

# **CHAPTER-I**

## **INTRODUCTION**

### **1.1 General Background**

Nepal is a one of the Least Developed Agricultural country. It is a democratic, independent, small, and landlocked country situated in the southern slopes of Himalayas. Nepal is surrounded by China in north and India by other side. The total area of Nepal is 147,181 sq. kilometers, situated between 26°22' north 30°27' north latitudes and 80°4' east 88°12' east longitudes resembling with roughly rectangular. Of the total area, about 83% is high hills, snow capped mountain, and 17% is the total land of Tarai in the South. The northern belt has high Himalayas (15% of total land) with snow all the year around (Economic Survey: 2006).

Nepal is one of the developing countries in the world characterized by high population growth. Unit price (2.2%), low Per capita income (\$385), and low unit price of capital formation. Gross domestic saving is 11 Percent of the GDP, and almost half of the population (above 50 Percent population) lives below the poverty line. Landlocked, unfavorable topography, absence of economic infrastructure, political instability in the past and lack of political commitment are some of the reasons behind the backward economic condition (Economic Survey: 2007).

Nepalese economy is dominant by agriculture that accounts for 41 Percent of national gross domestic product (GDP), which provides employment to 81.2 Percentage of the economically active population of the country in 1999. Hence, "Nepal has remained as one of the poorest country in the world with around 385 US dollars per capita income." This can be attributable to inefficient use of the resources in both the sectors i.e. agriculture and industry. However, in recent years, the non-agricultural sector is contributing more

shares in GDP in comparison with the agricultural sector. The area of information and communication retains the important as an inevitable infrastructure for the development of the country.

Public enterprises in Nepal constitute a vital instrument for the socio-economy development of the country. It enjoys a strategic price and crucial position in our mixed economy. Nepal has been trying to develop public sector institutions after the advent of democracy in the year 1951. The first enterprise to be turned to public sector was Nepal bank limited, established in 1994 B.S. Nepal started its planned economic development in 1956 with launching of first five-year plan. Since then the number of public enterprises has increased substantially in the various fields of Nepalese economy. There were 64 public enterprises before the privatization program of Nepal Government and at present, there are altogether 43 public enterprises in Nepal. Out of 43, 13 are in industrial sector, 6 are in trading sector, 8 are in service sector, 5 are social sector, 3 are in public utility sector, and 8 are in financial sector (Economic Survey: 2007).

The public enterprises are dominant in the production of sugar, cement, cigarettes, agriculture tools, petroleum product etc. Since the establishment of Nepal Telecommunication Corporation 28 years ago as public enterprises, its responsibility has been to provide reliable and affordable telecommunication service through the kingdom. Through its continuous effort to fulfill this responsibility, NT's contribution towards the overall socio-economic development of the nation is satisfactory.

## **1.2 Introduction of Nepal Telecom**

Telecommunication is a system, which facilitates conveying informing information quickly over long distance with a cheap cost. It is most scientific means of transmitting information in modern world. Without telecommunication facility, no organization can achieve its objective. In a developing country like Nepal, Nepal Telecom is the vital infrastructure for the

economic social and cultural development. It has been helping to keep close link with the international environment.

Nepal Telecommunication Corporation was established on 2032-3-1 B.S. under telecommunication act 1971 to provide reliable and affordable telecommunication service all over the country. Nepal Telecommunication corporation (NTC) the country's most profitable public enterprises were turned into a company in 1<sup>st</sup> Baishak 2061 with the name of Nepal Telecom. It was registered with the company registrars office on 2060-10-11 under company act 2053 and notice to this effort was published in Nepal gazette dated 26<sup>th</sup> Chaitra 2060 (Annual Report of NT 2000/01).

The first telecom service was established in Nepal during the regime of Chandra Samser in the year 1972 B.S. It was the first time and good opportunities for Nepalese people to transmit message from Kathmandu to Birjung. However, no remarkable development has been found until another 8 year. After 8 year, new telephone line-connecting Kathmandu to Gaur was installed in the year 1980 B.S. (Economic Survey 2007).

