

A Study on Consumer Satisfaction on Mobile Telephone Service of Nepal Telecom

A THESIS

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RECOMMENDATION

This is to certify that the thesis:

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Entitled
**A Study on Consumer Satisfaction on Mobile Telephone Service of Nepal
Telecom**

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DECLARATION

I hereby declare that the work reported in this thesis entitled **A Study On Consumer Satisfaction On Mobile Telephone Service Of Nepal Telecom** submitted to Nepal Commerce Campus, Faculty of Management, Tribhuvan University is my original work done in the form of partial fulfilment of the requirement for the Masters in Business Studies (MBS) under the supervision of Prof. Dr. Vishnu Khanal of Nepal Commerce Campus.

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CHAPTER – I

1.0 INTRODUCTION

Needs and wants of human beings give the real birth of products. The activities involved in satisfying customers by providing products and services according to their needs may be termed as marketing. In this context, Philip Kotler defines "Marketing is a social and managerial process by which individuals and groups obtain what they need and want through creating, offering, and exchanging products of value with others."¹

He gave main focus on fulfilling the needs and wants of the people, because in the modern world a buyer is regarded as the 'king', since the success and failure of the marketer largely depends upon the degree of consumer satisfaction. Their needs and wants are fulfilled by the marketer through exchange process by integrating various marketing activities like marketing mix or 4Ps (product, price, place and promotion).

Thus, marketing is important and necessary because it takes place all around us everyday, has a major effect on our lives, and is crucial to the survival and success of firm and individuals. Successful marketing provides the promise of an improved quality of life, a better society and even a more peaceful world.

In making marketing decisions, the manager adopts the view point of the customer. Decisions therefore are driven by what the customer needs and wants. Much of what the marketing manager does is concerned with making decisions that revolve around how the goods or services of the organization can be made to match the customer's needs and wants. But the key to success of marketing is adopting the customer's viewpoint.

Peter Drucker stated that "every business can be defined as serving either customers or markets or end users."² The key elements of marketing are outward- looking and firmly centered on the customer. This orientation requires marketers to look at their organization, activities, and processes through their customer eyes.

¹ Philip Kotler, "Marketing Management Analysis, Planning, Implementation and Control", 7th Edition, P. 4

² Michael R. Czinkota & Masaaki Kotabe, "Marketing Management", 2nd Edition, P. 2

Communication with customers, measurement of their satisfaction levels and designing programs to improve customer satisfaction allow marketing the greatest influence within the firms. Thus one of the marketer's tasks is to devise marketing activities and assemble fully integrated marketing programs to create, communicate, and deliver value for consumers.

Therefore in summary, marketing activities begin with the identification of consumer needs, run through manufacturing, pricing, promotion and distribution activities and ends with fulfillment of organizational goal through consumer satisfaction. Since both the product and services are the subject matter of marketing, this study too is concerned with consumer satisfaction on mobile service (communication facilities existing on) that marketed by Nepal Telecom (NTC) into Nepalese market.

Before describing about mobile phone services it is necessary to know what communication is and its importance at all. Communication refers to the share or exchange of ideas, feelings, emotion, news and information.³ It acts as the central nervous system for the development of nation by various ways.

It promotes not only economic activities but also reduce the cost of coordinating and implementing development projects, by mobilizing of labor force effectively. Likewise trade, industry and commerce depend largely upon the efficient communication system. Also by means of good communication system, the nation can have better link with the foreign countries and can expand international trade with them, which helps them to earn foreign currency and can get many opportunities available in the international market.

For the effective communication system, varieties of tools and techniques are being used and mobile phone is one of them. Actually, Mobile phone is an electronic wireless radio equipment based on digital cellular technology by means of which two-way conversation can be done with any other telephone subscriber either of mobile telephone network or of public subscriber telephone network (PSTN) or of CDMA network. The main feature of mobile telephone is its mobile nature i.e., one can carry the mobile set wherever he wants to go and can talk with other parties at any time he likes.

³A S Hornby, "An Oxford Advanced Learner's Dictionary Of Current English", Twelfth Indian Impression 1988, P. 170.

1.1 BACKGROUND

Nepal is considered to be economically less privileged and less developed among the countries in the world with around per capita income of US\$ 240. Recently, Nepal has adopted the path of economic development through liberalization for the economic growth of the nation. The overall development of a nation largely depends on its economic development. Thus, the primary goal of any nation, including Nepal, should be rapid economic development to promote welfare of the people and nation as well. Thus, for the overall development of the country, many private as well as public enterprises have been established and they all are performing on their own way to make better Nepal.

Mainly, public enterprises are established in a view to build up the infrastructures for development. But in Nepal, many others have also been established for providing basic needs (goods and services) of people. While the private sector enterprises are established solely with business motives and they provide basic and other types of needs of the society. In the context of Nepal, public utility service organization like Nepal Telecom is playing major role in the development of country.

But whichever the type of enterprises; either public or private, various activities such as finance, marketing, production etc. should be performed for smooth running. Each activity plays its own vital role for better operation. And the achievement of the business organization largely depends on how much these activities are integrated and coordinated in the business system. And here one can see the importance of marketing. It is that area of a business enterprise, on which all other functional areas are directly related. It is the means of integrating and coordinating such functions in the business organization.

As being an important aspect, the business organization should always be sincere for its management. The success and failure of an organization is mainly depends upon its marketing strategy. So the marketing personnel should analyze the strategy in a timely manner. It is concerned with analyzing the different marketing tools and action plans that are being applied for products and services of the enterprise. The real picture of marketing performance will be disclosed after thoroughly analyzing these tools and action plans.

The focus of the study is on the determination of the level of consumer satisfaction of mobile phone services of Nepal Telecom on the basis of surveys and interviews with costumers.

1.1.1 History of Telecommunications Development in Nepal

The history of telecommunication development in Nepal is not long one. The first telecommunication service was started in Nepal during the regime of Chandra Shamsher in 1972 BS. It was the first time & a good opportunity for Nepalese people to transmit message from Kathmandu to Birgunj. This telephone line attributed as magneto connected Birgunj with Kathmandu under the name of "Shree Chandra Telephone". Though, no remarkable development has been found at the time of Chandra Shamsher.

Another telephone line connecting Kathmandu & Gaur of Rautahat district had been installed in the year 1980 BS. 25 automatic telephone lines were distributed among the high-ranking personalities of Nepal for their own individual uses. The telecommunication office was first established near Ranipokhari. Another notable telecommunication lines were made available during the role of Prime Minister Juddha Shamsher by catering the line in the different districts to the extent of 300 miles long. The telephone lines were being extended from Kathmandu to Siraha; the same being extended up at Hanuman Nagar of Saptari district in 1994 BS. In the year 1998 BS, additional installation of telephone line linking Dhankutta, Dharan & Biratnagar were distributed.

A noticeable changed happened toward telecommunication during the period of Juddha Shamsher. About 200 miles long telephone lines was also brought into use in western part of Nepal. The government of Nepal felt the need of telecommunication for effective administration & active participation of people to achieve national goals. So 200 local Cross-Bar telephone lines were set-up & distributed for his majesty's offices having exchange office at Singha Durbar in the year 2012 BS before implementation of 1st five year plan. Nepal had 200 Cross-Bar lines, 100 magnet lines, 15 automatic lines, 10 military exchange lines and 600 miles of trunk lines connecting Kathmandu with other districts.

"Before the implementation of first five year plan, Nepal had wire-less relation between 28 centers only in various parts of the country. About 18 of these stations were equipped with modern equipment. The wireless services are made workable by means of petrol generators in different districts except Kathmandu and Biratnagar. As the material and machinery requisite for wire-less services has been made available during the period of second World War, a satisfactory service could not be achieved on account of transporting the petrol in remote district."⁴

1.1.2 Introduction of NTC

Telecommunication is a quick and reliable means of transmitting information. Without telecommunication facilities neither the government nor the business community can work effectively. The importance of the telecommunication is not limited to the national boundaries. In developing countries, communication helps to make people sensitive, active, enthusiastic and skillful. Communication is one of the basic infrastructures for national development.

In Nepal, operating any form of telecommunication service dates back to 94 years in B.S. 1970. But formally telecom service was provided mainly after the establishment of MOHAN AKASHWANI in B.S. 2005. Later as per the plan formulated in First National Five year plan (2012–2017); Telecommunication Department was established in B.S.2016. To modernize the telecommunications services and to expand the services, during third five-year plan (2023–2028), Telecommunication Department was converted into Telecommunications Development Board in B.S.2026.

After the enactment of Communications Corporation Act 2028, it was formally established as fully owned Government Corporation called Nepal Telecommunications Corporation in B.S. 2032 for the purpose of providing telecommunications services to Nepalese People. After serving the nation for 29 years with great pride and a sense of accomplishment, Nepal Telecommunication Corporation was transformed into Nepal Doorsanchar Company Limited from Baisakh 1, 2061. Nepal Doorsanchar Company Limited is a company registered

⁴ Sitaula Matrika Prasad, "Telecommunication Development in Nepal" An unpublished Thesis, TU Kirtipur, 1978

under the companies Act 2053. However the company is known to the general public by the brand name Nepal Telecom as registered trademark.

Nepal Telecom has always put its endeavors in providing its valued customers a quality service since its inception. To achieve this goal, technologies best meeting the interest of its customers has always been selected. The nationwide reach of the organization, from urban areas to the economically non- viable most remote locations, is the result of all these efforts that makes this organization different from others.

Definitely Nepal Telecom's widespread reach will assist in the socio-economic development of the urban as well as rural areas, as telecommunications is one of the most important infrastructures required for development. Accordingly in the era of globalization, it is felt that milestones and achievements of the past are not adequate enough to catch up with the global trend in the development of telecommunication sector and the growth of telecommunication services in the country will be guided by Technology, Declining equipment prices, market growth due to increase in standard of life and finally by healthy competition.

Converting NT from government owned Monopoly Company to private owned, business oriented, customer focused company in a competitive environment, Nepal Telecom invites its all-probable shareholders in the sacred work of nation building.

The company is seen as an effective instrument of program implementation for accomplishing the desired national development goals. NTC is exerting its all efforts to provide communication services to larger sectors of population. As of Chaitra 2065, the total line distribution from all PSTN, GSM and CDMA exchanges has reached 3,829,632 lines.⁵ NTC is still striving hard to connect hundreds of thousands of prospective customers in its network.

Nepal Telecom (NTC) introduced mobile telephones from Chaitra 2055, targeting four major cities namely Kathmandu, Pokhara, Birgunj and Biratnagar. This mobile telephone was based on "GSM" cellular mobile technology, which refers to the "Global System for Mobile Communication" and this technology as well as mobile exchange and other accessories were purchased from "Nortel Company" of Canada.

⁵ Nepal Telecom Central Office, "Management Information System", 21 year, 249 issue, 2065 Chaitra, 2009 (March 14 – April 13)

This mobile service is said to be “Cellular Mobile” since it consists of several cell stations within the target mobile telephone areas. Such cells are installed to provide qualitative and secure service to its customers. For a complete call, the mobile telephone holder must be in frequency coverage area of such cell stations.

Besides above mentioned GSM mobile service, NTC has also introduced another mobile telephone service based on CDMA (Code Data Multiple Access) technology on 05/02/2006. In the beginning, its service was limited to Kathmandu Valley only with limited mobility service. But now it has been expanded to all 75 districts of the country.

In the beginning, NTC had started its mobile telephone business as a monopoly since there were no competitors, launching 10000 postpaid mobiles lines in the four above-mentioned cities. Among this, it had distributed 6000 mobile lines in Kathmandu valley, 1200 lines in Birgunj and 1400 lines each in Biratnagar and Pokhara. But till recent days, its line has been expanded up to 3092343 lines in all over the country of which 103940 are GSM postpaid, 2467400 are GSM prepaid, 675 WCDMA and 520328 CDMA prepaid mobile lines.⁶

In present days, there is a huge competition for various telecom services including the mobile phones between different service providers. Three more service providers other than NTC are operating in the telecom sector. Spice Cell Nepal Pvt. Ltd. is solely working on GSM mobile lines while United Telecom Ltd. is serving both basic and mobile lines through CDMA technology. STM Wireless has been providing its services to rural costumers through V-SAT.

Although the basic telecommunication facilities like ordinary telephone, fax and other services were available in all the major areas of the country, they were not enough to fulfill the total telecom demand. In such a situation, NTC has launched mobile telephone as a useful telecom service to serve its valuable costumers in the country.

The first targeted areas for the distribution of mobile phones have had their own distinct features. Kathmandu Valley which includes Kathmandu, Lalitpur and Bhaktapur, is famous not only as a capital of Nepal, but also the attraction point of tourism, center for all types of business, hub station for other official as well as

⁶ Ibid

educational opportunities, large number of population having high level of income, areas of central offices and projects, international airport and highly industrialized areas.

Similarly Pokhara is rich in natural beauty and famous as a heart of all Nepalese citizens. Also it is famous as a sub-metropolitan city and highly residential area of British Gorkhas who represents high income level people. The areas of trade and commerce as well as spot of tourism are other remarkable features of Pokhara City.

Likewise, Birgunj and Biratnagar both are highly industrialized areas lie in South-East region of Nepal. Both of them are Sub-metropolitan City and are situated at the boarder side of India. Therefore they are also known as "Gate-Way" for export and import trade of Nepal. High density, high-income level people, and the area of large-scale merchants are the additional features of both the cities.

After the introduction of any products and services, marketing activities should be undertaken for its success. So, Nepal Telecom also adopted various techniques for the marketing of its mobile phones basically through the use of media like newspaper, Television, Radio etc. But as we study the marketing activities performed by Nepal Telecom for its mobile phones, we came to know that the geographical and economic conditions of our country Nepal has affected it very much.

As we know that Nepal is a country with maximum of 77% of its land area covered with high mountains and hills. Thus, due to its sloppy land and rocky mountains, it has caused difficulty in the infrastructure development of the country. As it is difficult to reach various parts of the country, marketing of the products and services is also hazardous. But also Nepal Telecom had made a lot of efforts to provide its mobile phone services to various parts of the country. Because of its efforts today, people of various hilly and rural areas are able to receive its mobile phone services.

Still Nepal Telecom is not able to introduce various new services to its customers outside the Kathmandu valley and this is not only because of the geographical structure of the country but also of the economic condition of Nepalese people. In case of economic context, our country is economically backward country with nearly 40% of the people living below poverty line. So, Nepalese people are not economically able to afford these services of Nepal Telecom.

As we study the history of marketing itself, Marketing has existed since many years ago ever since people first started to barter accumulated surpluses. Nepal's marketing activities also possess same history of marketing started from the barter economy of people exchanging their surplus goods.

After that trade started in the country especially with Tibet and India and planned trade started from 2008 B.S. when the country first prepared its annual budget. Similarly, country also started 5 year development plan from 2013 B.S. Gradually since then the marketing concept was also introduced in the country. And now the marketing concept of Nepal is also totally customer oriented. It is focused towards customer satisfaction through its product and services. This is also because of the technological development in the world and the introduction of the global concept of marketing.

Technology opens up a market space rather than a market place by allowing the firm to keep the content while changing the context and the infrastructure completely, such as when a newspaper is distributed globally online rather than house to house on paper. All this presents firms with new opportunities to serve and satisfy their customers. As one of the early pioneers of marketing stated "No system of marketing remain static; all are in stages of adaptation to continuing change, both in the external environment and with the marketing organization itself.

Thus, in present stage marketing consider the customer to be the focus of decision making and today's marketing takes place in a global context. Marketing efforts vary, depending on the different circumstances within which they are practiced. Marketing is a particularly practical business discipline. The various elements of marketing are employed in marketing campaigns known as marketing mix and are often described in terms of the four Ps: product, price, place and promotion. This mix applies not just to the tangible products sector but also to services and the non profit area.

Thus, it can be said that the market place is not what it used to be. It is radically different as a result of major, sometimes interlinking societal forces that have created new behaviors, new opportunities and new challenges such as: changing technology, globalization, privatization, customer empowerment, heightened competition etc.

But the history of mobile telephone in the world is not so old; and in the Nepalese context, it is running by the age of ten years. This research tries to analyze the consumer satisfaction on mobile telephone service and the consumer's response towards it, which will be highly beneficial to NTC in providing qualitative service and getting positive response from the customers. It will also helpful to other scholars and researchers to carry out further research on it.

1.1.3 Role of NTC

NTC has played a great role providing the main infrastructure for the overall development of the country. The services it provides are equally useful for almost all sectors of the society. Telecommunication is one of the quickest, cheapest as well as the most reliable means of communication in modern world. Without it, the private and government organization cannot function well. Telecommunication is a system which facilitates conveying information quickly over long distance with a cheap cost.

There are also other means of communication such as postal service. But they are slower, expensive and less convenient. Therefore, telecommunication is one of the swift and reliable means of communication in the scientific age. It brings coordination among different government entities, which ultimately promotes administrative efficiency. The increase in administrative efficiency can be expected to enhance the productivity of the government decision and a better utilization of country's resources as well as mobilization of labor force for the achievement of national goals.

The international telecommunication system contributes to link the overseas countries in the field of economy as well as politics. It also contributes in the development of tourism industry, the major sources of foreign exchange of Nepal. Thus the telecommunication system plays an important role to strengthen the national economy and bring unity among the people around the world creating brotherly relationship among them. Telecommunication contributes a lot to the development of social condition of the country because it is a means of social change, which facilitates the accumulation, exchange and transmission of knowledge between people. So without communication human society would remain static and not much different from very old societies.

Thus in the developing country like Nepal, the role, importance and contribution of telecommunication to development cannot be exaggerated. "The effects of telecommunication on the rural areas and their contribution to rural development are potentially extremely important, yet rather difficult to measure."⁷

1.2 STATEMENT OF THE PROBLEM

Nepal Telecom Company (NTC) at present is operating, as a 100 per cent government owned organization for providing communication services to all over the country. Since the 77 percent of total area of the kingdom are high Hills and snow capped Mountains and only 23 percent is the flat land of Terai, such extreme topography and weak infrastructure have made task of providing basic telecommunication facilities more difficult.

Though the top most priority of NTC is to provide basic telecommunication facilities to the public at reasonable prices, in the present context it has also to cope with the demand of customer for better and new services. The rural people in one hand wish to have services in their villages, and on the other hand the urban people expect the new service to land at their doorstep. In recent years, the telephone demand has swollen-up rapidly in the cities as well as the villages directed towards the urbanization.

Thus the huge gap between demand and NTC's existing capacity increase the public dissatisfaction to a large extent. Still, there are many waiters those waiting for a decade to have a telephone connection to their home and on the other hand, the customers who are using telephone service from last few years, are facing various problems like delay on shifting it from one place to another, delay on maintenance, billing of telephone calls etc. Also the opening of distribution area is also inconsistent and the distribution policy not properly matches with the public want and desire.

Since the world today is using very new and recent technologies in the field of communication service, Nepal too is not exception to this. Thus in recent years the people of few cities specially Kathmandu, Biratnagar, Birgunj, Pokhara etc., due to extensive urbanization as well as the cities being hub of all economic activities

⁷ Pierce William B., "ITU Seminar on Rural Telecommunication", New Delhi VOL 1 11-22 Sep 1978 page 6

demanding advanced communication facilities. In the context of fulfilling such demands NTC has introduced "Mobile Service" as a new service in Nepal from dated 2055 Chaitra.

To know how much quality service is being rendered by Nepal Telecom is very difficult to reach up to a conclusion. This has become a problem and matter of confusion till now. This study aims to know the reality of this question and problem. Addressing the key issues, the present study tries to answer the following questions:

1. What is the profile of mobile phone users?
2. What available facilities are mobile phone users using with mobile phone?
3. What is the opinion of mobile phone users with reference to overall service of Nepal Telecom?
4. What is the level of consumer satisfaction towards the mobile telephone services of Nepal Telecom?
5. What new facilities Nepal Telecom is introducing to satisfy its customer with its mobile phone services?

This study is confined to the level of consumer satisfaction towards the mobile telephone services of NTC. The present study will make a modest attempt to have an insight over the causes creating problems to NTC in providing effective services to its customers as well as to recommend some concrete suggestions for the improvement in overall performance through marketing analysis.

1.3 OBJECTIVES OF THE STUDY

The objectives of this study are as follows:

1. To analyze the expectations and areas of satisfaction of mobile phone users.
2. To find out the major strengths and weaknesses of NTC at present.
3. To find out the opportunities & threats of NTC at present.

4. To find out the most satisfied aspects in mobile phone service of Nepal Telecom.
5. To recommend NTC and all concerned based on findings of this research for making corrections and improvements.

1.4 IMPORTANCE OF THE STUDY

Since the subscribers or users of mobile telephone can take many facilities than the ordinary telephone subscribers, the importance of mobile phone is continuously increasing. The number of NTC mobile phone users within ten years (2055BS–2065BS) in Nepal exceeds three millions, which proves the popularity of mobile phone. The increasing demand and popularity of mobile phone is attracting the attention of investors to invest in these areas.

Nepal Government also established a separate body named "Nepal Telecommunications Authority" on Falgun, 2054, providing it full authority of regulating and controlling mechanism. Now this Authority is making rules and regulations and started to invite and registered private parties for the distribution of new communication services like Pager, WLL, and Mobile Phone etc. Recently a private joint venture company named Spice Cell Nepal Pvt. Ltd and United Telecom Limited is providing mobile telephone service into Nepalese market and these companies are expressing their commitment to operate mobile telephone service through out the country.

Analysis of marketing position is a crucial part of decision making process of a business enterprise. Poor marketing management affects adversely on profitability of organization. NTC is an enterprise of great national concern. Thus, this study is made to evaluate the marketing position of NTC. Basically NTC is a service oriented business enterprise. So, it should provide better services as well as make profit for the sake of expansion of its services, adoption of new technologies, repair & maintenance to keep its services update/intact. Due to the changing scenario of the economy and the current Nepal government policies, the private sector companies have been encouraged in telecommunication services.

Therefore, at one side, NTC is effectively operating its activities in distributing the new communication services to fulfill the growing demands of customers and on the other side; many private parties are in the process of introducing their services into the Nepalese market. So, it is sure that NTC will have to face cutthroat competition with outside competitors in coming future.

To get success in such a situation, this study will provide valuable guidelines to NTC in making their new strategy in providing qualitative services. Similarly the other outside investors or private parties may also be benefited from the information included in this study. It will also provide valuable insights and references to the scholars and researchers who are interested in conducting further researches on the field of communication service.

1.5 LIMITATIONS OF THE STUDY

This research is the requirement for the partial fulfillment of master's degree in Management. The researcher being a student and having a limited time and resources, this research work is not free from limitations. A research is a full blaze and vast investigation study for the settlement of the problems. It needs full time, adequate amount of money, and authentic information. So these factors are assumed to be the limit of this study. Some others are:

1. Although consumers of NTC are spread all over the country, but the consumer's opinion, market response and consumer's profiles are collected/made only from Kathmandu valley.
2. Similarly, this study is only focused on mobile telephone services.
3. The study also assumes secondary data provided by the organization. Thus the limitation of the secondary data may exist.
4. Since this study is mainly concerned with NTC, the conclusion drawn, findings and suggestions from the study may not be applicable to any other private or public enterprises.

1.6 ORGANIZATION OF THE STUDY

This study has been organized under five chapters. The **First Chapter** contains introduction, background, statement of the problem, objectives of the study, importance of the study and limitation of the study.

The **Second Chapter** is designed to examine the review of literature especially the historical background of communication service, its development in Nepalese context, the recently available communication services and few past researches conducted by the scholars.

The **Third Chapter** describes the methodological aspects of the study and it contains research design, sampling plan, and nature of sources of data, data collection procedure and method of analysis.

The **Fourth Chapter** is the main body part of the study in which data presentation, analysis and their interpretation is included. Major findings of the study are also presented in this chapter.

Finally a summary, conclusions and some valuable recommendations are presented in **Fifth Chapter**. The bibliography and appendices are presented at the end.

1.7 ABBREVIATIONS USED

The following Abbreviations are used in this thesis:

NTC	=	NEPAL TELECOM COMPANY
PSTN	=	PUBLIC SUBSCRIBER TELEPHONE NETWORK
CDMA	=	CODE DATA MULTIPLE ACCESS
STD	=	SUBSCRIBERS' TRUNK DIALLING
ISD	=	INTERNATIONAL SUBSCRIBER DIALLING
GSM	=	GLOBAL SYSTEM FOR MOBILE
WCDMA	=	Wideband Code Division Multiple Access
WLL	=	WIRELESS LOCAL LOOP
MIS	=	MANAGEMENT INFORMATION SYSTEM
GPRS	=	GENERAL PACKET RADIO SERVICE

PDSN	=	PACKET DATA SWITCHING NETWORK
SMS	=	SHORT MESSAGE SERVICE
MMS	=	MULTIMEDIA MESSAGE SERVICE
VMS	=	VOICE MAIL SYSTEM
CRBT	=	CALLER RING BACK TONE
Kbps	=	KILOBYTE PER SECOND
Mbps	=	MEGABYTE PER SECOND
Gbps	=	GIGABYTE PER SECOND
VDC	=	VILLAGE DEVELOPMENT COMMITTEE
Etc.	=	ETCETERA
BS	=	BIKRAM SAMBAT
i.e.	=	IN OTHER WORDS/ THAT IS
F/Y	=	FISCAL YEAR
NRs	=	NEPALI RUPEES
CO.	=	COMPANY
Pvt.	=	PRIVATE
Ltd.	=	LIMITED
NO.	=	NUMBER
GOVT.	=	GOVERNMENT
V-SAT	=	A Very Small Aperture Terminal
UTL	=	UNITED TELECOM LIMITED
SNPL	=	SPICE NEPAL PRIVATE LIMITED
FWT	=	FIXED WIRELESS TERMINAL
LM	=	LIMITED MOBILE

CHAPTER – II

2.0 REVIEW OF LITERATURE

“The purpose of reviewing the literature is to develop some expertise in one’s area, to see what new contribution can be made and to receive some ideas for developing research design.”⁸

This Chapter reviews the concepts concerning the subject matter that are written on text books in one hand and it reviews the previous studies which are related to the subject matter of this study on the other.

2.1 CONCEPTUAL FRAMEWORK

For the review purpose, the researcher has undergone conceptual aspects of consumer satisfaction and different relevant pilot works. Therefore, the objectives of the chapter are to provide the essential knowledge of different aspects of consumer satisfaction. Textual support and pilot studies are presented as follows.

- a. Communications
- b. Services
- c. Consumer
- d. Consumer Satisfaction
- e. Expectations
- f. Price
- g. Value
- h. Telephone
- i. Mobile
- j. Management

2.1.1 Communications

Communication is “The transference and understanding of meaning.”⁹

⁸ Howard K. Wolff and Prem R. pant, “A Hand book for social science research and thesis writing”, Buddha Academic Enterprises, Kathmandu, 2nd Ed., 1996, P. 30

Communication is “The process of passing information and understanding from one person to another.”¹⁰

Communications refers to “Methods of sending information, especially Telephone, Radio, Computers etc or Roads and Railways.”¹¹

Communication serves as the central nervous system for the development of nation in various ways. It promotes not only economic activities but also reduce the cost of coordinating and implementing development projects, by mobilizing of labor force effectively. Likewise trade, industry and commerce depend largely upon the efficient communication system.

Also by means of good communication system, the nation can have better link with the foreign countries and can expand international trade with them, which helps them to earn foreign currency and can get many opportunities available in the international market. In this context, telephone has become one of the means of effective communication.

2.1.2 Services

“A service is any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership or anything. Its production may or may not be tied to a physical product.”¹²

Similarly, customer service means Department or function of an organization that responds to inquiries or complaints from customers of that organization. Growing number of organizations are giving much more attention to customer service. Financial institutions, hospitals, public utilities, airlines, retail stores, restaurants, manufacturers, and wholesalers face the problem of gaining and retaining the patronage of customers.

⁹ Robins, Stephan P, “Organizational Behavior”, Prentice Hall of India Pvt. Ltd., 6th Ed., 1993, P. 327

¹⁰ Kazmier, Leonard J, “Principles of Management: A Programmed Instructional Approach”, Tata-McGraw Hill Book Co., 1977, P. 266

¹¹ A S Hornby, "Oxford Advanced Learner's Dictionary of Current English", Oxford University Press, 6th Ed., Page – 243.

¹² Philip Kotler, “Marketing Management Analysis, Planning, Implementation, and Control”, Prentice-Hall of India Pvt. Ltd., 7th Ed. 1992, Page - 455

Building long-term relationships with customers has been given a high priority by the majority of America's enterprises too. These companies realize that customer satisfaction is an important key to success. Customer service can be defined as those activities that enhance or facilitate the purchase and use of the product.

Today's emphasis on customer satisfaction can be traced to a managerial philosophy that has been described as the marketing concept. Various techniques are used to generate correspondence back to the customer, including checklists, form letters, typewritten letters, computer letters (fill-in type), or computer-generated personalized letters.

For example, a checklist may have three questions, with one question checked to indicate that it is the answer needed. Form letters accommodate a frequent and relatively standard situation. Typewritten letters are best for irate complaints or special situations. Computer letters combine the benefits of personalization with the efficiencies of automation. Customer service correspondence may be in letterhead or postcard format. Customer service is an important part of the fulfillment function, ensuring that customers will buy again and/or continue to be good customers.

2.1.3 Consumer

"A consumer is a person who buys goods or uses services".¹³

"Consumer is a broad label that refers to any individuals or households that use goods and services generated within the economy".¹⁴

In free market or capitalist economies, consumers are presumed to dictate what goods are produced and are generally considered the center of economic activity. Individual consumption of goods and services is primarily linked to the consumer's level of disposable income, and budget allocations are made to maximize the consumer's marginal utility.

¹³ A S Hornby, "Oxford Advanced Learner's Dictionary of Current English", Oxford University Press, 6th Ed., Page – 265.

¹⁴ "Wikipedia, the free encyclopedia", www.en.wikipedia.org/wiki/consumer

In 'time series' models of consumer behavior, the consumer may also invest a proportion of their budget in order to gain a greater budget in future periods. This investment choice may include either fixed rate interest or risk-bearing securities.

The concept of a consumer is used in different contexts, so that the usage and significance of the term may vary.

2.1.3.1 Consumer in economics and marketing

Typically when business people and economists talk of consumers they are talking about person as consumer, an aggregated commodity item with little individuality other than that expressed in the buy/not-buy decision. However there is a trend in marketing to individualize the concept. Instead of generating broad demographic profile and psycho graphic profiles of market segments, marketers are engaging in personalized marketing, permission marketing, and mass customization.

2.1.3.2 Consumer in law and politics

Within law, the notion of consumer is primarily used in relation to consumer protection laws, and the definition of consumer is often restricted to living persons (i.e. not corporations or businesses) and excludes commercial users. A typical legal rationale for protecting the consumer is based on the notion of policing market failures and inefficiencies, such as inequalities of bargaining power between a consumer and a business. As potential voters are also consumers, consumer protection takes on a clear political significance.

Concern over the interests of consumers has also spawned much activism, as well as incorporation of consumer education into school curricula. There are also various non-profit publications, such as Consumer Reports and Choice Magazine, dedicated to assist in consumer education and decision making.

2.1.4 Consumer Satisfaction

Despite extensive research in the years since Cardozo's (1965) classic article, researchers have yet to develop a consensual definition of consumer satisfaction. Oliver (1997) addresses this definitional issue by paraphrasing the emotion literature, noting that "everyone knows what [satisfaction] is until asked to give a definition. Then it seems, nobody knows" (p. 13).

Based on the perception that satisfaction has been defined, most research focuses on testing models of consumer satisfaction (e.g., Mano and Oliver 1993; Oliver 1993; Oliver and DeSarbo 1988; Spreng, MacKenzie, and Olshavsky 1996; Tse and Wilton 1988) while definitional considerations have received little attention.

As a result, the literature is replete with different conceptual and operational definitions of consumer satisfaction (see Table 1). As Peterson and Wilson (1992) suggest, "Studies of customer satisfaction are perhaps best characterized by their lack of definitional and methodological standardization" (p. 62).

A basic definitional inconsistency is evident by the debate of whether satisfaction is a process or an outcome. More precisely, consumer satisfaction definitions have either emphasized an evaluation process or a response to an evaluation process. Most definitions have favored the notion of consumer satisfaction as a response to an evaluation process.

Specifically, there is an overriding theme of consumer satisfaction as a summary concept i.e., a fulfillment response (Oliver 1997); overall evaluation (Fornell 1992); or evaluative response (Day 1984)). However, there is disagreement concerning the nature of this summary concept. Researchers portray consumer satisfaction as either a cognitive response (e.g., Bolton and Drew 1991) or an affective response (e.g., Halstead, Hartman, and Schmidt 1994).

A final discrepancy occurs in the terms used as a designation for this concept. Researchers have used discrepant terms to mean satisfaction as determined by the final user: consumer satisfaction (e.g., Oliver 1993; Spreng, MacKenzie, and Olshavsky 1996), customer satisfaction (e.g., Halstead, Hartman, and Schmidt 1994; Smith, Bolton, and Wagner 1999), or simply, satisfaction (e.g., Mittal, Kumar, and Tsiros 1999). These terms are used somewhat interchangeably, with limited, if any, justification for the use of any particular term.

The lack of a consensus definition for satisfaction creates three serious problems for consumer satisfaction research: selecting an appropriate definition for a given study; operationalizing the definition; and interpreting and comparing empirical results. These three problems affect the basic structure and outcomes of marketing research and theory testing.

A second problem is the development of valid measures of satisfaction. Defining a construct's theoretical meaning and conceptual domain are necessary steps to developing appropriate measures and obtaining valid results (Bollen 1989; Churchill 1979; Gerbing and Anderson 1988). If the choice of a consumer satisfaction definition, or lack thereof, is not justified, it is unclear whether the measures used are appropriate or valid. This problem becomes more serious as the measure becomes more global in nature.

Thus, the "chameleon effect" described by Marsh and Yeung (1999) is rampant in satisfaction research. Generally worded, global measures provide no guidance to respondents or other researchers for interpreting the exact meaning of satisfaction. In this situation, respondents will interpret the meaning of "satisfaction" based on the other cues including instructions, other measured constructs, and products being assessed.

Perhaps the most serious problem caused by the lack of a consensus definition is the inability to interpret and compare empirical results. Peterson and Wilson (1992) note that differences in results depend on how satisfaction was operationalized. For example, how do expectations influence satisfaction? It is impossible to compare results across studies since differences in the definition and operationalization of satisfaction will influence the role of expectations in the model.

Furthermore, expectations may be irrelevant for the particular context in which satisfaction is being determined. A specific concern to managers is that uninterpretable results are essentially results that can not provide information to make decisions. Thus, a lack of definitional and measurement standardization limits the degree to which generalizations can be developed; a lack of definitional standardization limits the degree to which results can be explained, justified, and compared.

Without definitional explication, true satisfaction can be elusive. A brief example may illustrate the relevance of a standardized definition of consumer satisfaction. Two automobile purchasers respond to the same seven-point satisfied/dissatisfied scale. Consumer A marks a '5' and Consumer B marks a '7.' Most likely, the interpretation is that Consumer B is more satisfied than Consumer A.

