, the technical and institutional limitations, the size of the country and the population have all been quoted as problems to industrialization in Nepal.

Besides problems, even prospects for Nepalese industrialization have been talked of in the article. Water and forest resources, if could be profitably exploited, a number of industries can be started. The study has focused upon the suitability of small and medium-scale industries in Nepal. The Swiss experience of having labour cost as 70-80 percent of the final cost teaches that labour-intensive technologies can also be beneficial. Japanese experience tells that small industries can occupy an important place in modern industrial economy. Comprehending all these realities, HMG/N is making tremendous effort to create an environment so as to attract local as well as foreign private capital for the expansion of industries in Nepal.

The study also evaluates different policies applied for the industrial development of the country and finds the major thrust falling on openness with emphasis on market driven strategies. An overwhelming majority of industrial base in Nepal has been supported by cottage and small industries. Finally, the study has highlighted the need to bring major changes in policy as well as the role of the government so as to integrate our domestic economy with the global economy through industrial development.

In 'A Study in Problems and Process of Industrialization', **B.P. Shrestha** holds the following objectives:

1. To make a systematic and comprehensive study on Nepalese economy.
2. To identify the problems concerned largely with the industrial development in Nepal.
3. To develop some workable solutions to the aforesaid problems.

Shrestha's methodology for the study is descriptive:

About the growth of ancient crafts and small industries, **Shrestha** remarks various contexts like trade with Tibet, encouraging attitude of the government, inborn capacity of the artisans etc. They had a serious setback from the half of the 19th century, especially due to opening of the Chumbi valley routes, the Anglo-Nepal Treaty of 1923, the unregulated inflow of cheap manufactured goods and then the changing political scenario. As a result, a fast decay of indigenous crafts and industries in Nepal occurred.

Reconstruction and development works juxtaposed with the unprecedented quake of 1934 and the war-like situation abroad have been thanked as responsible elements for the formation of a development agency "Udyog Parishad" in the country. The special agency of the Parishad "Nepali Kapada Ra Gharelu Ilam Parchar Adda" (Department of Cottage Industry) carried out some steps for the promotion of cottage, village and small industries, especially cotton spinning and weaving. Yet, the agency did not function well after the war (World War II).

The Ford Foundation established in 1961 functioned as a catalyst in enlivening the collapsing workshops of Nepal, mainly through its generosity in finance and technique. Yet, due to channeling of the meager help of 7.33 million rupees on numerous activities, no tangible result was obtained. Even the second Economic Plan (1962-65) could not rectify the shortcomings. Except rice and oil mills industries, no small scale industries could get significance, both in terms of investment and employment. Some industries organized as proprietary and partnership firms were the only subsistent units of production in the country.

About the growth of organized industries, Shrestha again holds the breakthrough of 1936 and remarks some issues like the unusual concessions and privileges granted by the government, the scarcity conditions created by war, the inadequate laws and regulations etc. as artificial stimulants aiming at industrial development in Nepal. However, the wrong went when many rash or ill-considered industrial ventures were privileged along the good ones. Due to high privileges, the tendency of neglecting efficiency aspect increased. Some bad entrepreneurs took the merit even at the cost of the enterprises of which they were directors or managers. It caused high mortality of companies and persistent inefficiency in the few surviving ones.

The war stimulated industries mostly failed later because of gross miscalculation on the part of so-called entrepreneurs and the lenient policy of the government. Some successful industries like jute mills and match factories could not rectify the mass failure throughout the economy.

Lack of integrated programme from the government's side, unsuitable social, political and economic environment of the country are solely responsible to dismiss the potential contribution of the aforesaid artificial stimulants in initiating a process of take-off. Thus, the early industrial effort of Nepal almost ended with no remarkable achievement. As a remedy, Badri P. Shrestha suggests to evolve a suitable approach to the problems and process of industrial development, not in

isolation as before but within an integrated scheme of overall economic transformation of the country.

In an article 'Quest for Industrialization in Nepal', [Gunanidhi Sharma](#) has made a quest to expose the reality of Nepalese industrialization. By using descriptive methodology, he has argued that agriculture has still remained dominant in Nepal to lead the economy, implying thereby that industrial growth is slow and small here. Consequently, there is lack of employment opportunity and investible surplus. Keynesian strategy of demand-led growth could not be realized in Nepal. Low-level equilibrium trap still continues, here. Sharma stresses on redistribution of income as essential only after industrialization saying that true growth occurs only by industrialization.

According to him, Nepalese plans, policies and strategies failed to translate high employment and productivity growth target into objective reality due to some inherent fault with our policy and vested interest of some specific group. In series, Sharma forwards the following points:

1. The 1950 treaty of trade and transit with India solely regulates Nepal's trading effort and happens in India's favour.
2. The 1971 treaty with India freely allows inflow of Indian advanced products in Nepal.
3. Nepal's difficult topography renders exchange control unenforceable across the border, causing limited scope of any trade policy in Nepal.
4. The fixed exchange rate between IC and NC with no control over the quantity of IC hampers Nepalese industries and encourages capital outflow instead.
5. Lack of transportation and communication network in the remote areas of hills and mountains of Nepal has created an information gap of resources and no-access of technology, causing inevitable trade deficit via export of raw-and semi-processed materials but import of finished goods. As a whole, industrialization is badly suffering.

Sharma rebukes the existing open door policy of trade with India as anti-industrial for Nepal and views the necessity of changing industrial pattern, holding only

those ones that have exhibited comparative goodness like bakery products, carpets and rugs, jute processing, *biris*, bricks, and tiles etc. Sharma is assured about the bearings of Nepal mother in her womb, as well as in her beautiful appearance. Yet, he accepts the reality that it has been negligibly harnessed via industrialization, resulting in low quality of life, inadequate foreign exchange earnings and deficits in the BOP.

Different types of resources are available in the local land of Nepal likely to help initiate many industries. Among them, cottage industries are the most potential for specific Nepalese items like woolen mats (*radi*), blankets (*pakhi*), muffler (*galbandi*), waist-band (*patuka*) etc. But for all this, industrial democracy is essential which refers to a specific situation in which the domestic relationships of production are made less exposed to foreign shocks and also consider, on the other hand, the structure of industrial ownership under the dominant influence of a few monopolists.

- a. Free and unrestricted movement of men, materials and Indian currency across the border is responsible to weaken our nation's drive for industrial development.
- b. Delayed growth of technology has caused incompetence of cottage and consumer goods industries.
- c. Capital-goods producing industries are marred by the different trade and transit treaty with India.
- d. Indecisive state policy is to be reckoned.
- e. Existing export base is fragile, and also, some traditional item producers are not likely to sustain.
- f. Trade diversification beyond India is essential.
- g. Product diversification beyond Indian policy touch is essential.
- h. It needs incentive package to the users of local goods.
- i. It is necessary to tighten border administration with India.

Above all, Gunanidhi Sharma stresses upon national commitment and determination to raise the estate of Nepal as an industrialized, self reliant, prosperous and economically stable and viable country.

In his article 'Current Status of Industrial Sector', **Bhanu P. Acharya** has evaluated the implementation of the policy brought about by liberalization. The data-based illustration shows that the contribution of industry sector has not been able to be above 10% of GDP. The capacity utilization rate of most industries is below 50%. Expected success has not been gained in terms employment opportunity from the sector of industry. Inability to recognize the sectors of comparative advantage and competence, lack of transparency and coordination in policy implementation, uncontrolled import trade and insufficient infrastructure have been mentioned as major issues to cause such low performance of the industrial sector in Nepal.

Although liberalization raised the number of establishment and amount of domestic and foreign investment significantly, the trend did not sustain. In terms of production scale, it recorded cent-percent increase from 2046/047 B.S. to 2054/055 B.S. In some products, Nepal has become self-reliant too. The number of producing industries shows fluctuating trend from 2043/044 to 2053/054. Closure of small carpet, garment, and '*bir*' industry is responsible for this. Only 3 percent of the economically active population is employed in those producing industries. Labour productivity is falling. About 98 percent of the producing industries are owned by private sector, while the rest by public sector and foreign investors 1/1 percent, each. About capacity utilization, the tannery records the maximum of 97%, while Stainless Steel Company records the minimum of 2%.

Some produces units like plants-oil and soap record increasing rate of capacity utilization due to growing export caused by trade and transit treaty between Nepal and India. The effective protection rate to our industries has been reduced from 16% in 2048/49 to 8.5% in 2053/054 B.S. It has been found that the ones protected earlier could not sustain in competition once protection on them was released or reduced. Despite the provision of foreign investment and technology

transfer, the foreign investment has not been satisfactory. The study also reveals that there is direct and positive relationship between political stability and investment.

As a conclusion, **Bhanu P. Acharya** views that liberalization policy was all fine but our industry sector could not promote much by it due to political instability, lack of timely reform of economic weaknesses, slow decision-making, irresponsible tendency of administration and lack of transparency and commitment by the government.

In an article 'Industrialization in Nepal: General Eco-Political Context' **Ghanashyam Bhusal** has exposed situation of Nepalese industrialization. In the data-based illustration, we find that cottage industries, the dominant type of industry in Nepal, are continually diminishing. Awful to note is that the industrialization in other countries causes closure of industries in Nepal. Moreover, some fifty-five thousand cottage industries have been deregistered in 2056/57 only. By then, 376,000 Nepalese cottage industries in 2029/30 B.S. have reduced to 130000. On the one hand, industrial contribution to GDP has reduced to 2.34% in 2057/58 from 4% in 2031/032 and on the other, industry's share in total non-agro-production fell from 13.22% to 3.71% during the same period. Thus, Nepalese economy badly shifted from truly productive sector of industry to unproductive sector. It is a doom of specific Nepalese economy because industries in other economies of the world recorded expansion during the period.