In 1992, B.S 25 automatic telecom lines were distributed among the high-ranking personalities of Nepal (including Royal Palace) for their own individual usage. Near Rani Pokhari, Kathmandu the telephone office was firstly established. Further telecommunication lines were made available during the rule of Prime Minister Judha Shamser by providing the line in the different districts to the extent of 300 miles long .The telephone lines were being extended from Kathmandu to Siraha, saptari in 1994B.S. In 1998 B.S additional Installation of telephone line Dhankuta, Dharan and Biratnagar were distributed. Similarly, 200 miles long telephone lines were also brought in use in the western part of Nepal, and to Pokhara Palpa and Bhairahawa. The government of Nepal felt the need of telecommunication for effective administration and active participation of people to achieve national goal. So

200 local C.B lines, 1000 magnet lines, 15 automatic lines 10 military exchange lines and 600 lines of trunk lines connecting Kathmandu with other district before the implementation of first 5 year national plan. NT has services, Mobile Phone Services (GSM), Sky Phone Mobile services, C-Phone Services, Prepaid Calling Card, Internet, and Intelligent network and so on. By the end of year 2006/07 Nepal Telecom had 5,20,000 PSTN subscribers, 12,19,000 Mobile subscribers, 311,000 CDMA subscribers and 25,000 Internet subscribers.

Increasing demand of Telecom service in general and mobile service in particular all over the country including Rural areas is a clear indication of the fact that Telecom sector has become one of the most vibrant and dominant service industries in the country. Recent entry of private operators in the sector should, therefore, we have considered as governments, initiative to make the sector grow at faster both in terms of quantity and quality. But the fact remains that in spire of new liberal Telecom Act 2053, due to various reasons the market share achieved by private sector is still less then 10% of the total Telecom businesses volume. Hence the incumbent Nepal Telecom shall have to make the responsibility of expanding infrastructure at faster pace covering nooks and corners of the country, not only as competitive strategy but also to cater ever increasing demand from general public for both voice as well as data services.

NT has charged different rate of different services in different time. Single rate is not suitable forever. Due to the continuous change in internal and external environment, NT rate of different services must be adjusted with the changed environment. Many factors are affecting by unit price change.

### **1.3 Objective of Nepal Telecom (NT)**

The main objectives of NT are to provide reliable, cheap, simple, and fast services to the customers as well as contribution to the national development.

Nepal Telecom as a progressive, customer spirited and consumer responsive Entity is committed to provide nation-wide reliable telecommunication service to serve as an impetus to the social, political, and economic development of the country. Goal of Nepal Telecom is to provide cost effective telecommunication services to every nook and corner of country. (www.ntc.net.np)

The other main objectives of the company are as follows;-

- To provide qualitative service, by commercializing telecom service.
- To provide internal and external telecom services to the customer.
- To held feasibility study to expand telecom services to the customer.
- To exchange telecom services with other same companies like UTL, Spice Nepal Pvt. Ltd etc.
- To develop and expand modern telecom technology as a system to expand telecom services.
- To held other necessary work and other programmers to opened price telecom services. (Prospectus of NTC.)

#### **1.4 Mission, Vision, Goal of Nepal Telecom**

##### Nepal Telecom mission

"Nepal Telecom as a progressive, customer spirited and responsive entity, is committed to provide national-wide reliable telecommunication services to service as an impetus to the social, political and economics development of the country" ( Annual Report 2007)

##### Nepal Telecom vision

"Vision of Nepal Telecom is to remain a dominant in telecommunication sector in the country. While also extending reliable and cost effect services to all "(Annual Report 2007)

### Nepal Telecom Goal

"Goal of Nepal Telecom is to provide cost effective telecommunication services to every nook and corner of the country"(Annual Report 2007)