Given only this much information, however, it is virtually impossible to interpret what these consumers mean from the number that they have marked. How they define satisfaction is integral to interpreting their response. In sum, it becomes impossible to create a unified, comparable body of research on consumer satisfaction if researchers do not agree on what satisfaction is and cannot base measurement decisions on a consensual definition.

On the basis of following Table No.1, these three general categories capture the essence of all the definitions presented. As expected, existing definitions are inconsistent in the specifics associated with the type, focus and timing of the satisfaction response.

TABLE: 1

Conceptual and Operational Definitions in Consumer Satisfaction

Source	Conceptual Definition	Response	Focus	Time
Oliver 1997	The consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over fulfillment (p. 13)	Fulfillment response / judgment	Product or service	During consumption
Halstead, Hartman, and Schmidt 1994	A transaction-specific affective response resulting from the customer's comparison of product performance to some prepurchase standard (e.g., Hunt 1977; Oliver 1989) (p. 122).	Affective response	Product performance compared to some prepurchase standard	During or after consumption

Mano and Oliver 1993	(Product satisfaction) is an attitude – like post-consumption evaluative judgment (Hunt 1977) varying along the hedonic continuum (Oliver 1989; Westbrook and Oliver 1991) (p. 454).	Attitude – evaluative judgment Varying along the hedonic continuum	Product	Post-consumption
Fornell 1992	An overall postpurchase evaluation (p.11).	Overall evaluation	Post-purchase perceived product performance compared with pre-purchase expectations	Post-purchase
Oliver 1992	Examined whether satisfaction was an emotion. Concluded that satisfaction is a summary attribute phenomenon coexisting with other consumption emotions (p. 242).	Summary attribute phenomenon coexisting with other consumption emotions	Product attributes	During consumption
Westbrook and Oliver 1991	A postchoice evaluative judgment concerning a specific purchase selection (Day 1984) (p. 84).	Evaluative judgment	Specific purchase selection	Post-choice
Oliver and Swan 1989	No conceptual definition. (With the salesperson) a function of fairness, preference, and disconfirmation (pp. 28–29).		Salesperson	During purchase

Source: Academy of Marketing Science Review Volume 2000 No. 1 Available: <http://www.amsreview.org/articles/giese01-2000.pdf> Copyright © 2002 - Academy of Marketing Science.

Similarly, the importance of consumer satisfaction can also be examined through three perspectives– the academic, the practitioner, and the consumer.

2.1.4.1 The Academic Perspective

The origin of much of our understanding of consumer satisfaction is in the field of consumer behavior. The satisfaction depends not on the absolute levels of performance on various attributes, but rather on how the actual performance compares with the expected performance. Following from this approach, satisfaction or dissatisfaction will result if the performance confirms or disconfirms expectations respectively. Here, satisfaction is seen as a process. Satisfaction may be regarded as:

- a. An emotion – An affective response to a specific service experience
- b. A fulfillment – The achievement of relevant goals
- c. A state – The level of reinforcement or arousal

Academicians have normally emphasized that the achievement of consumer satisfaction should not be an end in itself. It's not that satisfaction doesn't matter, it matters a great deal. The problem is that if we fail to link satisfaction scores to consumer loyalty and profits, they all too easily become an end in themselves.

There is also evidence of a 'halo effect' in measurements from consumer satisfaction surveys, which may render resulting interpretations and actions unreliable. Where a survey measures consumer satisfaction on attributes for eg, a post flight satisfaction survey that examines flight food, cabin crew service, in flight entertainment and so on. There is evidence that a high/low rating on the dominant attribute will result in positive/negative halo effects on the other attributes.

2.1.4.2 The Practitioner Perspective

As consumers we all have an opportunity to fill in consumer satisfaction questionnaires from service providers in the restaurant, banking, hotel, airline etc. Firms spend millions of dollars on tracking consumer satisfaction.

The content and length of a consumer satisfaction survey will vary according to context, and to the resources required to support the data gathering exercise. Some consumer satisfaction survey, for instance in a small restaurant may have as few as five or six questions/statements, relating directly to the quality of the food and the service.

Firms need to assess the potential benefits from the survey data against the costs of carrying out the survey. Most companies, however, would look for benefits associated with increased profits. There is an implicit assumption that increased consumer satisfaction will result in increased profit and so the goal of increased consumer satisfaction supported by (often costly) consumer satisfaction surveys is to be pursued. It is not only the service providers themselves that undertake consumer satisfaction surveys. The results of formal independent consumer satisfaction surveys are often published widely.

2.1.4.3 The Consumer Perspective

What do consumers understand by the term 'satisfaction' when responding to surveys by academics or service providers?

Research by Parker and Mathews was undertaken to address this question. When provided by the authors with possible categories, the respondents had categorized satisfaction as follows:

- a. Pleasure (14 percent of the response)
- b. An evaluation against what was expected(13 percent)
- c. Contentment (13 percent)
- d. Making the right purchase decision(13 percent)
- e. A feeling about the consumption experience(11 percent)
- f. Needs being fulfilled(11 percent)
- g. Delight(9 percent)
- h. Relief(7 percent)
- i. Being suitably rewarded for efforts(5 percent)
- j. Comparing the situation with those of other people(4 percent)

Satisfaction clearly means different things to different people in different contexts, and there is a real concern that consumer satisfaction surveys may be asking consumers to rate their level of satisfaction on scales where the constructs have no shared meaning.

From the above discussion, a summary of the different perspectives of consumer satisfaction could be drawn as follows:

- A summary affective response of varying intensity. The exact type of affective response and the level of intensity likely to be experienced must be explicitly defined by a researcher depending on the context of interest.
- With a time-specific point of determination and limited duration. The researcher should select the point of determination most relevant for the research questions and identify the likely duration of the summary response. It is reasonable to expect that consumers may consciously determine their satisfaction response when asked by a researcher; therefore, timing is most critical to ascertain the most accurate, well-formed response.
- Directed toward focal aspects of product acquisition and/or consumption. The researcher should identify the focus of interest based on the managerial or research question they face. This may include a broad or narrow range of acquisition or consumption activities/issues.

2.1.5 Expectations

“Expectation is a belief that something will happen because it is likely.”¹⁵

In the case of uncertainty, expectation is what is considered the most likely to happen. An expectation, which is a belief that is centred on the future, may or may not be realistic. A less advantageous result gives rise to the emotion of disappointment. If something happens that is not at all expected it is a surprise. An expectation about the behavior or performance of another person, expressed to that person, may have the nature of a strong request, or an order.

2.1.6 Price

Price in economics and business is the result of an exchange and from that trade we assign a numerical monetary value to a good, service or asset. Price is only part of the information we get from observing an exchange. The other part is the volume of the goods traded per unit time, called the rate of purchase or sale. From this

¹⁵ A S Hornby, "Oxford Advanced Learner's Dictionary of Current English", Oxford University Press, 6th Ed., Page – 438.

additional information we understand the extent of the market and the elasticity of the demand and supply.

The concept of price is central to microeconomics where it is one of the most important variables in resource allocation theory (also called price theory). Price is also central to marketing where it is one of the four variables in the marketing mix that business people use to develop a marketing plan.

In general terms price is the result of an exchange or transaction that takes place between two parties and refers to what must be given up by one party (i.e., buyer) in order to obtain something offered by another party (i.e., seller).

2.1.7 Value

“Value is a fair return or equivalent in money, goods or services for something exchanged.”¹⁶

Value is how much a desired object or condition is worth relative to other objects or conditions. Economic values are expressed as "how much" of one desirable condition or commodity will, or would be given up in exchange for some other desired condition or commodity.

For a firm to deliver value to its customers, they must consider what is known as the "total market offering." This includes the reputation of the organization, staff representation, product benefits, and technological characteristics as compared to competitors' market offerings and prices. Value can thus be defined as the relationship of a firm's market offerings to those of its competitors.

Value in marketing can be defined by both qualitative and quantitative measures. On the qualitative side, value is the perceived gain composed of individual's emotional, mental and physical condition plus various social, economic, cultural and environmental factors. On the quantitative side, value is the actual gain measured in terms of financial numbers, percentages, and dollars.

¹⁶ “The Merriam Webster Dictionary”, Merriam – Webster, Incorporated, Springfield, Massachusetts, USA © 1997 by Merriam-Webster, Incorporated, Page – 806, ISBN 0-87779-911-3

For an individual to deliver value, one has to grow his / her knowledge and skill sets to showcase benefits delivered in a transaction (e.g., getting paid for a job).

For an organization to deliver value, it has to improve its value : cost ratio. When an organization delivers high value at high price, the perceived value may be low. When it delivers high value at low price, the perceived value may be high. The key to deliver high perceived value is attaching value to each of the individuals or organizations—making them believe that what you are offering is beyond expectation—helping them to solve a problem, offering a solution, giving results, and making them happy.

2.1.8 Telephone

“Telephone is an instrument for sending and receiving sounds over long distances by electricity.”¹⁷

The telephone is a telecommunications device used to transmit and receive sound, most commonly the human voice. It is one of the most common household appliances in the developed world, and has long been considered indispensable to business, industry and government. The word "telephone" has been adapted to many languages and is widely recognized around the world.

The device operates principally by converting sound waves into electrical signals, and electrical signals into sound waves. Such signals when conveyed through telephone networks — and often converted to electronic and/or optical signals — enable nearly every telephone user to communicate with nearly every other worldwide.

¹⁷ “The Merriam Webster Dictionary”, Merriam – Webster, Incorporated, Springfield, Massachusetts, USA © 1997 by Merriam-Webster, Incorporated, Page – 743, ISBN 0-87779-911-3

2.1.9 Mobile Telephone

A mobile phone or mobile (also called cell phone, wireless phone, cellular phone, cell, cellular telephone, mobile telephone or cell telephone) is a long-range, electronic device used for mobile voice or data communication over a network of specialized base stations known as cell sites.

In addition to the standard voice function of a mobile phone, telephone, current mobile phones may support many additional services, and accessories, such as SMS for text messaging, email, packet switching for access to the Internet, gaming, Bluetooth, infrared, camera with video recorder and MMS for sending and receiving photos and video, MP3 player, radio and GPS.

Most current mobile phones connect to a cellular network consisting of switching points and base stations (cell sites) owned by a mobile network operator (the exception is satellite phones, which are mobile but not cellular).

A mobile phone, as opposed to a radio telephone, offers full duplex-communication, automatised calling to and paging from a public switched telephone network (PSTN), handoff (am. English) or handover (European term) during a phone call when the user moves from one cell (base station coverage area) to another.

A mobile phone offers wide area service, and should not be confused with a cordless telephone, which also is a wireless phone, but only offer telephony service within a limited range, e.g. within a home or an office, through a fixed line and a base station owned by the subscriber.

2.1.10 Management

Management in all business and human organization activity is simply the act of getting people together to accomplish desired goals and objectives. Management comprises planning, organizing, staffing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal. Resourcing encompasses the deployment and manipulation of human resources, financial resources, technological resources, and natural resources.

“The verb ‘manage’ comes from the Italian ‘maneggiare’ (to handle — especially a horse), which in turn derives from the Latin manus (hand). The French word mesnagement (later ménagement) influenced the development in meaning of the English word management in the 17th and 18th centuries.”¹⁸

2.2 REVIEW OF PREVIOUS RESEARCH

In order to understand the growth of communication services, present status of telecommunication services and other information about the telecommunication facilities, the researcher found a very few researches that have been completed on "Telecommunication Services on Nepal". These researches were mainly concerned with the economic aspect of NTC. Following are the researches on Telecom Services of NTC.

A Study on Economics of Telecommunications in Nepal

A research entitled "A Study on Economics of Telecommunications in Nepal" was done by **Integrated Development Systems (IDS)** in 1980. The main objective of the study was:

To examine the demand and supply of telephone lines, investment on telecommunication sector and the fixation of tariff as well as pricing policy of NTC.

For this purpose, the secondary data of NTC from 1969/70 to 1979/80 were thoroughly analyzed with the help of various statistical tools. The major findings of the study were as follows:

- a. In Nepal, Telecommunication facilities were started in 1913 as a luxury of Rana rulers. But concerned efforts to develop telecommunications were undertaken only in the 1970s. At present the arrival of Nepal Telecom (NTC) provides expanded telecommunications facilities for both domestic and international usage.

¹⁸ "Wikipedia, the free encyclopedia", www.en.wikipedia.org/wiki/management

- b. During the decade 1969/70 to 1979/80 the local telephone facilities (both the exchange capacity and the subscribers' connection) have increased along with the total expressed demand. But the exchange capacity has increased relatively at a lower rate than the total expressed demand. Therefore the gap between demand and supply promises to be wider and wider though time unless the supply increases at a faster rate than in the past.
- c. The existence of higher demand and a relatively lower supply of local telephone have resulted in the extensive black marketing of telephone lines. Both from the point of view of NTC and social welfare maximization this trend is harmful.
- d. In the case of local telephones, there is an inverse relationship between the increase in telephone traffic and deterioration in the grade of service. The grade of service reaches its lowest point when the telephone traffic reaches its highest point, i.e. during the day. This shows that the system is nearing its potential capacity during certain hours of the day. Thus, the possibility of differential tariff rates for peak and off-peak hours need to be examined.
- e. As shown by the waiting list classification more than 75 percent of the waiters are from the residential sector, and hence the demand for telephone is the highest from this sector.

Revenue collection improvements in service delivery of NTC

In 1994, **Mr. Manohar Krishna Shrestha** on his study of "Revenue collection improvements in service delivery of NTC" has analyzed about the revenue collection position, problem in revenue collection and to give the workable suggestion for improving the revenue collection position. The study covered the period of 10 years from 1983 to 1992.

The main objectives of the study were as follows:

- a. To show the actual revenue collection position, problems in revenue collection
- b. To give the applicable suggestions for improving revenue collection position.

Major finding of his research was:

- a. The problems of revenue generation in Telecommunication Corporation arises from congested local service bringing system failures, unsatisfactory clearances of faults in local cable distribution networks, shortage of circuits, normal large unmet demand, large overdue bill from Government Departments, agencies etc.

He recommended that NTC should take immediate action such as:

- a. Display customer service chart in the counter.
- b. Maintain complaint desk.
- c. Provide adequate manpower.
- d. Encourage payment through Banks.
- e. Simplify new line connection procedures.
- f. Maintain a call free counter for billing information etc.

2.3 REVIEW OF PREVIOUS THESES

Very few theses have been written in the areas of marketing of NTC products. Most of the theses have not been fully able to explain the strengths and weaknesses of this organization. No dissertations have been available in the consumer satisfaction on NTC products. Thus an attempt has been made to review the available thesis, which is relevant to this study. Most research works have been done in the areas of manufacturing. But there are few in the areas of public utilities.

An Evaluation Study of Telecommunication Development in Nepal

Ms. Beena Bajracharya has conducted a research in "An evaluation study of telecommunication development in Nepal". The main objectives of the research were concerning the evaluation of telecommunication development in Nepal.

The other objectives of this research work were as follows:

- a. To examine the present and expected future utilization of telecommunication facilities.
- b. To analyze the pattern of telecommunication development in Nepal with reference to its past trends, present performance and future prospects.

The conclusions were as follows:

- a. The Government of Nepal has also stressed the development of telecommunication by giving high priority in each and every development plans.
- b. But the telecommunication facilities in Nepal are very low in comparison with other developing countries.
- c. The main problems of telecommunication development of Nepal are lack of financial resources, lack of technical knowledge and problem of management and administration etc.
- d. In the process of development of telecommunication sector of Nepal, foreign aid has played a significant role.
- e. International telecommunication union has contributed to the establishment of a training institute to train the telecommunication technicians of Nepal.¹⁹

Marketing of Mobile Telephone Service in Nepal

Mr. Tej Prasad Basyal has submitted a thesis on the topic "Marketing of Mobile Telephone Service in Nepal".

The general objectives of the study were as follows:

- a. To find out the marketing approach of NTC for marketing and promotion of Mobile phone.

¹⁹ Ms. Beena Bajracharya, "An evaluation study of telecommunication development in Nepal". An unpublished Master Degree Thesis, submitted to the institute of Humanities and Social Science for the Degree (MA) in Economics, Instruction Committee, Kathmandu 2040

- b. To know about the types of facilities those are used by mobile phone users from mobile phone service.

The main findings were as follows:

- a. When mobile telephone was just introduced in to Nepalese market, the application forms for the mobile line were not registered as NTC's expectation because of expensive cost of mobile telephone and its high deposit system as well as lack of detail information about its various utilities.
- b. Consumers get knowledge about mobile telephone and its various services through different media of advertising. Basically, various newspaper, magazine, FM radios and Television commercial are used as a media of advertising.
- c. The billing system of mobile telephone is not satisfactory since it doesn't include all details of outgoing and incoming calls.
- d. The selling price of mobile telephone that imposed by NTC is more expensive than the open market price. NTC's Financial Statement-2055/56 shows that, it is selling mobile set by including 54.60 per cent profit in its original cost where as it sells other ordinary telephone set by adding 25 to 27 per cent profit.

The recommendations were as follows:

- a. It will be better for NTC to minimize (deduct) the selling price of mobile set since it includes 54.60 per cent profit in its original cost.
- b. As regards to the tariff charge of mobile lines, the current international trunk charge is getting decreased way in international market thus proper adjustment should be made accordingly.
- c. Instead of decreasing local tariff charge, it will be better for NTC to cancel incoming charge. This will make great relief to the mobile subscriber as well as volume of complain will be reduced for NTC.
- d. It is better for NTC to classify its customers on the basis of using variety of services. Taking Bank-Guarantee from large scale customers and by applying "Fraud Management System" (Indicator of maximum amount entertainable for

- calls and line disconnection on getting amount picked up) will be beneficial for NTC as well as for the customers.
- e. NTC should provide training for front-desk staffs so that they can present effective answers to their customers.

2.4 RESEARCH GAP

In this way the past researches on Nepal's Telecommunication Services were mainly concerned with the economic aspects but not about the potentiality of various new services of mobile phones. Thus, this study is carried out to reveal the present situation of available communication services as well as the market potentiality of new mobile telephone service.

CHAPTER – III

3.0 RESEARCH METHODOLOGY

"Research methodology is a way to systematically solve the research problem. It facilitates the research work and provides reliability and validity to it."²⁰ Research methodology employed in this study is given below.

3.1 INTRODUCTION

The main objective of this research is to find out the level of consumer satisfaction towards the mobile telephone services of Nepal Telecom. This chapter looks into the various aspects of research methodology such as: research design, nature and sources of data, data collection procedure. By analyzing various aspects, the clear idea of strengths and weaknesses, opportunities and threats of NTC can be derived.

3.2 RESEARCH DESIGN

"Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The plan is the overall scheme or program of research. It includes an outline of what the investigator will do from writing the hypothesis and the operational implications to the final analysis of data."²¹

For exploring the secondary sources of information about different aspects of consumer satisfaction on mobile telephone, primary information was generated through interview with mobile phone users. The study is therefore exploratory as well as descriptive in nature. To generate primary data, a survey research design is applied in the study.

²⁰ Lal Bahadur Baniya; "A Study of Buyer's Behaviour in Pokhara: with Special Reference to Cross Cultural Buying Pattern", Page 23.

²¹ Fred N Karlinger, "Fundamental of Behavioral Research", Holf Rinchart & Winston. INC. USA

The analysis of this study is based on certain research design keeping in mind the objective of the study. Generally, research design means definite procedure and technique, which guideline studying profound ways for researcher ability. The main objective of this study is to find out the level of consumer satisfaction towards the mobile telephone services of Nepal Telecom. For this purpose, the research design of this study is used for analytical as well as descriptive methods of collected data. This study will give some valuable suggestions to strengthen the marketing policy of NTC as far as possible.

3.3 SOURCES OF INFORMATION/DATA

The present study is based on secondary as well as primary sources of information/data. A secondary source of data includes various periodicals, annual reports and MIS reports that are published by NTC. Besides, concerned Department, Section-Heads were interviewed for the clarification of data. Primary sources of information are the people using mobile telephone service provided by NTC.

3.4 SAMPLING PLAN

The total number of people using mobile telephone service of NTC represents the population of the study. Sample unit of the study comprises the individual users who own the mobile phone. Since the population of the study is large, a sample of 100 mobile phone users was selected on the basis of judgmental sampling from the different cross section of the society for the study.

3.5 DATA COLLECTION PROCEDURE

For collecting primary data, the above mentioned population was interviewed by telephone through self – administered questionnaire. Also few copies of structured questionnaires were distributed to them by field visit. Sample of the questionnaire is presented at appendix. Similarly the secondary data and information were collected through desk research reviewing, publications of NTC booklets and reports lying at the central library of NTC, other magazines and TU journals at Kirtipur.

3.6 METHODS OF ANALYSIS

The collected data are thoroughly checked, compiled and presented in appropriate table to facilitate analysis and interpretation. Analysis has been done descriptively as well as statistically. For the analysis, statistical tools such as ranking, average, percentage, bar-diagram etc. are used.

CHAPTER – IV

4.0 DATA PRESENTATION AND ANALYSIS

This chapter deals with presentation and analysis of data, collected from the official periodicals as well as from the respondents and interpreted according to the objectives of the study related to consumer satisfaction on mobile phone introduced by NTC.

As mentioned in the research methodology 100 samples have been collected 20 each from different cross section of the society. The samples are derived from business persons, students, job holders, service professionals, and others. A list of 18 questions has been distributed as presented in the appendix. The data collection has been conducted as per the questionnaire survey by meeting the respondents after having them exposed to the objective of the survey and necessary concepts provided to them.

4.1 OBJECTIVE-WISE ANALYSIS AND INTERPRETATION OF DATA:

The study has been guided by five objectives. In order to meet these objectives, the collected data have been analyzed and interpreted on objective-wise basis.

4.1.1 Objective One: To analyse the expectations and areas of satisfaction of mobile phone users.

The first objective of this study is concerned about the areas in which consumers are highly satisfied with the mobile services provided by NTC, areas which are needed to be improved in the future as well as their expectations towards globally emerging new services in telecom sector to be introduced by NTC. For this purpose, the researcher has asked different questions to the sample users of NTC mobile phone in order to acquire their views towards different aspects of mobile phones and what they have expected from it in the future.

Question no. 6 to 9 on the questionnaire has been used to do so. Similarly, the researcher has also consulted the concerned authorities of NTC. By some visits to the NTC and with the help of some periodicals published by it, the researcher has found various services which NTC currently provides to its mobile phone users as well as some new services which it is planning to introduce in the future.

4.1.1.1 Services from Mobile Phones:

The services provided by NTC in its mobile phone can be divided in to two classes: Main Service and Supplementary Service.

(a) Main Service:

The main services available in GSM are as follows:

1. Voice (Regular Telephony and Emergency Calls)

It is one of the main services of mobile phones which allow voice talk.

2. Data (Standard rate up to 9.6 KBPS in GSM and 114 KBPS in CDMA)

This service is used for internet connection. In GSM network, data service is provided through General Packet Radio Service (GPRS). It offers 'always-on', higher capacity, Internet-based content and packet-based data services. GPRS enables services such as Internet browsing, e-mail on the move, multimedia messages. GPRS offers complete solutions through which you can always stay online and get connected with family, friends.

But in CDMA network, the data service is provided through Packet Data Switching Network (PDSN). To use PDSN Data Service, the Phone/PDSN Card is connected to the computer. Depending on the type of Phone/PDSN Card the respective software needs to be installed in the computer. In the Dial up connection setup uses dialing no. as #777 and the username and password provided by NTC.

3. VMS (Voice Mail System)

VMS enables a voice message to be stored for later retrieval by mobile recipient, either because he was not reachable at the time of the call or because the calling party chooses to access the voice mailbox.

4. SMS (Short Message Service)

SMS enables a means of exchanging short text message up to 160 characters between mobile telephones and other networks.

5. MMS (Multimedia Message Service)

MMS enables a means of exchanging multimedia such as short video clips, pictures, sounds etc. up to 300 Kilobytes between mobile phones through GPRS connection.

6. National Roaming

Subscriber can travel to different areas of the country and can make or receive calls with their same number. However, the capability to make or receive calls at any place depends on the availability of network coverage. In starting phase of mobile service, NTC had GSM network only and national roaming was limited to four places including Kathmandu Valley. But currently, NTC has two mobile networks – GSM and CDMA.

The CDMA network coverage has been expanded to all 75 districts and over 2729 VDCs as well as all municipalities and the GSM network coverage has been expanded to 39 districts. So currently, subscribers can move widely across the country with their mobile phones using the roaming facility. The details of area coverage are presented in the appendix.

7. International Roaming:

Mobile phone was developed primarily to have a standard system that grants wide area mobility. The subscriber may travel to another country which has a network and can make or receive calls with their own mobile, paying later at home, provided there is an agreement between the mobile phone network operators of different countries.

NTC has made inbound roaming agreement with more than 100 GSM operators in more than 40 different countries with some popular destinations like India, China, Thailand, Singapore, Hong Kong, Malaysia, United Kingdom, France, Germany and many more. Subscribers of NTC's GSM service are able to carry their own mobile to any of these countries. Currently, this facility is not available on the CDMA Network.

(b) Supplementary Service:

In addition to the above mentioned main services, the following Supplementary Services are also available in mobile phones. However, currently CRBT and balance transfer service are available only in GSM Network:

TABLE: 2
Supplementary Services of Mobile phone

S.N.	Types of Supplementary Services	Characteristics
1	Calling line Identification	Displays the number of calling party to the recipient.
2	Call Forward	A subscriber can forward his call to any other number in mobile or fixed networks.
3	Call Barring	A subscriber can bar incoming calls or outgoing calls or long distance calls.
4	Call Waiting & hold	A subscriber who is already engaged in a call can be notified of another incoming call and s/he can place the current call on hold and then talk to the new caller.
5	Multi-Party Conference	A subscriber can create a call with two or more parties at the same time.
7	Caller Ring Back Tone	A Subscriber can choose kind of ring back tone which is heard by the calling parties
8	Balance Transfer Service	A Subscriber can transfer the balance from one pre-paid mobile number to another pre-paid mobile number

In the context of different services available on NTC mobile phones, the researcher has asked question to different respondents that what sort of services they are currently using in their mobile phones in question no. 6. Their response is as follows:

TABLE: 3**Use of various services of mobile phone by different sectors of users**

<u>Mobile Phone Users</u>	<u>Voice with National Roaming</u>	<u>Caller Ring Back Tone</u>	<u>Data Service</u>	<u>Call waiting & hold</u>	<u>Call Forward</u>	<u>Call Barring</u>	<u>Voice Mail</u>	<u>International Roaming</u>	<u>Calling Line Identification</u>	<u>Multi Party Conference</u>	<u>Short Message Service</u>	<u>Balance Transfer Service</u>	<u>Multimedia Message Service</u>
Business Sector	20	10	5	12	12	4	5	8	20	14	20	5	5
Student Sector	20	17	3	5	15	2	4	0	20	4	20	17	8
Job holder	20	15	2	8	10	5	4	2	20	3	20	12	2
Service professionals	20	12	4	10	3	2	7	4	20	7	20	8	2
Others	20	10	1	5	8	3	2	0	20	2	20	15	1
Total	100	64	15	40	48	16	22	14	100	30	100	57	18

Source: Questionnaire

As per the table and diagram above, it is found that voice service with national roaming facility, SMS and calling line identification are used by every mobile phone users. The second large users are of Caller Ring Back Tone service. This service is used by 64%. Whereas Balance transfer, Call forward and Call waiting & hold service users are 57, 48 and 40 percent respectively. Multi Party Conference service is used by 30% and Voice Mail service by 22%. Services that are least used are MMS 18%, Call Baring 16%, Data service 15% and International Roaming 14%.

If we look at class-wise popularity of different services, voice service with national roaming facility, SMS and calling line identification are the most popular services for every class of people under research. These services are used by each mobile phone users of every class.

Services like multi party conference, call waiting & hold and call forwarding services are more popular than CRBT and international roaming among business sector. Similarly, data, voice mail, MMS, Balance transfer and call barring services are the least preferred among them. The figures are 70% for multi party conference, 60% each for call waiting & hold and call forwarding, 40% each for CRBT, 25% each for data, voice mail, MMS and Balance transfer service and only 20% for call barring service.

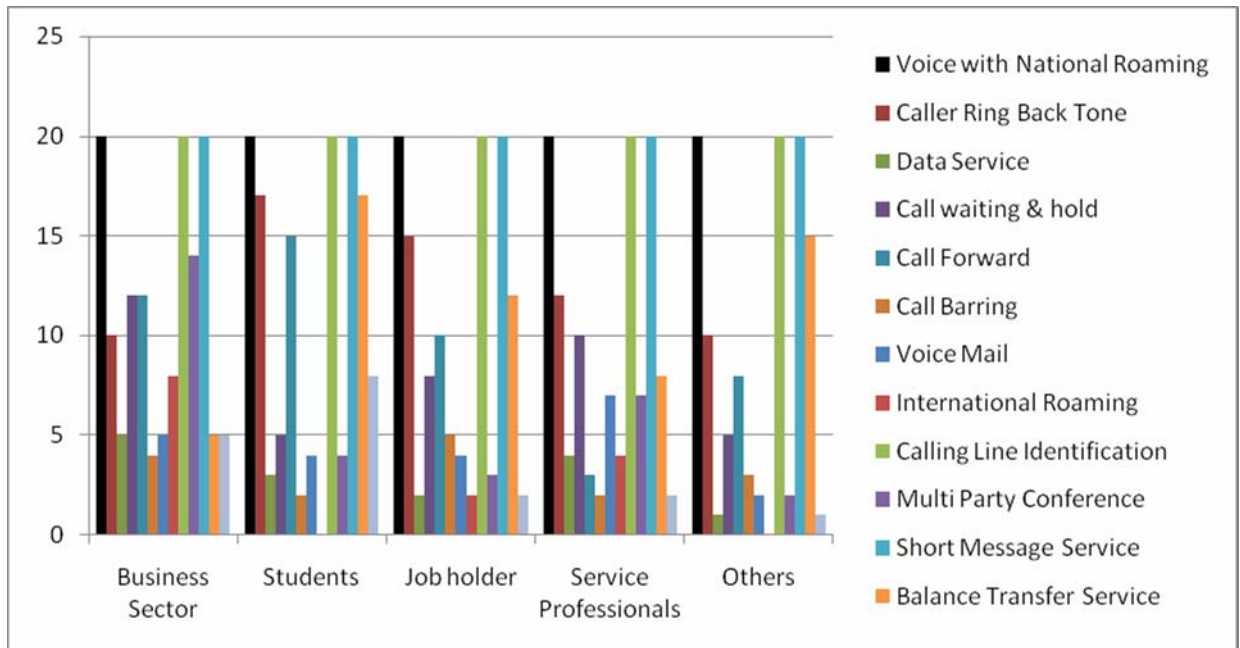
The student sectors' choices are rather different than the business sectors'. Services like CRBT, Balance transfer, Call Forwarding and MMS are more popular among students. But other services like Data Service, Call Waiting & Hold Service, Call Barring, Voice Mail, and Multi-Party Conference are less popular among students. No student under research has been found using International Roaming Service. The figures for students' choice are 85% for CRBT and Balance transfer, 75% for Call Forwarding, 40% for MMS, 25% for Call Waiting & Hold, 20% each for Voice Mail and Multi-Party Conference and 10% for Call Barring.

CRBT and Balance transfer services are more popular than other services among Job holders. The figures are 75% and 60% respectively for them using these services. About half of them also like Call Forwarding (50%) and Call Waiting & Hold (40%) services. All other services are least preferred among them. As these services users are below 25%.

Service professionals and others sectors are simple users. Among service professionals, CRBT and Call Waiting & Hold services seem more popular of which figures are 60% and 50% respectively. About 40% of service professionals use Balance transfer service and 35% of them use each of Voice Mail and Multi-Party Conference services. All other services users among service professionals are less than 20%.

Users at Others category are more similar with students. Balance transfer and CRBT are more popular. Figures of these services are 75% and 50% respectively. About 40% of them use Call Forwarding. And all other services are used by just under 25% of this category.

Figure:1
Use of various services of mobile phone by different sectors of users



Similarly the researcher has also asked whether services provided by NTC are sufficient or not in question no. 7. Regarding this question the response is as follows:

TABLE: 4
Sufficiency of Mobile Services provided by NTC

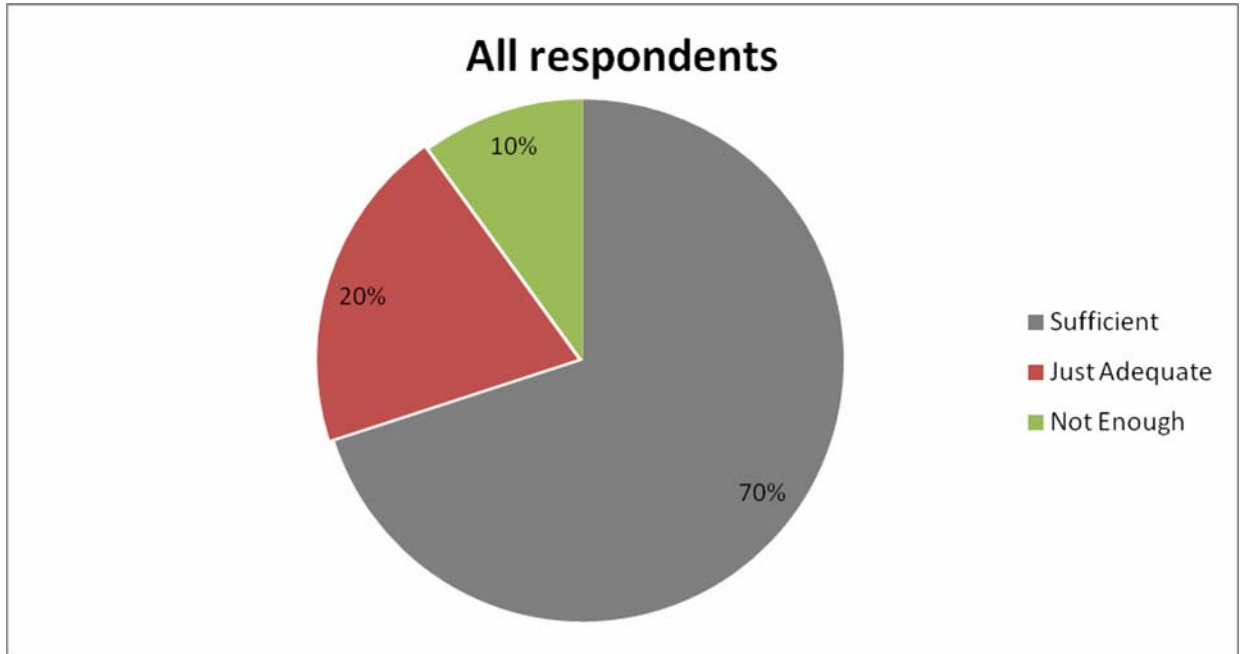
Mobile Phone Users	Sufficient	Just Adequate	Not Enough	Total
All respondents	70	20	10	100
Percentage	70%	20%	10%	100%

Source: Questionnaire

As per the Table 4 above and Figure 2 below, 70% of the respondents' response is that the services of mobile phone provided by NTC are Sufficient. 20% of them found that the NTC mobile services are just adequate and 10% consider the services are not enough. So it can be concluded that majority of NTC Mobile users are satisfied in terms of sufficiency of services in the mobile phone provided by NTC.