Despite the fact that liberalization could cause inflow of capital in the country, most of the ones initiated in foreign investment were non-agro-based implying that the liberalization policy could not modernize agriculture in Nepal. Also, more than one-third of the foreign investors were Indians, showing Indian monopoly in Nepalese economy. Thus brokers' capitalism tendency appeared in the Nepalese territory, limiting her trade, diminishing her industries and increasing that of the outsiders, instead.

Bhusal takes BOP situation of Nepal as another measure of her industrial efficiency. Data reveal that Nepal's trade deficit is continuously increasing. It means we are losing in terms of industries. According to Bhusal, the existing political system significantly matters in achieving industrial target. If only it is industry-friendly with its policies, economy can be raised via industrialization. In case of Nepal, the frequently changing industrial policies are less supportive but more contradictory to each other. In turn incentive package of protection were withdrawn, endorsing liberalization and abolishing non-tax provision on industries of national priority. Even the system of custom duty is not industry-friendly in Nepal. Liquor and tobacco are highly charged on import implying their protection in the national economy, while necessary goods are left free causing their easy access in Nepal in low-price so as to raise competition and probably cause shut down of domestic industries. Thus, Bhusal says that industrialization in Nepal is impossible unless the approach of the ruling class turns into industry-friendly from the one opposing it.

As the politico disturbances hindered Nepalese industrialization in history, the solution ought to be sought in the same for future. Because of the industries' association to production of goods and promotion of human life, raising the industrial estate of the country is a must. There are various problems and challenges. In the Nepalese context, Ghanashyam Bhusal recommends the following:

1. It requires national, political determination to prioritize native labour, skill and capital.
2. There should be some legal provision to invest the fruitlessly accumulated property owned by the ruling class in productive sectors, be it held in native or foreign land.
3. Import substitution and export promotion should be made the main and major policy of the national economy.
4. Different treaties should be renewed (mainly with India) so as to remove restrictions or hindrances in Nepalese industrialization.

5. Anti-industry political system should be dethroned and responsible, participatory, and truly democratic government system should be established, instead.

2.2.2 Review from Thesis

In M.A. Thesis entitled '*The Role of Cottage and Small-Scale Industry in the Nepalese Economy*' **Rajendra Prasad Ojha** has used descriptive methodology and drawn the following as conclusions:

1. The earning from carpet export in case of Nepal has been quite low due to inferior quality causing low price.
2. Reduction in export-dependency has not been materialized as expected, despite the adoption of diversification measures.
3. There is negligence towards the aspect of publicity by the concerned authorities, which may be fatal hindrance in the promotion of carpet export trade.

Ojha has emphasized on industrialization mainly because it eases trade diversification. Also, it reduces dependence on traditional markets as a part of export promotion – both in terms of product and destination. Not only that, industrialization has been emphasized also as a good source of foreign exchange. Support to employment availability is additional benefit, it has been said. Ojha finally views that proper utilization of available resources is quite essential.

In M.B.S. Thesis '*The Role of NIDC on Industrial Growth*', **Rajendra K. Dahal** holds the following objectives:

1. To analyze the contribution of NIDC to the industrialization process of Nepal.
2. To examine NIDC's investment policy.
3. To provide concrete suggestive framework for industrial development.

By using descriptive methodology, Dahal concludes that the role of NIDC has been genuine right from its establishment in 1959. The volume of its investment is increasing year by year. Yet, the unequal investment in different regions needs

strict correction. Its financial assistance is appreciably high. It has been providing direct loan, share participation, guarantee arrangement and underwriting share issue in agriculture, forestry, tourism, mine-based industries, etc.

The study also identifies that despite an invaluable assistance provided to industrial development, some of the NIDC policies such as Margin of Security, Bridge-Gap Loan, Guarantee Arrangement of Supplier's Credit, and Underwriting Share Issue of public limited companies etc. need reform.

The MBA Thesis '*Development of Industrial Sector and Privatization in Nepal*' by **Babu Kaji Shrestha** has the following objectives:

1. To determine the impact of privatization on Nepalese industries.
2. To compare the performance of private sector vs. public sector.
3. To identify factors responsible for the development of industrial sector and to study the present status and needs for improvement.
4. To study the global trend on privatization.

To meet these objectives, Shrestha basically adopts descriptive methodology:

Conclusions of his study are:

- i. Nepal's industrial development suffers from policy deficiency.
- ii. Problems to industrialization are:
 - Nepal's trade and transit treaty with India.
 - Long bureaucratic procedure.
 - The tendency of smuggling raw materials to India, etc.
- iii. As a whole, there is lack of proper environment in Nepal conducive to industrial growth.

As a remedy, Babu Kaji Shrestha recommends privatization. He views that priority to social function rather than commercial viability has mostly caused failure of the

PEs. As a result, public debt burden is mounting day by day. So, too, Nepal ought to adopt privatization policy at least for debt problem alone.

In **Ram Kumar Khadka's** M.A. Thesis '*Growth and Structure of Manufacturing Industries in Nepal*', there are the following objectives:

- i. To examine the industrial development process in Nepal and assess government's efforts towards it.
- ii. To examine the regional distribution of manufacturing industries.
- iii. To examine the growth and structure of manufacturing industries.
- iv. To analyze factor intensity in Nepalese manufacturing industry i.e. capital-output ratio, capital-labour ratio and output-labour ratio.

As a methodology, Nepal Standard Industrial Classification (NSIC) has been adopted to process different data.

After making a periodic-plan-based analysis, Khadka's study concludes that the industrial development in Nepal is in initial stage. A few industries, which have been established, are also consumer goods industries mostly. The 65 percentage share of food processing and oil mills of the total manufacturing units in 1965/66 has risen to 76 percent in 1972/73. As shown by the manufacturing census of 1991/92, the carpets and rugs manufacturing have become the dominant type.

The employment scenario in Nepalese industries is not much encouraging. Yet, its trend is rising. The average employment per firm has become 52 in 1991/92 from only 15 in 1965/66. Jute and cigarette manufacturing are the greatest employment providers.

Despite various reforms on industrial policy, there are still many shortcomings existent, hence, constraints unaddressed. For example, the problems of finance, technology, management, entrepreneurship, raw materials and infrastructure are still burning in Nepal. Khadka points them out as responsible in widening the gap between targets and achievements in Nepalese industrialization.

In his M.A. Thesis '*Trend and Structure of Manufacturing Industries in Nepal*', **Tirtha Raj Baral** holds the following objectives:

1. To analyze the trend and structure of manufacturing production in Nepal.
2. To analyze the geographical diversification of Nepalese manufacturing industries.
3. To estimate factor intensity and returns to scale in Nepalese manufacturing industry.
4. To analyze capacity utilization.

To analyze the structure of different sub-sectors within the manufacturing sector, NSIC₂ and NSIC₄ have been adopted. As a tool, simple ratio, percentages, arithmetic averages, and growth rates have been used. Cobb-Douglas production function has been estimated to know factor intensities, returns to scale, etc.

Baral's thesis concludes that Nepalese industrialization is still low and sluggish, despite government's several efforts to bring it up, along the policy reform of early 1990s. GDP based analysis for the period 1986/87 – 1996/97 shows that Nepalese economy is growing very slowly. Due to traditional dominance of agriculture sector, the industrial aspect of the economy is still under the shadow. Despite having an encouraging growth rate of more than three-fold compared to agriculture sector, the manufacturing sector could not drag the whole economy due to its small coverage in the GDP (About 9 percent only).

The reformed industrial policy of the early 1990s could give a remarkable energy to industrial promotion whereby manufacturing sector could grow at an appreciable speed of 14 percent in the first half of the decade. However, the glorious pace could not sustain due to inability of domestic industries to survive against the wave of liberalization invited by the very policy.

As a source of direct employment generation, Nepalese manufacturing is a tiny sector. No matter the trend they have in that direction is rising, its share of below 10 percent in total employment is quite negligible. Growing labour force has got to remain idle in general. Even in terms of production, the growth of the

manufacturing is fluctuating. In average, 9 percent is the growth rate of Nepalese manufacturing industries during the review period of ten years. Mainly, the export-oriented sectors like carpet and garment are rapidly growing. Finding over-dominance of consumer-oriented sub-sectors, Baral concludes that Nepalese manufacturing is still undiversified.

CHAPTER- III

RESEARCH METHODOLOGY

Research Methodology can be understood as a science of studying how research has been done. This chapter looks into the research design, nature and sources of data, data collection procedure and tools & technique of analysis. For the purpose of achieving the objectives of the study, the applied methodologies are used. The research methodology used in the present study is briefly mentioned below.

3.1 Research Design

The research will be carried out by using both quantitative and qualitative analysis methods. Mostly, the secondary data will be used for analysis. Hence, research design for undertaking this study will be based on the descriptive and analytical method.

3.2 Sources of Data

This study is based on the secondary data published by different authorities directly as well as indirectly associated to my topic. Some mention-worthy ones are:

1. Department of Industry;
2. Department of Cottage and Small-Scale Industry;
3. Ministry of Industry, Commerce and Supplies;
4. Related Theses and Dissertations available in Central Library;
5. FNCCI, NIDC, and different timely publications.

3.3 Population & Sample

The data of annual fine series published by department of industry has been used as the source of population. Apart from this 18 manufacturing industries selected by NRB have been studied as samples.

3.4 Data Analysis Tools

The collected data will be analyzed with the help of different statistical tools. Statistical tools are the measures of the instruments to analyze the collected data from the different sources. In statistics, there are numerous statistical tools to analyze the data of various natures. In this study, the following statistical tools have been used to analyze the data:

(a) Average (\bar{X})

The term 'average' is referred as a measure of central tendency. The average is the measure, which condense a huge data into a single value, which represents the entire data and generally located at the central part. There are different types of averages but only arithmetic mean is used for this study. Arithmetic mean is the most popular and frequently used measure of central tendency. It is the sum of all observations to the number of observations.

Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if X_1, X_2, \dots, X_n are the given N observations, then their arithmetic mean, denoted by \bar{X} is given by,

$$\bar{X} = \frac{X_1 + X_2 + \dots + X_n}{N} = \frac{\sum X}{N}$$

Where,

$\sum X$ = Sum of the observations, and

N = Number of Years

(b) Standard Deviation

"Standard deviation is the square root of the arithmetic average of the squares of the deviations measured from the mean. Thus, in the calculation of standard deviation, first the arithmetic average is calculated and the deviation of various items from the arithmetic average are squared. The squared deviations are totaled and the sum is divided by the number of items. The square root of the resulting figure is the standard deviation of the series." (Elhance and B.M. Aggarwal, 2000: 9.25) The standard deviation is conventionally represented by the Greek letter sigma (σ). If X_1, X_2, \dots, X_n is a set of N observations then, standard deviation is given by,

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum(X - \bar{X})^2}{N}}$$

$\sum(X - \bar{X})^2$ = Sum of the squares of the deviations measured from mean, and
 N = Number of Observations

(c) Trend Analysis

A general tendency of the time series data to increase or decrease or stagnate during a long period of time is called the secular trend or simple trend. Trend is the general, smooth, long-term average tendency. "It is not necessary that the increase or decline should be in the same direction throughout the given period. It may be possible that different tendencies of increase, decrease or stability are observed in different sections of time. However, the overall tendency may be upward, downward or stable. Such tendencies are the result of the forces which are more or less constant for a long time or which change very gradually and continuously over a long period of time. Such as the change in the population, tastes, habits and customs of the people in a society, and so on. They operate in an evolutionary manner and do not reflect sudden changes." (Gupta, 2001:510)

The study of the data over a long period of time enables to have a general idea about the pattern of the behavior of the phenomenon under consideration. By isolating trend values from the given time series, the short-term and irregular movements can be studied. Moreover, trend analysis enables to compare two or more time series over different periods of time and draws important conclusions about them. Least square is one of the best ways of obtaining the trend values. The principle of least squares provide an analytical or mathematical device to obtain an objective fit to the trend of the given time series.

The equation of a straight line is $Y = a + bX$, where a and b are constants

CHAPTER VI

DATA PRESENTATION AND ANALYSIS

This chapter has presented the major findings of the study. Tables have been used for support and charts for illustration.

Before jumping into the presentation of findings on industry, it would be better to know the different types of industries that we are going to talk about.

Classification of industries (As per Industrial Enterprises Act, 1992)

Sector wise:

- a. **Manufacturing Industries:** Industries which produce goods by utilizing or processing raw materials, semi-processed materials, by-products or waste products or any other goods.
- b. **Energy-based Industries:** Industries generating energy from water resources, wind, solar, coal, natural-oil, gas, bio-gas or any other sources.
- c. **Agro- and Forest-based Industries:** Business mainly based on agriculture or forest products such as integrated sericulture and silk production, horticulture and fruit processing, animal husbandry, dairy industry, poultry farming, fishery, tea gardening and processing, coffee farming and processing, herbiculture and herb processing, vegetable seed farming, mushroom, vegetable farming or vegetable processing, tissue culture, green house, bee-keeping, honey production, rubber farming, floriculture and production and forestry related business such as lease-hold forests, agro-forestry etc.
- d. **Mineral Industries:** Mineral excavation or processing there of.
- e. **Tourism Industries:** Tourist lodging, motel, hotel, restaurant, resort, travel agency, skiing, gliding, water rafting, cable car complex, pony-trekking, trekking, hot air ballooning, parasailing, golf-course, polo, horse-riding, etc.
- f. **Service Industries:** Workshop, printing press, consultancy service, ginning and baling business, cinematography, construction business, public transportation business, photography, hospital, nursing home, educational and training institution, laboratory, air services, cold storage, etc.

- g. Construction Industries: Road, bridge, ropeway, railway, trolley bus, tunnel, flying bridge and industrial, commercial and residential complex construction and operation.

Scalewise:

- a. Cottage Industries: The traditional industries utilizing specific skill or local raw materials and resources, and labour intensive and related with national tradition, art and culture.
- b. Small Industries: Industries with a fixed asset of up to an amount of thirty million rupees shall be named as small industries.
- c. Medium Industries: Industries with a fixed asset between thirty million rupees and one hundred million rupees shall be named as medium industries.
- d. Large Industries: Industries with a fixed asset of more than one hundred million rupees shall be named as large industries.

4.1 Number of Industries Registered

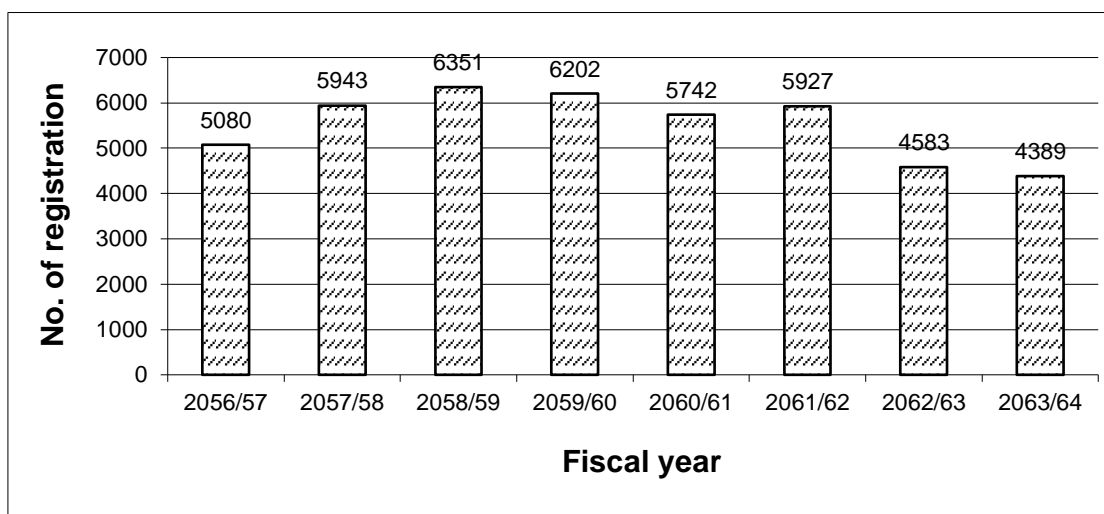
4.1.1 Registration of Small and Cottage Industries

**Table 4.1
Manufacturing Industries**

Fiscal year	No. of registration
2056/57	5080
2057/58	5943
2058/59	6351
2059/60	6202
2060/61	5742
2061/62	5927
2062/63	4583
2063/64	4389
Total	44217

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4.1
Manufacturing Industries



The above figure shows that the registration of small and cottage manufacturing industries increased for the first three years. Then there is fluctuation. And we find a continual decline in the trend for the last three years of study.

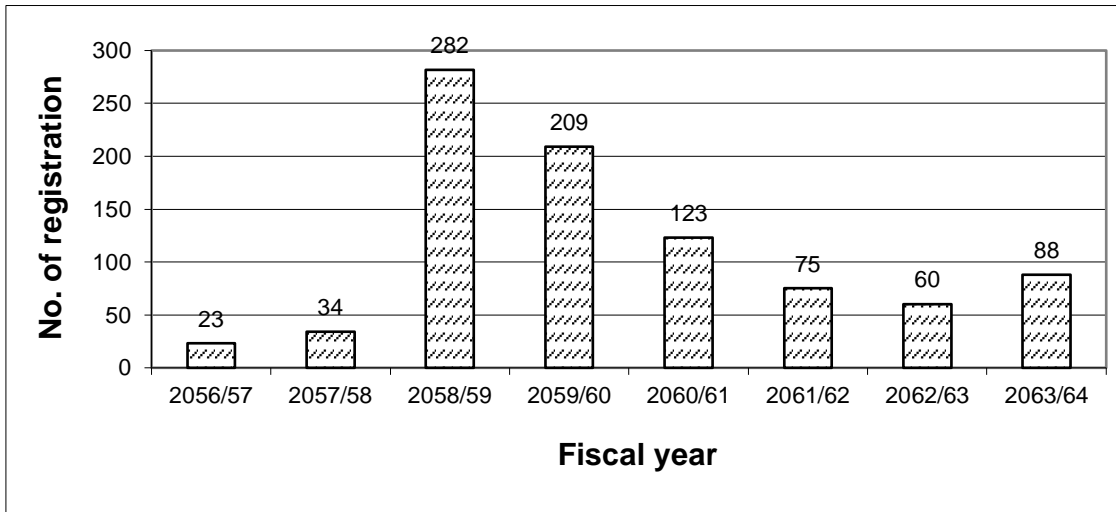
Table 4.2
Energy-based Industries

Fiscal year	No. of registration
2056/57	23
2057/58	34
2058/59	282
2059/60	209
2060/61	123
2061/62	75
2062/63	60
2063/64	88
Total	894

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4. 2

Energy-based Industries



The above figure shows that the energy based small and cottage industries continuously increased for the first three years. From the maximum registration (i.e. 282) on the third year there is continual decline for the next four years. At last, again, the situation is likely to be hopeful with an upward turn, with significant rise by 28 units of establishments.