### **1.5 Focus of the Study**

Some external and internal environment influences every organization's activities. Therefore, organization's activities should improve according to change. One of the major activities of organization is to fixed price of its product or services. Single price is not suitable for each product. According to diversified product, price also should charge differently. High price should be charge for high quality product. Due to the globalization, every thing is changing rapidly. For instance, cost of resources, inflation, technology, competition, and political situation Due to these changes, the unit price of service have to adjust accordingly. Some other factors are also affected by their change. Due to change of unit price, some factors are affected positively, and some factors are affected negatively. To minimize the negative impact, suitable changes shall be made by the organization

Nepal telecom has been providing reliable and affordable telecommunication service all over the country. It is a most profitable public enterprise of Nepal. It provides different type of telecom services. Allocated costs vary for different services. I.e. cost of ISD service is greater than cost of STD services. Numerous internal and external environments affect NT's activities. Out of various major activities, processes of determining unit price are also affected. Single unit price is not appropriate forever; therefore, unit price shall be change in order to maintain the cost and other factors. If time adjusted unit price is not charge to its customer then sales revenue may be negatively affected.

The focus of the study is to find out the major causes of unit price change of NT's services. To analysis the impact of unit price change, it is necessary to review the different unit price of different service of the study Period.

Especially focus of study focuses on impact of unit price change, on sales revenue of different service, profit of NT and No. of service user of NT.

### **1.6 Statement of the Problem**

Most of the public enterprises of Nepal are in a great crisis. Some of them are liquidated, some are privatized, and some are in process of privatization. At present, among public enterprises of Nepal, NT is regarded as one of the few successful corporations. Even so, how long can this prosperity continue? This question is haunting and daunting to every conscious person. The monopoly of Nepal Telecom in telecom sector is seems to end continuously. In this competitive and complex situation, NT and all its effort and stables should focus more toward customers. Different political movement has victimized NT. Many valuable infrastructures of NT were destroyed during 8-10 year of Maoist movement.

This study has tried to answer the following research question:

- What are the factors, which affects the pricing system?
- What is trend of unit price of Nepal Telecom over last Seven years?
- What is the position of unit price in NTC?
- What is the impact of price on profit and revenue in NTC?
- What is the relationship between unit price and total revenue of company?

### **1.7 Objective of the Study**

Nepal Telecom is a large-scale public enterprise, which is one of the basic infrastructures for the development of the nations. Without Communication Corporation, industrialization and development process is impossible. The main objective of the study is unit price and its relationship with other factors like revenue and profit of Nepal Telecom. The other specific objectives of the study are:

- To identify the factors, governing price in NTC.

- To review the unit price of different services in difference year.
- To find out the impact of unit price change on different factor especially on profit and sales revenue.
- To provide suggestions and recommendations for the development of Nepal telecom.

### **1.8 Importance of the Study**

Many researchers felt that, there is lack of study on the unit price service of Nepal telecom. By the study of "Impact of unit price change of internal and external services of NT" it helps to know and identity the various unit price followed by NT in different time Period. This study shows the effect of unit price change on many factors such as profit, sales revenue, and number of served customer. Appropriate causes of unit price change can be known from above study. This study may be useful to know more about various unit price of different service in different period and about different services. It may be also useful for future researcher.

### **1.9 Limitations of the Study**

A research is a full blaze and vast investigation study for the settlement of the problems. Therefore, it needs full time, finance, and detailed information. The focus of the study is to identify the impact of unit price change of NT. There are various services provided by NT following factors have limited the scope of this study.

- The study covers a 7 years Data based on historical records provided by NTC from 1999/00 to 2005/06.
- This study focuses especially on unit price of basic telephone service and mobile phone service.
- This study covers the impact especially on profit sales revenue and no. of services user.



- The accuracy of the study is base on the data available from the management of NT and other secondary sources.
- Since the study deals with NT, the conclusion drawn from study may or may not be applicable to other enterprises.
- The study focus especially on domestic service (i.e. Local call and STD) and international services (i.e. ISD)

## **1.10 Organization of the study**

This study is divided into 5 different chapters. They are

### **Chapter I: Introduction**

This chapter contains the brief introduction of the subject matter. I.e. Background of the study, introduction of Nepal Telecom, objective of Nepal Telecom, focus of the study, statement of problem, objective of the study, importance of the study, and limitation of the study.