Figure: 2

Sufficiency of Mobile Services provided by NTC



4.1.1.2 Areas of Satisfaction

Question no. 8 of the questionnaire is about the areas of satisfaction. In this question, the researcher has asked the respondents that among the various aspects of NTC mobile phones, which ones have satisfied them most. The responses on the query are as follows:

TABLE: 5

Areas of Satisfaction of mobile phones provided by NTC

<u>Areas of Satisfaction</u>	<u>Services of Mobile Phones</u>	<u>Tariff Rate</u>	<u>Area Coverage</u>	<u>Network Connection</u>
Percentage satisfied	40%	5%	50%	5%

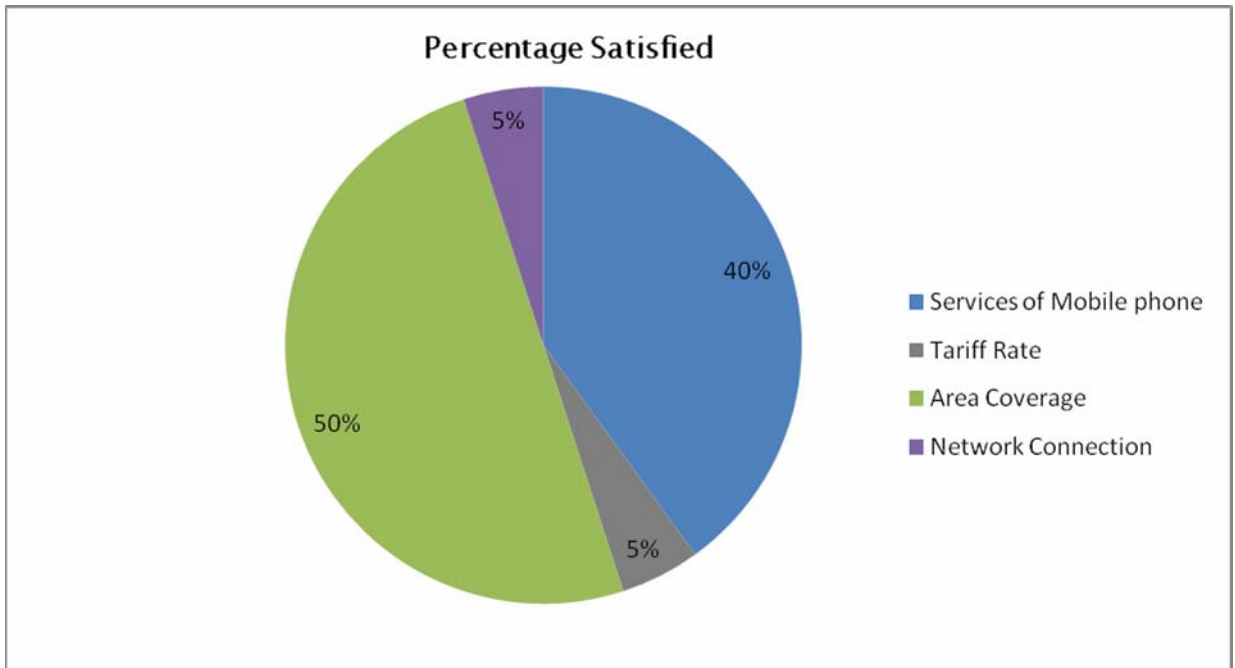
Source: Questionnaire

Among various aspects of NTC mobile phones, 50% of the respondents have exposed that area coverage of NTC Mobile Network has satisfied them most while 40% have revealed their most satisfaction on services provided by NTC in their

Mobile phone. Tariff Rate and Network Connection of NTC Mobile phone is the least satisfied aspect. Just 5% each of users have most satisfied with both. So it can be concluded that NTC Mobile users are most satisfied with Network Coverage Area and least satisfied with Network Connection and tariff rate of Mobile phone.

Figure: 3

Areas of Satisfaction of NTC Mobile phone



4.1.1.3 Expectations of mobile phone users

The researcher has asked a question in question no. 9 regarding mobile phone user's future expectations about different aspects of NTC mobile phones. The responses are as follows:

TABLE: 6

Future Expectations on different aspects of NTC Mobile phone

<u>Mobile Phone Users</u>	<u>Reduce price</u>	<u>Improve quality of service</u>	<u>Introduce new services</u>	<u>Expansion of coverage area</u>
All respondents	30	50	5	15
Percentage	30%	50%	5%	15%

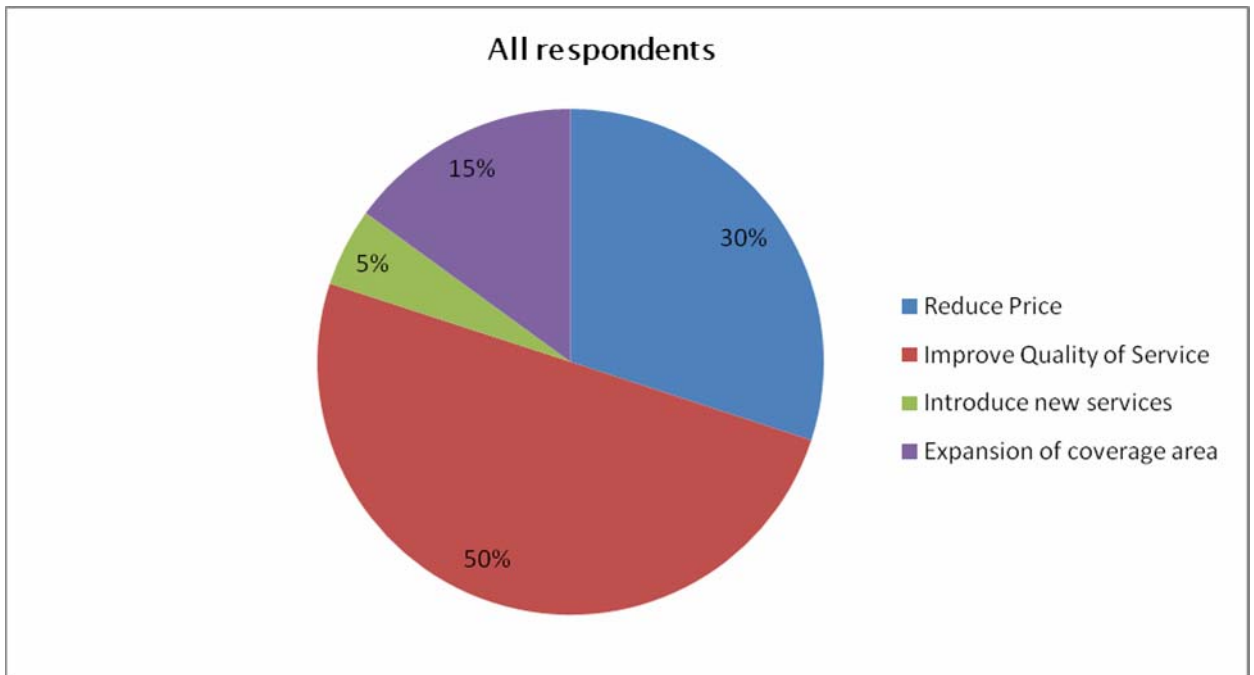
Source: Questionnaire

Fifty percent respondent's response is that NTC should improve the quality of service of its Mobile phone in the future. Next 30% sample users' suggestion is

towards price reduction. Fifteen percent of them have replied that network coverage area should be expanded and only few, that is, 5% of them want NTC to introduce new services on their mobile service. A conclusion can be derived that NTC should concentrate its greater efforts to improve quality of service and price reduction.

Figure: 4

Future Expectations on different aspects of NTC Mobile phone



4.1.2 The Profiles of NTC Mobile phone users

The researcher has also analysed the different profiles of NTC Mobile phone users. With regards, equally balanced samples of 100 mobile phone users residing in Kathmandu Valley were taken into account. This includes 20 each from business sector, student sector, job holders, service professionals, and others. The questionnaire has been distributed among all the sample users of NTC mobile phones. Then "Telephone Interview" as well as personal meeting has also been conducted. The related questionnaires in this connection are presented in question number 1 to 5 and the results and concerned analysis are presented below.

4.1.2.1 Age Group:

Question no. 1 in the questionnaire is related to age group.

TABLE: 7

Age Group of Mobile phone Users

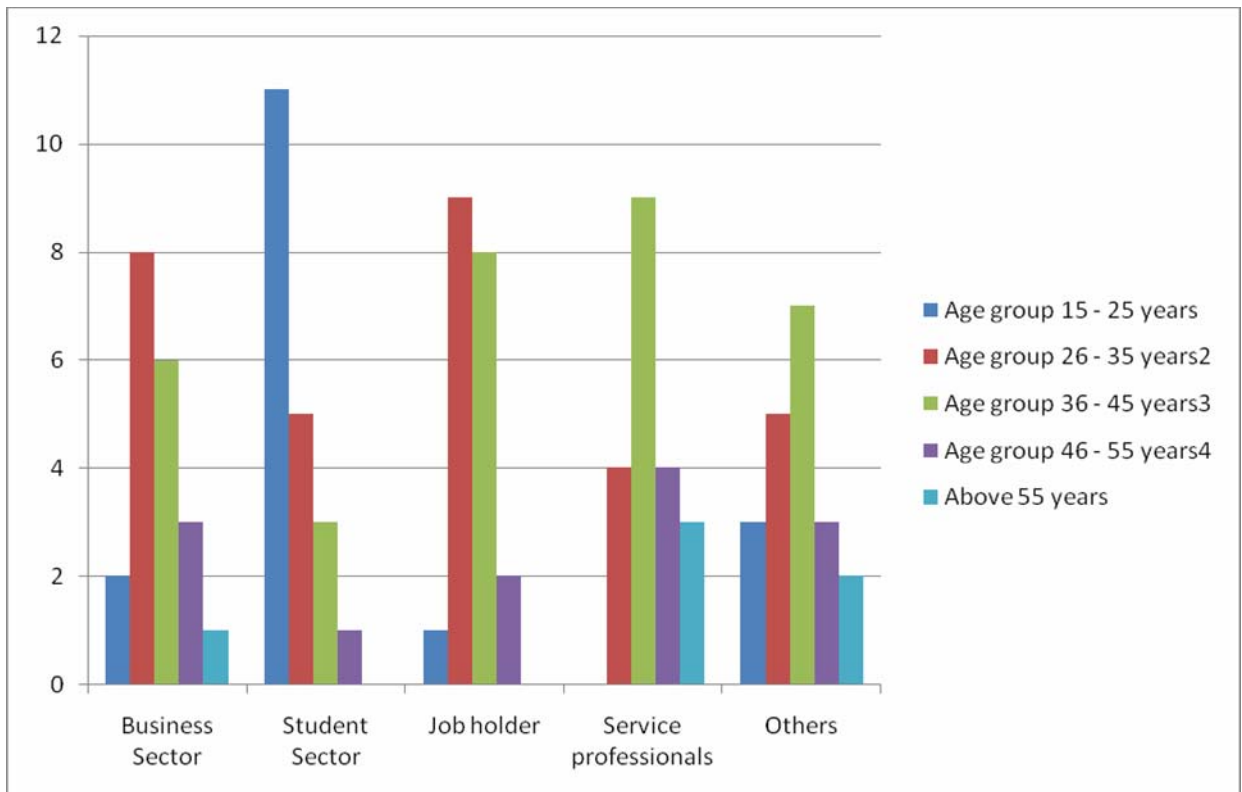
Mobile Phone Users	Age -Group (Years)					Total
	15-25	26-35	36-45	46-55	Above 55	
Business Sector	2	8	6	3	1	20
Student Sector	11	5	3	1	0	20
Job holder	1	9	8	2	0	20
Service professionals	0	4	9	4	3	20
Others	3	5	7	3	2	20
Total	17	31	33	13	6	100

Source: Questionnaire

The Table 7 above and Figure 5 below depict the age group of the NTC mobile phone users. It can be seen from the table that, out of 100 respondents, 33 percent fall into the age group of 36–45 years, 31 percent fall into the age group of 26–35 years, 17 percent are in the age group of 15–25 years, 13 percent fall into the age group of 46–55 years, and 6 percent are of more than 55 years old. So it seems that most of the mobile phone users fall in the age group of 26 to 45 years.

Figure: 5

Age Group of Mobile phone Users



4.1.2.2 Family Size

Question no. 3 in the questionnaire is related to family size.

TABLE: 8

Number of family members of Mobile phone Users

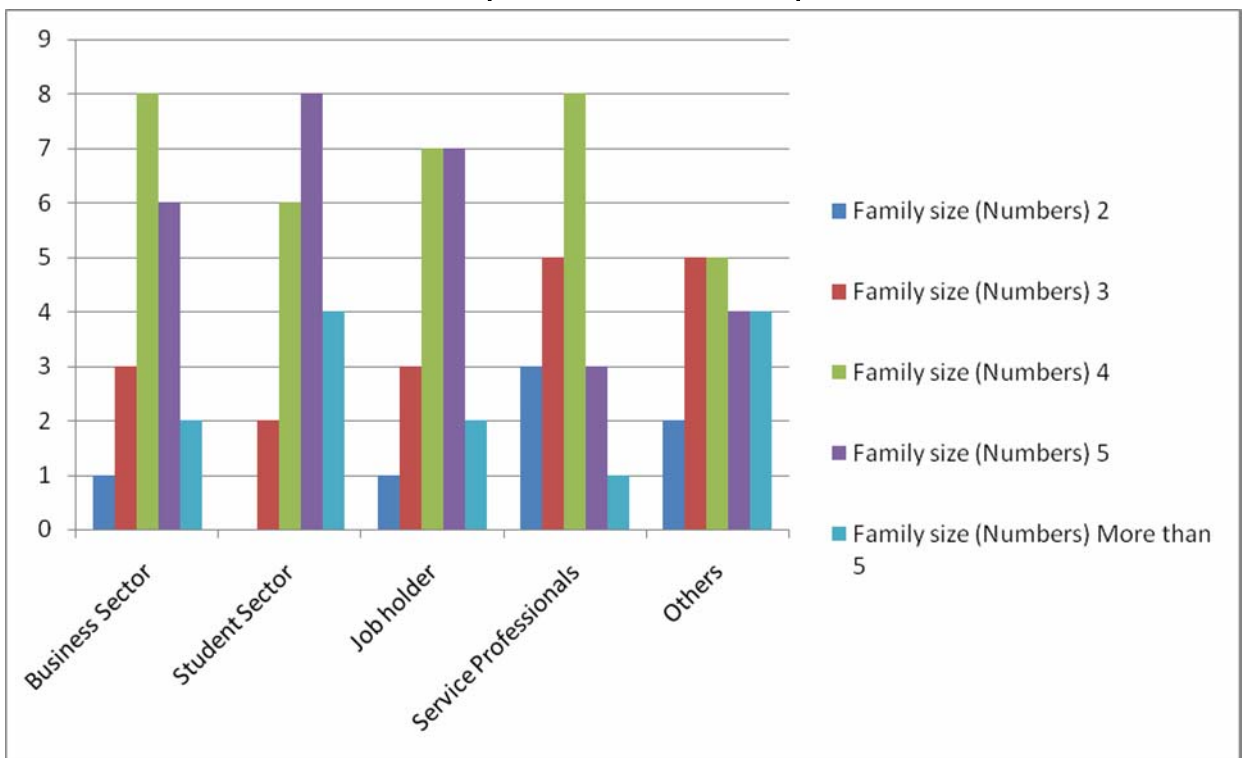
Mobile Phone Users	Family Size (Numbers)					Total
	2	3	4	5	More than 5	
Business Sector	1	3	8	6	2	20
Student Sector	0	2	6	8	4	20
Job holder	1	3	7	7	2	20
Service professionals	3	5	8	3	1	20
Others	2	5	5	4	4	20
Total	7	18	34	28	13	100

Source: Questionnaire

Regarding the family size of the respondents, Table 8 above and Figure 6 below show that, 34 percent have four family members, 28 percent have five family members, 18 percent have three family members, 13 percent have more than five family members, and 7 percent have two family members. Thus, it is known that most of the mobile users have four to five family members.

Figure: 6

Number of family members of Mobile phone Users



4.1.2.3 Educational background of Mobile Phone Users

Question no. 2 in the questionnaire is related to educational background.

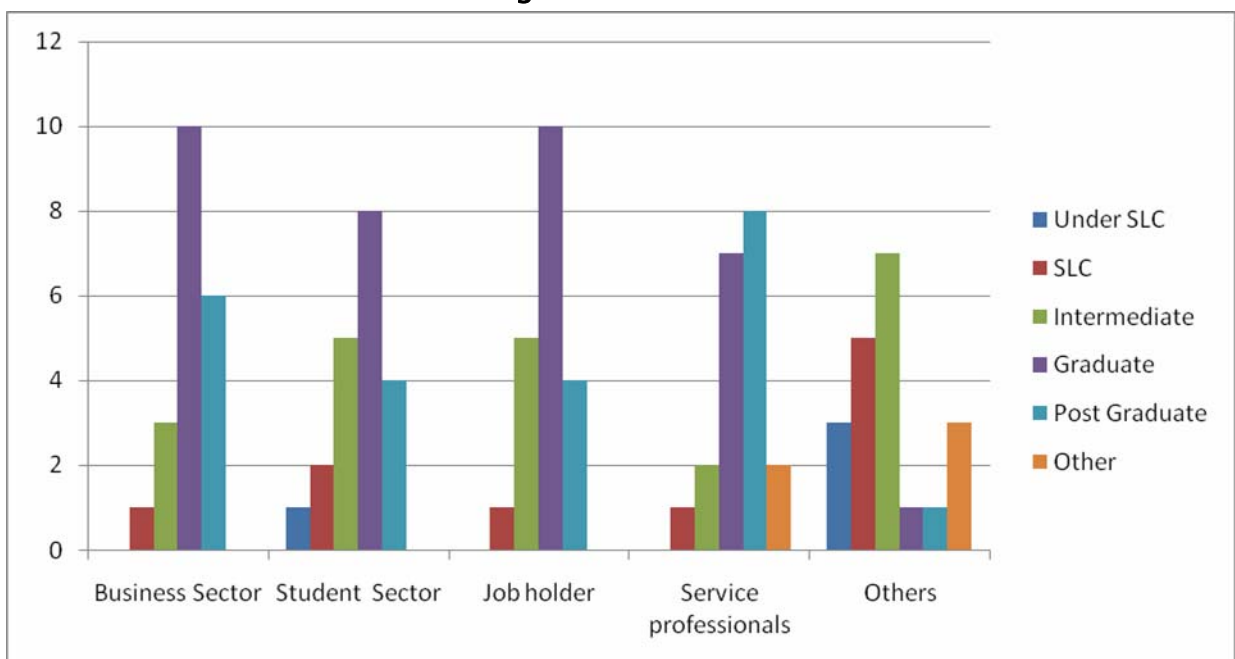
TABLE: 9
Educational background of Mobile Phone Users

<u>Mobile Phone Users</u>	Education -Group						Total
	Under SLC	SLC	Inter-mediate	Graduate	Post Graduate	Other Specify	
Business Sector	0	1	3	10	6	0	20
Student Sector	1	2	5	8	4	0	20
Job holder	0	1	5	10	4	0	20
Service professionals	0	1	2	7	8	2 CA	20
Others	3	5	7	1	1	3 PHD	20
Total	4	10	22	36	23	5	100

Source: Questionnaire

The Table 9 above and Figure 7 below show the educational background of NTC mobile phone users. From the table it is evident that 36 percent of the total respondents are Graduate, 23 percent are of Post-Graduate, 22 percent are of Intermediate Level. Similarly 10 percent are of SLC Level and 5 percent mobile telephone users have had specific qualification like PHD and Chartered Accountant and 4 percent are of under SLC Level.

Figure: 7
Educational background of Mobile Phone Users



4.1.2.4 Monthly Income of Mobile Phone Users

Question no. 4 in the questionnaire is related to monthly income.

TABLE: 10

Monthly Income Level of Mobile Users (NRs)

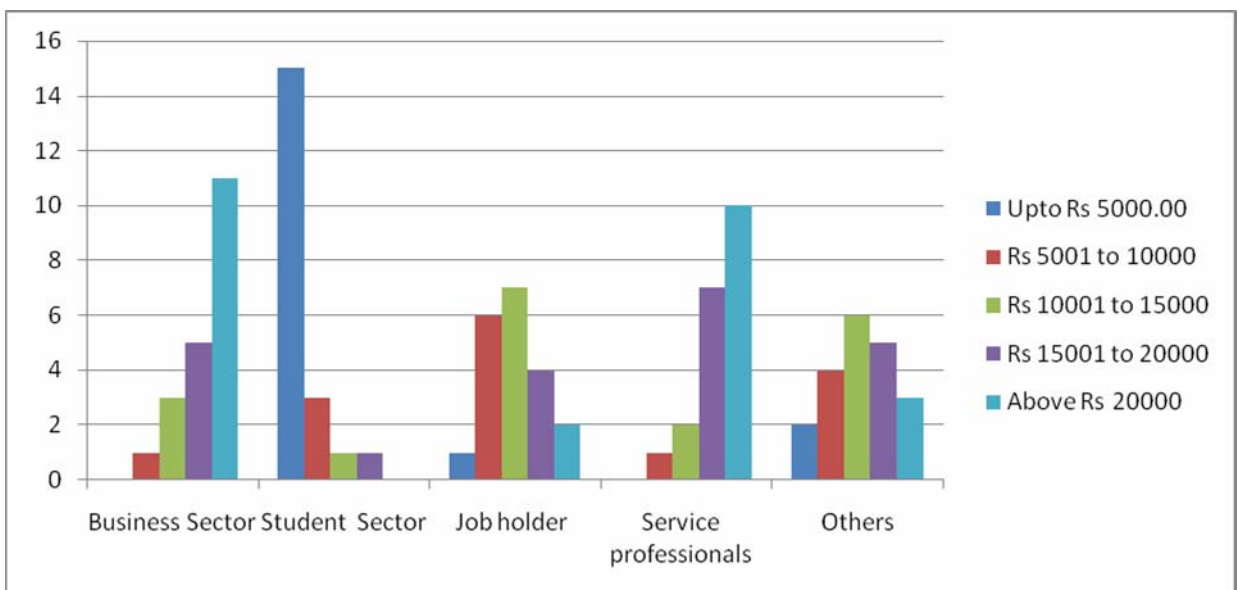
<u>Mobile Phone Users</u>	Upto 5000	5001 to 10000	10001 to 15000	15001 to 20000	Above 20000	Total
Business Sector	0	1	3	5	11	20
Student Sector	15	3	1	1	0	20
Job holder	1	6	7	4	2	20
Service professionals	0	1	2	7	10	20
Others	2	4	6	5	3	20
Total	18	15	19	22	26	100

Source: Questionnaire

The Table 10 and Figure 8 reveal the monthly income of NTC mobile customers. It is evident from the table that 26 percent of mobile phone users have more than Rs 20000.00, 22 percent of mobile users have the monthly income of Rs 15001.00 – 20000.00, 19 percent of the respondents have the monthly income of Rs 10001.00 – 15000.00, 18 percent have up to Rs 5000.00, and 15 percent have the monthly income of Rs 5001.00 – 10000.00.

Figure: 8

Monthly Income Level of Mobile Users



If we see the sector-wise household income of mobile users, different income pattern can be seen. Business sectors and service professionals are high income earning sectors. Fifty five percent business professionals and 50% service professionals earn more than Rs 20,000.00 per month. But the students are the least earning sectors. Seventy five percent of them earn less than Rs 5,000.00 per month. But the job holders and other occupation holders are average earning sectors.

4.1.2.5 Monthly Expenditure on Mobile phones

The Table 11 and Figure 9 reveal the monthly expenditure amount on mobile phones of NTC mobile customers. It is seen from the table that 36% of NTC mobile users spend upto Rs.200.00, 23% spend more than Rs.600.00, 21% spend Rs.401.00 to Rs.600.00, and 20% users spend Rs.201 to 400.00.

TABLE: 11

Monthly Expenditure on Mobile phones of NTC Mobile Users (NRs)

Mobile Phone Users	Less than 200	201 to 400	401 to 600	Above 600	Total
Business Sector	1	3	6	10	20
Student Sector	15	3	1	1	20
Job holder	9	6	3	2	20
Service professionals	1	4	8	7	20
Others	10	4	3	3	20
Total	36	20	21	23	100

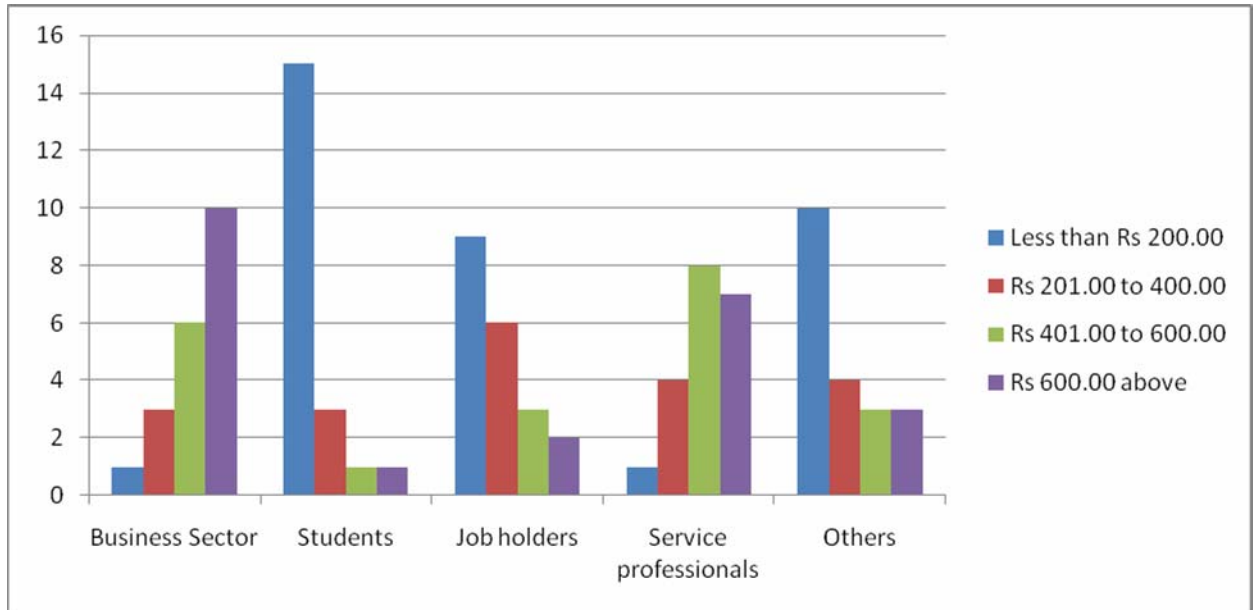
Source: Questionnaire

If we see the sector-wise expenditure on mobile phones, different expenditure pattern can be seen. Business sectors and service professionals are higher billing customers. About 50% of business sector and 35% service professionals spend more than Rs.600.00 and 30% of business sector and 40% of service professionals spend Rs.401.00 – 600.00 per month on their mobile phones.

All other category customers are lower billing customers. Most of them spend upto Rs.200.00 per month. The billing range of Rs.201.00–400.00 seems common for almost all users of NTC mobile phones.

Figure: 9

Monthly Expenditure on Mobile phones of NTC Mobile Users



4.1.3 Objective Two: To find out the major strengths and weaknesses of NTC at present

Regularly assessing and monitoring strengths and weaknesses is an important task for a business organization as it helps to tackle the threats the company currently is facing. There are many types of instruments to assess strategic strengths and weaknesses of a business organization.

They belong to the different functional areas of the organization. For example, there may be Production sector's strengths and weaknesses; managerial strengths and weaknesses; financial strengths and weaknesses; marketing strengths and weaknesses etc.

But these all are interrelated with each other. Different types of analysis have to be done to find out the different strengths and weaknesses components. For the sake of this dissertation, only strengths and weaknesses of NTC for its mobile phone marketing have been considered.

For this regard, certain components like tariff rate, condition of network connection, clarity of sound, various services in the mobile phone, advertisement about mobile services, and quality in the services have been considered as tools to assess

strengths and weaknesses and analyzed accordingly through the questionnaire to find out strengths and weaknesses at present and in future.

4.1.3.1 Price (Cost & Tariff)

In general, price is value or amount of money, sacrificed to obtain a particular product or services and in economic sense price is value–expressed in terms of rupee or dollars or any other monetary medium of exchange.²²

Actually price is regarded as a backbone on which the success of marketing program largely depends on. No product, no design and no marketing strategy can be formulated without consideration of price. Price setting has become one of the most complicated and competent jobs these days because it is directly concerned with the objectives of the organization and the existing market situation like, demand and supply, competition, market rate and other marketing mix. There are several methods of pricing and it can be categorized into three ways:

- (1) Cost oriented pricing
- (2) Demand oriented pricing and
- (3) Competition oriented pricing.

If the price is fixed on the basis of cost it is said to be cost oriented pricing. Under cost oriented pricing different companies use different methods such as mark–up pricing, target return pricing, marginal cost pricing, average cost pricing break even pricing methods etc. But in demand oriented pricing the price rate totally depends on what the position of demand is i.e. price rate may be fluctuate reversibly according to the fluctuation of product’s demand.

Similarly in competition oriented pricing price is charged according to the market rate and thus cost of the product will be in same level as the competitor’s product. In the context of mobile telephone service, NTC has adopted competition oriented pricing method.

²² Dr. Shyam Krishna Shrestha, “Marketing Management and Strategy”, First Edition 1992, Page 112.

4.1.3.2 Installation Charge for the Customer and Its Procedure

Person wishing to have a mobile phone must fill-up an application form as prescribed by NTC. The customer should pay Rs.50 for registration of Mobile Phone. A photocopy of citizenship certificate and a copy of passport size photograph should be attached with the application form.

NTC has fixed the following installation charges that must be paid after acceptance or approval of application form by the applicants.

TABLE: 12

Post-Paid Subscription Charge

S.N.	Description	Amount Rs.	
		With STD	With STD & ISD
1	Credit Limit	3000.00	5000.00
2	SIM Card	500.00	500.00
3	VAT	65.00	65.00
4	Ownership Charge	1130.00	1130.00
5	Registration Charge	50.00	50.00
	Total	4745.00	6745.00

Source: NTC website www.ntc.net.np

TABLE: 13

Pre-Paid Subscription Charge

S.N.	Description	Amount Rs.
1	SIM Card	500.00
2	VAT	65.00
3	Advance Recharge	500.00
4	Ownership Charge	20.00
5	Registration Charge	50.00
	Total	1135.00

Source: NTC website www.ntc.net.np

In the case of Post-Paid connection, the subscriber can pay installation charge as his necessity of the service i.e. the volume of deposit amount depends upon the service he required. After the payment of required installation charges, NTC provides mobile connection immediately.

4.1.3.3 Tariff Rate of Mobile Calls

The tariff rates of mobile calls imposed by NTC vary with:

- The type of calls,
- The time duration taken by the call,
- The time on which the call occurs i.e., Day time/Night time,
- Types of network (mobile to mobile or to other networks).

The details of tariff rate are as shown in the following table:

TABLE: 14
Tariff Rate Alternatives

S.N.	ALTERNATIVES			GSM		CDMA
				POST-PAID	PRE-PAID	PRE-PAID
FOR LOCAL CALLS						
1	PEAK HOUR	(8:00 - 20:00)	SUNDAY - FRIDAY	1.60	2.00	1.80
			SATURDAY	1.00	2.00	1.80
2	OFF PEAK HOUR	(6:00 - 8:00) & (20:00 - 22:00)	SUNDAY - FRIDAY	1.00	2.00	1.80
			SATURDAY	1.00	2.00	1.80
		(22:00 - 6:00)	SUNDAY - SATURDAY	0.75	0.75	0.75
FOR STD CALLS						
3	PEAK HOUR	(8:00 - 20:00)	SUNDAY - FRIDAY	2.60	3.00	2.80
			SATURDAY	2.00	3.00	2.80
4	OFF PEAK HOUR	(6:00 - 8:00) & (20:00 - 22:00)	SUNDAY - FRIDAY	2.00	3.00	2.80
			SATURDAY	2.00	3.00	2.80
		(22:00 - 6:00)	SUNDAY - SATURDAY	1.75	1.75	1.75

Source: NTC website www.ntc.net.np

In addition to the above mentioned charges, other charging information is as follows:

- a. In post-paid mobile, NTC has provided free talk time worth Rs 500.00 in monthly charge of Rs 500.
- b. In connection to charging of mobile bills, the pulse rate is ascertained separately for local and domestic trunk as well as for international calls i.e., per 10 seconds for local and domestic trunk and per 6 seconds for international calls.
- c. The charge will be calculated as per duration of call, but it will be rounded off each 10 seconds even when it is less than 10 seconds, for local and domestic trunk calls. In the case of international trunk calls, the duration of call will be rounded in multiples of 6 seconds duration.

d. Customer of Local Fixed Telephone (PSTN) subscriber calling to local mobile subscriber will be charged NRs1.00 per minute. No Off-hour discount will be applicable.

Customer of Local Fixed Telephone (PSTN) subscriber initiating a trunk call to mobile subscriber will be charged as per the current domestic trunk tariff rate of local fixed telephone line (PSTN). While summarizing the pricing procedures of mobile telephone service, we find that NTC is adapting competitive oriented pricing day by day by reducing price of its mobile phones.

This may be because of the presence of competition in mobile phone sector. In achieving the objectives stated above, the researcher has asked questions to various respondents in question number 10 to 14 of the questionnaire distributed. The response is as follows:

4.1.3.4 Response towards tariff rate of Mobile phone

In question no. 10 of the questionnaire, the samples were asked for their opinion about the tariff rate of NTC Mobile services.

TABLE: 15

Response towards tariff rate of Mobile phone

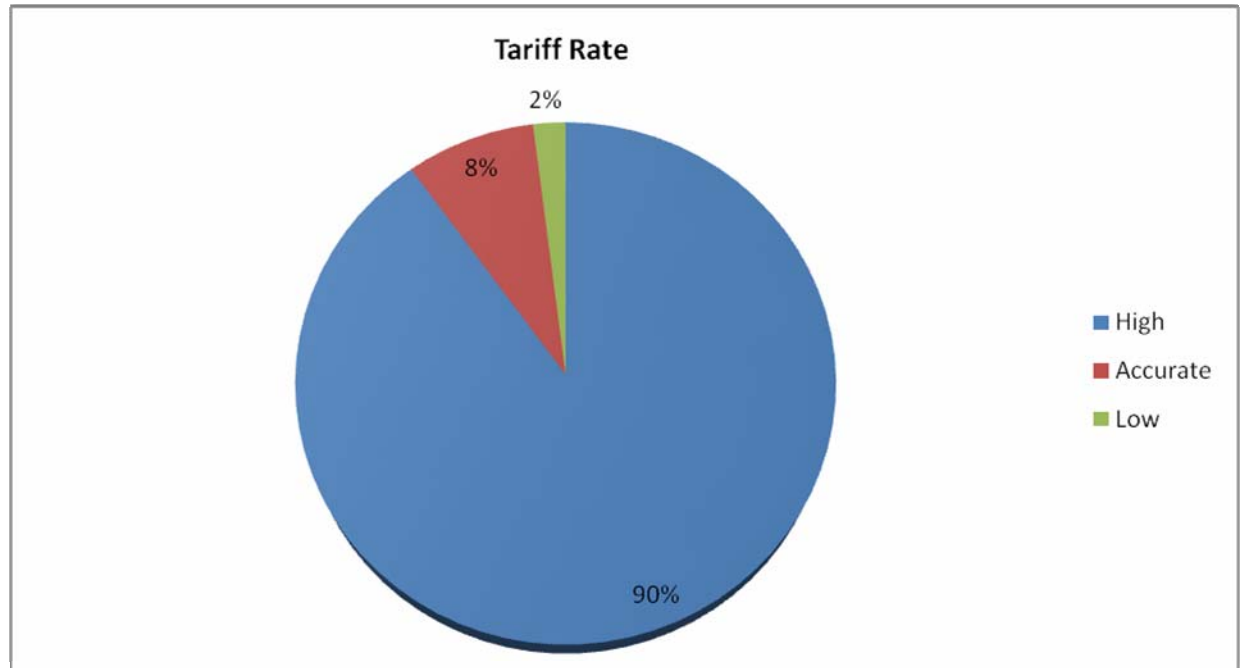
Mobile Phone Users	High	Accurate	Low	Total
All respondents	90	8	2	100
Percentage	90%	8%	2%	100%

Source: Questionnaire

The above Table and Figure below show that 90 responses among the 100 respondents are that it is high, 8 responses are that the rate applied by NTC is accurate and two of them reply that it is low. So it is clear that the current tariff rate of mobile phone is high which seems to be a weakness component of NTC.