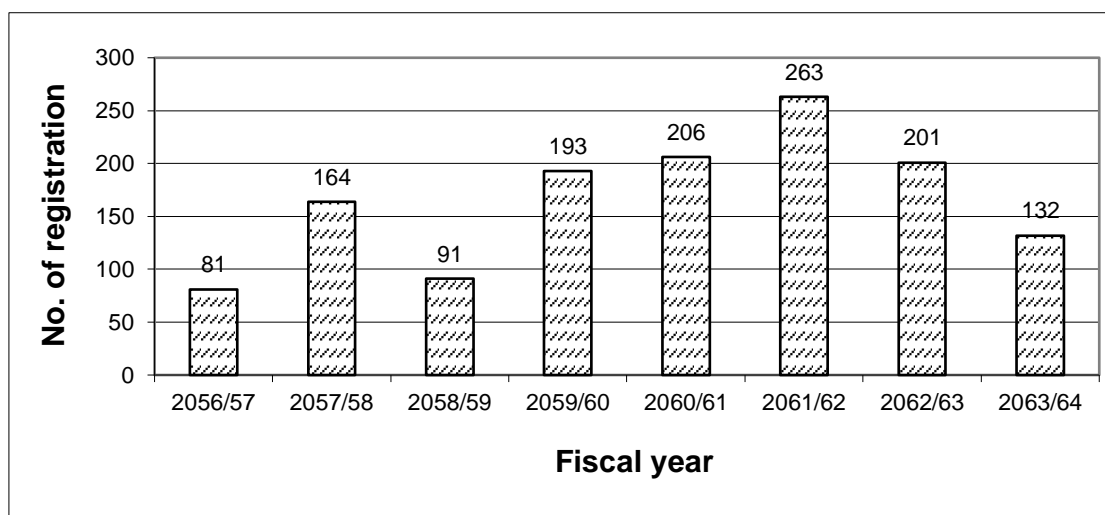
Table 4.3

Agro and Forest-based Industry

Fiscal year	No. of registration
2056/57	81
2057/58	164
2058/59	91
2059/60	193
2060/61	206
2061/62	263
2062/63	201
2063/64	132
Total	1331

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4.3
Agro and Forest-based Industry



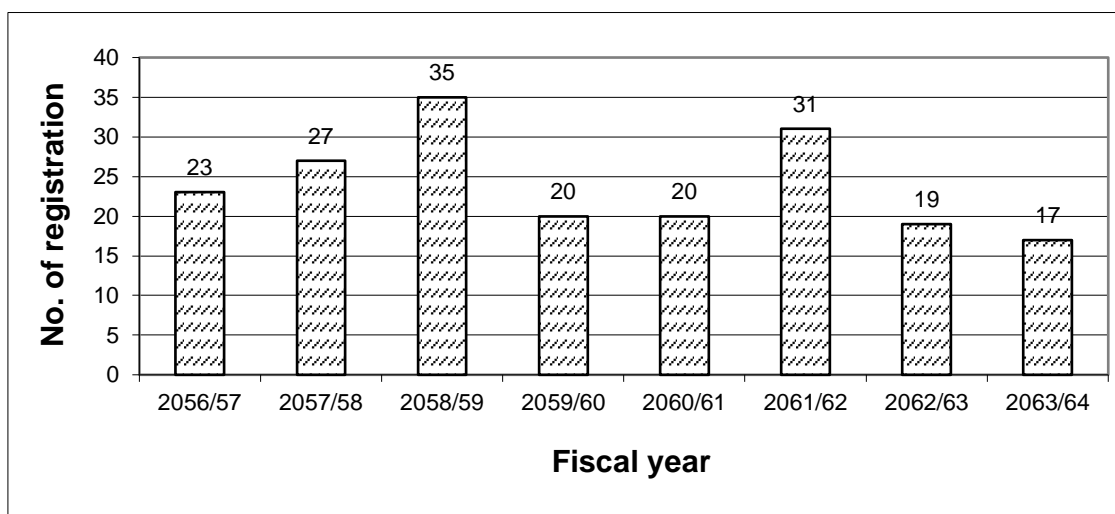
There is fluctuation in the trend of agro and forest-based industries. However, noteworthy fact is that the last three years of study record a downward trend of industry registration.

Table 4.4
Mineral Industry

Fiscal year	No. of registration
2056/57	23
2057/58	27
2058/59	35
2059/60	20
2060/61	20
2061/62	31
2062/63	19
2063/64	17
Total	192

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4.4
Mineral Industry



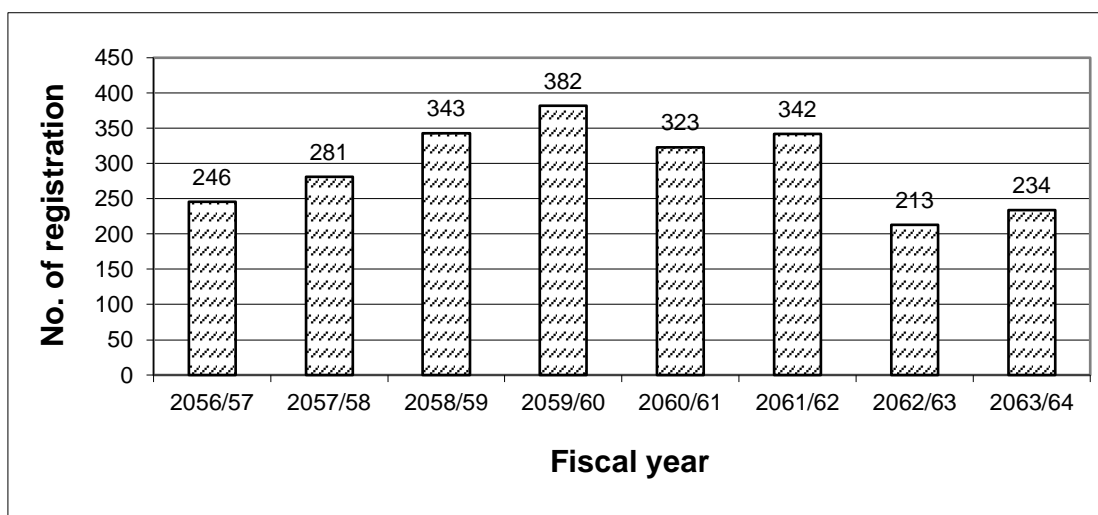
The mineral industries have been also found registered in an increasing order during the first three years of study. Then there is stagnation and fluctuation.

Table 4.5
Tourism Industry

Fiscal year	No. of registration
2056/57	246
2057/58	281
2058/59	343
2059/60	382
2060/61	323
2061/62	342
2062/63	213
2063/64	234
Total	2364

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4.5
Tourism Industry



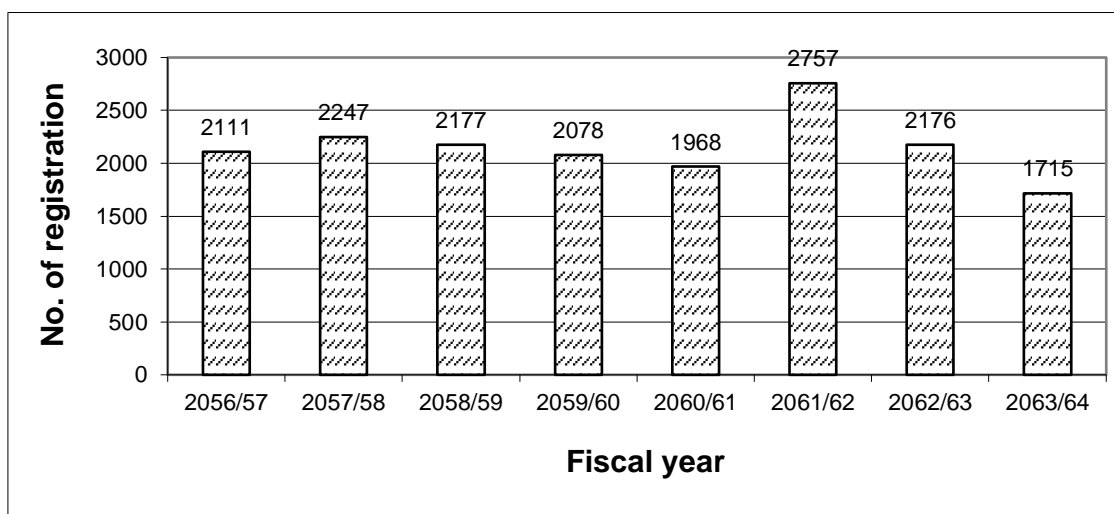
Data show that tourism industry recorded an increasing number of registrations during the first four years of study. Afterwards, there is fluctuation even in this type of lucrative sector.

Table 4.6
Service Industry

Fiscal year	No. of registration
2056/57	2111
2057/58	2247
2058/59	2177
2059/60	2078
2060/61	1968
2061/62	2757
2062/63	2176
2063/64	1715
Total	17229

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4.6
Service Industry



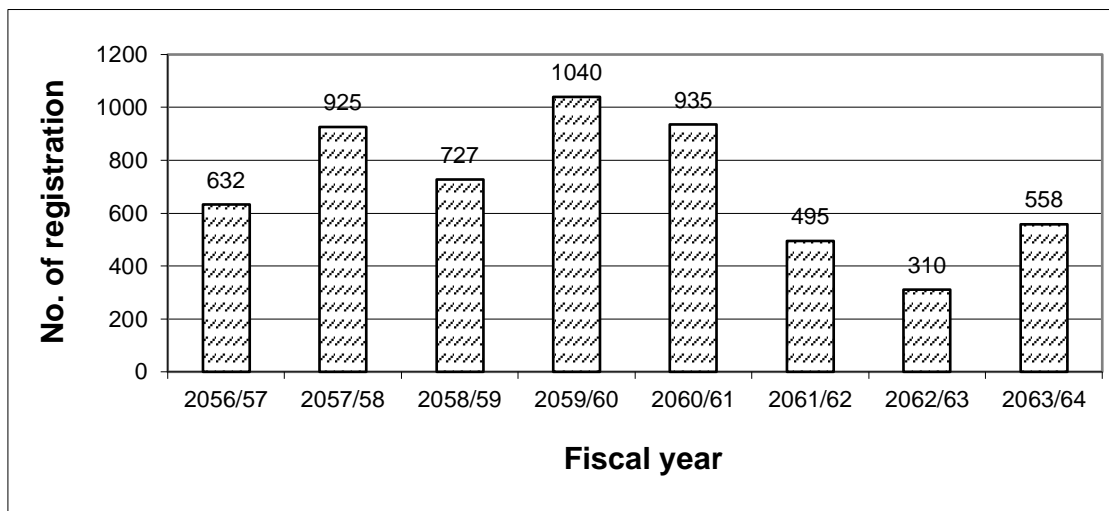
From second year, there is continual decline in the registration of service industry in the country for three years. The third-last year of study has recorded a good increment in this connection, however to give way to falling trend afterwards.