### **Chapter II: Review of Literature**

This chapter is an explanatory section of the thesis. It includes conceptual and theoretical reviews, review of related studies and research gap.

### **Chapter III: Research methodology**

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

### **Chapter IV: Data presentation and analysis**

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

## **Chapter V: Summary, conclusions, and recommendations**

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

Bibliography, Appendix and the supportive document have also been incorporated at the end of the study.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

Review of literature means reviewing research studies or other relevant propositions in the related area of the study. It is a stocktaking of available literature in the field of research. It supports the researcher to explore the relevant and true facts for the reporting purpose in the field of study. Literature here means the related printed material about the subject matter of the research work. It may be in various forms like book, booklet, thesis, reports etc. In the course of research, review of the existing literature would help to check the chance of duplication in the present study. It can also help to find what studies have been conducted and what remains to go with. Review of literature is vital while doing research work as it gives the finding of the previous study. It can be used as a secondary data, and it gives the valuable information about the subject.

In this study, review of literature has been divided into three sections. Section 1 deals with Conceptual and Theoretical Review while review of related studies has been explained in section 2 and section 3 deals with Research gap.

#### **2.1. Conceptual and Theoretical Review.**

##### **2. 1.1 Definition of Rate**

Price Per unit of product or services is called unit price. It is defined for the purpose of this study. There are numerous needs of human being. To fulfill that need they should purchase some goods or services. For purchase, they should pay some amount that is called price. By paying amount as price, they received some goods or services. They will be satisfied by consuming goods, which they had purchased by paying price. It is defied by customer's view.

Every profit motive organization and non-profit motive organization sells some goods or provides some services to its customer. For selling purpose, they purchase or produce goods. For it, they bear some cost, which can be recovering by selling goods or services. For selling purpose, organization should set their goods or services' Price. How much price should charge? This question may arise.

By both concepts, price is same. Price is the amount scarified to obtain a particular product or services. Price is usually expressed in term of monitory units. In the past, goods were used as price. At present, price is expressed in different terms in different exchange transactions as.

Interest	Price paid	for loan or debt
Rent	Price paid	for hiring physical assets.
Fare	Price paid	for Transportation Services
Fee	Price paid	for Professional services
Tuition	Price paid	for Education
Premium	Price paid	for Insurance
Salary	Price paid	for employee services
Wages	Price paid	for Worker or labor services
Commission	Price paid	for executing a deal
Postage	Price paid	for Sending mail thought post office

Price is also defined as statement of value, most commonalty expressed in Rupees in Nepal. Price is the value assigned to the utility one receives from product or services.

Historically, Price has seen the major factor affecting buyer choice. This is still true in poorer country. Price is the element that produce sales revenue that is must desired regular and reliable sources for sustainable development of any organization. How much price to be charge is one of the most crucial decisions

a business face. This work is also one of the most difficult or challenging because it should appeal to customer, beat competitor, recover cost, provide surplus for survival, further growth and expansion, fulfill social responsibility, honor government regulation comply with business ethics and enhance organization image. To fulfill the same need of customer, producer can produce different quality of product. For different variety of product, different price can be charge by seller or producer.

### **2.1.2 New Tariff Unit Prices from its 27<sup>th</sup> Anniversary**

Marking the 27<sup>th</sup> Anniversary of its foundation, NT has decided to introduce new tariff unit prices starting from Ashad 1, 2059. The new tariff unit prices shall be implemented in both the basic telephone service and the mobile service. To cope with the recurrent changes in the telecommunication sector, at national and international fronts along with new developments in technologies, it was paramount for NT to change its tariff structure.

Such tariff re-balancing normally calls for lower prices for international & long distance calls and higher charges for local calls & for basic connection and rentals.