Figure: 10

Response towards tariff rate of Mobile phone



4.1.3.5 Differential tariff rate with respect to time interval

In question no. 11, the respondents were asked for their opinion about differential tariff rate with respect to time interval.

TABLE: 16

Response towards Differential tariff rate with respect to time interval

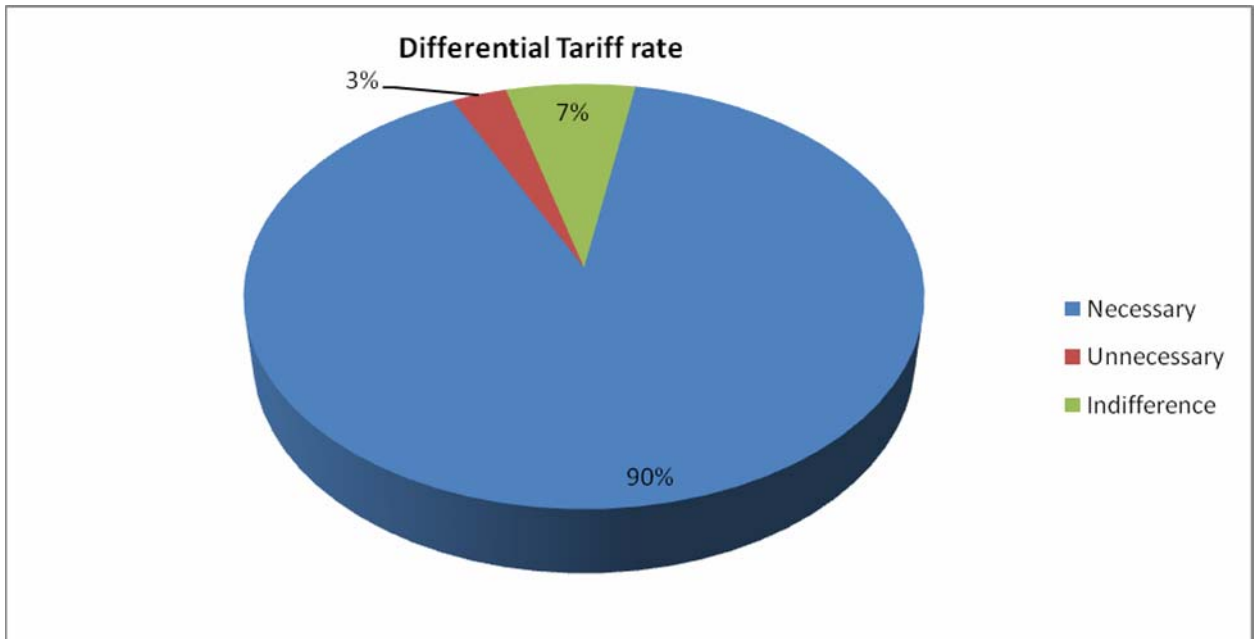
Mobile Phone Users	Necessary	Unnecessary	Indifference	Total
All respondents	90	3	7	100
Percentage	90%	3%	7%	100%

Source: Questionnaire

As per the Table 16 and Figure 10, 90 of the respondents' response is that differential tariff rate as per the time interval is necessary. Whereas 7 of them said that they are indifference towards it and 3 of them felt that it is unnecessary. So it is clear that the differential tariff rate of mobile phone, which NTC has applied for, is highly appreciated by most of the costumers. So it certainly is a strength component of NTC.

Figure: 11

Response towards Differential tariff rate with respect to time interval



4.1.3.6 Condition of network connection

The researcher has asked in question no. 12 about the condition of network connection of NTC Mobile phones. The responses are as follows:

TABLE: 17

Response towards Condition of Network Connection

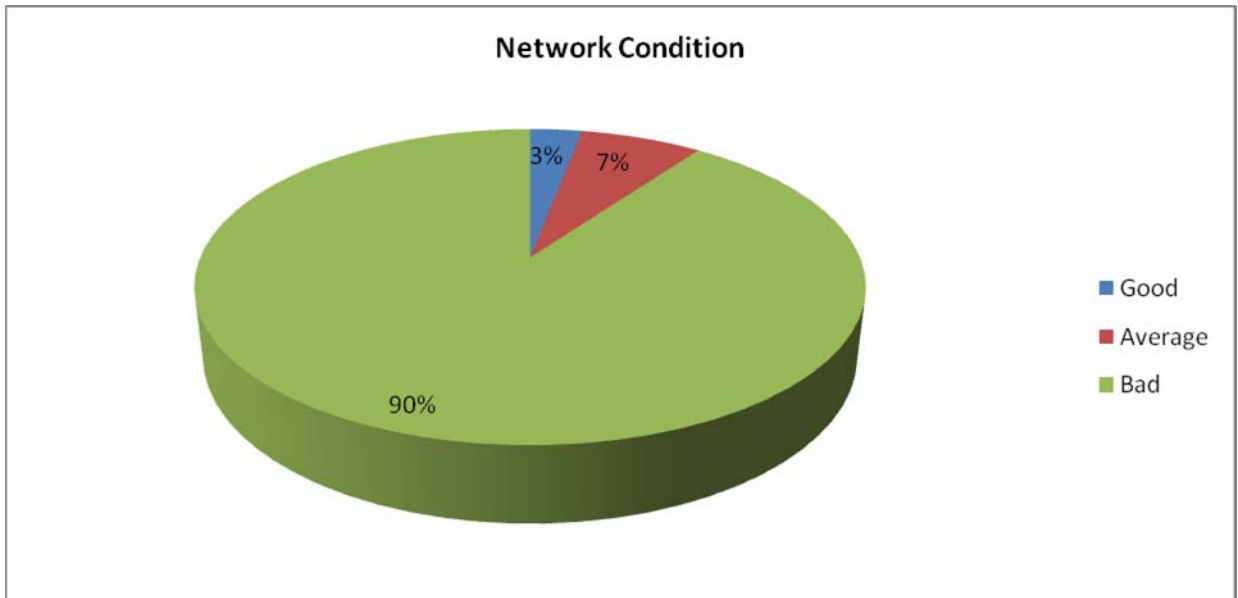
<u>Mobile Phone Users</u>	<u>Good</u>	<u>Average</u>	<u>Bad</u>	<u>Total</u>
All respondents	3	7	90	100
Percentage	3%	7%	90%	100%

Source: Questionnaire

In the response of the question about network connection in question no. 12 of the questionnaire, 90% of the respondents' responses are that it is inferior. 7% of the respondents reply that it is average and only 3% of them respond that it is good. Thus, it is seen that network connection of NTC mobile is quite bad and that is a big weakness of NTC.

Figure: 12

Response towards Condition of Network Connection



4.1.3.7 Clarity of sound in Voice Communication

The researcher has asked in question no. 13 about the clarity of sound in voice communication of NTC Mobile phones. The responses are as follows:

TABLE: 18

Response towards Clarity of sound in Voice Communication

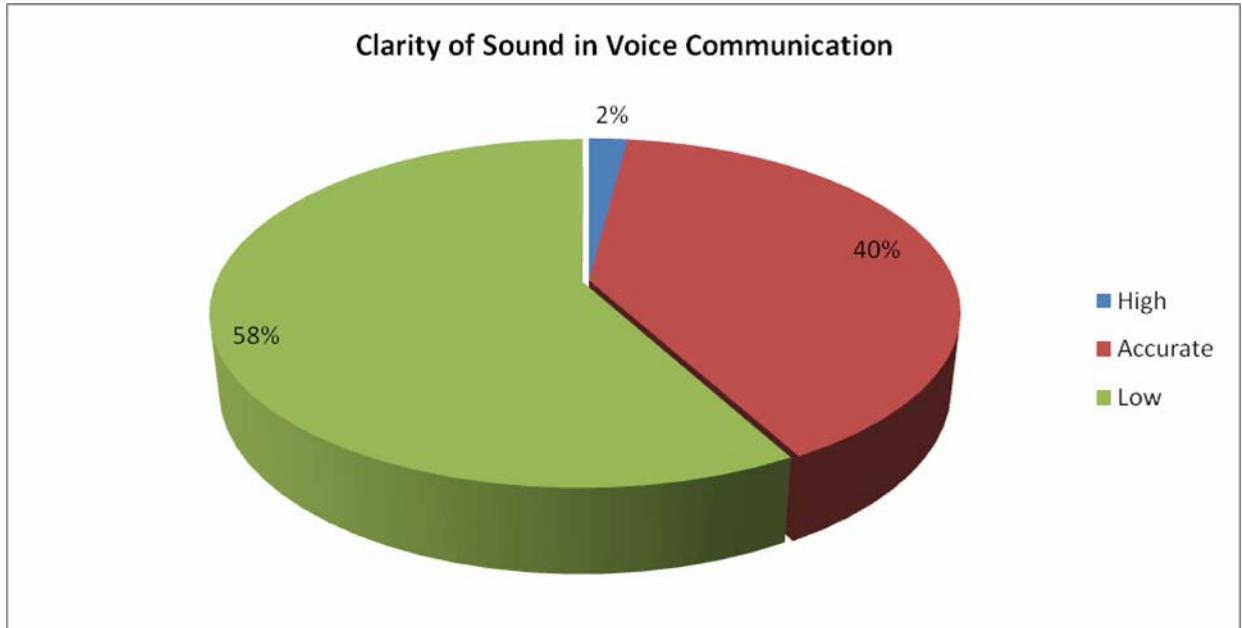
<u>Mobile Phone Users</u>	High	Accurate	Low	Total
All respondents	2	40	58	100
Percentage	2%	40%	58%	100%

Source: Questionnaire

In response to the question no. 13 about clarity of sound in voice communication, as per the table 17 and figure 13, it is seen that among the 100 respondents, 58 responses are that the clarity of sound is low while communicating whereas 40 of them reply that it is accurate and only 2 of them think that it is high. So in this aspect also, NTC seems quite weak.

Figure: 13

Response towards Clarity of sound in Voice Communication



4.1.3.8 Sources of Information

Sources of Information play major role to let people know about various services NTC offers. If a company wants its customers get informed well about products and services it delivers in the market, it has to choose effective means of communication.

Effective advertisement can make positive impression about products and services to people. So if sources of information are effectively applied, means of advertisement are properly chosen, the company can get a good strategic advantage.

TABLE: 19

Response towards the best Source of information

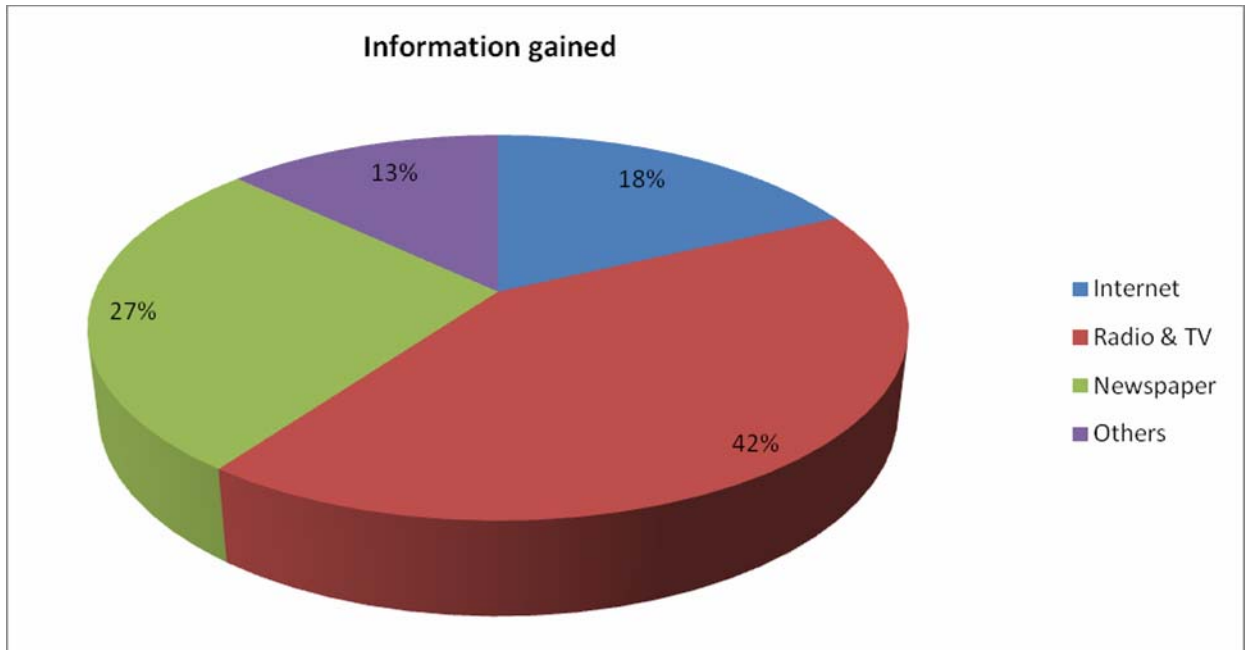
<u>Mobile Phone Users</u>	<u>Internet</u>	<u>Radio & TV</u>	<u>Newspaper</u>	<u>Others</u>
All respondents	18	42	27	13
Percentage	18%	42%	27%	13%

Source: Questionnaire

In question no. 14 the respondents were asked to give their view towards best source of advertisement about various services of NTC mobile phone. Table 18 and Figure 13 below tell that 42% customers feel that Radio & TV are the best

information provider while 27% of them think that newspapers are the best means of information about NTC services. Same way, 18% people think Internet and 13% think other means of advertisement would be the best.

Figure: 14
Response towards the best Source of information



4.1.4 Objective Three: To find out the opportunities and threats of NTC at present

Regularly assessing and monitoring opportunities and threats is an important task for a business organization as it helps to tactfully deal with competitors' movement and solve problems that appears in the course of business.

Different types of opportunities and threats come up and go in the daily business life. With the help of SWOT (Strengths, Weaknesses and Opportunities, Threats) analysis, organization tries to grab opportunities and solve problems. Opportunities and Threats may arise in the different functional areas of the organization.

For example, there may be Production sector's opportunities and threats; managerial opportunities and threats; financial opportunities and threats; marketing opportunities and threats etc. But these all are interrelated with each other. Different types of analysis have to be done to find out the different opportunities and threats.

For the sake of this dissertation, only opportunities and threats of NTC for its mobile phone marketing have been considered. For this regard, certain aspect like distribution, network coverage area, tariff rate, condition of network connection, clarity of sound, and quality in the services etc. have been considered for analysis.

For this regard, tariff rate, condition of network connection, clarity of sound and quality in the services etc. have already discussed in the previous objective – wise analysis. Only distribution and area coverage aspect are discussed here.

4.1.4.1 Place and Distribution

Place is also an important variable of marketing. The Choice of any place largely depends on the nature and characteristics of the product. Thus before launching any product or service, it is necessary to analyze the features of product and service as well as the additional features of such places so that right goods and services can be distributed at right places which helps for the better consumption and expansion of its market.

In the beginning, NTC had chosen four major areas for the distribution of mobile telephone service; they were Kathmandu Valley, Pokhara, Birgunj and Biratnagar. But now it has expanded its services all over the country. It is not possible to collect data from all places of the country. So, the researcher has categorised the total distribution according to the areas covered by the six different regional directorate of the company which are as follows:

4.1.4.1.1 Distribution of Mobile Phone in Kathmandu Region

The areas under the Kathmandu Regional Directorate include the whole of Bagmati zone and Dolakha district of Janakpur Zone. There are ten municipalities in this region of which Kathmandu and Lalitpur are classified as ‘Metropolitan City’ and ‘Sub-metropolitan City’ respectively.

The other municipalities are Bhaktapur, Kirtipur, Madhyapur Thimi, Banepa, Dhulikhel, Panauti, Trishuli, and Bhimeshwar. According to the population census 2001, the population of the region at that time was 3172261.²³

²³ His Majesty's Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

TABLE: 20**Mobile phone distribution in Kathmandu Region**

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile Telephone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	802438	131161	3511	13421	805949	144582	950531	27.13
2	Jesthya	805949	144582	1110	2941	807059	147523	954582	27.25
3	Ashadh	807059	147523	70679	4223	877738	151746	1029484	29.38
4	Shrawan	877738	151746	77829	6539	955567	158285	1113852	31.79
5	Bhadra	955567	158285	24880	3675	980447	161960	1142407	32.60
6	Ashwin	980447	161960	17818	3756	998265	165716	1163981	33.22
7	Kartik	998265	165716	22563	1705	1020828	167421	1188249	33.92
8	Marga	1020828	167421	26690	3963	1047518	171384	1218902	34.79
9	Poush	1047518	171384	113165	0	1160683	171384	1332067	38.02
10	Magh	1160683	171384	22990	8633	1183673	180017	1363690	38.09
11	Falgun	1183673	180017	28156	2317	1211829	182334	1394163	38.93
12	Chaitra	1211829	182334	24285	1587	1236114	183921	1420035	39.66
Total number of distributed Mobile for whole year						433676	52760		

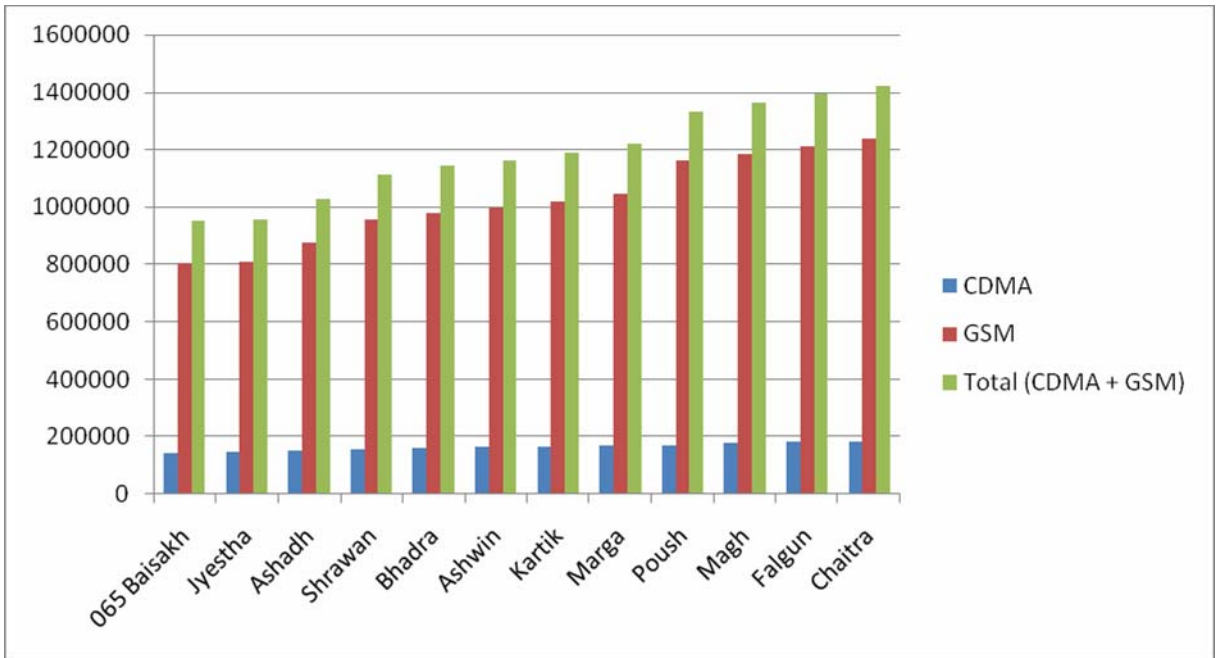
Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

Table 19 and Figure 14 show the distribution of mobile telephone in Kathmandu region. In the 1st of Baisakh, 2065, there are 802438 GSM and 131116 CDMA mobile lines distributed in the region. And in the last of Chaitra, 2065, the figure was 1236114 and 183921 for GSM and CDMA respectively. The total distributed mobile has been reached 1420035 lines in the last of Chaitra, 2065.

Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in distribution can be assumed due to the supply rather than the demand side of mobile phones.

Figure: 15

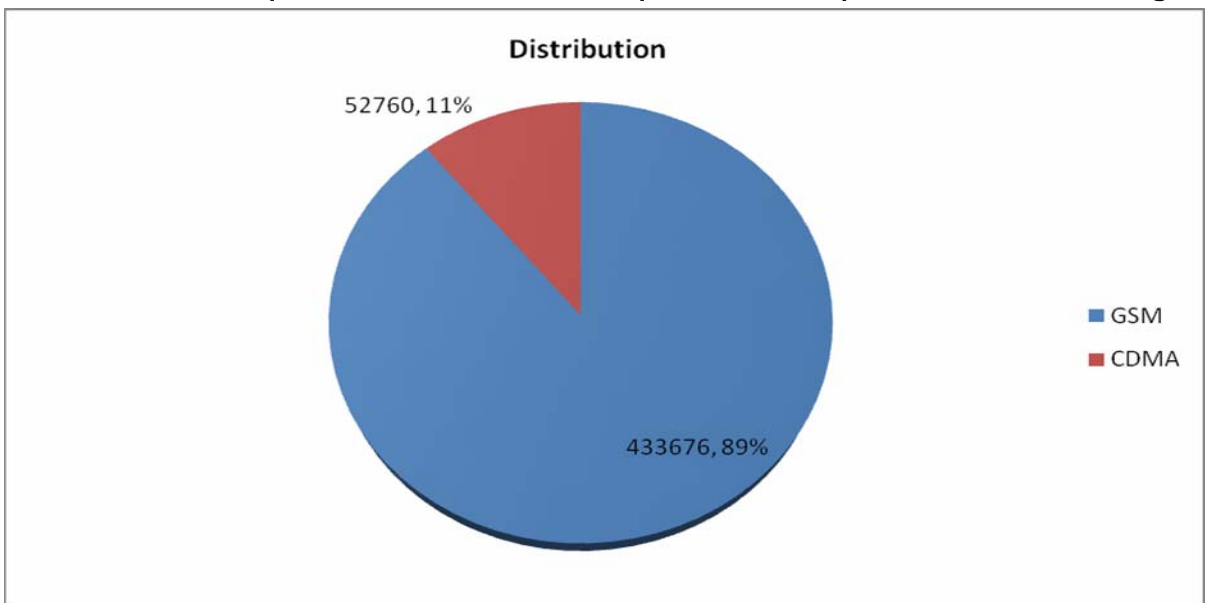
Mobile distribution upto the respective months in Kathmandu Region



Comparatively, GSM mobile distribution is greater than CDMA mobile over the year in Kathmandu region. A total of 433676 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 52760 lines for the same. If we see the graph below, it shows, among the total distributed mobile, 11% were CDMA and 89% were GSM.

Figure: 16

Number of Mobile phones distributed in the period of one year in Kathmandu Region



4.1.4.1.2 Distribution of Mobile Phone in Biratnagar Region

The total area of Mechi, Koshi and Sagarmatha zones are covered by Biratnagar Regional Directorate. There are 14 municipalities in this region of which Biratnagar is the biggest city. It is the second largest city of the country in terms of population and famous for trade and commerce. Other municipalities are Itahari, Mechinagar, Siraha, Inaruwa, Dhankuta, Bhadrapur, Ilam, Rajbiraj, Triyuga, Lahan, Damak, Dharan, and Khandbari. According to the population census 2001, about 5286890 people are living in this region.²⁴

TABLE: 21

Mobile phone distribution in Biratnagar Region

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile phone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	162463	13291	9609	7904	172072	21195	193267	3.09
2	Jesthya	172072	21195	8979	2924	181051	24119	205170	3.27
3	Ashadh	181051	24119	21069	3351	202120	27470	229590	3.67
4	Shrawan	202120	27470	-193	3740	201927	31210	233137	3.72
5	Bhadra	201927	31210	18661	7897	220588	39107	259695	4.14
6	Ashwin	220588	39107	24106	11420	244694	50527	295221	4.72
7	Kartik	244694	50527	7743	11865	252437	62392	314829	5.03
8	Marga	252437	62392	3080	9714	255517	72106	327623	5.23
9	Poush	255517	72106	6936	7343	262453	79449	341902	5.46
10	Magh	262453	79449	8183	6965	270636	86414	357050	5.58
11	Falgun	270636	86414	3211	4615	273847	91029	364876	5.70
12	Chaitra	273847	91029	50949	2041	324796	93070	417866	6.52
Total number of distributed Mobile for whole year						162333	79779		

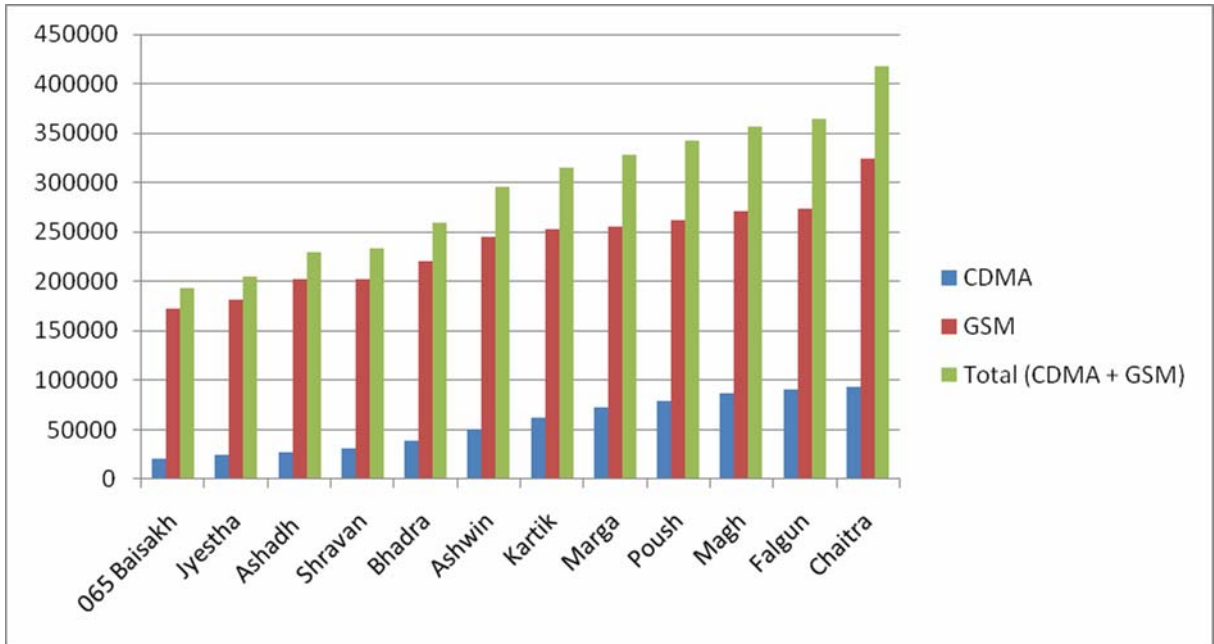
Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

The table and graph presented above show the distribution of mobile telephone in Biratnagar region. In the 1st of Baisakh, 2065, there are 162463 GSM and 13291 CDMA mobile lines distributed in the region. And in the last of Chaitra, 2065, the figure was 324796 and 93070 for GSM and CDMA respectively. The total distributed mobile has been reached 417866 lines in the last of Chaitra, 2065. Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in distribution can be assumed due to the supply rather than the demand side of mobile phones.

²⁴ His Majesty's Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

Figure: 17

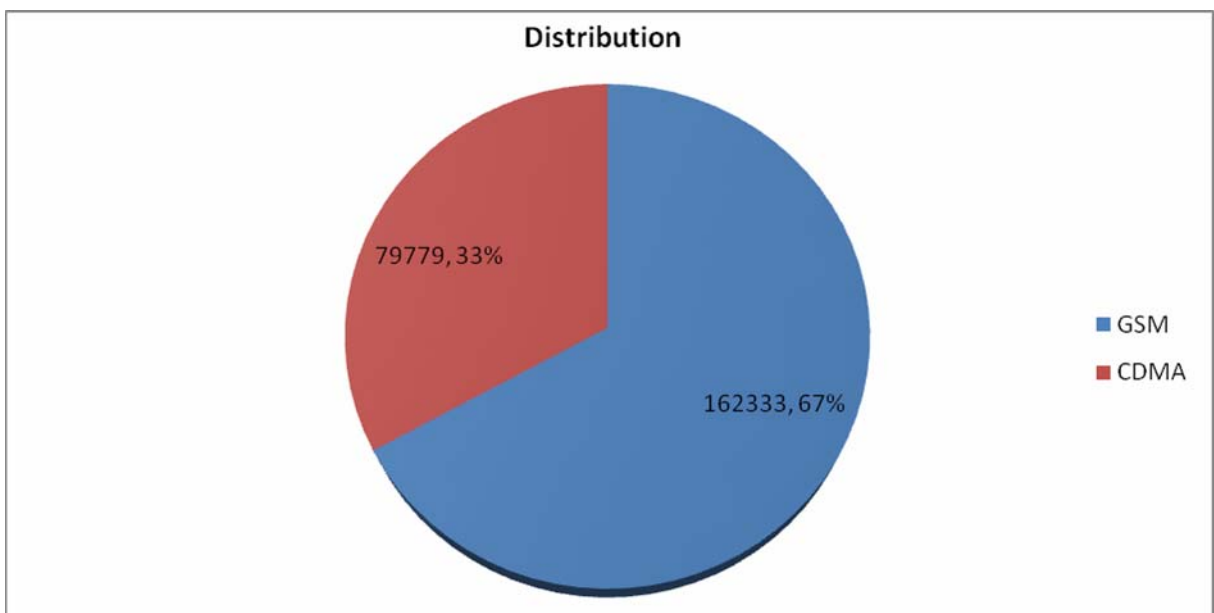
Mobile distribution upto the respective months in Biratnagar Region



Comparatively, GSM mobile distribution is greater than CDMA mobile over the year in Biratnagar region. A total of 162333 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 79779 lines for the same. If we see the above graph, it shows, among the total distributed mobile, 33% were CDMA and 67% were GSM.

Figure: 18

Number of Mobile phones distributed in the period of one year in Biratnagar Region



4.1.4.1.3 Distribution of Mobile Phone in Birgunj Region

All parts of Janakpur zone except Dolakha district and Narayani zone are the serving area of Birgunj Regional Directorate. There are ten municipalities in this region of which Birgunj is a sub-metropolitan City. It is situated at the 'South-East' region of Nepal. It is also famous as an economic capital, since it acts as a 'gate-way' for exports and import trade. Other municipalities are Janakpur, Jaleshwar, Kamalamai (Sindhuli), Malangwa, Gaur, Kalaiya, Hetauda, Tandi, and Bharatpur. The population of this region according to population census 2001 is 4816351.²⁵

TABLE: 22

Mobile phone distribution in Birgunj Region

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile Telephone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	180250	19011	561	7604	180811	26615	207426	3.37
2	Jesthya	180811	26615	7620	2849	188431	29464	217895	3.52
3	Ashadh	188431	29464	13540	6353	201971	35817	237788	4.06
4	Shrawan	201971	35817	14877	5724	216848	41541	258389	4.42
5	Bhadra	216848	41541	19807	3678	236655	45219	281874	4.82
6	Ashwin	236655	45219	6661	2719	243316	47938	291254	4.98
7	Kartik	243316	47938	6818	4136	250134	52074	302208	5.17
8	Marga	250134	52074	2647	1780	252781	53854	306635	5.24
9	Poush	252781	53854	6172	1629	258953	55483	314436	5.38
10	Magh	258953	55483	8244	4425	267197	59908	327105	5.47
11	Falgun	267197	59908	7728	3991	274925	63899	338824	5.67
12	Chaitra	274925	63899	9954	1979	284879	65878	350757	5.87
Total number of distributed Mobile for whole year						104629	46867		

Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

Table 21 above and Figure 18 below show the distribution of mobile telephone in Birgunj region. In the 1st of Baisakh, 2065, there are 180250 GSM and 19011 CDMA mobile lines distributed in the region. And in the last of Chaitra, 2065, the figure was 284879 and 65878 for GSM and CDMA respectively. The total distributed mobile has been reached 350757 lines in the last of Chaitra, 2065.

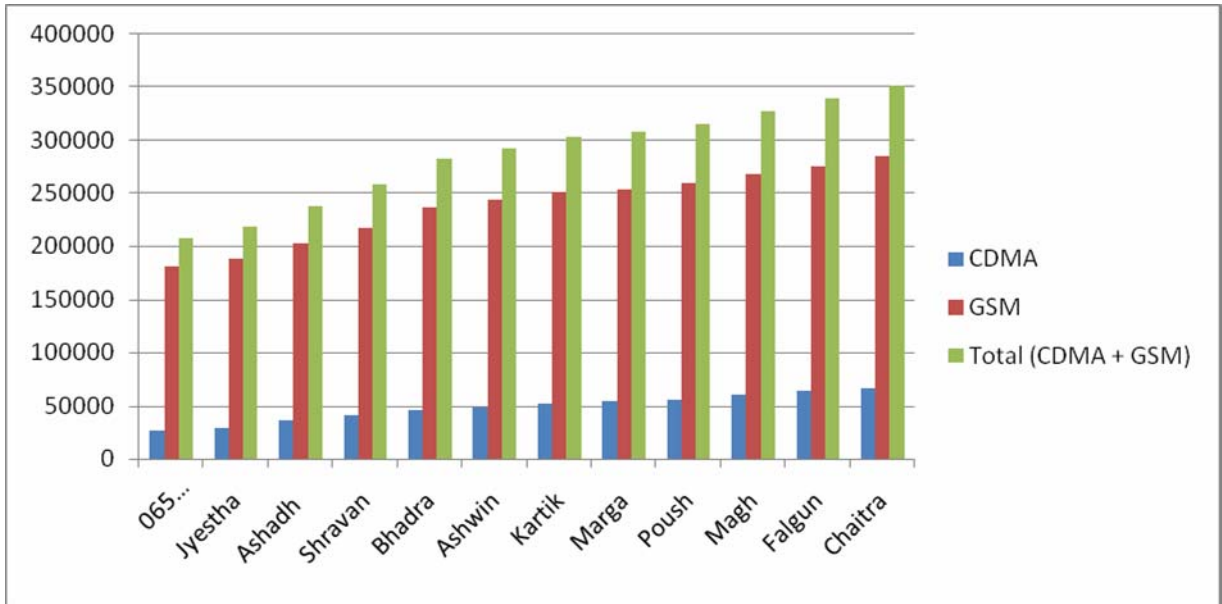
Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in

²⁵ His Majesty's Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

distribution can be assumed due to the supply rather than the demand side of mobile phones.