Table 4.7
Construction Industry

Fiscal year	No. of registration
2056/57	632
2057/58	925
2058/59	727
2059/60	1040
2060/61	935
2061/62	495
2062/63	310
2063/64	558
Total	5622

Source: Industrial Promotion Statistics (2064), Department of Small and Cottage Industry, Nepal.

Figure 4.7
Construction Industry



There is severe fluctuation in registration of construction industry over the period of study.

Now, let us view the general situation of small and cottage industries.

Table 4.8
Time Series Aggregation

Fiscal year	No. of registration
2056/57	8196
2057/58	9621
2058/59	10006
2059/60	10123
2060/61	9317
2061/62	9890
2062/63	7562
2063/64	7133
Total	71848

Source: Industrial Promotion Statistics (2064)

Figure 4.8
Time Series Aggregation

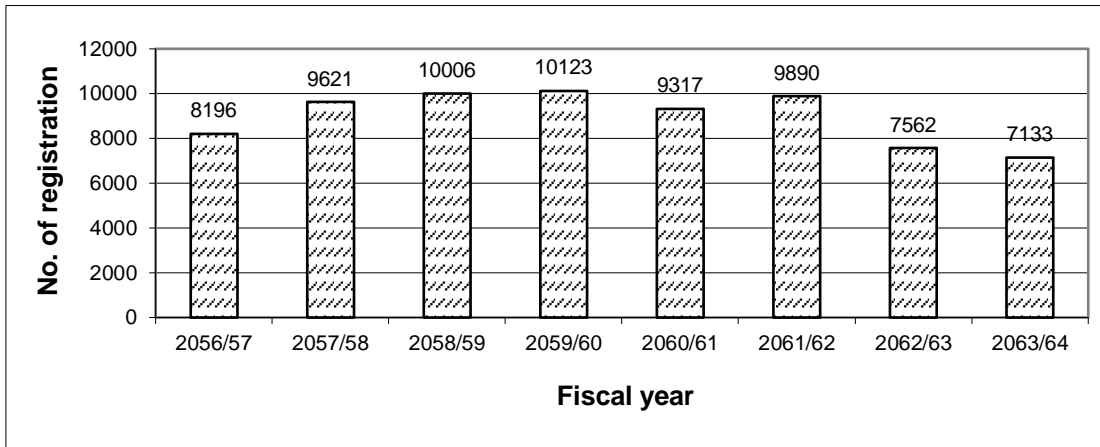
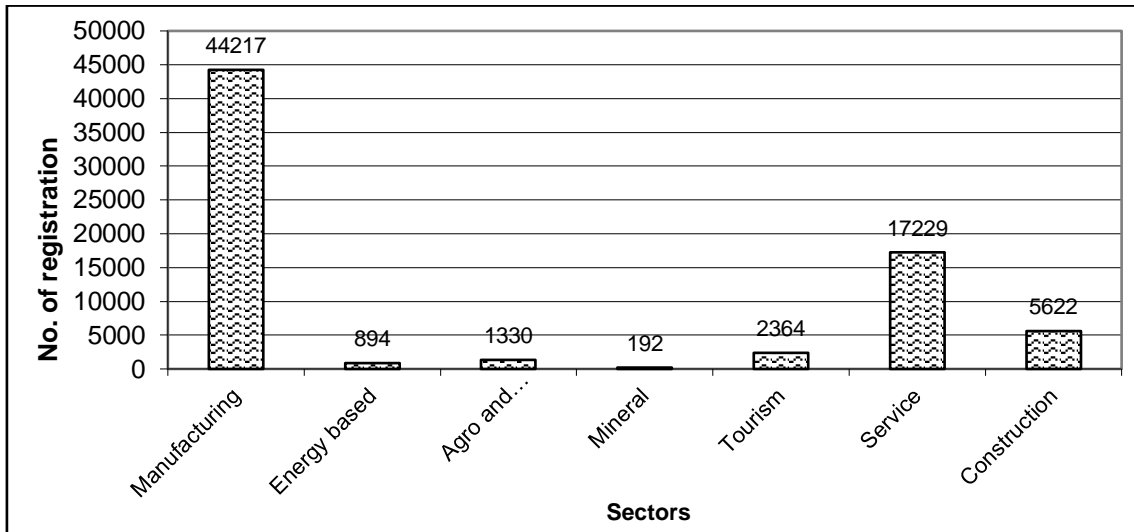


Table 4.9
Cross Section Aggregation

Sector	No. of Registration
Manufacturing	44217
Energy based	894
Agro and Forest-based	1330
Mineral	192
Tourism	2364
Service	17229
Construction	5622
Total	71848

Source: Industrial Promotion Statistics (2064)

Figure 4.9
Cross Section Aggregation



In aggregate 71,848 small and cottage industries have been registered in the country over the study period. The first four years show an upward trend, touching the peak registration of 10123 units in the FY 2059/60 B.S. The maximum number of industries registered is of manufacturing type, while the mineral and power industries are minimal.

4.1.2 Registration of Medium and Large-Scale Industry ¹

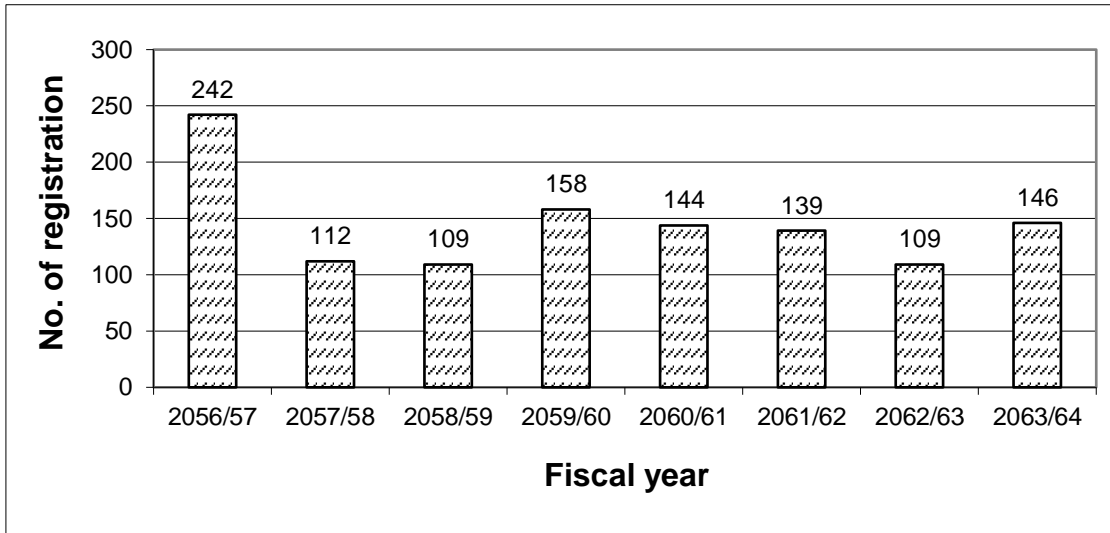
Table 4.10
Medium and Large-Scale Industry

Fiscal year	No. of registration
2056/57	242
2057/58	112
2058/59	109
2059/60	158
2060/61	144
2061/62	139
2062/63	109
2063/64	146
Total	1159

Source: Industrial Statistics, Fiscal Year 2063/64.

¹ In this thesis, every data on medium and large scale industry includes data on small industry that is of joint venture nature with national and foreign investment and hence registered in Department of Industry, unlike other small-scale and industries that are registered in Department of Small and Cottage Industry.

Figure 4.10
Medium and Large-Scale Industry



Data reveal that there is an abrupt fall in registration of industry by more than half in FY 2057/58 B.S. compared to the previous year. And then there is fluctuation and downward trend alternatively.

Over the study period, 1159 industries have been registered in the Department of Industry. Among them, the very first year (i.e. FY 2056/57) has recorded the maximum registration of 242 industries.

Since the mere registration can't ensure the true trend of industrialization, it has been attempted to inculcate, the performance of 18 selected manufacturing industries, based on their production.