With the tariff rebalancing, the significant charge made in the basic telephone service, is the increase in the minimum monthly charge rental. From Rs. 150/- to 220/- inclusive of the number of free calls, this has also been increased from 100 to 175 calls. Additional calls after 175 free calls will be charged Rs. 1/- Per call. The three different tariff slabs implemented during the day, are Business Hour from 8:00 am to 18:00 pm; Normal Hour from 18:00 pm to 22:00 pm as well as from 6:00 am to 8:00 am and Off Hour from 22:00 pm to 6:00 am. The duration per call for these three categories is 2 minutes, 4 minutes and 8 minutes per call respectively. Similarly, fewer call tariff categories depending on distance, both in national and international telephone services have also been introduced. For national STD service, three categories depending on

distances of 0-50 Km, 50-200 Km, and 200 Km upwards have been set. The Per minute charge for the three categories during the day for Business, Normal and Off Hour at times specified above are Rs. 2.50, 1.70 and 1.00 respectively for distance up to 50 Km. Rs. 5.25, 3.52 and 2.10 respectively for distances form 50 to 200 Km and Rs. 9.00, 6.00 and 3.60 respectively for distances above 200 Km.

For international Long Distance calls, only two-tariff call structure had been fixed besides India and SAARC countries. The Per minute call charge for all Asian countries except SAARC countries including Australia, Europe and countries of North America has been fixed as Rs. 75/- For all other countries, the Per minute call charge shall be Rs. 90/-. Trans-border calls and calls through terrestrial links to India shall be charged Rs. 5/- and 30/- Per minute respectively. All calls to SAARC countries and to India through satellite links shall be charged Rs. 45 per minute (Annual Report of NTC 2000/01).

For mobile service, the monthly rental charge and the airtime charges have been reduced significantly. The monthly rental charge has been reduced to half i.e. Rs. 500/- instead of previous unit price of Rs. 1000/-. However, the minutes free call facility has been removed from the reduced rental charge. For outgoing mobile calls, the airtime charge Per minute for Business Hour (15 seconds/pulse) and Off Hour (30 seconds/ Pulse) have been reduced to Rs. 4/- and 2/- respectively. Similarly for incoming Mobile Calls, the airtime charge Per minute for Business Hour (30 second/ Pulse) and Off Hour (60 seconds/pulse) have been reduced to Rs. 2/- and 1/- respectively. National Trunk Calls made through mobile phones shall be charged Rs. 10/- Per minute at Business Hours (airtime charge Rs. 4/- + STD charge Rs. 6/-) and Rs. 5/- at Off Hours (airtime charge Rs. 2/- + STD charge Rs. 3/-) respectively. For Mobile service Business Hour denotes a span form 8:00 am to 22:00 pm and off Hour from 22:00 pm to 8:00 am.

The introduction of the new tariff unit prices is a milestone achievement in NT's effort to implement cost based tariff structure. At present, the tariff structure is out of range with costs because the unit prices have not charged significantly for almost a decade now (the only change made was the implementation of metering of one call per three minutes) although inflation was on the rise all these years. NT had to be supported by subsidies from other services to bear the loss (i.e. from international to local telephone). The tariff re-balancing is also a landmark in NT's policy to be ready to face competition with the imminent entrance of the private operators in the telecommunications sector. In a competitive market, such subsidies are unlikely. Operators operations in a competitive market have to optimize tariff for each service to fulfill the demand from the market. Without optimizing the tariffs, NT will be left back with all non-lucrative services and areas. Yet the new tariff structure to be introduced so on is just the first stepping-stone towards implementing actual cost based tariff structure (Telephone Directory of NT: 2003).

### **2.1.3 Factor influencing to the price of product or services**

Major factors that influence price are as follows:

#### **a) Target Customer**

Every executive sells his or her goods or services to its customer. Based on income, there may be three types of customer. They can be divided into; High-income class customer, Middle-income class customer, and Low income class customer. High income classes customer pay high price for high quality product. They does not consider about price if they get quality product. Business can sell high quality product by charging high price to this type of customer. Middle income classes customer compare price with quality of product. They want to purchase quality product at low price. Such customers are rational. They pay amount according to product quality. Low-income class customers want to purchase goods at low cost. They want to purchase product in high quantity at low cost. Business should provide medium quality product

to fulfill the need of this type of customer by charging low price. Thus, producer or seller should charge price to their product according to income of customer.