Figure: 19

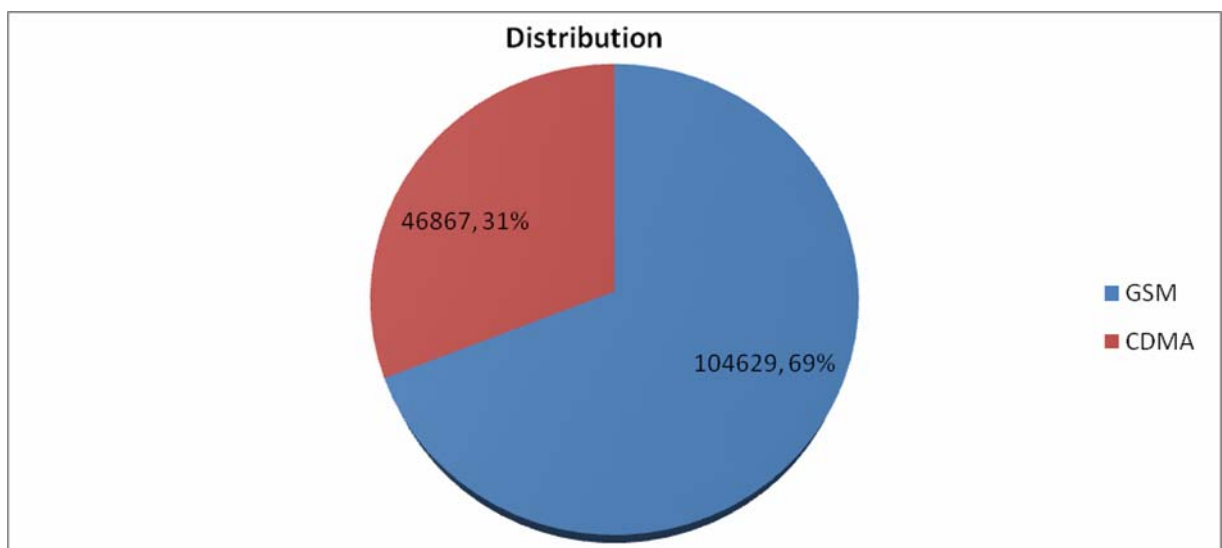
Mobile distribution upto the respective months in Birgunj Region



Comparatively, GSM mobile distribution is greater than CDMA mobile over the year in Birgunj region. A total of 104629 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 46867 lines for the same. If we see the above graph, it shows, among the total distributed mobile, 31% were CDMA and 69% were GSM.

Figure: 20

Number of Mobile phones distributed in the period of one year in Birgunj Region



4.1.4.1.4 Distribution of Mobile Phone in Bhairahawa Region

Three zones namely Lumbhini, Gandaki and Dhawalagiri and their respective districts are covered by the Bhairahawa Regional Directorate. Pokhara is the biggest city of this region. It is classified as “Sub-Metropolitan” city and perceived as a tourism capital of Nepal. Various places of natural interest like Fewa, Begnas and Rupa lakes; Fishtail mountain and Annapurna mountain range; Mahendra, Bat and Gupteshwor caves; David fall (water fall), Seti River etc. are the main tourism spots of Pokhara.

Including Pokhara, There are twelve municipalities in this region. Others are Butawal, Putalibazar, Byas, Waling, Siddharthanagar, Prithbinarayan, Kapilvastu, Baglung, Ramgram, Lekhnath, and Tansen. According to the population census 2001, the population of the region covered by the Bhairahawa Regional Directorate at that time was 4571013.²⁶

TABLE: 23

Mobile phone distribution in Bhairahawa Region

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile Telephone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	228392	29308	3211	6212	231603	35520	267123	5.21
2	Jesthya	231603	35520	17358	3044	248961	38564	287525	5.64
3	Ashadh	248961	38564	3892	6263	252853	44827	297680	5.59
4	Shrawan	252853	44827	4060	7382	256913	52209	309122	5.81
5	Bhadra	256913	52209	35930	2699	292843	54908	347751	6.53
6	Ashwin	292843	54908	3797	12683	296640	67591	364231	6.84
7	Kartik	296640	67591	8518	2273	305158	69864	375022	7.04
8	Marga	305158	69864	-3851	2475	301307	72339	373646	7.02
9	Poush	301307	72339	15392	3679	316699	76018	392717	7.38
10	Magh	316699	76018	51864	2775	368563	78793	447356	8.22
11	Falgun	368563	78793	22852	2895	391415	81688	473103	8.69
12	Chaitra	391415	81688	45632	7917	437047	89605	526652	9.68
Total number of distributed Mobile for whole year						208655	60297		

Source: “NTC’s MIS Reports from 2065 Baishakh to Chaitra”.

Table 22 above and Figure 20 below show the distribution of mobile telephone in Bhairahawa region. In the 1st of Baisakh, 2065, there are 228392 GSM and 29308 CDMA mobile lines distributed in the region. And in the last of Chaitra, 2065, the

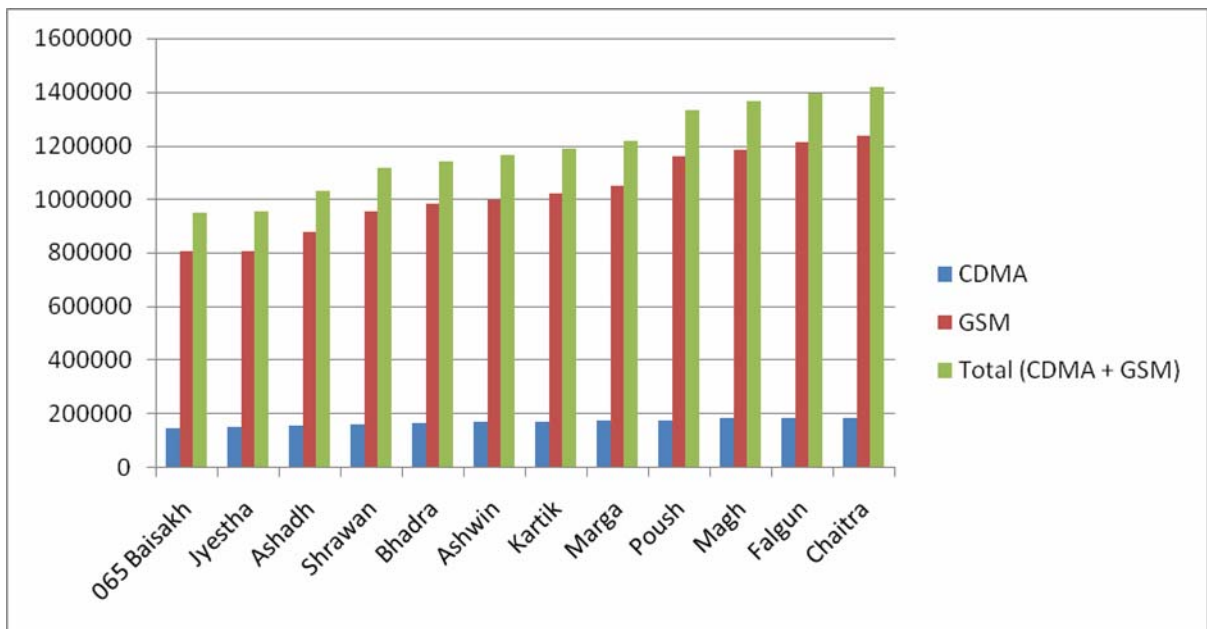
²⁶ His Majesty’s Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

figure was 437047 and 89605 for GSM and CDMA respectively. The total distributed mobile has been reached 526652 lines in the last of Chaitra, 2065.

Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in distribution can be assumed due to the supply rather than the demand side of mobile phones.

Figure: 21

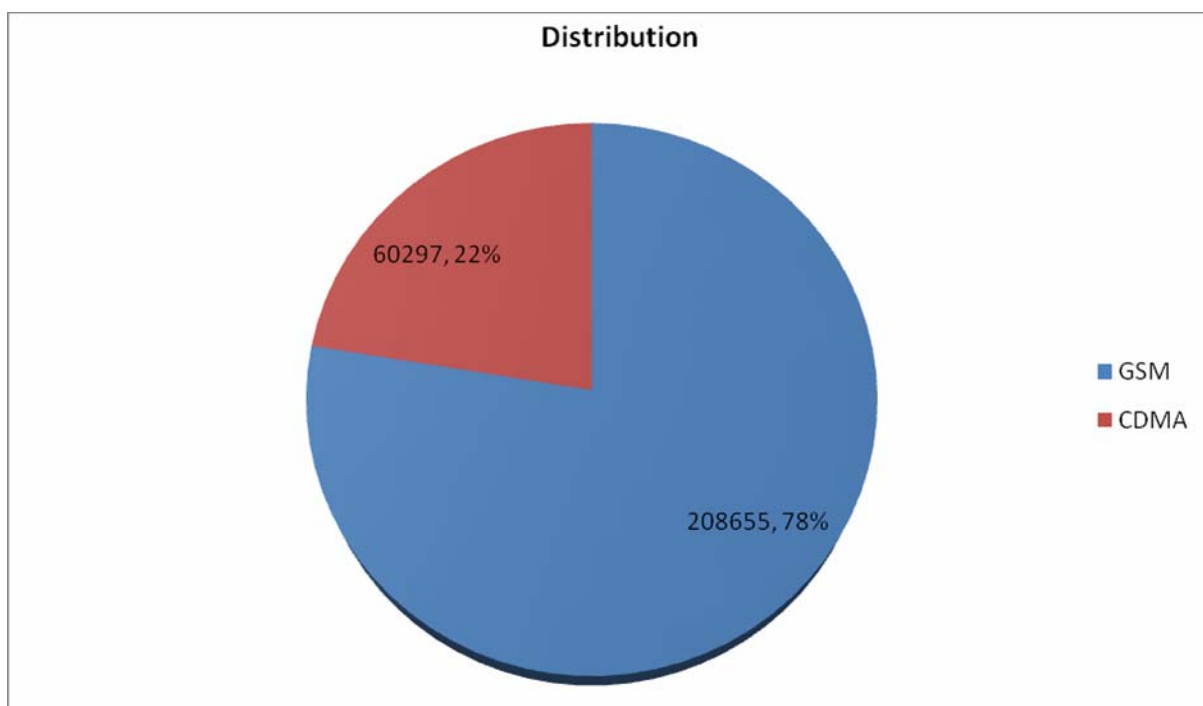
Mobile distribution upto the respective months in Bhairahawa Region



Comparatively, GSM mobile distribution is greater than CDMA mobile over the year in Bhairahawa region. A total of 208655 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 60297 lines for the same. If we see the above graph, it shows, among the total distributed mobile, 22% were CDMA and 78% were GSM.

Figure: 22

Number of Mobile phones distributed in the period of one year in Bhairahawa Region



4.1.4.1.5 Distribution of Mobile Phone in Nepalgunj Region

Areas under Rapati, Bheri, and Karnali are covered by Nepalgunj Regional Directorate. There are six municipalities in this region of which Nepalgunj is the largest city in terms of population. Others are Tulasipur, Ghorahi, Surkhet, Narayan, and Gulariya. The population of this region according to population census 2001 is 2707244.²⁷

²⁷ His Majesty's Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

TABLE: 24**Mobile phone distribution in Nepalgunj Region**

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile Telephone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	115554	10093	13223	2371	128777	12464	141241	4.07
2	Jesthya	128777	12464	14895	4282	143672	16746	160418	4.62
3	Ashadh	143672	16746	2650	5675	146322	22421	168743	4.87
4	Shrawan	146322	22421	3124	9518	149446	31939	181385	5.23
5	Bhadra	149446	31939	8653	5378	158099	37317	195416	5.64
6	Ashwin	158099	37317	7569	2065	165668	39382	205050	5.92
7	Kartik	165668	39382	5124	688	170792	40070	210862	6.07
8	Marga	170792	40070	338	842	171130	40912	212042	6.11
9	Poush	171130	40912	6183	957	177313	41869	219182	6.32
10	Magh	177313	41869	36745	7576	214058	49445	263503	7.44
11	Falgun	214058	49445	758	2565	214816	52010	266826	7.53
12	Chaitra	214816	52010	11523	1319	226339	53329	279668	7.90
Total number of distributed Mobile for whole year						110785	43236		

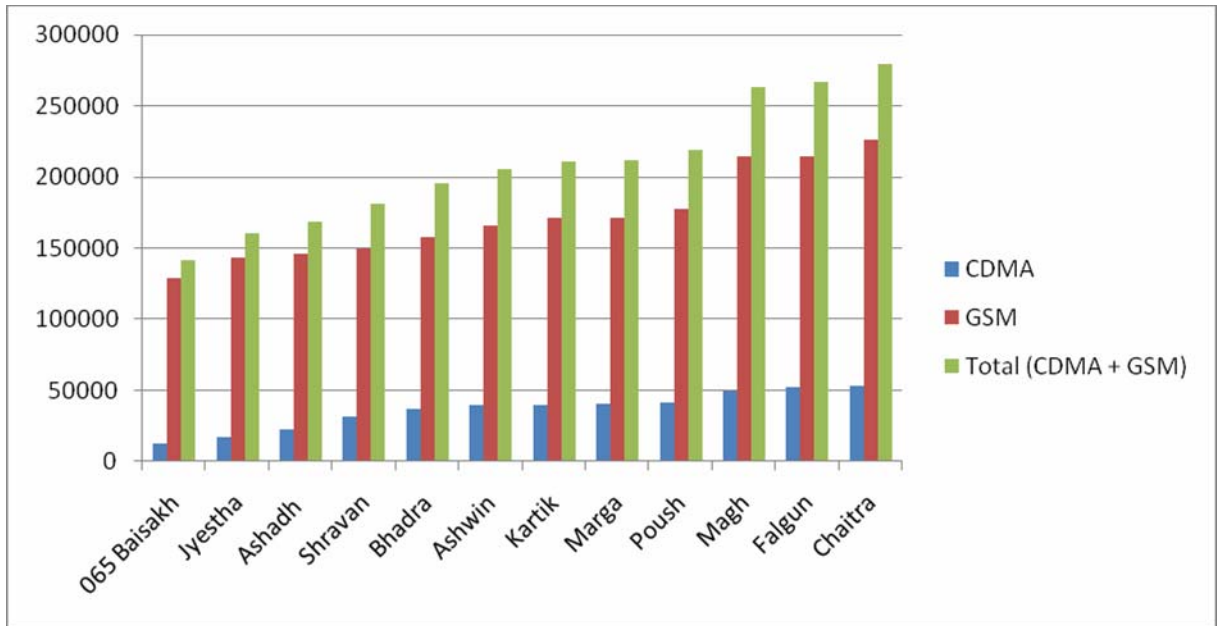
Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

The table and graph presented above show the distribution of mobile telephone in Nepalgunj region. In the 1st of Baisakh, 2065, there are 115554 GSM and 10093 CDMA mobile lines distributed in the region. And in the last of Chaitra, 2065, the figure was 226339 and 53329 for GSM and CDMA respectively. The total distributed mobile has been reached 279668 lines in the last of Chaitra, 2065.

Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in distribution can be assumed due to the supply rather than the demand side of mobile phones.

Figure: 23

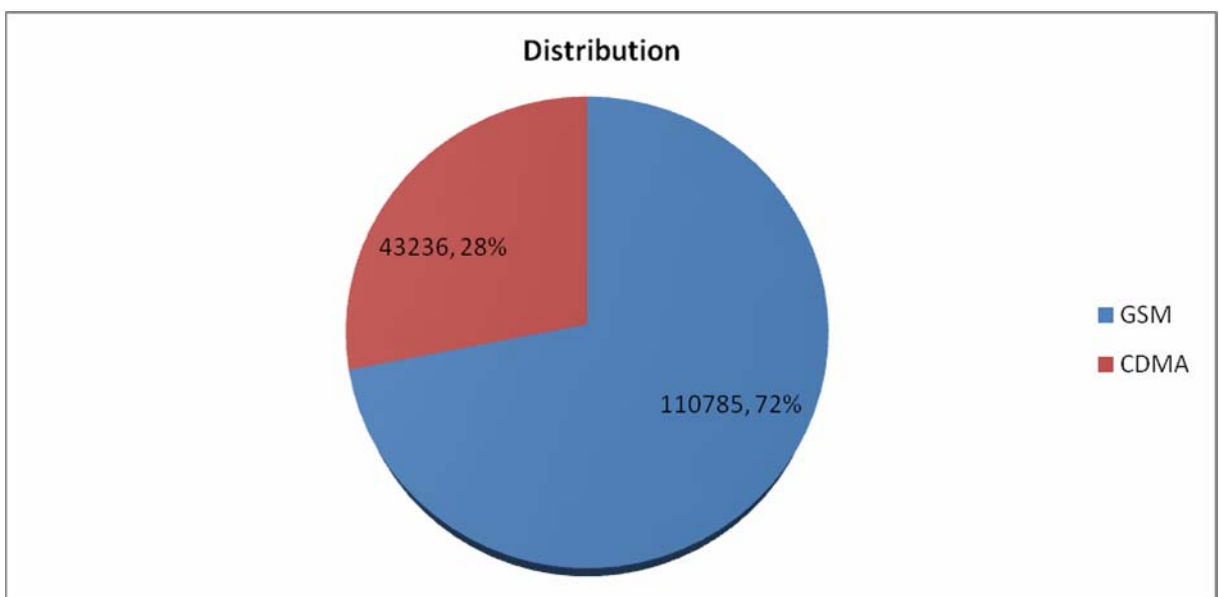
Mobile distribution upto the respective months in Nepalgunj Region



Comparatively, GSM mobile distribution is greater than CDMA mobile over the year in Nepalgunj region. A total of 110785 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 43236 lines for the same. If we see the above graph, it shows, among the total distributed mobile, 28% were CDMA and 72% were GSM.

Figure: 24

Number of Mobile phones distributed in the period of one year in Nepalgunj Region



4.1.4.1.6 Distribution of Mobile Phone in Dhangadhi Region

Areas under Seti and Mahakali are covered by Dhangadhi Regional Directorate. There are six municipalities in this region of which Mahendranagar is the largest city in terms of population. Others are Amargadhi, Dhangadhi, Dasharathchanda, Tikapur, and Dipayal. The population of this region according to population census 2001 is 2183175.²⁸

TABLE: 25

Mobile phone distribution in Dhangadhi Region

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile Telephone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	26418	8249	4615	7968	31033	16217	47250	1.86
2	Jesthya	31033	16217	3670	3137	34703	19354	54057	2.12
3	Ashadh	34703	19354	1523	3996	36226	23350	59576	2.34
4	Shrawan	36226	23350	1548	2386	37774	25736	63510	2.49
5	Bhadra	37774	25736	2418	741	40192	26477	66669	2.60
6	Ashwin	40192	26477	1844	237	42036	26714	68750	2.70
7	Kartik	42036	26714	3375	128	45411	26842	72253	2.83
8	Marga	45411	26842	1013	39	46424	26881	73305	2.87
9	Poush	46424	26881	3182	-16	49606	26865	76471	2.99
10	Magh	49606	26865	4057	3284	53663	30149	83812	3.22
11	Falgun	53663	30149	2204	3426	55867	33575	89442	3.43
12	Chaitra	55867	33575	6973	950	62840	34525	97365	3.73
Total number of distributed Mobile for whole year						36422	26276		

Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

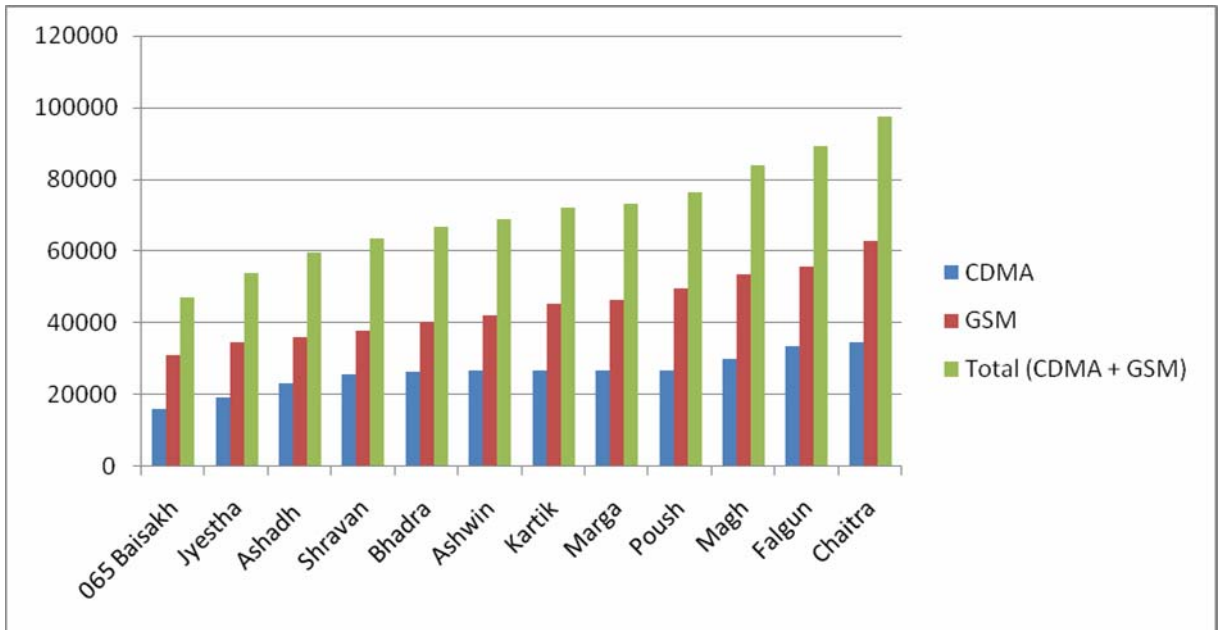
The table and graph presented above show the distribution of mobile telephone in Dhangadhi region. In the 1st of Baisakh, 2065, there are 26418 GSM and 8249 CDMA mobile lines distributed in the region. And in the last of Chaitra, 2065, the figure was 62840 and 26276 for GSM and CDMA respectively. The total distributed mobile has been reached 97365 lines in the last of Chaitra, 2065.

Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in distribution can be assumed due to the supply rather than the demand side of mobile phones.

²⁸ His Majesty's Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

Figure: 25

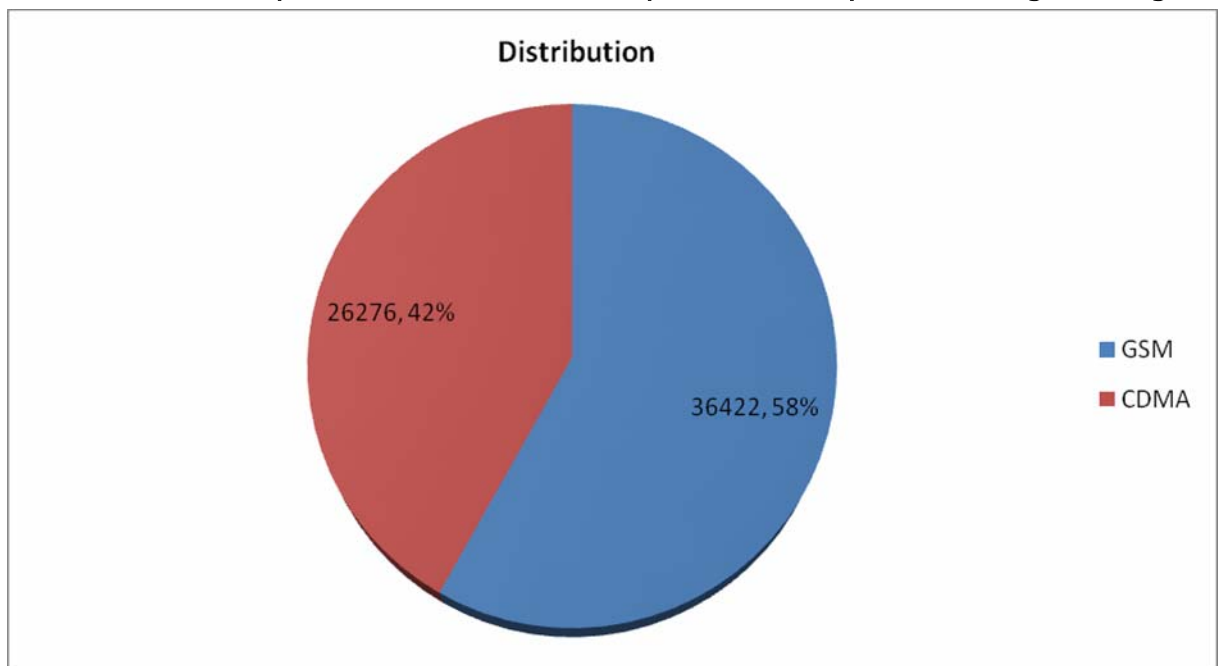
Mobile distribution upto the respective months in Dhangadhi Region



Comparatively, GSM mobile distribution is greater than CDMA mobile, over the year in Dhangadhi region. A total of 36422 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 26276 lines for the same. If we see the above graph, it shows, among the total distributed mobile, 42% were CDMA and 58% were GSM.

Figure: 26

Number of Mobile phones distributed in the period of one year in Dhangadhi Region



4.1.4.1.6 Aggregate Distribution of Mobile Phone in the Country

There are fourteen zones and seventy five districts in the country. According to the land structure, the country has been classified to the mountainous region, hilly region, and the terai region. All three regions lie from Mechi to Mahakali. Of these three regions, the hilly region is the largest and terai is the smallest in terms of area. Sixty eight percent of the total area of the country is occupied by the hilly region. Seventeen percent is covered by the mountainous region and only 15% is covered by the terai region. According to the population census 2001, about 23151423 people are living in the country.²⁹

But in terms of population, the terai region has the greatest population among the three regions. Due to its plain land structure and close border line with India, agriculture, business and industry are more prosperous in the terai region than in other regions. That's why many cities are developed and more people live in this region. The density of population is very high of terai region. There are so many densely populated cities and trade areas in this region. Bhadrapur, Biratnagar, Rajbiraj, Janakpur, Birgunj, Bhairahawa, Nepalgunj, Dhangadhi, and Mahendranagar are some examples of such areas.

There are some big cities in the hilly regions too. The capital city Kathmandu and the famous city Pokhara lie here. Some other places are Ilam, Dhankuta, Gaighat, Sindhuli, Palpa, Surkhet etc. These are economically sound and densely populated areas of the hilly region. But many other places are underprivileged in terms of economic development. Due to the lack of the infrastructures for development like electricity, transport, communication; life of this region is considered very hard. The population growth rate is also lower than the terai region.

Mountainous region is the least developed among all. Many parts of this region are covered with snow during the year. Very little amount of land is available for farming. The life is very difficult here. So the population too, is comparatively low.

²⁹ His Majesty's Government Nepal, Population Census 2001, National Planning Commission, Central Bureau of Statistics

TABLE: 26**Aggregate Distribution of Mobile phone in Nepal**

S.N.	MONTHS	DISTRIBUTION OF MOBILE PHONES							Density of Mobile Telephone
		UP TO PREVIOUS		THIS MONTH		UP TO THIS MONTH			
		GSM	CDMA	GSM	CDMA	GSM	CDMA	Total	
1	2065 Baisakh	1515515	211113	34730	45480	1550245	256593	1806838	6.70
2	Jesthya	1550245	256593	53632	19177	1603877	275770	1879647	6.97
3	Ashadh	1603877	275770	113353	29861	1717230	305631	2022861	7.50
4	Shrawan	1717230	305631	101245	35289	1818475	340920	2159395	8.00
5	Bhadra	1818475	340920	110349	24068	1928824	364988	2293812	8.50
6	Ashwin	1928824	364988	61795	32880	1990619	397868	2388487	8.86
7	Kartik	1990619	397868	54141	20795	2044760	418663	2463423	9.13
8	Marga	2044760	418663	29917	18813	2074677	437476	2512153	9.32
9	Poush	2074677	437476	151030	13592	2225707	451068	2676775	9.93
10	Magh	2225707	451068	132083	33658	2357790	484726	2842516	10.32
11	Falgun	2357790	484726	64909	19809	2422699	504535	2927234	10.62
12	Chaitra	2422699	504535	149316	15793	2572015	520328	3092343	11.22
Total number of distributed Mobile for whole year						1056500	309215		

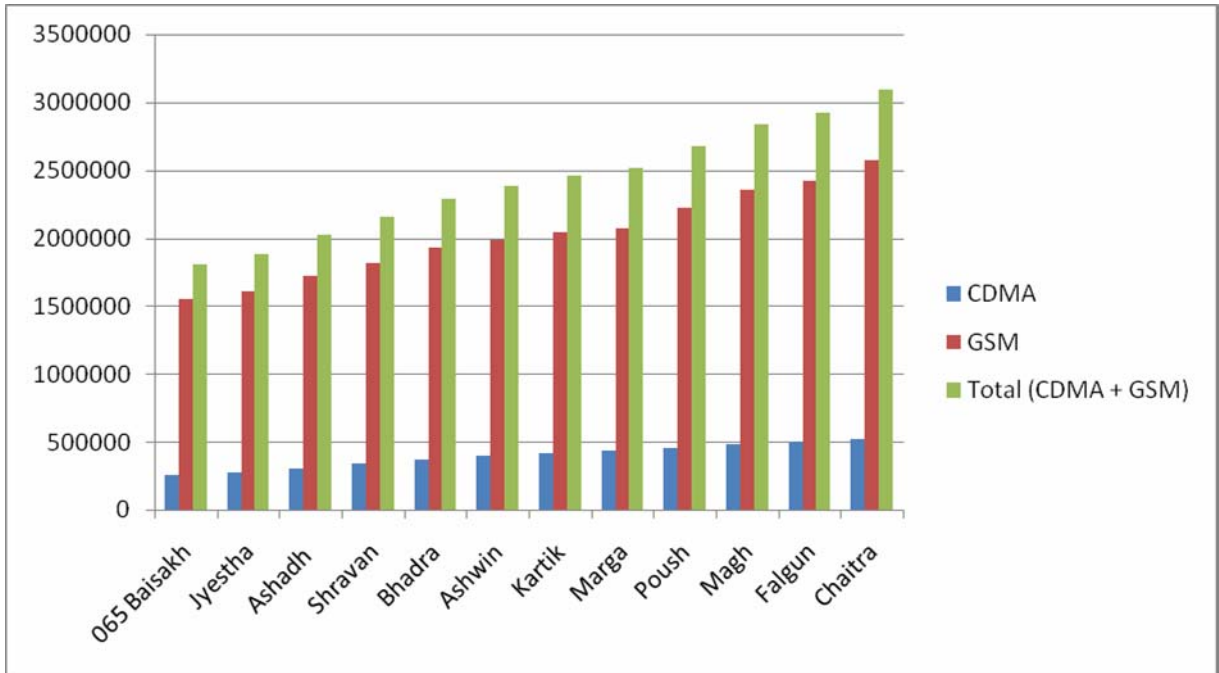
Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

The table and graph presented above show the aggregate distribution of mobile telephone in the whole country. In the 1st of Baisakh, 2065, there are 1515515 GSM and 211113 CDMA mobile lines distributed in the country. And in the last of Chaitra, 2065, the figure was 2572015 and 520328 for GSM and CDMA respectively. The total distributed mobile has been reached 3092343 lines in the last of Chaitra, 2065.

Although the figure seems always increasing, the increment is not even. There are many fluctuations in the monthly distribution. NTC has not able to supply enough mobile lines to meet market demand from long time. So the fluctuations in distribution can be assumed due to the supply rather than the demand side of mobile phones.

Figure: 27

Aggregate Distribution of Mobile phone upto the respective months in Nepal

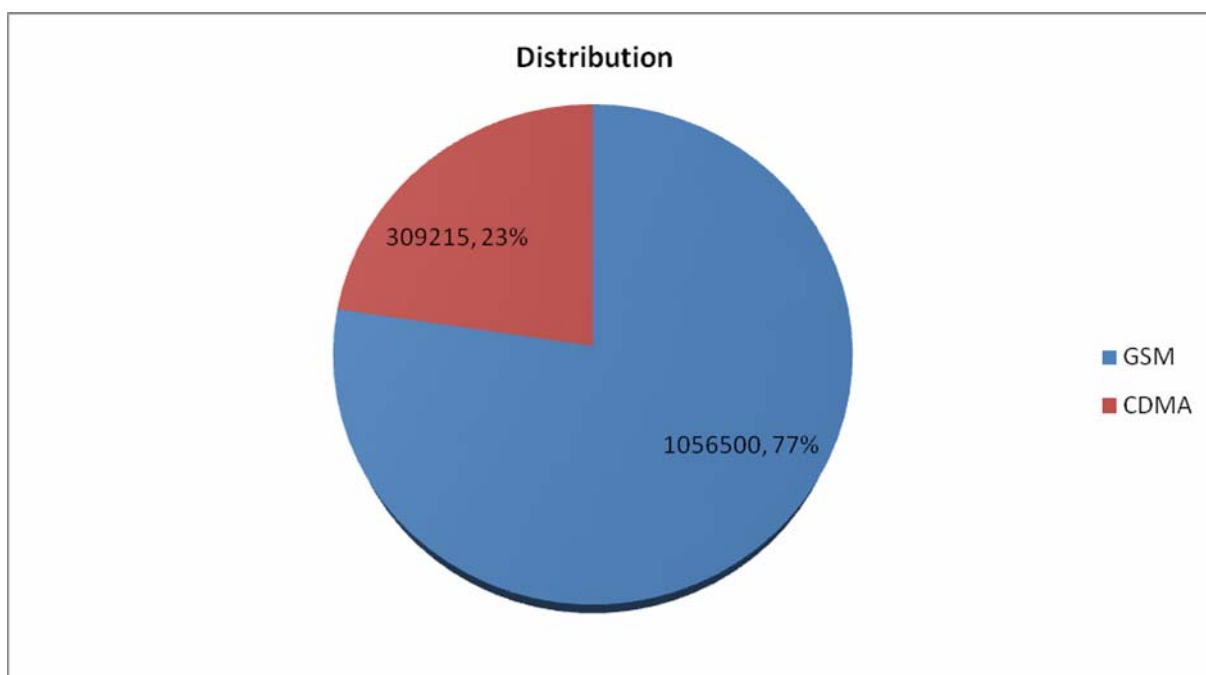


Comparatively, GSM mobile distribution is greater than CDMA mobile over the year in the whole country. A total of 1056500 lines of GSM mobile were distributed during the period while the figure for CDMA mobile was only 309215 lines for the same. If we see the above graph, it shows, among the total distributed mobile, 23% were CDMA and 77% were GSM. The distribution position of GSM mobile seems better than CDMA mobile. It may be that NTC started CDMA service just about three years ago while GSM service has been operating since 1999.