Table 4.11**Production of Manufacturing Commodities* 1998/99 to 2007/08**

S.N.	Industrial products	Unit	1998/ 99	1999/ 00	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08++
1	Jute goods	Metric ton	29908	39585	51432	43928	33130	32037	31400	34862	35699	36092
2	Sugar	Metric ton	67051	63374	67206	68512	77156	78313	82200	94052	96174	97809
3	Cigarettes	In Mil. Sticks	8067	7944	8127	7315	6584	6979	6900	6812	7268	7421
4	Matches	Th. Gross	1316	1246	1951	1930	2241	2297	2320	2150	2053	1936
5	Liquor	Th. Litre	2608	2800	3100	3345	3847	3885	3700	3792	4437	4317
6	Soap	Metric ton	25111	29014	39086	47704	49631	55090	55900	54624	53805	55053
7	Shoes	Th. Pairs	649	550	550	605	650	709	744	786	865	833
8	Processed leather	Th. Sq. ft.	10977	10754	11372	9841	3010	3236	3184	3120	3076	3184
9	Agricultural tools	Metric Ton	60	40	-	-	-	-	-	-	-	-
10	Tea	Metric ton	2457	2561	2275	2339	7395	8282	8770	9631	11397	12463
11	Steel utensils	Metric Ton	240	250	100	83	55	56	58	66	88	100
12	Bricks & Tiles (Govt.)	Th. Pieces	25911	32414	28250	22866	25153	25781	25500	28954	29967	30297
13	Beer	Th. Litre	18315	21497	13933	18753	21725	23354	22800	24162	24977	25951
14	Cotton Textiles (Cloth)	Th. Meter	5160	4000	3329	2878	2630	2485	1700	1438	1503	1542
15	Cement	Metric Ton	309466	226681	139080	190588	205835	215098	233000	255171	279412	277736
16	Biscuits	Metric ton	6057	6868	9113	11810	9129	9585	9440	9836	9590	9852
17	Plywood	Th. Sq. Ft.	383	476	70	102	590	606	632	510	545	584
18	Synthetic textiles (Cloth)	Th. Meters	18213	18183	18685	17811	24248	25582	26100	28594	31239	30114

* Based on NRBs selected industries from the selected districts.

++Actual data first eight month and projection for the four month.

Source: Economic Survey 2007/08, Ministry of Finance.

From second year, the production of jute goods shows continuous downturn, only to have little rise at the last two years. Exactly similar is the case of cigarette and processed leather. The production of sugar, liquor, tea, beer, cement and synthetic textile records a continuously upward trend over the study period. Other products of general rising trend are matches, soap, shoes, biscuits, etc. The items having down turn of production are agricultural tools, steel utensils, cotton textiles, etc. And there is fluctuation in the production of bricks and tiles, ply-wood, etc.

The following figure further illustrates the trend of medium and large-scale industry, the manufacturing sector in main.

4.2 Employment Situation in Nepalese Industries

4.2.1 Employment in Small and Cottage Industry

Table 4.12

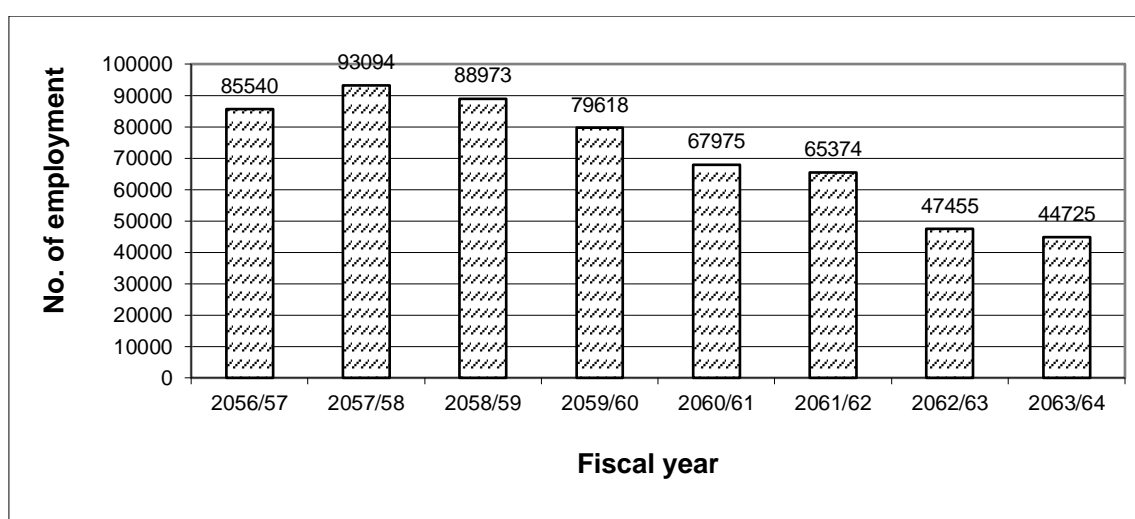
Employment in Small and Cottage Industry

Fiscal year	No. of employment
2056/57	85540
2057/58	93094
2058/59	88973
2059/60	79618
2060/61	67975
2061/62	65374
2062/63	47455
2063/64	44725
Total	572754

Source: Industrial Promotion Statistics, 2064, Department of Small and Cottage Industry, Nepal

Figure 4.11

Employment in Small and Cottage Industry



The small and cottage industries have provided employment opportunity to 572754 people within the study period. Yet, point to note is that each incremental employment in successive fiscal years is in descending order right from the second year.

4.2.2 Employment in Medium and Large-Scale Industry

Table 4.13

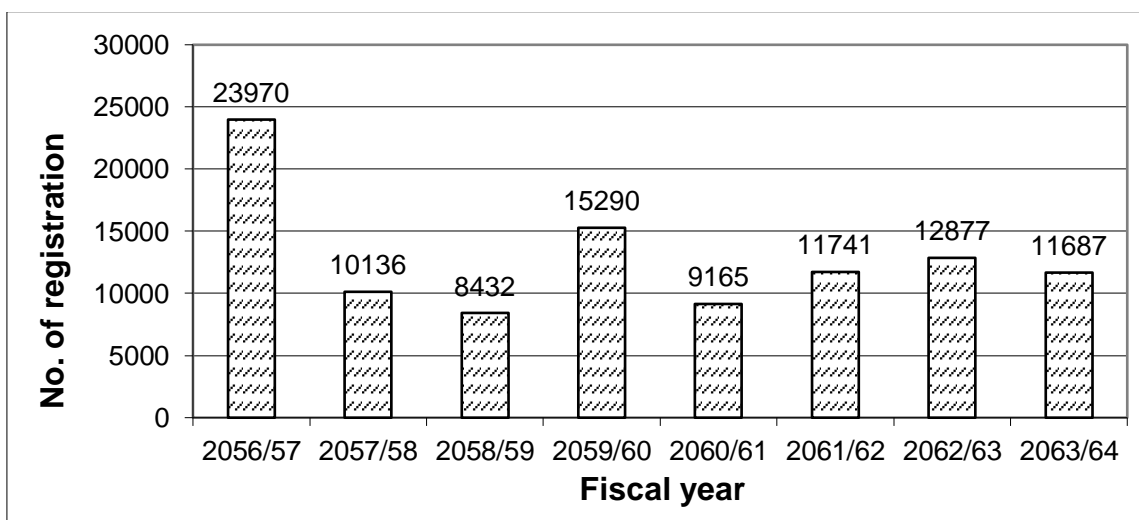
Employment in Medium and Large-Scale Industry

Fiscal year	No. of Employment
2056/57	23970
2057/58	10136
2058/59	8432
2059/60	15290
2060/61	9165
2061/62	11741
2062/63	12877
2063/64	11687
Total	103298

Source: Industrial Statistics, Fiscal Year 2063/064.

Figure 4.12

Employment in Medium and Large-Scale Industry



The above data shows that there is fluctuation in industrial employment, however falling in general. The maximum of 23970 employments in FY 2056/57 has given

way to mere 11687 employments in FY 2063/64. In total, 103298 people have got employment opportunity in medium and large industries over the study period.

4.2.3 Composition of Manpower in Nepalese Industries

Considering the data availability, here the study has been limited to the study of manpower composition in manufacturing establishments only.

Table 4.14

Manpower Engaged in Small Manufacturing Establishments

Description	Survey year 1992/93			Survey year 2000/01		
	Male	Female	Total	Male	Female	Total
1. Working proprietors and family members	64239	22464	86703	64678	10541	75219
2. Employed workers						
A. Operative & contract						
Nepali	44489	6689	51178	42556	620	43176
Foreigner	2034	18	2052	1070	0	1070
Total	46523	6707	53230	43626	620	44246
B. Administrative & Technical						
Nepali	806	28	834	1770	9	1779
Foreigner	17	0	17	26	0	26
Total	823	28	851	1796	9	1805
C. Total (A+B)						
Nepali	45295	6717	52012	44326	629	44955
Foreigner	2051	18	2069	1096	0	1096
Total	74346	6735	54081	45422	629	46051
3. Total persons engaged (I+C)	111585	29199	140784	110100	11170	121270

Note: A small manufacturing establishment means less than 10 persons engaged but at least one hired employee.

Number of establishments are 14367 for 2000/2001 and 46418 for 1992/1993.

Compiled by research and information division of FNCCI from various publications of Central Bureau of Statistics.

This table shows that in the small manufacturing the total employment has gone down by 19514 seats between the two survey years 1992/93 and 2000/01. Among the total employed, the females are 20.74 percent in the first survey while it is 9.21 percent only in the latter survey similarly, the foreign employees in 3.83 percent among the hired ones in the former survey has fallen to 2.38 percent by the later survey of 2000/01. Interesting to note is that more than 60 percent manpower in

both the surveys is from working proprietors and family members, and not the hired ones.