#### **b) Competitor's Unit Price Strategies**

That business which sells same type of product for same needs of different customer is called competitors. Product price is affected by competitor's unit price strategy. Management must keep watchful eye on the firm's competitors. Predicting competitive reaction to its product design and pricing. Unit price strategy is difficult but it is important for the management.

Price leader refers to the top positioned company in the market. If this company changes its price, other follower company also follows that price. If there are not effects of single firm on market, their market evaluates all competitors' price and reacts accordingly.

#### **c) Cost of Product**

To produce product or to provide service to customer business should bear different type of cost. That cost recovers from selling the product or services. Price charges according to that cost. High price for high cost product and vice versa. In some situation price are determined by market forces. Price is charged according to unit price running in market. In this situation cost are not considered so much. For example, price of vegetable, meat, bread, milk etc in Kathmandu market. To make profit, they must produce at a cost below the market price. No firm can set the price of its products below the production cost forever. Neither price can be set blindly at a cost plus profit without keeping a glance at a market. Therefore, the market forces and cost considerations considerably influence prices.



#### **d) Political and Image Related Issues**

Business organizations have to consider political environment while charging price to product. The company could face political pressure if the public feels that the price of product is charged by including excess margin.

#### **e) Government**

Price is also effected by government policy and low every country has own rule and regulation. Price soul determine by considering government price related policy, sales tax and income tax policy etc. Some product's price is controlled by government order. Government such as petroleum product directly determines some product's price, LP gas etc.

#### **2.1.4 Price Setting Objective**

Management should fix objective on setting price before price setting. Following may be main objective of price-policy in an organization.

##### **a) Profit objective**

Profit maximization is a very popular pricing objective. Profit maximization in short run may create a bad image for an organization. Long-term profit must be considered while setting price by the organization. Manufacturing organizations prefer to set their pricing objectives in term of achieving target return on investments. They usually manage their price in order to recover a specified return on investment in research, development, manufacturing, and commercialization of the product.

##### **b) Sales objective**

Expanding the current market share is a popular price-setting objective. By decreasing profit margin in price setting, organization can sales more product or services. Organization can earn profit by selling high volume of product. Organizations attempt to achieve higher sales volume that may lead to lower unit cost and higher long run profits. In price sensitive market, an organization

may achieve healthy growth through lower price and achieve profits through the high sales volume.

**c) Status-quo-objective**

This objective is targeted at maintaining the current situation of the organization in the market, such objective are survival, price stabilization and meeting competition.

**2.1.5 Price Change**

The factors, which affect the activity of organization, are known organization's environment. Organization environment are changeable. It changes time to time. Organization activities should adapt the change. As a result, organizations are forced to initiate price change. It can be price decrease or price increase.

Organization can decrease its price on following cases:

**a) Excess Capacity**

If organization has installed new innovated high capacity plant then organization can produce high quantity. Organizations need additional market to sell more products, to sell it organization could decrease its product price and attract new customer. Utilization of excess capacity leads to lower cost.

**b) Market Share**

If the market share is declining, organization initiate price decrease to maintain its market share some organization initiate price cut to gain additional market share. They want leadership in the market.

**c) Price Wars**

Competitor can use price decrease as weapons. Organization may also decrease price to respond to price decrease by competitor, Price wars by competing firms in the market, necessitate price decrease.

**d) Recession**

Business passes through different phases of trade cycle. Trade cycle consists of Recession, Recovery, Prosperity, and Depression phases. If there is economic slowdown due to recession, price decrease may become necessary. At the time of recession, the spending capacity of customer has decrease. To serve the customer organization should decrease price.

**e) Changing Environment**

To cope with changing environment, NT is decreasing its unit price of its service. As per the objective of NT is has been able to do so.