But if we look at the chart below, it doesn't seem that the time factor is only the case that has determined the distribution. Of total distributed mobile in the 12 months period, the share of CDMA mobile was just 23%. So NTC has not been able to provide enough CDMA mobile to the market.

Figure: 28

Number of Mobile phones distributed in the period of one year in whole country



The Table below shows month-wise density of mobile phone in the different regions and in whole country. The trend of mobile density seems always increasing. In Baisakh 2065, there were 6.7 lines of NTC Mobile per hundred people in the country which increased to 11.2 per hundred in the year end.

If we look at the region-wise density, Kathmandu holds the best position. The figure was 27.13 in Baisakh 2065 that increased to 39.66 in the year ended. It seems that NTC always focuses its attempt to meet the demand of the people in the capital.

Bhairahawa and Nepalgunj regions have better position in respect of the density of NTC Mobile phones after Kathmandu. In the beginning of the year the figures were 5.21 & 4.07 for Bhairahawa & Nepalgunj respectively which turned to 9.68 & 7.90 in the year end.

Although Birgunj and Biratnagar are the industrial and business places, NTC Mobile phone density are very low for these regions. It seems that NTC has not supplied enough number of Mobile phones to meet the demand of these regions. The figures were 3.09 & 3.37 in Baisakh 065 and 6.52 & 5.87 in the year end for Biratnagar & Birgunj respectively.

Dhangadhi region has the least density of NTC Mobile phones. In the beginning of the year, there were 1.86 lines of Mobile per hundred people living in the region which improved to 3.73 lines in the year end.

TABLE: 27

Month-wise Density of Mobile phones in different regions of the country in 2065 BS

S.N.	MONTHS	Density of Mobile Telephone per hundred people						
		Kathmandu	Biratnagar	Birgunj	Bhairahawa	Nepalgunj	Dhangadhi	Whole Country
1	2065 Baisakh	27.13	3.09	3.37	5.21	4.07	1.86	6.70
2	Jesthya	27.25	3.27	3.52	5.64	4.62	2.12	6.97
3	Ashadh	29.38	3.67	4.06	5.59	4.87	2.34	7.50
4	Shrawan	31.79	3.72	4.42	5.81	5.23	2.49	8.00
5	Bhadra	32.60	4.14	4.82	6.53	5.64	2.60	8.50
6	Ashwin	33.22	4.72	4.98	6.84	5.92	2.70	8.86
7	Kartik	33.92	5.03	5.17	7.04	6.07	2.83	9.13
8	Marga	34.79	5.23	5.24	7.02	6.11	2.87	9.32
9	Poush	38.02	5.46	5.38	7.38	6.32	2.99	9.93
10	Magh	38.09	5.58	5.47	8.22	7.44	3.22	10.32
11	Falgun	38.93	5.70	5.67	8.69	7.53	3.43	10.62
12	Chaitra	39.66	6.52	5.87	9.68	7.90	3.73	11.22

Source: "NTC's MIS Reports from 2065 Baishakh to Chaitra".

4.1.5 Objective Four: To find out the most satisfied aspects in NTC Mobile phone

The researcher has asked the sample NTC mobile users a question (question no. 15) regarding overall worth that count more to them than other service providers' services. The response of the question that which aspect of NTC mobile has attracted the consumers so that they prefer to use NTC mobile phone to others is as follows:

TABLE: 28

Most satisfied aspect of NTC Mobile phones

<u>Mobile Phone Users</u>	Reasonable Price	Quality of service	Goodwill	Advertisement	Total
All respondents	10	20	65	5	100
Percentage	10%	20%	65%	5%	100%

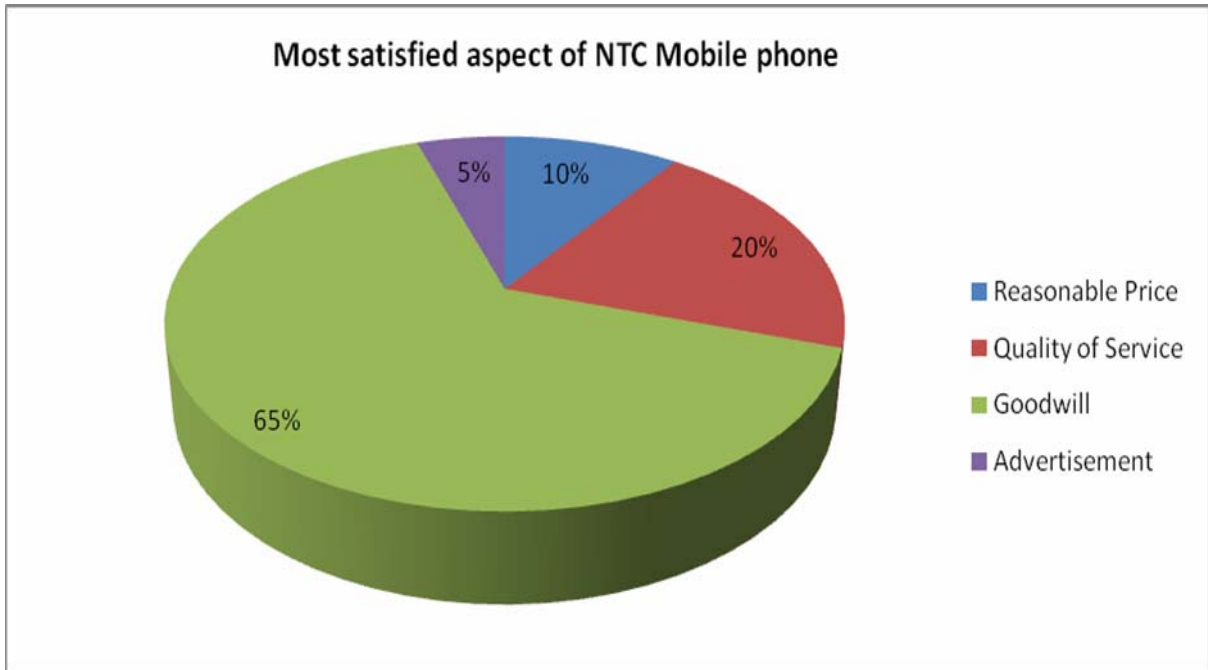
Source: Questionnaire

From the responses, it is found that most of the respondents prefer NTC mobiles to others because of the goodwill of the organization. In the other words, 65% of NTC

Mobile users are most satisfied by the goodwill. Twenty percent of them have responded that it's the quality of service that causes them to prefer NTC mobile phones. Whereas 10% of them prefer due to its reasonable price and five percent of them prefer because of its impressive advertisement.

Figure: 29

Most satisfied aspect of NTC Mobile phones



Similarly informations regarding whether other family members of the respondents also use NTC mobile, and if yes, how many of them use and what is their occupation etc. are also collected through question no. 16 of the questionnaire. The responses are as follows:

Table: 29

Family members using NTC mobile phones

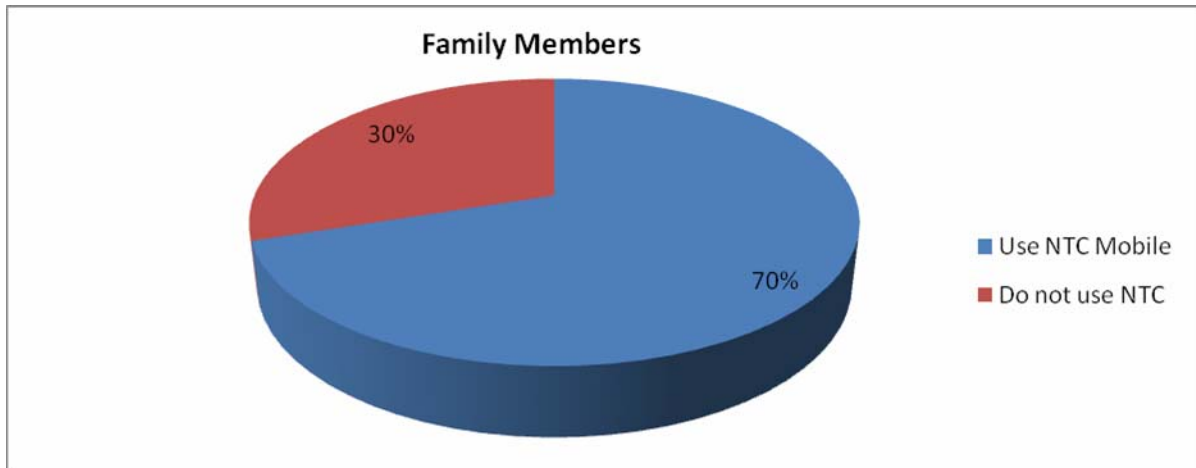
Mobile Phone Users	Use NTC Mobile	Do not use NTC Mobile	Total
All respondents	70	30	100
Percentage	70%	30%	100%

Source: Questionnaire

In response of the query wheather other members of family also use NTC Mobile; it has been found that 70% of the respondents' family members use NTC mobile whereas 30% of them do not use it. Table 28 above and Figure 29 below show the information regarding the query.

Figure: 30

Family members using NTC mobile phones



In the same way, they have been asked how many members of their family use NTC Mobile in the same question. The responses are as follows:

Table: 30

No. of family members using NTC mobile phones

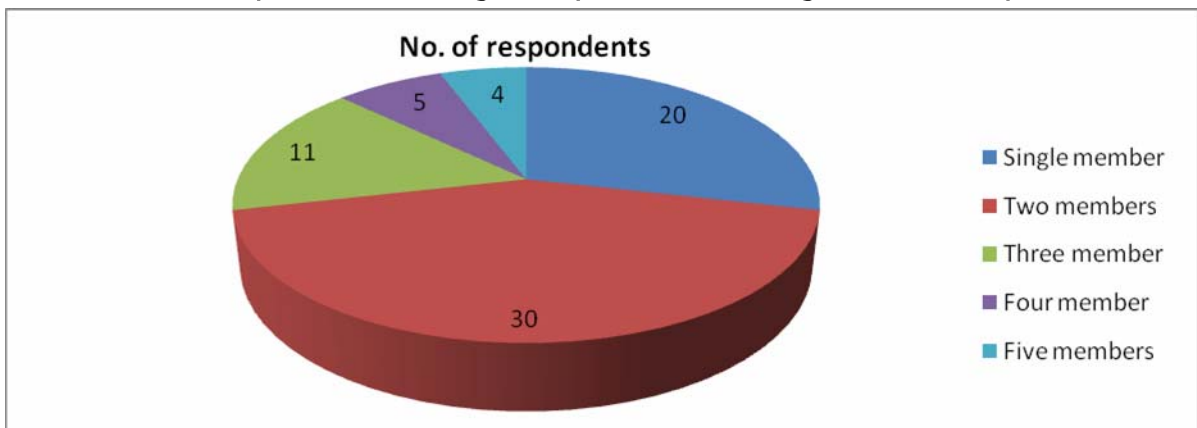
No of family members	1	2	3	4	5	Total
Respondents	20	30	11	5	4	70
Percentage	28%	43%	16%	7%	6%	100%

Source: Questionnaire

Table 29 and Figure 30 reveal that out of 70 respondents whose family members use NTC mobile phones, 30 of them have two, 20 of them have only 1 family member who use NTC Mobile. Similarly, 11, five and four of them have three, four, and five persons in family use NTC mobile phones respectively.

Figure: 31

No. of respondents having family members using NTC mobile phones



In the same question they have been asked about occupations of other members of their family who use NTC Mobile. The responses are as follows:

Table: 31

Occupation of family members using NTC mobile phones

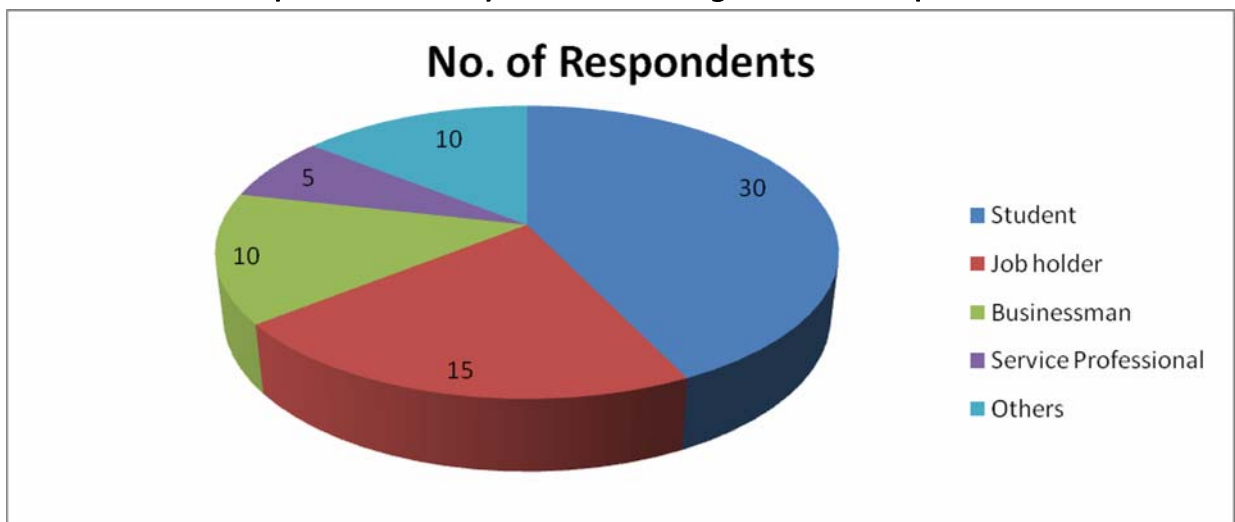
<u>Occupation</u>	Student	Job holder	Businessman	Service professionals	Others	Total
Respondents	30	15	10	5	10	70
Percentage	43%	22%	14%	7%	14%	100%

Source: Questionnaire

Out of 70 respondents whose family members use NTC Mobile, 30 of them have students, 15 of them have job holders, 10 of they have businessman, 10 of them have other occupations, and five of them have service professionals.

Figure: 32

Occupation of family members using NTC mobile phones



4.1.5 Mobile users' recommendations towards better performance of NTC

The researcher has asked the respondents through question no. 17 whether they have any complaint and/or suggestions regarding improvement for the better performance of NTC mobile phones. Different respondents provided different suggestions and complaints which are presented as follows:

- a. NTC should pay attention to improve the quality of service as well as expanding services with technical sophistications.

- b. Network coverage should be expanded all over the country.
- c. NTC should reduce the current tariff rate so that more rural people could also use the service.
- d. NTC should pay attention to the customer complaints and should try to resolve it.
- e. Network connection is deteriorating day by day. It should be improved.
- f. Quality of voice should be improved as sometimes it is quite unclear creating problem in voice communication.
- g. Cross connection should be avoided.
- h. New services should be introduced.
- i. As only up to Rs100 can be transferred from one mobile to another, the amount of balance transfer should be increased.
- j. Besides call charge, charge of other facilities like caller Back Ringtones, Data Service etc. should also be minimised.
- k. In CDMA sky phone, there is no facility of balance transfer, which should be provided.
- l. If the balance of CDMA Sky Phone falls below Rs.50.00, it always appears information to recharge which disturbs to connect immediately to the called party, which should be minimized.
- m. NTC should come up with such packages that cost lesser tariff to students as they do not earn.

Of the above suggestions/complaints, most of the respondents' complaints are about the network connection problem. So they have suggested NTC improving it. Other suggestion is for reducing the high tariff rate of NTC mobile. NTC should address these suggestions as soon as possible in order to retain loyal consumers. Otherwise, there is a chance that consumers may shift from NTC resulting heavy loss to it.

CHAPTER – V

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the 5th objective of this study. A Summary of this study will be presented, Conclusion will be drawn and on the basis of these summary and conclusion, Recommendation to NTC and other concerned will be suggested. All these will be done with the help of analyses made on Chapter four.

5.1 INTRODUCTION

The key elements of marketing are outward- looking and firmly centered on the customer. This orientation requires marketers to look at their organization, activities, and processes through their customer eyes. Communication with customers, measurement of their satisfaction levels and designing programs to improve customer satisfaction allow marketing the greatest influence within the firms. Thus one of the marketer's tasks is to devise marketing activities and assemble fully integrated marketing programs to create, communicate, and deliver value for consumers.

Therefore in summary, marketing activities begin with the identification of consumer needs, run through manufacturing, pricing, promotion and distribution activities and ends with fulfillment of organizational goal through consumer satisfaction. Since both the product and services are the subject matter of marketing, this dissertation intends to cover the consumer satisfaction aspect on various services of Mobile Telephone provided by Nepal Telecom (NTC) into Nepalese market.

To carry out this function, the marketing manager needs to have understanding of various components affecting consumer satisfaction besides the knowledge and understanding of all the factors of marketing. Even when one has the knowledge of the outcome of all relevant analysis tools, he/she cannot note down all his/her findings and conclusions at one go. So, to give order to our conclusions we will be mentioning them step by step based on summary of the various analysis tools. We first summarise the result of the analysis done in chapter four and on the basis of the summary we will conclude our findings and try to provide some relevant

recommendations to the management of NTC so that they can apply those recommendations if they deem appropriate.

5.2 SUMMARY OF THE STUDY

NTC has introduced cellular based mobile telephone service to its customers about 10 years ago showing its commitment to bring home one of the latest technologies in the fast changing world of telecommunication. Since it is a service having more facilities than the ordinary telephone and having mobility nature, its popularity is increasing day by day as a result private sectors have also shown interest and made huge investments in the field of mobile telecommunication.

In present days, two more operators other than NTC are providing mobile phone services in Nepal. United Telecom Limited is the first company from private sector that provided basic wireless telephone service in the starting. Spice Cell Nepal P.Ltd is the first private sector company that launched GSM based mobile service. Then after United Telecom Limited also started CDMA based mobile service. Thus, there is a huge competition in this sector.

Considering the huge competition, NTC should realize customer's wants, attitude and behaviour and then provide service accordingly to increase best goodwill from the existing customers and to attract other potential customers. It should not be forgotten that the customer is the king in any business and the success and failure of any business organization entirely depends on consumer's reaction to its offerings.

Understanding the market response as well as consumer behavior has become much more complex because it requires continuous investigation. Neither any scholars nor NTC itself has conducted such research by giving focus on consumer reaction on mobile telephone service. NTC has done only financial analysis before investing in this sector.

In such a circumstance, an attempt has been made in this research to study the areas of consumers' satisfaction on mobile telephone service by connecting it with consumer's response. The underlying objectives of the study are: to find out the expectations and areas of satisfaction of mobile phone users; to study and analyze

the profiles of mobile phone users; to find out the opportunities and threats of NTC at present and in future; to find out the most satisfied aspect in mobile phone service of NTC; and to recommend for better performance based on research findings.

In the course of achieving these objectives, a sample of 100 mobile phone users was taken by judgmental sampling from the Kathmandu Valley. The sample includes 20 each from business, student, job holder, service professionals, and other sectors. They were interviewed with the help of structured questionnaires. The collected data were completely analyzed and interpreted on objective-wise. Table, bar-diagrams and other information are presented as per need. The summary of major findings is as follows.

1. NTC has been providing various telecommunication services that vary from old technology to newly developed technologies such as Ordinary Telephone, Leased Line Circuits, Rural Telecommunication service, Mobile Telephone, Internet, etc.
2. NTC introduced 'Mobile Telephone Service' in Kathmandu Valley from 2055 Chaitra. But currently, the service has been expanded in all 14 zones and 75 districts throughout the country.
3. While observing the distribution trend of mobile phone, it can be seen that mobile phone users are in increasing order, although the growth rate is not constant. In case of GSM mobile phones there are no more waiters. But NTC currently has not been able to distribute CDMA mobile phone as per the demand.
4. Among various services available on NTC Mobile phones, the basic services like voice communication with national roaming, calling line identification (Caller ID), and SMS are used by all users.
5. Other most popular services are: caller ring back tone, balance transfer service, and call forwarding service.
6. The various services in mobile phones provided by NTC seem almost sufficient.

7. Most of the consumers are satisfied with the types of services on NTC Mobile phones and area coverage by NTC Network.
8. Most of the consumers' expectations are to improve quality of service and reduce price.
9. Most of the consumers of NTC Mobile services fall in the age group of 26 to 45 years.
10. Most of the consumers of NTC Mobile services have four to five family members in the household.
11. Most of the NTC Mobile users are educated. They have had Intermediate to Post Graduate degree.
12. The monthly income level is scattered from upto 5000.00 per month to above 20000.00 per month among consumers of NTC Mobile phone. But the income of business sector is more than other sectors in the society.
13. The monthly expenditure on Mobile phone is scattered from less than Rs 200.00 per month to above Rs 600.00 per month among consumers of NTC Mobile phone. But the expenditure of business sector is more than other sectors in the society.
14. Most of users have felt that the current tariff rate of NTC Mobile phone is high and the differential tariff with respect to time interval is necessary.
15. Most of the users have felt that the condition of Network connection of NTC Mobile phone is poor.
16. Some of the users agree that the clarity of sound in voice communication is accurate but majority of them don't agree with that. They feel the sound clarity is poor.
17. Different users of NTC Mobile phone are informed about various services that NTC offers through different media. Majority of them get information by Radio & TV.

18. The overall distribution of mobile phones in the country during the year 2065 was 1365715 lines. Of the total lines, 77.36% that is 1056500 was GSM Mobile and 22.64% that is 309215 was CDMA Mobile.
19. Till the end of year 2065, the total distribution of Mobile phone was highest in the Kathmandu region where a total of 1420035 lines were distributed. Distributions in other regions are 417866, 350757, 526652, 279668, and 97365 lines for Biratnagar, Birgunj, Bhairahawa, Nepalgunj, and Dhangadhi regions respectively.
20. In the beginning of the year, the density of Mobile phones (Number of Mobile phones per hundred people) in the country was 6.7 which has increased up to 11.22 at the end of the year.
21. The density of Mobile phone is highest in Kathmandu region and lowest in Dhangadhi region. The figures are 39.66, 6.52, 5.87, 9.68, 7.9, and 3.73 for Kathmandu, Biratnagar, Birgunj, Bhairahawa, Nepalgunj, and Dhangadhi regions respectively.
22. Goodwill of NTC is the most convincing aspect to the users. In spite of its various weak points, majority of NTC Mobile users use mobile phones due to the goodwill of the company.
23. Majority of NTC Mobile users' family members also use NTC Mobile phone.
24. While asking for the problems that are faced by mobile subscribers, majority of them showed the following points.
- (a) They are unable to get proper information from front-desk staffs when any problem exists in their mobile line.
 - (b) They are facing difficulties in changing their mobile number, name and to disconnect their line at the demanding time period.
 - (c) They blamed NTC that it charges penalties in the bill amount as crossing the last date of bill payment but it doesn't give any discount for fast paying customers.

(d) Majority of mobile users are identified with the newly developed communication technologies like email and Internet and its service charge. Thus indicating towards it, most of them express their strong dissatisfaction to the data and other extra services charge of mobile telephone.

25. There are some precautions regarding the use of Mobile phones which the consumers should keep in mind.

(a) Some of the newspaper and magazine are attracting the attention of mobile phone users not to use it in continuous manner since it may cause cancer or brain infection.

(b) Mobile phones are strictly restricted to use in hospital especially near Operation Theater and medical equipment due to radiation.

(c) It should not be used inside the aircraft and near aircraft equipment, which may cause the aircraft controlling failure.

(d) Near gas station, explosive materials, and highly inflammable petroleum products, the use of mobile telephone will be hazardous.

(e) Talking in mobile telephone while driving vehicles may invite sudden accidents.

5.3 CONCLUSION

On the basis of major findings the following conclusions have been drawn:

1. NTC has been trying its best to provide various communication services including mobile phones to the people of the country.
2. NTC has not been able to meet the demand of Mobile phones throughout the country. Although it seems that GSM Mobile phones are supplied as per demand, the reality is not like that as NTC has not yet been able to expand GSM Mobile phone to all 75 districts of the country. In the case of CDMA, the area coverage seems better but the supply has been crawled at snail's pace.

3. Apart from the most basic services like voice communication with national roaming, calling line identification (Caller ID), and SMS, only caller ring back tone, balance transfer service, and call forwarding service among various services available on NTC Mobile phones are popular. In other words, consumers are not satisfied for other services in one ways or other.
4. NTC has wide area coverage network and variety of services to offer, from which most of the consumers are well satisfied.
5. Although having wide variety of services, poor quality and high tariff rate are major negative aspects of its services.
6. Most of NTC Mobile phone consumers are 26 to 45 years of age and have four to five family members. Their education level varies from intermediate to post graduate.
7. Most of NTC Mobile phone consumers' income and expenditure on mobile pattern seems even. The high income holder spends more on mobile phones than low income holder.
8. Although NTC Mobile users have felt that the current tariff rate is high, they are satisfied with the differential tariff with respect to time interval.
9. The condition of network connection of NTC Mobile phone is poor. It is more severe in GSM than in CDMA network.
10. Consumers got knowledge about mobile telephone and its various services through different media of advertising. Basically, various newspaper, magazine, FM radios and Television commercial are used as a media of advertising.
11. Although the number of Mobile lines distribution and its density has been increased during the year, it does not seem enough as a prospective consumer still cannot get a mobile line, Pre-paid in particular, in many parts of the country. available
12. The current strategy of Mobile line distribution of NTC is focused on urban areas of the country. As the country has more population in rural areas, still more population is outside the access of NTC Mobile phones.

13. Goodwill of NTC has played a very important role for making its consumers loyal to NTC Mobile.

NTC has been working hard towards providing mobile phones to the people around the country and improvement of its service quality. The CDMA service has been expanded all 75 districts and GSM service is still in expansion phase and has crossed over 39 districts. To improve its quality of service, many BTS are installed in many sites in different areas around the country.

In spite of these efforts, the quality of service of Mobile phones has not been improved yet. One of the major complaints of most of the users is inferior overall quality of NTC Mobile service. This aspect is considered to be a strong dissatisfier to the consumers, a hard weakness point to the company's operational strategy and a dangerous threat to compete with other competitors.

Network area coverage and variety of services are well appreciated by consumers. And services like CRBT, balance transfer service, and call forwarding service etc. are popular among consumers. Network area coverage is key factor to NTC as all other services are also available in competitors' network too. So, network area coverage is major strength point to NTC. It can utilise this aspect as opportunity to fight with competitors.

The tariff rate of NTC Mobile service seems high. So, if it can reduce its tariff rate, it will gain strategic advantage over its competitors. Although it has made a positive feeling to its consumers through differential tariff rate with respect to time interval, it won't be enough to make them loyal in future.

5.4 RECOMMENDATIONS

On the basis of major findings and its conclusion, the following recommendations have been made.

1. NTC should expand its network area coverage all over the country as this will make NTC superior to its competitors in respect to strategic action plans. It will have advantage of attracting more and more prospective consumers which will help NTC grow and prosperous.

2. NTC should concentrate its effort to improve the quality of Mobile services it provides in the market, since it is the biggest weakness & threat for maintaining sound consumer – NTC relationship. It is very essential to improve the quality of its services in order to retain its existing consumers as well as to attract new consumers.
3. NTC should minimize the overall tariff rate of Mobile services to retain its consumers and to make new users. Apart from the differential tariff rate with respect to time interval, it should apply various tariff schemes targeting different segments of users so that different options would be available to consumers. It should terminate incoming charge in its own network as this has made great suffer to consumers comparing other service providers.
4. NTC should apply different marketing plans to distribute its Mobile phone according to the profiles of consumers. With variation in their age, number of family members, education level, income level, expenditure pattern on mobile phone etc., their need for mobile phones, use of services, amount of time used, their purpose of using a mobile may be different. So these variables should be kept in mind while distributing Mobile phones.
5. NTC should apply different types of advertising media to inform people effectively about its services. Since there are different types of people in respect to the age group, education level, income level, urban/rural residing etc., the media of information should be chosen with these variables keeping in mind. NTC should introduce new promotional activities like concerts, mobile fair, bonus coupon etc. for better promotion of its services.
6. NTC should expand its capacity to meet the market demand of Mobile phones. In the contest of more and more demand of Mobile (CDMA in particular) in the market, NTC has a great chance to grab the opportunity by providing enough lines in the market.
7. NTC should distribute its mobile lines in rural areas of the country too rather than urban area. Since more people live in rural areas in Nepal, there are more prospective consumers in rural areas.

8. NTC should boost up its goodwill among its consumers by providing them better quality of service in low price. It should introduce the new emerging services and technologies in Nepal too.
9. NTC should make its customer service more advance and consumer oriented. It should provide front–desk staffs and other complaints handling personnel so that, they can give valuable informations to the consumers and make them satisfy with NTC services.
10. While advertising about the mobile telephone service NTC should give its precautionary points mentioned in the summary of major findings chapter.

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QUESTIONNAIRE

Dear Respondents (NTC Mobile Users),

As a MBS student, I am going to research on Mobile Telephone Service for the partial fulfillment of the requirement for the degree course. Therefore you are kindly requested to fill up the following questionnaire and it will be the great help for me to prepare the research report.

Please give tick mark (✓) in appropriate box.

1. In which age category do you fall?
 - a. 15 – 25 b. 26 – 35 c. 36 – 45
 - d. 46 – 55 e. Above 55

2. In which of these categories does your educational Background fall?
 - a. Under SLC d. Graduate
 - b. SLC e. Post Graduate
 - c. Intermediate f. Other Specify

3. What is the size of your household (family numbers)?
 - a. Two b. Three c. Four d. Five e. More than 5

4. Which of the following best identifies your total monthly income?
 - a. Upto Rs 5000 b. Rs 5001 – 10000 c. Rs 10001 – 15000
 - d. Rs 15001 – 20000 e. More than Rs.20000.

5. What is your monthly expenditure on mobile phone?
 - a. Less than Rs. 200 b. Rs. 201 – 400
 - c. Rs. 401 – 600 d. Rs. 600 above

6. What sort of facilities you are using from mobile phone?

- a. Voice with national roaming b. Voice mail
- c. Caller ring back tone d. International roaming
- e. Data service f. Calling line identification.
- g. Call hold/waiting h. Multi party conference.
- i. Call forward j. SMS
- k. Call barring l. MMS
- m. Balance transfer service
7. Are the services provided by NTC in respect of mobile phones sufficient?
- a. Sufficient b. Just Adequate c. Not enough
8. What is the area of satisfaction regarding NTC Mobile phone?
- a. Services of Mobile phones b. Tariff rate
- c. Area Coverage d. Network connection
9. What is your future expectation towards NTC regarding its mobile phones?
- a. Reduce Price c. Introduce new services
- b. Improve Quality of Service d. Expansion of coverage area
10. The current tariff rate (call charge) of mobile telephone is:
- a. High b. Accurate c. Low
11. Differential discount tariff rate introduced by NTC with respect to time interval is:
- a. Necessary b. Unnecessary c. I'm Indifference
12. What is the condition of network connection in your area?
- a. Good b. Average c. Bad
13. How do you assess the clarity of sound in voice communication?
- a. Good b. Average c. Bad

14. What do you think would be the best source of advertisement to let you know about various services of NTC Mobile phone?
- a. Internet b. Radio & TV c. Newspaper d. Others
15. What is the most satisfied aspect of NTC mobile that lead you to prefer NTC mobile phones to others'?
- a. Reasonable Price c. Goodwill of the organization
- b. Quality of Service d. Impressive Advertisement
16. Do your other family members also use mobile telephone?
- a. Yes/No.....
- b. If Yes, how many members?
- c. His/her Occupation.....
17. If you have any complain and suggestion regarding to the mobile telephone service, please mention point wise:
- a.
- b.
- c.
- d.

Sincerely Yours,

Manju Acharya

Nepal Commerce Campus
Kathmandu

Thank you for your kind cooperation.