Table 4.15
Manpower Engaged in Large Manufacturing Establishments
(Covered in the Census of Manufacturing Establishments)

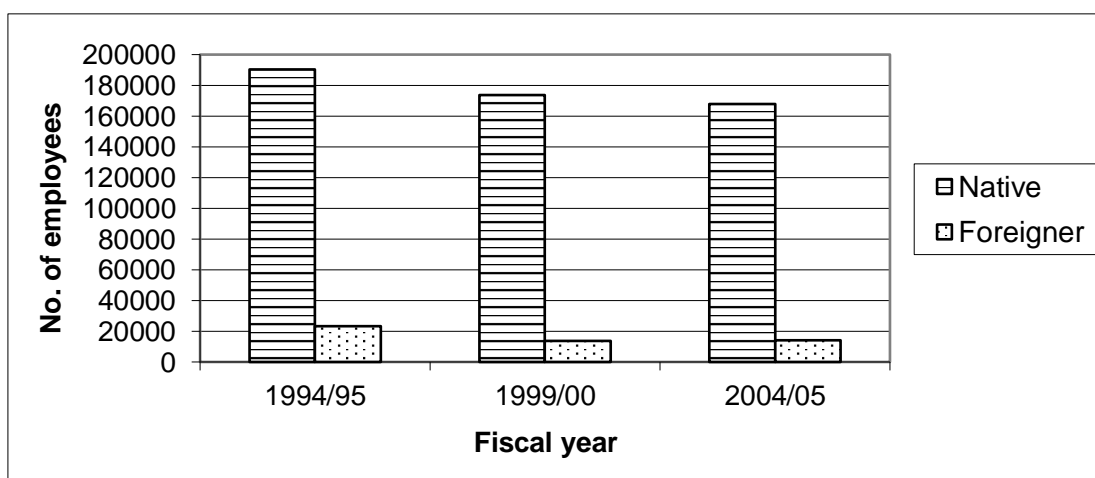
Description	Survey year 1994/95			Survey year 1999/00			Census year 2004/05		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Working proprietors and family members	8203	1607	9810	7665	1727	9392	9005	905	9910
2. Employed workers									
A. Operative & contract									
Nepali	118420	49985	168405	112482	38248	150730	105668	31752	137420
Foreigner	20942	1262	22204	11186	1035	12221	11234	773	12007
Total	139362	51247	190609	123668	39283	162951	116902	32525	149427
B. Administrative & Technical									
Nepali	17959	1360	19319	17060	864	17924	19727	1090	20817
Foreigner	540	14	554	608	51	659	795	76	871
Total	18499	1374	19873	17668	915	18583	20522	1166	21688
C. Total (A+B)									
Nepali	138971	51493	190464	134330	39324	173654	134695	33084	167779
Foreigner	21908	1281	23189	12567	1095	13662	13314	850	14164
Total	160879	52774	213653	146897	40419	187316	148009	33934	181943
3. Total persons engaged (I+C)	169082	54381	223463	154562	42146	196708	157014	34839	191853

Note: Manufacturing establishments with 10 or more persons engaged are covered in the Census. No. of establishments are 4271 as of 1994/95. 3557 as of 1999/00 and 3213 as of 2004/05.

Compiled by Research and Information Division of FNCCI from Census of Manufacturing Establishments Nepal. Central Bureau of Statistics.

Figure 4.13

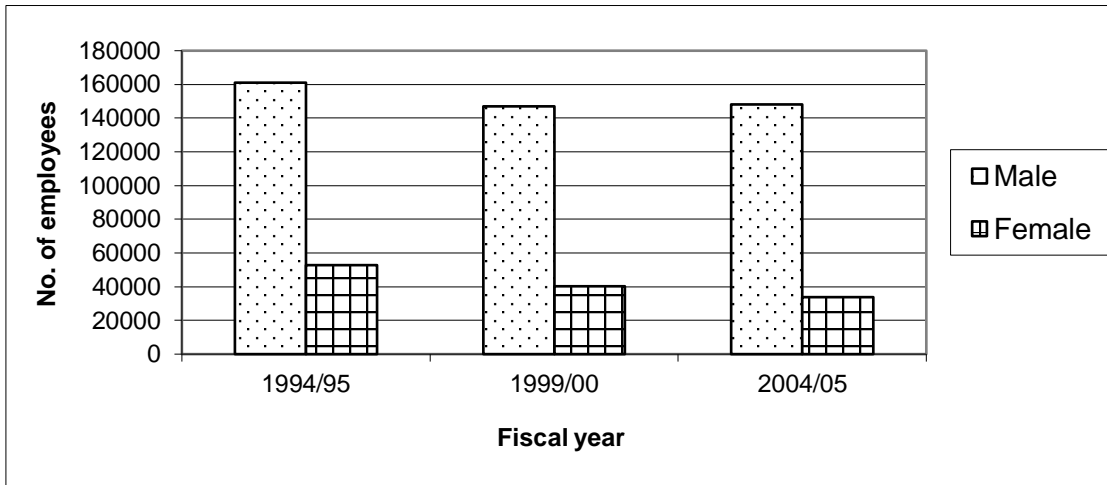
Composition of Native-Foreigner Employees in Large Manufacturing of Nepal



Note: This figure includes only the hired employees, and not the proprietors who themselves involve in work.

Figure 4.14

Composition of Male-Female Employees in Large Manufacturing of Nepal



Note: This figure includes only the hired employees, and not the proprietors who themselves involve in work.

These above figures show that total employment in large manufacturing is in descending order over the decade under purview. The proportion of female employee is also in descending order with 24.34 percent, 21.43 percent and 18.16 percent along the three industrial-censuses, respectively. About nationality, the proportion of foreign workers among the hired ones is decreasing in general with 10.85 percent, 7.29 percent and 7.78 percent, serially. And in the case of these large manufacturing, the production of working proprietors and family members is, naturally, very low at around 5 percent only in every census under consideration.

So far the involvement of Indian workers in Nepalese industry is concerned; the reality is unrecorded, yet. As mentioned in point No. 56 of "Nepal Labour Statistics 2003: Review and Recommendation", the number of Indian nationals employed in Nepal is not known, despite having national concern. Actually, the work permit system should enumerate the Indian workforce in Nepal. But it has not been done because most Indians do not bother to apply for permits, perhaps because they think they need not be receiving work permit as they do not require visa to enter Nepal. Hence, only an average reality of foreign workers' situation in Nepal has been glimpsed above, to the extent allowed by data.

4.3 Regional Scatterness of Industries

Table 4.16

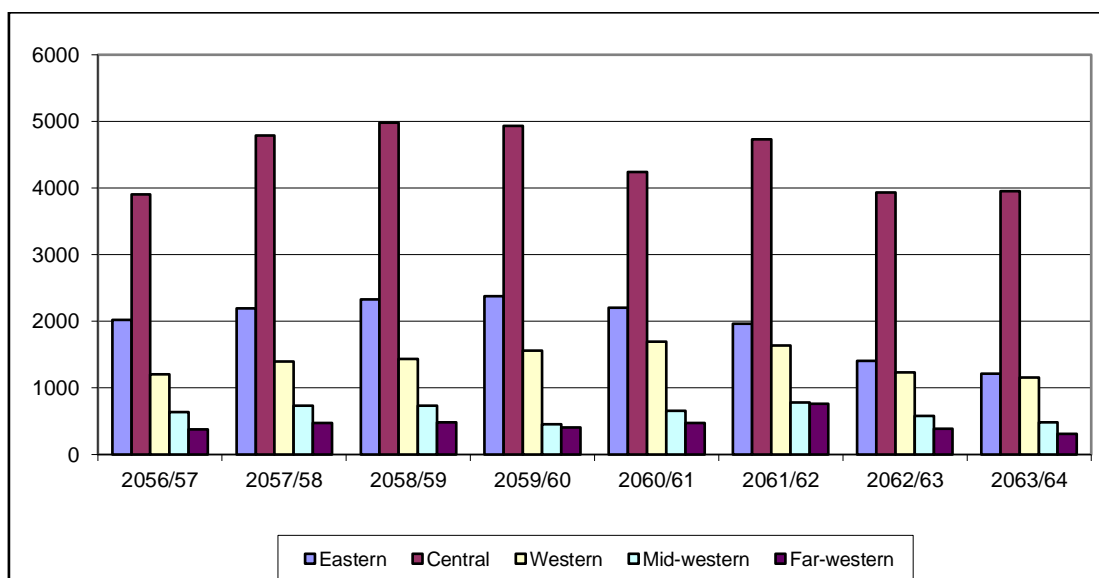
**Regional Scatterness of Small and Cottage Industries
(Except those registered in Department)**

F.Y.	Eastern	Central	Western	Mid-western	Far-western
2056/57	2025	3909	1209	642	375
2057/58	2197	4788	1397	736	477
2058/59	2325	4982	1432	734	480
2059/60	2381	4936	1564	457	409
2060/61	2207	4243	1694	655	471
2061/62	1964	4735	1638	786	761
2062/63	1408	3935	1231	580	385
2063/64	1212	3951	1156	488	314
Total	15719	35479	11321	5378	3672

Source: Industrial Promotion Statistics, 2064, Department of Small and Cottage Industry, Nepal.

Figure 4.15

Regional Scatterness of Small and Cottage Industries (Except those registered in Department)



The above figure illustrates that the Central Development Region always holds the maximum number of small and cottage industries that have been established in

the country over the eight year of study. Then the Eastern and Western Development Regions hold second and third position in terms of small and cottage industries, respectively. The Mid-western and the Far-western Development Regions have very few industries.