Organizations initiate price increase in the following condition.

**a) Inflation**

Inflation indicates overall rising of price. They lead to increase cost. Organization increase price to keep up with the cost increase.

**b) Increase of Demand**

When there is over-demand of product in the market, organization cannot supply products in needed quantity. They initiate price increases. They can also resort to reduction in discount to customer.

**c) Quality**

If product's quality improves, it leads to increases the price. Some organizations introduce high quality models at higher prices.

**d) New Taxes**

New taxes imposed by the government results the price increases. Increase in customer duties is an example.

Customers prefer price increase on a regular basis to one-time sharp increase in price. The reactions of customer's competitors and suppliers are important for price changes.

#### **2.1.6 Method of Pricing**

Price can set by considering specially cost, demand, and competition by considering this there factor following method can adopt to set the price of product or services.

##### **a) Cost - Based Methods**

Mostly company set their price of their product and services by considering recovering at least cost of production. Different company set price of product by different method based on cost. Out of these, some methods are as follows.

##### **I. Cost Plus or Mark up Method**

This method is a most popular, simple and traditional method of price determination. In this method, to determine price, certain profit margin added on cost per unit. Retailer and whole seller use mostly this method. There is also different mark up Percentage used based on product nature. In luxurious goods like expensive vehicle, jewelry etc. added profit margin on cost 75% to 100% similarly only some Percentage of profit margin added on cost for daily consumable product 20% standard margin is used for book in Nepal generally. Although it is used widely, there are some weakness limitations) the important factor in determining price like demand and competition is not considered in this method. In every situation, it is not easy to determine total cost (Dongol, 2060)

##### **II. Target Return on Investment Method**

To determine the price, certain Percentage of investment is added as profit on invested amount. This method is popular among manufacturing organizations that need to recover a fixed target return (profit) on their investment from the

price. This method is used mostly by monopoly business. Public welfare oriented having huge investing companies as well as obtaining fair return with own investment companies could use such method.

### **III. Break Even Pricing Method**

The use of this method is increasing day by day. Break even point is that point of sales in which point there is no profit and no loss. By BE analysis we can find out the relation between cost and revenue and also find the point that BEP profit will arise and if sales be come less than BEP loss will arise.

#### **b) Value Based Method**

It is based on customer's value Perception rather than cost of the product. A large number of companies are adopting this form of pricing. There are two types of value oriented pricing method.

##### **I. Perceived Value Method**

Under this method, the firm collects buyer's Perception of value (Price) of product and fixes the price around the average Perceived value. Cost and demands are secondary factor in this method. This method is mainly used for new product.

Under this method, the price setter first determines the customers Perceived value of product and then formulated strategy price to make the cost compatible with the price. Price Perceptions are collected from a large number of customers at different place and at different point of time. It is depends on the market research techniques to gene unit price customer's Perception of the value.

##### **II. Customer Value Pricing**

An organization may charge a very low price for a high quality product to crease special customer value for the product. The price charged may some

times be below the costs. Such method of pricing is adopted by organizations that have substantial width and depth in their product time or mix. They adopt customer value pricing on only few product items while most of other product are sold at premium prices. They try to achieve higher sales of premium priced product items by attracting customer groups through the high value lower price products. This method of pricing may allow on organization to lower down the product cost of high customer value products through large sales volumes.

### **C) Market Based Pricing Method**

This method is based on the competitor's prices. The price setter does not consider cost and demand as major pricing factor. An organization operating in a highly competitive market may price equal to the competitive level, slightly above the competitive level or slightly below the competitive level. Generally, there methods are used to determine price on the sales of market value.

#### **I. Going Unit Price Pricing**

Some organization does not consider cost and demand of its product to determine price. They fixed their price based on price, which is charge, by competitors. If company determine price based on average price of competitor's then this method is known as going unit price pricing method.

#### **II. Sealed-Bid Pricing**

If any firm perform work by tender then this form adopt sealed bid pricing method. Market price tender issue to perform work and determine price based on competitive price of received bid price. Cost and demand are not loss by firm in this method.