ANNEX – 2

List of Inbound Roaming Partners (Last updated: 04 June, 2009)

S.No	Operator Name	Country
1	Bharti Cellular Ltd (AirTel)	India, N.Delhi
2	Sing Tel Mobile 900	Singapore
3	Sing Tel Mobile 1800	Singapore
4	BT Cellnet	U.K
5	Bharti Cellular Ltd (AirTel)	India, Calcutta
6	Tele Denmark	Denmark
7	Hutchison Essar Ltd.	India, Mumbai
8	Vodafone Airtel Movil S.A	Spain
9	Hongkong CSL Ltd	Hongkong
10	Vodafone (former Libertel)	Netherlands
11	Sonera	Finland
12	Total Access Com (DTAC)	Thailand
13	Hutchison Telecom East	India, Calcutta
14	Hutchison Essar Telecom Ltd.	India, N.Delhi
15	BPL Mobile Communications Ltd.	India, Mumbai
16	GrameenPhone Ltd	Bangladesh
17	Omnitel Pronto Italia SpA	Italy
18	Bharti Mobile Ltd (Airtel)	India, Bangalore
19	New World PCS Ltd	HongKong
20	IDEA	India, Punjab
21	Swisscom Mobile Ltd	Switzerland
22	Fascel Limited(Hutch, Gujrat)	India, Ahmedabad
23	Cellcom	Israel
24	Partner Communications	Israel
25	MTNL Delhi	India
26	MTNL Mumbai	India
27	SONOFON A/S	Denmark
28	OPTUS	Australia
29	Orange Communications	Switzerland
30	Celltel Lanka Limited	Sri Lanka
31	IDEA	Karnataka, India

32	NTT DoCoMo	Japan
33	Dialog Telekom Limited	Sri Lanka
34	Orange France	France
35	Chunghwa Telecom Co Ltd	Taiwan
36	China Mobile	China
37	China Mobile	China
38	Hutchison Essar Cellular Limited (formerly BPL Mobile Cellular Limited). Maharashtra & Goa	India
39	Hutchison Essar Cellular Limited (formerly BPL Mobile Cellular Limited) , Kerala	India
40	Hutchison Essar Cellular Limited (formerly BPL Mobile Cellular Limited), Tamil Nadu & Pondicherry	India
41	Hutchison Telephone Co. Ltd.	Hongkong
42	VimpelCom(Former KB Impuls)	Russia
43	Idea Cellular Delhi	India
44	Idea Cellular Gujarat	India
45	Idea Cellular Andhra Pradesh	India
46	Advanced Info Service (AIS)	Thailand
47	Mobilkom Austria	Austria
48	SOFTBANK MOBILE Corp.(Former Vodafone K.K.)	Japan
49	Bharti Hexacom Ltd. (Airtel Rajasthan circle)	India
50	T-Mobile Netherlands	Netherlands
51	KPN Mobile	Netherlands
52	SFR	France
53	Smartone	Hongkong
54	Mobitel	Srilanka
55	Ufone	Pakistan
56	Polska (Era)	Poland
57	MobileOne	Singapore
58	Globe Telecom	Phillippines
59	StarHub	Singapore
60	Mobistar	Belgium
61	Turkcell	Turkey
62	Bharti (Airtel) Maharastra & Goa	India
63	Malaysian Mobile Services (Maxis)	Malaysia
64	Etihad Etisalat (mobily)	Saudi Arabia
65	TIM	Italy

66	Base	Belgium
67	LMT	Latvia
68	Vodafone	UK
69	Vodafone New Zealand	New Zealand
70	B-Mobile	Bhutan
71	O2	Ireland
72	Reliance	India
73	Cingular Wireless	USA
74	Cingular Wireless	USA
75	Cingular Wireless	USA
76	Cingular Wireless	USA
77	Bharti Airtel Limited, Punjab	India
78	Belgacom	Belgium
79	Aktel	Bangladesh
80	Qtel	Qatar
81	Aircel Cellular Limited, Chennai	India
82	T-Mobile	USA
83	T-Mobile	USA
84	T-Mobile	USA
85	T-Mobile	USA
86	T-Mobile	USA
87	T-Mobile	USA
88	T-Mobile	USA
89	T-Mobile	USA
90	T-Mobile	USA
91	T-Mobile	USA
92	Netcom	Norway
93	O2	Germany
94	O2	Germany
95	MegaFon	Russia
96	Thuraya	Worldwide
97	Banglalink	Bangladesh
98	Bharti Airtel Limited, Tamilnadu	India
99	Bharti Airtel Limited, Kerala	India
100	Bharti Airtel Limited, Mumbai	India
101	Telstra	Australia

102	Dhiraagu	Maldives
103	Bharti Airtel Limited, Madhya Pradesh	India
104	Bharti Airtel Limited, Himachal Pradesh	India
105	Bharti Airtel Limited, Chennai	India
106	Tango	Luxembourg
107	Bharati Airtel Limited, UP West	India
108	INDOSAT (IDNIM)	Indonesia
109	INDOSAT (IDNSL)	Indonesia
110	Rogers Wireless Partnership	Canada
111	Rogers Wireless (Fido Solution Inc)	Canada
112	PCCW (formerly SUNDAY)	Hongkong
113	Airtel Cellular Limited	Tamilnadu, India
114	Telenor Mobil	Norway
115	Voxmobile Luxembourg LUXVM	Luxembourg
116	PCCW (3G)	HongKong
117	Taiwan Mobile	Taiwan
118	Airtel haryana circle	India
119	Bharati Airtel, Andra pradesh	India
120	Telenor	Sweden
121	H3G S.P.A.	Italy
122	Chine Unicom	China
123	TeliaSonera Mobile Networks	Sweden
124	Hutchison(3G), HK Ltd.	Hongkong
125	Bharati Airtel Ltd. (Gajarat Circle)	India
126	BSNL	India
127	Tele2 Sweden	Sweden
128	T Mobile Germany	Germany
129	TMN	Porgutal
130	Zain	Saudi Arabia
131	CJSC BaykalWestCom (BWC)	Russia
132	T-Mobile Netherlands	Netherlands
133	SK Telecom	S. Korea
134	Wind	Italy
135	IDEA - Bihar	India
136	IDEA - Haryana	India
137	IDEA - Himachal Pradesh	India

138	IDEA - Kerala	India
139	IDEA - Madhya Pradesh	India
140	IDEA - Maharashtra and Goa	India
141	IDEA - Mumbai	India
142	IDEA - Rajasthan	India
143	IDEA - Tamil Nadu	India
144	IDEA - UP East	India
145	IDEA - UP West	India
146	DiGi	Malaysia
147	Go Mobile	Malta

List of Outbound roaming partners (Last updated: 04 June, 2009)

S.No	Operator Name	Country
1	Bharti Cellular Ltd (AirTel) New Delhi	India
2	Hutchison Essar Telecom Ltd., New Delhi	India
3	BPL Mobile Communications Ltd., Mumbai	India
4	BT Cellnet(O2)	UK
5	IDEA	India
6	Dialog Telekom Limited	Sri Lanka
7	Idea Cellular Delhi	India
8	Idea Cellular Gujarat	India
9	Cellcom	Israel
10	Advanced Info Services	Thailand
11	Chunghwa Telecom Mobile	Taiwan
12	Turkcell	Turkey
13	Mobistar	Belgium
14	Globe Telecom	Philippines
15	M One	Singapore
16	Sonofon	Denmark
17	China Mobile (CHNCT)	China
18	China Mobile (CHNCM)	China
19	Hong Kong CSL Limited	Hong Kong
20	SingTel Mobile 900	Singapore
21	Optus	Australia
22	Fascel Limited Ahemadabad(Hutch, Gujrat)	India
23	StarHub Singapore	Singapore
24	Hutchison Telecom East, Kolcutta	India

25	T-Mobile Netherlands	Netherlands
26	GrameenPhone	Bangladesh
27	Celltel	Sri Lanka
28	SFR France	France
29	Pak Telecom Limited (Ufone)	Pakistan
30	Polska (Era)	Poland
31	Bharti (Airtel) Maharashtra and Goa	India
32	TIM	Italy
33	Base	Belgium
34	Vodafone New Zealand	New Zealand
35	B-Mobile	Bhutan
36	O2	Ireland
37	Cingular Wireless	USA
38	Bharti Airtel Limited, Punjab	India
39	Belgacom	Belgium
40	Aktel	Bangladesh
41	Qtel	Qatar
42	NTT DoCoMo	Japan
43	Aircel Cellular Limited, Chennai	India
44	Netcom	Norway
45	O2	Germany
46	O2	Germany
47	Banglalink	Bangladesh
48	Bharti Airtel Limited, Tamilnadu	India
49	Bharti Airtel Limited, Kerala	India
50	Bharti Airtel Limited, Mumbai	India
51	Dhiraagu	Maldives
52	Maxis	Malaysia
53	Bharti Airtel Limited, Madhya Pradesh	India
54	Bharti Airtel Limited, Himachal Pradesh	India
55	Bharti Airtel Limited, Chennai	India
56	Reliance	India
57	T-Mobile(USA16)	USA
58	T-Mobile(USAW0)	USA
59	T-Mobile(USAW1)	USA
60	T-Mobile(USAW2)	USA

61	T-Mobile(USAW3)	USA
62	T-Mobile(USAW4)	USA
63	T-Mobile(USAW5)	USA
64	T-Mobile(USAW6)	USA
65	T-Mobile(USA27)	USA
66	T-Mobile(USA31)	USA
67	Tango	Luxembourg
68	Bharati Airtel Limited, UP West	India
69	Rogers Wireless Partnership	Canada
70	PCCW (Formerly SUNDAY)	Hongkong
71	Airtel Cellular Limited	Tamilnadu, India
72	Telenor Mobil	Norway
73	Voxmobile Luxembourg LUXVM	Luxembourg
74	Taiwan Mobile	Taiwan
75	Airtel haryana circle	India
76	Bharati Airtel Limited, Andra Pradesh	India
77	Bharati Airtel Limited, kolkata	India
78	Telenor	Sweden
79	Bharati Airtel Limited, Rajasthan	India
80	China Unicom	China
81	Etihad Etisalat (Mobily)	Saudi Arabia
82	TeliaSonera Mobile Networks	Sweden
83	VimpelCom(Former KB Impuls)	Russia
84	Hutchison(3G), HK Ltd.	Hong Kong
85	Bharati Airtel Ltd. (Gajarat Circle)	India
86	BSNL	India
87	Tele2 Sweden	Sweden
88	T Mobile Germany	Germany
89	TMN	Portugal
90	Hutchison (2G) Telephone Co. Ltd.	Hongkong
91	Zain	Saudi Arabia
92	CJSC BaykalWestCom (BWC)	Russia
93	Orange	Switzerland
94	SK Telecom	S. Korea
95	Wind	Italy
96	IDEA - Bihar	India

97	IDEA - Haryana	India
98	IDEA - Himachal Pradesh	India
99	IDEA - Kerala	India
100	IDEA - Madhya Pradesh	India
101	IDEA - Maharashtra and Goa	India
102	IDEA - Mumbai	India
103	IDEA - Rajasthan	India
104	IDEA - Tamil Nadu	India
105	IDEA - UP East	India
106	IDEA - UP West	India
107	IDEA - Karnataka	India
108	DiGi	Malaysia
109	Go Mobile	Malta

Source: www.ntc.net.np

CDMA Network Coverage Area

S/N	Districts	Covered VDC	No. of VDC
1	Taplejung	Change, Dhugresanghu, Dokhu, Hangdewa, Hangpang, Khamlung, Khojenim, Khoklin, Limkhim, Lintep, Liwang, Niguradin, Phulbari, Phunling, Phurumbu, Santharka, Sawa, Sawadin, Thukimba	19
2	Panchthar	Aarubote, Bharappa, Chilingdin, Chokmagu, Duradimba, Hanbung, Imbung, Limba, Lumphabung, Lungrupa, Nagin, Nawamidanda, Pauwasaartap, Phaktep, Phidim, Rabibazaar, Ranitar, Siwa (Kafalbote), Yangnam	19
3	Ilam	Aamchok, Chamaita, Chulachuli, Dhusaini, Ekatappa, Gajurmukhi, Godek, Gorakhe, Imang, Irautar, Jirmale, Jitpur, Kanyam, Kolbung, Laxmipur, Lumde, Mangalbare, Namsaling, Nayabazar, Panchakanya, Pashupatinagar, Phakphok, Phikkal, Phuyetapa, Puwamajhuwa, Sakaphara, Sakhejung, Samalabung, Shangrumba, Shantipur, Shreeantu, Siddhithumka, Soyak, Soyang	34
4	Jhapa	Anarmuni, Arjundhara, Bahundangi, Baluwadi, Baniyani, B-egundhura, Budhabare, Chakchaki, Chandragadhi HQ, Charpane, Dangibari, Dhaijan, Dharampur, Duwagadhi, Garamuni, Gauradaha, Gaurigunj, Ghailadubba, Gherabari, Goladhap, Haldibari, Jalathal, Juropani, Jyamirgadhi, Kechana, Khajurgachhi, Khudunabari, Kohabara, Koshebari, Kumar-khod, Lakhanpur, Mahabhara, Maharanihora, Mahe-shpur, Panchgachhi, Pathamari, Pathariya, Prithivinagar, Rajgadhi, Sattashidham, Shanishchare, Shantinagar, Sharanamati, Shivagunj, Surunga, Tanghandubba, Topgachhi	47
5	Shankhuwashava	Bana, Baneshwor, Chainpur, Dhupu, Diding, Jalajala, Kharang, Madirambeni, Mamling, Mawadin, Num Mudhe Sanischare, Nunadhaki, Sabhapokhari, Sidhakali, Sitalpati, Syabun, Tamaphok	17
6	Terhathum	Aabung, Angdeem, Basantapur, Dangpa, Hamarjung, Jalajale, Jirikhimti, Morahang, Myanglung, Oyakjung, Phakchamara, Phuleka, Piple, Sabala, Solma, Sudapa, Sungnam, Tamphula	18

7	Bhojpur	Aangtep, Baikunthe, Basikhora, Bhojpur, Dalgaun, Deurali (Jhyaupokhari), Dewantar, Homtang, Jarayotar, Keurenipani, Khawa, Kherang, Kota, Manebhayang, Mulpani (Dingla), Nepaledanda, Patalepani, Pawala, Ranibas (Ghoretar), Shyamshila, Sindrang, Thulodumma, Tiwaribhanjyang, Tungechha	24
8	Dhankuta	Aahale, Aankhisalla, Arkhaulejitpur, Basantatar, Belhara, Bhendetar, Bhirgaun, Bodhe, Budhabare, Budhimorang, Chanuwa, Chhintang, Chungbang, Dandabajar, Dandagaun, Gholikharka, Hattikharka, Khoku, Khuwafok, Kurul-etenupa, Leguwa, Mahabharat, Marek Katahare, Maunabudhuka, Mudhebas, Muga, Murtidhunga, Pakhribas, Parewadin, Phakasib, Phalate, Rajarani, Sanne, Tankhuwa, Teliya	35
9	Sunsari	Amaduwa, Amahibela, Aurabani, Babiya, Bakalauri, Baraha Khsetra, Bhadgaun Sinuwari, Bhaluwa, Bharaul, Bhokraha, Bishnupaduka, Chandbela, Chhitaha, Chimadi, Dewangunj, Duhabi, Dumraha, Ekamba, Ghuskighat, Hansposa, Harinagara, Jalpur, Kaptanganj, Khanar, Kushaha West, Kushaha Purba, Laukahi, Madhali, Madhesa, Madhuban, Madhyaharshahi, Mahendranagar, Narsingha, Pakali, Panchkanya, Prakashpur, Rajgunj Sinuwari, Ramgunj Belgachhiya, Ramnagar Bhutaha, Saterjhora, Shreepurjabdi, Simariya, Singhiya, Sonapur, Tanamuna	45
10	Morang	Aamgachhi, Amahi Bariyati, Amardaha, Babiyabirta, Bahuni, Baijanathpur, Banigama, Baranghi, Bardanga, Bayarban, Belbari, Bhaudaha, Bhogteni, Budhanagar, Dadarberiya, Dainiya, Dangihat, Dangraha, Darbesa, Dulari, Govindapur, Haraicha, Hasanadaha, Hattimudha, Hoklabari, Indrapur, Itahara, Jante, Jhorahat, Jhurkiya, Kaseni, Katahari, Kerabari, Keron, Kudamaha, Lakhantari, Letang, Madhumalla, Mahadeva, Majhare, Mathigachha, Motipur, Mrigoliya, Nocha, Pathari, Patigaun, Pokhariya, Rajghat, Ramitekhola, Rangeli, Shanishchare, Sidraha, Sijuwa, Singhdevi, Sisawani Jahada, Siswani Badahara, Sorabhag, Sundarpur, Takuwa, Tandi, Tankisinwari, Tetariya, Thalaha, Urlabari, Yangshila	65
11	Solukhumbu	Baku, Basa, Chaulakharka, Chaurikharka, Deusa, Garma, Goli, Jubing, Jubu, Kagel, Khumjung, Likhim, Mukli, Naile, Namche, Nechabatase, Panchan, Porbe(Mabe), Salleri, Salyan, Sotang, Taksindu, Tamakhani	23

12	Khotang	Bajhe Chihandanda, Chiuridanda, Lafyang, Matimabirta, Nerpa, Nirmalidanda, Ratamchha Majhagaun	7
13	Udayapur	Balamta, Baraha, Barre, Basaha, Beltar, Bhalayadanda, Bhutar, Chaudandi, Dumre, Hadiya, Iname, Jalpa Chilaune, Jante, Jogidaha, Katari, Katunjebawala, Lekhagaun, Nametar, Panchawati, Pokhari, Rauta, Risku, Siddhipur, Sirise, Sundarpur, Tapesworibelahi, Tawashree, Thanagaun, Thoksila, Tribeni	30
14	Okhaldhunga	Barnalu, Betini, Bigutar, Chyanam, Gamnangtar, Jyameere, Katunje, Kuntadebi, Musinga, Narayansthan (Andheri), Narmadeshwor, Okhaldhunga, Pokali, Ragani, Rumjatar, Salleri, Tarkerabari, Thulachhap, Yasama	19
15	Saptari	Aarnaha, Aurahi, Badagama, Bagangamakaththi, Bairawa, Bakadhunwa, Banainiya, Banarjhula, Banaula, Banauli, Barmajhiya, Basabitti, Bathanaha, Belhi Chapena, Bhagawatpur, Bhangaha, Bharadaha, Birpur, Bisahariya, Bodebarsain, Boriya, Bramhapur, Chhinnamasta, Dadha, Daulatpur, Deuribharuwa, Dhangadhi, Dharampur, Didhuwa, Dimana, Etahari Bishnupur, Fattepur, Gamariya Parawaha, Ghoghanpur, Gobardanda, Goithi, Hanuman Nagar, Hardiya, Hariharpur, Haripur, Inarwa, Inarwa Phulbaria, Jagatpur, Jamuni Madhepura, Jandaul, Jhutaki, Joginiya 1, Joginiya 2, Kalyanpur, Kamalpur, Kanchanpur, Kataiya, Khojpur, Khoksar Parwaha, Kochabakhari, Koiladi, Kushaha, Lalapatti, Launiya, Lohajara, Madhawapur, Madhupatti, Madhupur, Mahadewa, Mainasahashrawahu, Malahanama, Malahaniya, Maleth, Malikapur, Menakaderi, Mohanpur, Nardho, Nawarajpur, Nengada, Odroha, Pakari, Pansera, Parasawani, Paterwa, Patthargada, Phakira, Pharaseth, Phulkahi, Pipra (East), Pipra (West), Porataha, Rampurjamuwa, Roopnagar, Sakarpura, Sarashwor, Shambhunath, Simaraha Sigyaun, Siswa, Sitapur, Terahota, Theliya, Tikuliya, Trikaul	98
16	Siraha	Arnamaramapur, Asanpur, Ashokpur Balkawa, Aurahi, Ayodhyanagar, Badahara Michaiyamal, Barchawa, Belhi, Betauna, Bhadaiya, Bhagawatipur, Bhawanipur, Bhawanipura Kalabanjar, Bhediya, Bhokraha, Bishnupur Rampurwa, Bisnupur Mahisoht, Bisnupurkatti, Bramhamana Gorachh-	83

		ari, Chandra Ayodhdhya, Chandra Lalpur, Chandrodayapur, Chatari, Devipur, Dhangadhi, Dhodana, Dumari, Durgapur, Gadha, Gamhariya Maheshpur, Gaurpur, Gautadi, Govindapur Gudigaun, Hakapara, Hanumannagar pra ma, Harkatti, Hunumannagar, Inarwa, Itari Parsahi, Jamadaha, Janakinagar, Jijhaul, Kabilasi, Kalabanjar, Kalyanpur Jabdi, Karjanha, Krishnapur, Kushalakshminiya, Lagadigoth, Lakchminiya, Lalpur, Mahadewa Portaha, Mahanaur, Maheshpur Patar, Majhaura, Majhouliya, Malhaniya Govindapur, Malhaniyagamariya, Malhaniyakhori, Mohanpur Kamalpur, Muksar, Naraha Balakawa, Naraharigol (Gamhariya), Navarajpur, Pathariyatharutol, Phulbariya, Phulkahakatti, Pipra pra bi, Pipra (Dhanawar), Radhapur, Rajpur, Ramnagar Mirchaiya, Sakhuwa Nankarkatti, Sanaitha, Sanardanachikna, Sikron, Silorwa, Sitapur Pra Da, Sitapur Pra Ra, Sonamati, Sukhachaina, Sukhipur, Thalaha Kataha	
17	Dhanusa	Andupatti, Aurahi, Bagachauda, Bahedabela, Bahuarwa, Balabakhar, Balhakathal, Balhasadhara, Baniniya, Baramjhiya, Barphe, Basahiya, Basbitti, Bateshwor, Benga Dawar, Benga Shibapur, Bharatpur, Bhuhakapur, Bhutahi Paterwa, Binhi, Bisarmora, Chakkar, Chorakoyalpur, Debadaha, Denupura Rupaitha, Deuri Parawah, Dhabauli, Dhalkebar, Dhanauji, Dhanusa Govindapur, Dhanushadham, Digambarpur, Dubar kot Hathaletawa, Duhabi, Ekarahi, Ghodghas, Giddha, Gopalpur, Gothkoyalpur, Hansapur Kathapulla, Harine, Haripur, Hatthipur Hadwara, Itaharwa, Jhatiyahi, Jhojhi Kataiy a, Kajararamaul, Kanakpatti, Khajurichanha, Kharihani, Kurtha, Labatoli, Lagama Gadthaguthi, Lakhauri, Lakkar, Laxminiwas, Laxmipur Bagewa, Lohana, Machi Jhitakaiya, Makhanaha, Manansingpatti, Mithileshwor Nikas, Mithileswor Mauwahi, Mukhiyapatti Musrain, Nagarain, Nakatajhijh, Nanupatti, Nauwakhor Parasahi, Pai.Ko Mahawa, Patanuka, Paterwa, Pathacharwa, Paudeshwor, Phulgama, Pra.Kha. Mahuwa, Pushpalpur, Raghunathpur, Ramdaiya, Sabaila, Sakhuwa Mahendranagar, Sapahi, Satoshapur, Shantipur, Singyani Madan, Sinurjoda, Sonagama, Suga Nikas, Sugama Dhukari, Tallo Godar, Tarapati Sirsiya, Thadijhijha, Thera Kachuri, Thilla Jaduwa, Tulasiyahi Nikash, Tulasiyahijabdi, Tulsi, Umapremipur, Yaggyabhumi	98

18	Mahottari	Aaurahi, Ankar, Badiya Banchauri, Bagada, Bairagiya Lakshminiya, Balawa, Banauli Danauli, Banauta, Bardibas, Basabitti, Bathanaha, Belgachhi, Bharatpur, Bhatauliya, Bhramarapura, Bijalpura, Damhimadai, Dhamaura, Dharmapur, Dhirapur, Ekarahiya, Ekdara, Gaidabhetpur, Gauribas, Gaushala, Gonarpura, Halkhori, Hatilet, Itaharawakatti, Khopijanghatya, Khutta Piparadi, Kisannagar, Kolhuwabag-aiya, Laxminiya, Loharpatti, Mahadaiya Tapanpur, Mahottari, Maisthan, Majhaura Bishnupur, Manara, Matihani, Nainhi, Nigaul, Padaul Tilgadha, Parikauli Phuhatta, Parsa Pataili, Parsadawad, Pashupatinagar, Phulkaha, Pigauna, Pipra, Pokharbhinda Sangrampur, Raghunathpur, Ramgopalpur, Ramnagar, Ratauli, Sahasaula, Sahodawa, Samsi, Sanda, Sarpallo, Shreepur, Simardahi, Sisawakataiya, Sonama, Sonamai, Sonaula, Suga Bhawani Patti, Sundarpur	69
19	Sarlahi	Achalgaadh, Arnaha, Atrauli, Aurahi, Babarganj, Bagadaha, Bahadurpur, Balara, Barahathawa, Baraudyoorana, Batraula, Bela, Belhi, Belwajabdi, Bhagawatipur, Bhaktipur, Bhandasar, Bhawanipur, Bhelahi, Bramhapur, Chandranagar, Chhataul, Chhatauna, Dhanagadha, Dhanakaul, Dhanakaul, Dhungrikhola, Dhurkauli, Dumariya, Gadahiya, Gamhariya, Gaudeta, Hajariya, Harakathawa, Haripur, Hariwan, Hathiaul, Hemapur, Ishworpur, Jabdi, Jamuniya, Janakinagar, Jingadawa, Kabilasi, Kalinjur, Karmaihiya, Khoriya, Khairawa Mugalaha, Khutauna, Kodena, Lakhmipur, Lalbandi, Laukhat, Laxmipur, Madhuwan Goth, Madhuwani, Mahinathapur, Manpur, Mirjapur, Mohanpur, Motipur, Murtiya, Musaili, Narayankhola, Narayanpur, Naukelawa, Netraganj, Padariya, Parabanipur, Parsa Dewad, Pattharkot, Pharahadawa, Phulparasi, Pidari, Piparaya, Rajghat, Ramawan, Ramnagar Bahuarwa, Raniganj, Rohuwa, Sahodawa, Sakrola, Salempur, Sangrampur, Sasapur, Shankapur, Shreepur, Simara, Sirsaut, Sisauna, Sisautiya, Sudama, Sundarpur, Sundarpur Choharwa, Tribhuwannagar	95
20	Sindhuli	Amale, Balajor, Belghari, Bhadrakali, Bhimasthan, Bhimeshwor, Dandi Gurase, Jalkanyachapauli, Jarayotar, Kalpabrikchhya, Lampantar, Majuwa, Nipane, Purano Jhagajholi, Rani- bas, Ranichuri, Ratanchur, Shanteshwori Rampur, Sitalpati	19

21	Ramechhap	Bamti Bhandar, Betali, Bhaluwajor, Bhatauli, Bhuji, Bijulikot, Chanakhu, Chisapani, Chuchure, Deurali, Duragaun, Gelu, Gonshwara, Gothgaun, Gumdel, Gupteshwor, Kathajor, Khimti, Kubukasthali, Lakhanpur, Manthali, Nagdaha, Namadi, Okhreni, Pakarbas, Phulasi, Priti, Ramechap, Rasnal, Sainpu, Salu, Sanghutar, Sukarjor, Sunarpani, Tharpu, Those, Tilapung	37
22	Dolakha	Bhadpu, Bhirkot, Bhushaphedi, Boch, Chhetrapa, Chyama, Dadakharka, Gairimudi, Ghyangsukathor, Hawa, Japhe, Jhyanku, Jiri, Jugu, Kabhre, Katakuti, Lakuri Danda, Lamidanda, Lapilang, Magapauwa, Mali, Malu, Melung, Mirge, Namdu, Pawati, Phasku, Sahare, Sailungeshwor, Shyama, Sundrawati, Sunkhani, Suri, Thulopatal	34
23	Sindhupalchok	Atarpur, Bandegaun, Bansbari, Banskark, Barhabise, Batase, Bhimtar, Bhotechaur, Bhotenamlang, Bhotsipa, Chaukati, Dhuskun, Dubachaur, Gunsakot, Jalbire, Jethal, Jyamire, Kadambas, Karthali, Kiula, Kubhinde, Kunchowk, Lagarche, Lisankhu, Mahankal, Maneshora, Mangkha, Melamchi, Nawalpur, Palchowk, Pangretar, Pedaku, Phatakshila, Phulapingkatti, Phulpingkot, Pipaldanda, Piskar, Ramche, Sangachowk, Sanusirubari, Selang, Shikharpur, Sindhukot, Sifalkavre, Sipapokhare, Sunkhani, Syaule, Talamarang, Tathaili, Tatopani, Tekanpur, Thulo Dhading, Thulopakhar, Thumpakhar, Yamuna Danda	55
24	Rasuwa	Bhorle, Bridhrim, Chilime, Dandagaun, Dhunche, Gatlang, Haku, Jibjibe Nilkantha, Laharepauwa, Ramche, Saramthali, Thulogaun, Thuman, Timure, Yarsa	15
25	Dhading	Benighat, Chainpur, Chhatreurali, Dhola, Dhuwakot, Gajuri, Jibanpur, Jyamrung, Kalleri, Katunje, Khalte, Khari, Kumpur, Maldi, Muralibhanjyang, Nalang, Naubise, Nilkantha, Pida, Salang, Salyantar, Shankos, Sunaulabajar, Thakre, Tripureshwor	25
26	Nuwakot	Bageshore, Belkot, Bhalche, Buddhasing, Bungtang, Charghare, Chaturale, Chaughoda, Chauthe, Dangsing, Deurali, Duipipal, Gerku, Gorsyang, Jijiling, Kabilas, Kakani, Kalika Halde, Kalyanpur, Karki Manakamana, Kaule, Khadgabhyang, Khanigaun, Kintang, Madanpur, Mahakali, Okharpauwa, Panchakanya, Phikuri, Ratamate, Salme, Samari, Sikre, Sunkhani, Thanapati, Thansing, Tupche	37

27	Kathmandu	Aalapot, Balmbu, Baluwa, Bangbhanjyang, Bhadrabas, Bhimdhunga, Budhanilkanth, Chalnakhel, Chapalibhadrali, Chhaimale, Chunikhel, Dahachowk, Dakshinkali, Dhapasi, Dharmasthali, Gagalphedi, Gokarneshor, Goldhunga, Gongabu, Gothatar, Ichangunarayan, Indrayani, Jhormahankal, Jitpurphedi, Jorpati, Kapan, Kavresthali, Khadkabhadrakali, Lapsiphedi, Machchegaun, Mahadevsthan, Mahankal, Manamaiju, Matatirtha, Mulpani, Naikap Naya, Naikappurano, Nanglebhare, Nayanapati, Phutung, Pukhulachhi, Ramkot, Sangla, Sankhu Bajrajogini, Sankhusunatol, Satungal, Saukhel, Sheshnarayan, Sitapaila, Sundarijal, Syuchatar, Talkududechaur, Thalidanchhi, Thankot, Tinthana, Tokhachandeshori, Tokhasaraswoti	57
28	Lalitpur	Aashrang, Badikhel, Bhardev, Bhattedanda, Bishankhunarayan, Bungmati, Bunkhel, Chandapur, Chapagaun, Chaughare, Chhampi, Dahachok, Dhapakhel, Dukuchhap, Ekudol, Godamchaur, Godbari, Gotikhel, Harisiddhi, Imadol, Jhuruwarasi, Khokna, Lamatar, Lele, Lubhu, Malta, Manikhel, Nallu, Pyutar, Saiibu Bhainsepati, Shankhu, Siddhipur, Sunakothe, Thaiba, Thecho, Tikathali	36
29	Bhaktapur	Bageshori, Balkot, Changunarayan, Chhaling, Chittapol, Dadhikot, Duwakot, Gundu, Jhaukhel, Katunje, Nagarkot, Nankhel, Sipadol, Sirutar, Sudal, Tathali	16
30	Kavrepalanchok	Anaikot, Balthali, Balting, Baluwa Deubhumi, Baluwatapati Naldung, Bolde phediche, Basadol Mahendrajyoti, Bhumlutar, Birtadeurali, Chalalganeshsthan, Chandeni Mandan, Dapcha Chhatrebas, Dapcha Khanlthok, Daraune Pokhari, Devitar, Dhungakhark Barhabise, Dolalghat, Gairibisauna Deupur, Gothpani, Hoksebazhar, Jaisithok Mandan, Jyagdimandan, Kalapani Bhumedanda, Kanpur kalapani, Kattikedeurali, Katunjebesi, Kavrenidhi Chandeshwori, Kharelthok, Kharpachowk, Kolanti, Koshidekha, Kuruwas Chapakhori, Kushadevi Biharbar, Mahadevsthanmandan, Mangaltar, Mathurapatiphulwari, Methinkot, Nasikasthan Sanga, Nayan gaun, Panchkhal, Patlakhet, Phalate, Pokhari Narayansthan, Puranagaunpokhari, Ryalebhar, Salle, Sankhupatichaur, Sanuwangthali Gotamchaur, Saping, Saramathali, Sarsyunkharka, Sathigharbhagwati, Sharada Batase, Shyampati Simalchaur, Sivalichilaune, Takucha Nala, Thuloparsel, Ugrachandi Nala, Ugratara Janagal	59

31	Makawanpur	Aambhanjyang, Basamadi, Bhainse, Bhimfedi, Chitalang, Churemai, Daman, Dhiyal, Faparbari, Handikhola, Hatiya, Ipa Panchakanya, Kalikatar, Khairang, Kogate, Kulekhani, Makawanpurgadhi, Manahari, Manthali, Markhu, Namtar, Nibuwatar, Padampokhari, Palung, Phakhel, Raigaun, Shikharpur, Shreepur Chhatiwan, Sisneri, Sukaura, Thingan, Tistung	32
32	Rautahat	Ajagaibi, Akolwa, Auraiya, Badarawa, Bagahi, Bairiya, Banjaraha, Bariyapur, Basabiti Jingriya, Basantapatti, Basantapur, Bhasedawa, Bhediyahi, Birtiprastoka, Bishnupurawamanpur, Bishrampur, Brahmapuri, Chandranigahapur, Debahi, Dharahari, Dharmapur, Dipahi, Dumariya (Paroha), Dumariya Matiyon, Gadhi, Gamhariya Parsa, Gamhariyabirta, Gangapipra, Garuda, Gedahiguthi, Hajaminiya, Hardiyapaltuwa, Hathiyahi, Inarabari Jiutahi, Inarawarijiutahi, Jatahara, Jethahiya, Jhunkhunma, Jingadawa Belbichhawa, Jokaha, Judibela, Kanakpur, Karkacha, Karuniya, Katahariya, Khasarhiya, Laukaha, Laxmipur, Laxmipur Belbichhawa, Madhopur, Maryadpur, Mathiya, Matsari, Mithuawa, Mudabalawa, Narkatiya, Pacharukhi, Phatuhamaheshpur, Pipariya(1st), Pipariya(2nd), Pipra Bhalohiya, Pipra Pokhariya, Pipra Rajwada, Piprabhagawanpur, Porahi, Pothiyahi, Pratappur Paltuwa, Prempurgunahi, Raghunathpur, Rajadevi, Rajpur Farahadawa, Rajpurtulsi, Ramauli Bairiya, Rampurkhap, Rangapur, Sakhuawa, Sakhuawa Dhamaura, Samanpur, Sangrampur, Santapur(M), Santapur(Second), Saruatha, Simara Bhawanipur, Sitalpur Baiganiya, Tejapakad, Tengraha	86
33	Bara	Amab, Amarpatti, Amlekhgunj, Amritgunj, Babuain, Bachhanpurwa, Bagahi, Baghawana, Bahuari, Bakda Phulwariya, Balarampur, Banauli, Banjriya, Barainiya, Bariyarpur, Basantapur, Batara, Beldari, Bhagwanpur, Bhaluhi Bharbaliya, Bharatgunjsigaul, Bhatauda, Bhodaha, Bishnupur, Bishrampur, Buniyad, Chhatapipra, Chhatawa, Dewapur Phoolbariya, Dharamnagar, Dohari, Dumarwana, Gadhahal, Golaganj, Gunjabhawanipur, Haraiya, Hardiya, Hariharpur, Inrawamal, Itiyahi, Jhitkaiya(1), Jhitkaya(2) majhwaliya, Jitpur, Kachorba, Karaiya, Kawahigoth, Khutawajabdi, Kolhbi, Kudwa, Laxmipurkotawali, Lipnimal, Madhuri Jabdi, Matiarwa, Mahendra Adarsha, Maheshpur, Majhriya, Manaharawa, Motisar, Narahi, Nijgadha, Pakdiya Chikani, Parasurampur, Pathara, Patharahati, Phattepur, Pheta, Pipara, Piparadhingoth, Piparapati(1), Piprabirta, Piprasimara, Prasauna Bharseni, Prastoka, Purainiya, Raghunathpur, Rampur(Tokani), Rampurba, Ratanpuri, Raubahi, Shrinagarbairiya, Siharwa, Sisahaniya, Tedhakatti, Telkuwa, Tetariya, Uchidiha, Umjan	87

34	Parsa	Aalaun, Amarpatti, Auraha, Bagabanna, Bagahi, Bageshwari Titarauna, Bahuarwa Matha, Bahuwri Pidari, Bairiyabirta, Basadilawa, Basantapur, Belawa Prasauni, Beriya Birta, Bhauratar, Bhawanipur, Bhedihari, Mikhampur, Bhisawa, Bijabaniya, Bindabasini, Birchibarwa, Biruwaguthi, Bishrampur, Chorani, Deurbana, Dhobini, Dhore, Gadi, Gamhariya, Govindapur, Harapur, Haratapgunj, Hariharpur, Hariharpur Birta, Jagannathpur, Jankitola, Jayamangalpur, Jhauwaguthi, Jitpur, Kauwawan Kataiya, Lakhanpur, Lalparsa, Langadi, Lihabarthakari, Lipani Birta, Madhuban Mathaul, Mahadevpatti, Mahuban, Maniyari, Masihani, Mirajapur, Mudali, Nagardaha, Nichuta, Nirmalbasti, Pakaha Mainapur, Pancharukhi, Parasauni Matha, Parsauni Birta, Parsurampur, Paterwa Sugauli, Patwaritolabarba (Sivaorga), Pidariguthi, Pipra Ghodadaud, Pokhariya, Ramgadhawa, Ramnagari, Sabaithawa, Samjhauta, Sankhuwa Prasauni, Sedhawa, Shankarsaraiya, Sirsiya Khawatola, Sirsiya Nautaga, Sonbarsa, Subarnapur, Sugauli Birta, Supauli, Surjaha, Tulsibarwa, Udayapur Ghurmi	81
35	Chitawan	Audhyapur, Baghauda, Barchhauri, Bhandara, Birendranagar, Chainpur, Chandibhanjyang, Dahakhani, Dibyanagar, Gardi, Gitanagar, Gunjnagar, Jagatpur, Jutpani, Kabilas, Kalyanpur, Kathar, Khairhani, Kumroj, Mangalpur, Meghauri, Narayanpur, Padampur, Parwatipur, Patihani, Piple, Pithuwa, Saktikhor, Sharadanagar, Shivanagar, Shukranagar	31
36	Nawalparasi	Aamarapuri, Amarod, Argyouli, Badhara Dubauliya, Banjaraya, Bharatipur, Bhujahawa, Bulingtar, Daibachuli, Dandajheritandi, Daunnedevi, Debagaun, Dedgaun, Deurali, Dhauwari, Dibyapuri, Dumkibas, Gaindakot, Gerami, Guthi Parsauni, Guthi Suryapura, Hakui, Harapura, Jahada, Jamuniya, Jaubari, Kawasoti, Kolhuwa, Kudiya, Kumarbarti, Kusma, Mainaghar, Makar, Manari, Mithukaram, Mukundapur, Nararam, Narasahi, Narayani, Naya Belahani, Paklihawa, Palhi, Panchanagar, Parsauni, Pithauli, Pragatinagar, Pratappur, Rajhar, Rakachuli, Rakuwa, Ramnagar, Rampur Khadona, Rampurwa, Ratanpur, Ruchang, Rupauliya, Sanai, Sarawal, Shiva Mandir, Somani, Sukrauli, Sunawal, Swathi, Tamasariya, Thulo Kheratawa, Tilakpur, Triveni Susta, Upallo Arkhala	68