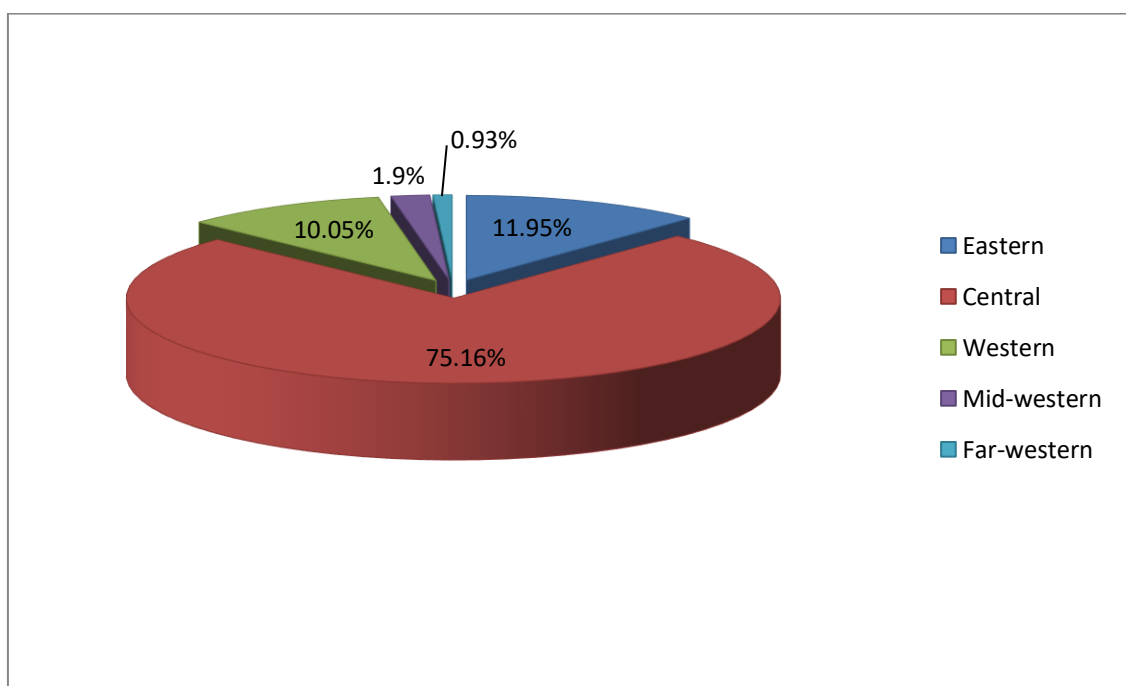
Table 4.17
Regional Scatterness of Medium and Large-Scale Industries

Development Regions	No. of industries	%
Eastern	371	11.95
Central	2333	75.16
Western	312	10.05
Mid-western	59	1.90
Far-western	29	0.93
Total	3104	100.00

Source: Industrial Statistics, Fiscal Year 2064/065.

Note: Due to unavailability of time-series data, aggregate cross-section data upto FY 2063/64 has been used.

Figure 4.16
Regional Scatterness of Medium and Large-Scale Industries



The above figure illustrates that there is heavy concentration of medium and large scale industries in the central development region.

4.4 Major Finding of the study

1. The instability of the government and lack of proper vision from executive level forced negative impact on industrial development.
2. The establishment and development of industries are far behind than the targeted plan.
3. The possession of natural resources like water and mineral has hindered the industrial development.
4. The lack of progressive policy and implementing institutions has adversely affected the industrial production.
5. Nepalese industries are unable to create employment opportunities as targeted and their contribution to GDP is not satisfactory.
6. Large scale industries contribution to Nation GDD is below the target however small and cottage industries have significantly contributed for raising the standard of living at local levels.
7. The industrial act 1992 has not been effectively implemented, bureaucratic procedure should be simplified with clear Act & Laws to promote foreign direct investment & flourish industries.
8. The lack of political stability & government enforcement has discouraged the establishment of industry.
9. The lack of industrial environment (technology, transportation, raw material and market) has adverse effect for the development of industries.
10. The deficit of energy & power supply has been a major threat for existing industries & has discouraged the establishment of new industries.

CHAPTER V

SUMMARY, CNCLUSION & RECOMMENDATIONS

This is the final chapter of the study. It is divided into three sections – summary, conclusions and recommendations.

5.1 Summary

The study had examined the trends of industrialization in Nepal to investigate and explore in establishment trend of industries in Nepal, It has analyzed the establishment and growth of various industries in various sectors of the nation by the objective of the industries and sectors of the government policy. Their contribution in national economy has been studied. The contribution of industrial sector by increasing industrial production and producing by using local material of export-orientation to release the procure of unemployment and underemployment on agriculture by adopting appropriate policy of industrialization for balanced development of all sectors, has been studied by reviewing various books, journal and reports published from government and non government sectors. The employment simulator created by industrial sectors in various a plan has been analyzed on the basis of various plans has been analyses. The analysis was pyramiding based on the secondary data using simple material tools.

5.2 Conclusion

- In general, the first four years of study (i.e. 2056/57 to 2063/64) were encouraging for small and cottage industries. It is proved by the increasing order of their registration. The afterward downturn and fluctuation refer to degrading industry environment in the country.
- Despite that Nepalese people are much engaged in small manufacturing for daily-need items, the position of energy and mineral-based industry is still lagging behind in the country. It shows our backwardness in terms of tapping the natural resources we have for the betterment of our living.
- The continuously diminishing registration of medium and large industries justifies that Nepal's industrial status is slackening.

- The rising trend and the falling trend of some products while stagnation and fluctuation of many others among the 18 selected manufacturing commodities make us draw that the direction of industrial production in Nepal is uncertain in general.
- Naturally, the falling number of small and cottage industry has provided employment to less and less additional people over each successive fiscal year. The total industrial employment over the period is around 3 percent of total population. And in it, the contribution of small and cottage industry is nearly 85 percent. It justifies that small and cottage industry can play a crucial role in generating employment opportunity in a capital scarce economy as of Nepal.
- In the case of medium and large industry, too, the created employment is in diminishing order over each successive period. And despite that the medium and large industries provide more employment than small and cottage industry if viewed individually, their contribution to total industrial employment is only around 15 percent. The reason behind this may be referred to very few number of establishment (some 1159) of medium and large scale industry, compared to large number of establishment (some 71848) of small and cottage industry in the country over the study period.
- Small manufacturing in Nepal are mostly operated by proprietor and family member themselves or that such industries are cottage in nature. Female employees are relatively more in large manufacturing than that in small manufacturing, no matter they are always fewer than males. Foreign workers are also in large proportion in large manufacturing compared to that in small manufacturing, no matter they are always fewer than national workers. Free border with India has had significant impact on employment in Nepalese industries, despite beyond exact record as how much.
- Industrialization in Nepal has not been guided successfully in terms of balanced regional growth. Some fifty percent small and cottage industry of the study period are in Central Development Region. It proves that even the small industrial practice in the country has not much influenced the people of other regions beyond the centre. Similar is the case of medium and large

scale industry, having more than seventy-five percentage of its units in the central development region.

5.3 Recommendations

- It is very urgent to create an industry-friendly environment in the country. For it, people, the government and every section of the community should be cautious and cooperative enough. About people, practical education and/or direct useful trainings should be managed; about government, stability should be maintained with resolution of conflict and restoration of peace; about community, each should be integrated to national grid of country's development via infrastructural connection. Otherwise the downward trend of Nepalese industries at present will not be maintaining the backbone of the economy. Instead, the economy will be more vulnerable to external shocks.
- Generally, we feel pride that our country is rich in natural resources like water and minerals. But neither of the possessions has been utilized for the betterment of our living via industrial development. Both large and small industry of energy and mineral like iron, copper etc. base are very few with us. So, it is strongly recommended to hold policies so as to encourage those industries that will base on the minerals lying idle inside our land and water flowing free and worthless on our land. Then only, it will be meaningful to enjoy over our possessions of natural gift. In fact, we have been losing in terms of economics mainly because of our disability as well as discard to those types of industries that can yield comparative advantage.
- Uncertainty in industrial production can put critical question on trading status of the nation. At present, Nepalese industries are at the threshold of coming or not coming, running or not running, or what! Also, their production level has no specific direction as shown by the analysis of NRB selected 18 manufacturing industries, the dominant type of industry in the country. It torments employment aspect. In the lack of affordability, the very independent existence of the people is threatened. It may cause social anarchy, having poisonous effect in every aspect of living. Hence, it is

recommended here to amend the situation of uncertainty in Nepalese industries both in terms of progressive policies and implementing institutions.

- Traditionally known as an agricultural country, Nepal is making industrial effort at the moment. However small it be (only around three percent of population), industries here have provided alternatives to agriculture for employment; it is glorious in itself. Yet, so far the downward trend of industrial employment is concerned, it will be very sincere to recommend that proper acts and laws be forwarded for companies, factories and industries, so as to raise industry's share in employment, GDP, etc. Agriculture yields diminishing returns and holds disguised unemployment. Hence, to cure such problems, too, generation of sufficient industrial employment is a must.
- Besides, focus should also be given to the establishment of large-scale industries because it is for large-industry-products that we have got to spend a lump-sum of foreign exchange in import. Also, large industries provide mass employment opportunity. However, understanding the thrust of industrial policy of 1992, small and cottage industry's heavy significance must be complimented; they have comparative advantage over many other types. Semi-skilled as well as unskilled labour and locally available different raw materials in our biologically diverse land give further incentive for the establishment of small and cottage industry in the country. Yet, the medium and large scale industry has its own merit. Hence, it is recommended here to set up and/or prior both small and large type industry in Nepal in a ratio that is suitable from raw-material, labour and capital view-point.
- Balanced regional growth has been a sound goal of Nepal's economic planning since history. However, it has never been realized in terms of industrialization. How could the heavier concentration of both small and large type industry in the Central Development Region help us materialize the goal? The reason behind all this is but the backwardness of other regions in terms of development infrastructure, in main. That is , there is lack of environment encouraging to set up and operate industries causing fewer industries in remote areas. Since it is likely to affect internal as well as external migration thereby giving way to brain-drain plus capital-drain, economic development further slackens. Thus, imbalanced regional growth is

a root of self-sustaining underdevelopment. Hence, it is strongly recommended to properly implement government planning and create an industry-friendly environment throughout the country, so as to flourish industries in the land all over. Then only, Nepalese economy can realize an upward trend in terms of every growth measure.

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