37	Rupandehi	Aadarshaamuwa, Aama Balrampur, Aanandavan, Asureni, Bagaha, Bagauli, Bairghat, Basantapur, Betarueya, Bhagwanpur, Bishnupura, Bodabar, Bogadi, Chhipagadha, Chhotki Ramnagar, Chilhiya, Dayanagar, Devdaha, Dhakadhahi, Dhamauli, Dudharakshya, Ekala, Gajedi, Gangoliya, Gonaha, Harnaiya, Hatti Pharsatikar, Hattibangain, Jogada, Kamahariya, Karahiya, Karauta, Kerwani, Khadwa Bangain, Khudabagar, Lumbini, Madhubalia, Madhuwani, Mainihawa, Majhagawa, Makahara, Manmateriya, Manpakadi, Maryadpur, Masina, Motipur, Padsari, Pajarkatthi, Pakadi Sakron, Parauha, Patakhali, Pharena, Pokharavindi, Rayapur, Rohanihawa, Rudrapur, Sadi, Saimalar, Saljhandi, Sauraha Pharsatikar, Semara, Shankarnagar, Siktahan, Silautiya, Sipawa, Suryapura, Tanuhawa, Thumhapiparahawa, Tikuligadha	69
38	Kapilvastu	Ajigara, Amiraw, Badganga, Bahadurgynj, Baluhawa, Banskhor, Barahipur, Barkoolpur, Basantapur, Bedauli, Bhagwanpur, Bhalawad, Bhaluwari, Milmi, Bidhyanagar, Bijuwa, Birpur, Bisunpur, Buddhi, Chanai, Dhankauli, Dharmapaniya, Dohani, Dudiya, Dumara, Gajehada, Ganeshpur, Gauri, Gotihawa, Gugauli, Haradona, Haranampur, Hariharpur, Hathosa, Jahadi, Jawabhari, Kajaharawa, Khuruhuriya, Kopuwa, Krishnanagar, Kusahawa, Lalpur, Maharajganj, Mahendrakot, Mahuwa, Motipur, Niglihawa, Pakadi, Parasohiya, Patana, Patthardehiya, Phulika, Pipara, Purusottampur, Rajpur, Ramnagar, Rangapur, Shivagadhi, Shivanagar, Shivapur, Singhakhor, Sirsihawa, Sisawa, Somadiha, Soraha, Thunhiya, Tilaurakot, Titirkhi, Udayapur	69
39	Arghakhanchi	Adguri, Argha, Arghatos, Asurkot, Bagi, Bhagawati, Chhatraganj, Chidika, Dhakawang, Dhanachaur, Dharapani, Dhatiwang, Dhikura, Divarna, Gokhunga, Hansapur, Jukena, Kerunga, Khana, Khanchikot, Khandaha, Khidim, Kimdanda, Maidan, Mareng, Narapani, Nuwakot, Pali, Pokharathok, Sandhikharka, Simalpani, Sitapur, Suwarnakhal, Thada, Thulapokhar, wangla	36
40	Palpa	Argali, Baldengadhi, Bandipokhara, Bhairabsthan, Birkot, Boghapokharathok, Chappani, Chidipani, Chirtungdhara, Darlamdanda, Deurali, Gejha, Kasauni, Khaliwan, Khanigaun, Madanpokhara, Masyam, Nayarnamatales, Pokharathok, Rampur, Roopse, Satyawati, Siluwa, Telgha, Timure, Yamgha	26

41	Gulmi	Aapchaur, Aarje, Amarpur, Arbeni, Arkhale, Arkhawang, Aslewa, Bada gaun, Baletaksar, Balithum, Bamdha, Bhurtung, Birbas, Bisukharka, Chhaphila, Darbardevisthan, Darlamchaur, Darling, Dhamir, Dhurkotrajasthal, Dibrung, Digam, Doholi, Dubichaur, Gaidakot, Gwadha, Gwadi, Hadhade, Harewa, Harrachaur, Hasara, Hastichaur, Hunga, Hwandi, Ismarjasthal, Jaishithok, Jayakhani, Jubhung, Juhang, Juniya, Khadgakot, Kharjyang, Kurgha, Limgha, Malayagiri, Marbhung, Musikot, Nayagaun, Neta, Pallikot, Paralmi, Paudiamarai, Phoksing, Pipaldhara, Purkot Daha, Purtighat, Rimuwa(Nimuwa), Roopakot, Ruru, Shantipur, Simichaur, Sirseni, Tamghas, Thanapati, Thulolumpek, Turang, Wagla, Wamitaksar	68
42	Syangja	Aalamadevi, Aaruchaur, Aarukharka, Arjun Chaupari, Bangefatke, Bangsing, Bhatkhola, Bichari Chautara, Birghaarchale, Chandi Bhanjyang, Chapakot, Chhangchhangdi, Chilaunewas, Darsingha Dahathum, Eladi, Fedikhola, Jagatbhanjyang, Jagatradevi, Kalikakot, Khiludeurali, Kibare, Kuwakot, Malunga, Malyangkot, Nibuwakharka, Pakwahi, Panchamul, Pauwegode, Pelakot, Pelkachaur, Phaparthum, Pidikhola, Rangmang, Rapakot, Sataudarau, Setidobhan, Shree Krishnagandaki, Sworek, Taksar, Thumpokhara, Tindobato, Tulasibhanjyang	42
43	Tanahu	Aabukhaireni, Arunodaya, Bandipoor, Barbhanjyang, Basantpur, Bhanu, Bhanumati, Bhimad, Bhirkot, Chhang, Chhimkeshwari, Chok Chisapani, Deurali, Devghat, Dharampani, Dhorfedi, Dulegauda, Ghasikuwa, Jamune, Kahunshivapur, Keshabtar, Khairenitar, Kinhun, Kotadarbar, Kyamin, Majhkot, Manpang, Pokharibhanjyang, Purkot, Ramjakot, Risingranipokhari, Roopakot, Samubhagawatipur, Shyamgha, Tanahunsur, Thaprek, Thiringsundhara	37
44	Gorkha	Aanppipal, Ashrang, Bakrang, Bhirkot, Biguwa, Bungkot, Chhoprak, Chyangli, Deurali, Dhuwakot, Gaikhur, Gankhu, Gherung, Ghyachchok, Gumda, Kashigaun, Keroja, Kharibot, Khoplang, Laprak, Lapu, Makaisin, Manakamana, Manbu, Masel, Mucchok, Namjung, Palungtar, Saurapani, Shwara, Simjung, Taklung, Takumajhalakuri, Taple, Uhiya	35

45	Manang	Bagarchhap(Tachai), Chame, Dharapani, Pisang, Thoche	5
46	Lamjung	Archalbot, Baglungpani, Bahundanda, Bajhaket, Bangre, Bansar, Besishahar, Bhalayakharka, Bharti, Bhoje, Borletar, Bhotedar, Bhulbhule, Bichaur, Chakratirtha, Chandisthan, Chandreshwar, Chiti, Dhamilikuwa, Dhodaini, Dudhpokhari, Duradanda, Elampokhari, Esaneshwor, Gaunshahar, Ghermu, Ghusaini, Gilung, Hiletaksar, Jita, Karapu, Khudi, Kunchha, Mohoriyakot, Nalma, Nauthar(Sera), Neta, Parewadanda, Puranakot, Samibhanjyang, Shreebhanjyang, Simpani, Sindure, Sundarbajar, Tadhiring, Tarkukot, Tarkughat, Udipur	48
47	Kaski	Arbabijayapur, Argala, Bhadauretamago, Bhalam, Bharatp-okhari, Chapakot, Dangsingja, Deurali, Dhachok, Dhampus, Dhikupokhari, Dhital, Hansapur, Hyangja, Kahun, Kalika, Kaskikot, Kistinachnechaur, Lahachowk, Lamachaur, Lumle, Lwangghalel, Machhapuchhre, Mauja, Nirmalpokhari, Pumdibhumdi, Puruncahaur, Ribhan, Rupakot, Sarangkot, Sardikhola, Semarang, Siddha, Thumki, Thumkodanda	35
48	Parbat	Aarthar Dandakhark, Bachha, Bahakithati, Bajung, Banau, Barrachaur, Baskharka, Bhangora, Bhuktangle, Chitre, Chuwa, Deuliwas, Deupoor, Devisthan, Dhairing, Durlung, Katuwachaupari, Khanigaun falebas, Kholalakuri, Khurkot, Kurgah, Lekhaphant, Lunkhudeurali +, Majhaphant(Mallaj), Mudhikuwa, Nangliwang, Pakuwa, Pangrang, Pipaltari, Ramja Deurali, Ranipani, Shaligram, Shiwalaya, Takalak, Thulipokhari, Tilahara, Urampokhari	37
49	Baglung	Adhikarichaur, Amalachaur, Ammarbhumi, Arjewa, Batachaur, Bhakunde, Bhimpokhara, Bhinggithe, Binhu, Boharagun, Burtibang+, Chhisti, Damaika, Darling, Devisthan, Dh-amja, Dudilabhati, Harichaur, Hatiya, Jaidi, Kandebas, Khunga, Lekhani, Malma, Narayansthan, Narethanti, Paiyupata, Pala, Rajkut, Rangkhani, Rayadanda, Resh, Righa, Salyan, Sarkuwa, Singana, Sisakhani, Sukhaura, Tangram, Tityang	40
50	Maygdi	Arman, Arthunge, Babiyachaur, Baranja, Bhagabati, Bhakimli, Bhalkawang, Bim, Dana, Darbang , Devisthan, Ghatan, Jyamarukakot, Kuhun, Marang, Mudi, Muna, Narachyang, Niskot, Okharbot, Patlekhet, Piple, Pulachaur, Ramche, Ratnechaur, Room, Shikh, Singa, Takam, Tatopani, Dhar	31

51	Mustang	Jhong, Jomsom, Kowang, Kundo, Lete, Marpha, Muktinath, Tukuche	8
52	Mugu	Karkibada, Pina, Shreenagar, Rowa, Ruga, Rara	6
53	Dolpa	Dunai, Tripurakot	2
54	Humla	Chhipra, Kharpunath, Simikot, Syada, Theha	5
55	Jumla	Badaki, Chandanath, Chumchaur, Depalgaun, Dhap, Dillichaur, Gajyangkot, Guthichaur, Haku, Kalika, Kartikswami, Sanigaun, Kudari, Lihi, Mahadev, Mahatgaun, Narakot, Patarasi, Patmara, Tatopani	20
56	Kalikot	Badalkot, Bharta, Daha Phatagaun, Gela, Kotwada, Lalu, Manma Khadachak, Mugraha, Ranku, Sukatiya	10
57	Rukkum	Bhalakcha, Chaurjhari, Chhiwang, Chokhawang, Jhula, Kakri, Khara, Mahata, Marwang, Muru, Musikot, Nuwakot, Peudha, Rugha, Sankha, Syalapakha	16
58	Rolpa	Badachaur, Bhawang, Budhagaun, Dhawang, Dubring, Gajul, Garigaun, Ghodagaun, Gumchal, Harjang, Hawama, Iriwang, Jaimaksala, Jalpokhari, Jankot, Jedwang, Jhenam, Jugar, Kareti, Khungri, Khumel, Korchawang, Kotgaun, Kureli, Liwang, Masina, Mijhing, Mirul, Nuwagaun, Ot, Pachhawang, Pakhapani, Pang, Phagam, Rak, Rangkot, Rangsi, Talwang, Tawang, Thawang	40
59	Pyuthan	Badikot, Bangemaro, Barjiwang, Barola, Belbas, Bhingri, Bijuli, Bijuwar, Bijya Nagar, Chuja, Dakhakwadi, Dangwang, Dharampani, Dharmawati, Dhawang, Gothiwan, Jumrikan-da, Khalanga, Khera, Kochiwan, Lung, Majhkot, Maranthana, Nayagaun, Okharkot, Pakala, Phopli, Ramdi, Raspukot, Sari, Sworgadwari, Torwang, Tushara, Udyapurkot	34
60	Dang	Baghmare, Bela, Bijauri, Chaulahi, Dhanauri, Dharna, Dhikpur, Duduwa, Gadhwa, Gangaparaspur, Gobariya, Goltakuri, Halwar, Hapur, Hekuli, Kavre, Lalmatiya, Laxmipur, Manpur, Narayanpur, Panchakule, Pawannagar, Phulbari, Purundhara, Rajpur, Rampur, Satwariya, Shantinagar, Shishaniya, Shreegaun, Sodiya, Sonapur, Syuja, Tarigaun, Urahari	35
61	Salyan	Bajhakanda, Chhaya Chhetra, Damachaur, Dandagaun, Dhanwang, Hiwalcha, Jimali, Kajeri, Karagithi, Khalanga, Kotmola, Kotwara, Marke, Nigalchuli, Phalbang, Pipalmeta, Rim, Sarapani Garchha, Sejuwal Takura, Shiddheshwori, Shivarath, Sinwang, Syanikhal, Tharmare, Tribeni	25

62	Banke	Bageshwori, Banakatti, Bankatwa, Basudevapur, Belbhar, Belhari, Betahani, Bhawaniapur, Binauna, Chisapani, Ganapur, Gangapur, Hiraminiya, Holiya, Indrapur, Jaispur, Kachanapur, Kalaphanta, Kamdi, Karkando, Kathkuiya, Khajurakhurda, Khaskushma, Kohalpur, Laxmanpur, Mahadevpuri, Manikapur, Matahiya, Narenapur, Naubasta, Paraspur, Phattepur, Piprahawa, Puraina, Puraini, Radhapur, Rajhena, Raniyapur, Saigaun, Shamsheergung, Sitapur, Sonapur, Titihiriya, Udharapur, Udyapur	45
63	Bardiya	Badalpur, Baunaha, Belwa, Bhimmapur, Daulatpur, Deudhakala, Dhodari, Ghadhawar, Gola, Jamuni, Kalika, Khairichandanpur, Magaragadi, Mahamadpur, Mainapokhara, Manau, Manpur Tapara, Motipur, Nayagaun, Nyaulapur, Padnaha, Pashupatinagar, Patabhar, Shivapur, Sorahawa, Surya Patuwa, Thakur Dwar	27
64	Surkhet	Babiyachaur, Bidhyapur, Bijora, Chhapre, Chhinchu, Dahachaur, Dandakhali, Dasharathpur, Dharapani, Dhumkhahare, Gadhi, Garpan, Ghuthu, Gumi, Hariharpur, Jarbuta, Kalyanpur, Kaprichaur, Khanikhola, Lagam, Latikoili, Lekhaparajul, Lekhgaun, Lekpharasa, Maintara, Mehelkuna, Neta, Ramghat, Ratudevisthan, Sahare, Salkot, Satakhani, Tarangaghat, Uttarganga	34
65	Jajarkot	Jagtipur, Jajarkot Khalanga	2
66	Dailekh	Awalparajul, Bada Bhairab, Badakhola, Badlamji, Baluwatar, Basi, Belpata, Bhawani, Bherikalikathum, Chauratha, Dandaparajul, Dullu, Gamaudi, Gauri, Goganpani, Chiudi Pusakot, Jagannath, Jamkukandh, Kal Bhairaw, Kalika, Katti, Kushapani, Lakuri, Lyanti, Malika, Mehaltoli, Naulekatuwal, Nepa, Padukasthan, Pagnath, Piladi, Raniban, Rawatkot, Rhadigera, Rum, Salleri, Seri, Toli	38
67	Kailali	Baliya, Basauti, Bauniya, Beladevipur, Bhajni, Chaumala, Darakha, Dhansinapur, Dododhara, Durgauli, Gadariya, Geta, Godawari, Hasuliya, Jankinagar, Joshipur, Khairala, Khaulang, Kotatulsipur, Lalbojhi, Malakheti, Masuriya, Mohanyal, Munuwa, Narauanpur, Nigali, Pahalmanpur, Pandon, Pathariya, Pawera, Phulwari, Pratappur, Ramshikhajhala, Sadepani, Sahajpur, Shripur, Thapapur, Udasinpur, Urmi	39

68	Doti	Baglek, Bajhakakani, Basudevi, Bhumirajmandau, Chhatiwan, Gairagaun, Gajari, Ghanteshwor, Kadamandau, Kafalleki, Kalena, Kalikasthan, Khatiwada, Khirsan, Ladagada, Laxminagar, Mudabhara, Mudhegaun, Niroli, Pachanali, Pokhari, Ranagaun, Sanagaun, Saraswotnagar	24
69	Achham	Babala, Badadaivi, Baijanath, Bannatoli, Barala, Bayala, Bindyabasini, Chandika, Darna, Jalapadevi, Janalikot, Japu, Kalagaun, Kaledanda, Kalika, Kalikasthan, Kuntivandali, Kuskot, Layati, Lunga, Malatakot, Mangalsen, Nada, Nandegada, Oligaun, Payal, Pualtletaula, Rahafa, Ridikot, Siudi, Timilsen, Turmakhad	32
70	Bajura	Aatichaur, Bahrabise, Bai, Bandhu, Brahmataola, Budiganga, Chhatara, Gudukhati, Jagannath, Jayabageshwori, Jugada, Jukot, Kailashmandau, Kotila, Kuldeumando, Manakot, Martadi, Pandusen, Tolidewal	19
71	Bajhang	Banjh, Bhatekhola, Byasi, Chainpur, Chaudhari, Dangaji, Deulekh, Deuralikot, Dhamchaur, Gadaraya, Hemantabada, Kadel, Kafalseri, Kailash, Kalukheti, Khiratadi, Koiralakot, Lamatola, Lekagaun, Luyata, Majhigaun, Malumela, Mastadev, Matela, Maulali, Parakatne, Patadewal, Pauwagadhi, Pipalkot, Rithapata, Sainpasela, Sunkunda, Suweda, Syadi	34
72	Darchula	Bhagawati, Boharigaun, Bramhadev, Chhapari, Dandakot, Dattu, Dhap, Ghari, Gokuleshwor, Gwani, Hunainath, Khalanga, Kharkada, Lali, Malikarjun, Riththachaupata, Sarmauli, Shankarpur, Uku	19
73	Baitadi	Basantapur, Bashulinga, Bhumeswar, Dehimandau, Deulekh, Durgabhawani, Durgasthan, Giregada, Gurukhola, Gwalek, Hatairaj, Mauneli, Nagarjun, Nwali, Salena, Shreekedar, Shreekot, Sidheshwor, Sidhpur, Silanga	20
74	Dadeldhura	Aajayameru, Bagarkot, Belapur, Bhadrapur, Bhageshwor, Chipur, Dewaldibyapur, Ganeshpur, Gangkhet, Koteli, Manilek, Mashtamandau, Nawadurga, Rupal, Samaijee	15
75	Kanchanpur	Baisi Bichawa, Beldandi, Chandani, Daijee, Dekhatmuli, Jhallari, Kalika, Krishnapur, Laxmipur, Parasan, Pipaladi, Raikar Bichawa, Rampur Bilaspur, Rauteli Bichawa, Shankarpur, Shreepur, Shunda, Trivuan Basti	18
Total No of VDC Covered			2765

Source: www.ntc.net.np

GSM Network Coverage Area

SN	Number Range			Zones/ Cities	Areas
	Post-Paid	Pre-Paid	3G-Prepaid		
1	98510, 98511	9841	9840	Kathmandu	East: Dhulikhel, West: Thankot, North: Budhanilkantha, South: Pharping
2		9849		BAGMATI	kathmandu valley, Kavre, Naubise, Maleku, Benighat, Kumpur, Ugratara VDC, Sanga, Nuwakot, Gajuri, Goganpani VDC, Dunche, Barabise, Chautara
3	98520	98421		KOSHI	Itahari, Duhabi, Dharan, Inaruwa, Dhankuta, Urlabari, Rangeli, Khandbari, Chainpur, Bhojpur, Terathum
4		98420		Biratnagar	Biratnagar
5	98526	98426, 984262		MECHI	Illam, Damak, Mechinagar, Bhadrapur, Chandragadi, Birtamod, Surunga, Budhabare, Gauriganj, Phidim, Taplejung, Phikal, Pashupatinagar
6	98528	98428, 984282		SAGARMATHA	Rajbiraj, Siraha, Fattepur, Kalyanpur, Mirchiya, Golbazar, Namche Bazar, Lukla, Gaighat, Kanchanpur, Okhaldhunga, Khotang, Diktel
7	98540	98440, 984402		JANAKPUR	Janakpur NP, Jaleswor, Dhalkebar, Jiri, Bardibas, Pipra, Mathiyani, Dhanusadham, Nagrain, Godar, Sathosar, Charikot, Lakuri dada, Mantahli, Malangawa, Hariwan, Lalbandi, Sindhulimadi NP
8	98550	98451, 98452		NARAYANI	Birgunj, Parwanipur, Simra, Bharatpur, Hetauda, Rampur, Ramnagar, Narayanghat, Tandi, Bhandara, Kalaiya NP, Ratna Nagar, Jitpur, Kolhabi VDC, Amlekhgunj, Nijgadh, Bhandara, Mugling, Sauraha, Daman, Manahari, Ghir Ghari, Parwanipur, Gaur NP, Gardi, Cnpur, Madi
9		98450		Birgunj	Birgunj
10		98460		Pokhara	Pokhara

11	98560	98461		GANDAKI	Pokhara valley, Manakamana, Gorkha, Damauli, Putali Bazar NP, Tanahu, Lamjung
12	98570	98470, 98471, 98476		LUMBINI	Butwal, Lumbini, Manglapur, Bhairahawa, Parasi, Chanauta, Taulihawa, kapilvastu, Sandhikharka, Tamghas, Tansen, Krishna Nagar, Gorusinghe, Parasi, Ram Nagar
13	98576	984762		DHAULAGIRI	Baglung, Beni, Parbat, Jomshom, Muktinath, Kagbeni
14	98578	98478, 984782		RAPTI	Lamahi, Lalmatiya, Ghorahi, Narayanpur, Tulsipur, Pyuthan, Salyan, Rolpa(Liwang, Thawang), Rukum(Khalangwa)
15	98580	98487, 98484, 98482, 98481, 98480		BHERI	Nepalgunj, Kohalpur, Gulariya, Bhurigaon, Bansgadhi, Rajapur, Surkhet, Dailekh, Jajarkot
16	98584	984842		SETI	Bajhang(Chainpur), Bajura(Martadi), Achham(Mangalsen), Doti(Dipayal,Silgadi), Dhangadi, Tikapur, Attariya
17	98587	984872		MAHAKALI	Mahendranagar, Jhalari, Darchula, Baitadi, Dadeldhura
18		98483		KARNALI	Kalikot(Manma), Jumla(Khalanga), Humla(Simikot), Dolpa(Dunai), Mugu(Gamgadi)

Source: www.ntc.net.np

ANNEX – 5

Mobile Call Tariff (GSM)

Effective Date: – 17 Baisak, 2066

1. SIM Subscription Charges:-

A	SIM Change	Charges
	SIM Card	Rs 500.00
	VAT	Rs 65.00
	Total	Rs. 565.00

B	Post-Paid Subscription Charge	with STD	with STD and ISD
	Credit Limit	Rs. 1000.00	Rs. 3000.00
	Ownership Charge	Rs. 1130.00	Rs. 1130.00
	Total	Rs. 2130.00	Rs. 4130.00

Tariff (Monthly Rental)	
Voice	Rs. 400.00*
Data	Rs. 200.00
Fax	Rs. 200.00
Multiparty	Rs. 100.00
GPRS (Unlimited)	Rs. 600.00

* Free Talk Time worth Rs 400.00 in monthly charge of Rs 400.00

*If GPRS is subscribed on **Usage Basis**, the monthly charge for voice will be 500.00 and Rs 0.02/KB will be charged on GPRS usage

C	Pre-Paid Subscription Cost	Charges
	SIM Card	Rs. 500.00
	VAT	Rs. 65.00
	Advance Recharge	Rs. 500.00
	Ownership Charge	Rs. 20.00
	Registration Charge	Rs. 50.00
	Total	Rs. 1135.00

2. Validation Period of Pre-Paid Recharge Card:-

SN	Card Type	Validation Period
1	Rs. 510	6 Months
2	Rs. 1020	1 Year

3. Calls Made from NT Mobile Service to Basic NT Phone and Mobile Services (except VSAT).

		ATC (Air Time Charge) [Rupees /minute]			
		Peak Hour		Off Peak Hour	
		08:00 to 20:00		06:00 to 08:00 20:00 to 22:00	22:00 to 06:00
GSM Post-paid	Sunday - Friday	1.60	1.00	0.75	
	Saturday	1.00	1.00		
GSM Pre-paid	Sunday - Friday	2.00	2.00		
	Saturday	2.00	2.00		

4. International Call Charge (ISD)

- a. ISD charge from mobile = ISD Charging Rate applicable to Basic Telephone Service + Air Time Charge (ATC) of Mobile Service within a zone
- b. Transborder Call to India thru mobile service is not available.

5. Domestic Roaming Charge (paid by Roamer)

	Roaming Charge 24 Hours
Incoming call from Nepal Telecom GSM/CDMA Mobile	Free
Incoming call from Nepal Telecom PSTN/C-Phone	Re. 1.00 per minute
Incoming call from other operator's network	Re. 1.00 per minute

6. Short Message Service (SMS)

- a. Within Nepal Telecom Network = Re. 1/- per SMS
- b. International SMS = Rs. 10/- per SMS

7. Inter Operator Charge

A. From Nepal Telecom's Fixed Service (PSTN and C-Phone) to

1. Call Charges for calls made to UTL's network

1.1 Local Calls

Call From	Call To	Pulse Duration	Pulse Rate	Rs (Approax)
PSTN / C-Phone	UTL FWT	PSTN & Ppostpaid C-Phone Business hour (2 min) Normal hour (4 min) Off hour(8 min)	Re. 1	Re. 1.00 per unit call
		Prepaid C-Phone Business hour (90 sec) Off hour(180 sec)		
PSTN / C-Phone	LM	46.2 sec	Re. 1	Rs. 1.30 per minut

PSTN and Postpaid C-Phone

Business hour: 8:00 am to 6:00 pm

Normal hour: 6:00 am to 8:00 am and 6:00 pm to 10:00 pm

Off hour: 10:00 pm to 6:00 am

Prepaid C-phone

Business hour: 8:00 am to 8:00 pm

Normal hour: 8:00 pm to 8:00 am

1.2 Zonal Calls (with in a same zone)

Call From	Call To	Cat A (24 hours)			Cat B (24 hours)		
		Pulse Duration	Pulse Rate	Total/min (approax)	Pulse Duration	Pulse Rate	Total/min (approax)
PSTN / C-Phone	UTL FWT / LM	37.5 sec	Re. 1	Rs. 1.60	33.3 sec	Re. 1	Rs. 1.80

1.3 From one zone to another zone

Call From	Call To	Cat A (24 hours)			Cat B (24 hours)		
		Pulse Duration	Pulse Rate	Total/min (approax)	Pulse Duration	Pulse Rate	Total/min (approax)
PSTN / C-Phone	UTL FWT / LM	16.6 sec	Re. 1	Rs. 3.60	15.7 sec	Re. 1	Rs. 3.80

2. Call charges for calls made to STM network

Call From	Call To	Cat A (24 hours)			Cat B (24 hours)		
		Pulse Duration	Pulse Rate	Total/min (approx)	Pulse Duration	Pulse Rate	Total/min (approx)
PSTN / C-Phone	STM	16.6 sec	Re. 1	Rs. 3.60	15.7 sec	Re. 1	Rs. 3.80

3. Call charges for calls made to SNPL network

Called From	Call To	Pulse Duration (24 hours)	Pulse Rate	Total (approx) per min
Local / Intra Zonal				
PSTN / C-phone	SNPL	40 sec	Re. 1	Rs 1.50
Inter Zone				
PSTN / C-phone	SNPL	17.1 sec	Re.1	Rs. 3.50

B. From Nepal Telecom's Mobile Service (GSM and CDMA) to

1. Call Charges for calls made to UTL's network

1.1 Zonal Call (with a same zone)

Call From	Call To	Cat A (24 hours)			Cat B (24 hours)		
		Pulse Duration	Pulse Rate	Total/min (approx)	Pulse Duration	Pulse Rate	Total/min (approx)
GSM / CDMA Post Paid	UTL FWT / LM	15 sec	55 paisa	Rs. 2.20	15 sec	60 paisa	Rs. 2.40
GSM Pre Paid			65 paisa	Rs. 2.60		70 paisa	Rs. 2.80
SkyPhone Prepaid			60 paisa	Rs. 2.40		65 paisa	Rs. 2.60

1.2 From one zone to another zone

Call From	Call To	Cat A (24 hours)			Cat B (24 hours)		
		Pulse Duration	Pulse Rate	Total/min (approx)	Pulse Duration	Pulse Rate	Total/min (approx)
GSM / CDMA Post Paid	UTL FWT / LM	15 sec	80 paisa	Rs. 3.20	15 sec	85 paisa	Rs. 3.40
GSM Pre Paid			90 paisa	Rs. 3.60		95 paisa	Rs. 3.80
SkyPhone Prepaid			85 paisa	Rs. 3.40		90 paisa	Rs. 3.60

2. Call charges for calls made to STM Network

Call From	Call To	Cat A (24 hours)			Cat B (24 hours)		
		Pulse Duration	Pulse Rate	Total/min (approx)	Pulse Duration	Pulse Rate	Total/min (approx)
GSM / CDMA Post Paid	STM	15 sec	80 paisa	Rs. 3.20	15 sec	85 paisa	Rs. 3.40
GSM Pre Paid			90 paisa	Rs. 3.60		95 paisa	Rs. 3.80
SkyPhone Prepaid			85 paisa	Rs. 3.40		90 paisa	Rs. 3.60

3. Call charges for calls made to SNPL Network

Called From	Call To	Pulse Duration (24 hours)	Pulse Rate	Total/min (approx)
Local / Intra Zonal				
GSM/CDMA Post paid	SNPL	15 sec	52.5 paisa	Rs. 2.10
GSM Prepaid			62.5 paisa	Rs. 2.50
CDMA Prepaid			57.5 paisa	Rs. 2.30
Inter Zone				
GSM/CDMA Post paid	SNPL	15 sec	77.5 paisa	Rs. 3.10
GSM Prepaid			87.5 paisa	Rs. 3.50
CDMA Prepaid			82.5 paisa	Rs. 3.30

Note

FWT = Fixed Wireless Terminal

LM = Limited Mobile

Cat. A: Calls terminated in Kathmandu Valley (Area code 01), Morang (Area code 021), Kaski (Area Code 061) and Parsa (Area code 051)

Cat. B: Calls terminated in other districts apart from mentioned in Cat. A.

C. Short Message Service (SMS)

SMS sent from NDCL to SNPL's Network – Rs. 1.25 per SMS

SMS sent from NDCL to UTL's Network – Rs. 1.25 per SMS (now, on testing period)

Note:

* All above mentioned charges are exclusive of all applicable taxes of Nepal Government.

ANNEX – 6

Tariff Rates for CDMA Mobile

Updated on: Poush 15, 2065

Domestic Calls

		Peak Hour			Off Peak Hour			
		(0800–2000)			0600–0800	2000–2200		2200 – 0600
Domestic Calls (per minute charge)	Days	Charge per minute	Pulse Duration	Pulse Rate	Charge per minute	Pulse Duration	Pulse Rate	Charge/ min
Local Calls (PSTN, CDMA, GSM)	(sun–fri)	Rs 1.80	15 sec	Rs. 0.45	Rs. 1.80	15 sec	Re. 0.45	Re. 0.75
	(sat)	Rs. 1.80	15 sec	Rs. 0.45	Rs. 1.80	15 sec	Rs 0.45	
STD Calls (PSTN, CDMA, GSM)	(sun–fri)	Rs 2.80	15 sec	Rs. 0.70	Rs 2.80	15 sec	Rs. 0.70	Rs. 1.75
	(sat)	Rs 2.80	15 sec	Rs. 0.70	Rs 2.80	15 sec	Rs. 0.70	

International Calls

International Calls (per minute charge)	6 AM to 8PM			8 PM to 6AM		
	Charge/min	Pulse Duration	Pulse Rate	Charge/min	Pulse Duration	Pulse Rate
SAARC Countries	Rs 20	3 sec	Re. 1	Rs. 15	4 sec	Re. 1
	24 hrs					
	Charge/min		Pulse Duration		Pulse Rate	
Other Country	Rs. 50		3.6 sec		Rs. 3	
Budget Call	Rs. 25		2.4 sec		Re. 1	

Inter operator Calls

Inter Operator Calls (per minute charge)	8 AM to 8PM			8 PM to 8AM		
	Charge/min	Pulse Duration	Pulse Rate	Charge/min	Pulse Duration	Pulse Rate
UTL Fixed	Rs. 3	15 sec	Rs. 0.75	Rs. 2	15 sec	Rs. 0.50
UTL Limited Mobile	Rs. 3	15 sec	Rs. 0.75	Rs. 2	15 sec	Rs. 0.50
SPICE Local	Rs. 4	15 sec	Rs. 1.00	Rs. 3.00	15 sec	Rs. 0.75
SPICE STD	Rs. 5	15 sec	Rs. 1.25	Rs. 4.00	15 sec	Rs. 1.00
STM	Rs. 4	15 sec	Re. 1	Rs. 3	15 sec	Rs. 0.75

Short Message Services (for 160 characters)

For national	Rs. 1
International	N/A

Voice Mail Box

Direct Deposit: 1615	Rs. 1
Retrieval : 1616, 1611,1617	Free

Special Numbers

Management Access Code (SKY Phone) 1415	Free
191,197	Free

PSDN Data

	24 hrs		
PDSN Data	Charge/100 KB	Pulse Duration	Pulse Rate
Data	Rs 0.15	10 KB	Rs 0.015

Note: The above mentioned Tariff is exclusive of TAX and VAT