#### **2.1.7 Rate Diversification**

Any established business organization sells product or services to its customer. Organization should provide different types of goods and services to fulfill the different needs of customer. To produce different types of product organization

also should bear different cost of production for different product. Organization charge different price for different product due to different cost such type of charging price method is called unit price diversification. Different price is charge for different service is called unit price diversification. Price change according to change situation or time is also a type of unit price diversification.

#### **2.1.7.1 Need of Unit Price Diversification.**

##### **a) Income of Customer:**

Customers are different income group. They are high-income group, medium income group and low-income group. High-income class customer wants to purchase quality product although expensive. Organization should charge high price to this type to customer by providing high quality product or services. Similarly, organization can charge medium price by producing medium quality product to medium income class customer, such income class customer used to purchase goods by comparing price and quality of product. Organization can produce basic quality product for low-income class customer. Low-income class customers want to purchase durable goods at low price for example mobile, which is used to talk to distance Person. Colorful set, attractive game, camera function and other attractive function including mobile produce by any manufacturer they should also bear high cost for it and should charge high price for such types of mobile. This product is suitable for high-income class customer. Similarly colorful and some attractive function added mobile if produce by manufacturer they should bear medium cost comparatively less than above product for it. Then if can sell medium income class customer by charging medium price. Similarly, BIW, durable and some basis function added mobile produce by producer they should bear low cost than medium cost for it. Then this type of mobile is suitable for low-income clan customer (Koirala, 2004).

**b) Perception of Customer about Quality**

Quality can define according to customer Perception. Quality may be durability, attractive in looking, cheap in cost, fashionable, expensiveness etc. because of these Perception quality can defined. Producer can produce different types of good considering these Perceptions. Cost of production also be different so price charge differently for there heterogeneous product.

**c) Organization's Risk**

If producer produce single type cost goods then risk may be also high. It suddenly change external environment and decrease demand suddenly then organization may bear loss. In this situation, loss from one product should recover from other product by increasing price slightly and give continuity in business. So if organizations provide more than one service or product then risk of loss can minimize of one product by other product. "Do not keep all eggs in one basket" theory may useful in this situation.

**d) Needs of Customer**

There are unlimited needs of customer to fulfill there needs there are necessary of different goods and services. Only one organization can provide more than one product or service to fulfill different needs of customer for different service, different price can charge for example one Person wants to talk his relatives about something. His relatives may be in next village, may be in next zone, or may be in next country. To provide service by identifying these different needs different service required. For next village local service of telecommunication may required, for next zone STD service required and for next country ISD service required. Different cost of production should bear to provide these different services. Price also should charge differently due to different cost (Koirala, 2004).



## **2.2. Review of Related Studies**

This part is a descriptive presentation of the literature work done by the various authors and previous researchers in the related field. It encompasses a combined effort of the entire researcher. The main objective of this part is to analyze the previous research studies. However, numerous studies have been made related to NT; study related to price of NT was not found.

An attempt is made here to review some of the research works related to NTC.

Pokharel (1997) had conducted a research on the topic of “Tariff Structure of Telecommunication in Nepal”, with the following objectives.

- To examine the situation of present tariff structure of NT, with reference to its target people and its current efficiency and future development of services.
- Recommend the valuable measures to upgrade the services with reference to restructure tariff system like time duration and unit price.

The study concluded that:

- The rates of tariff are reasonable because per capita income is low in relation to other countries. That is why willingness to pay is also low. Tariff rate to local telephone is found cheaper subsidizing from STD, ISD and other services.
- Current call duration of local telephone service was changed. Time Constraint is necessary because it helps to check the misuse and wastage of time as well as helpful to prevent the circuit congestion, but 3-minute allocation now is not sufficient.
- The grade of NT services to local national and international trunk telephone users are found to be normal, and this indicates the need for improvement in the future.

- Average monthly fault rate of telephone was only once per month, and this should be minimized to once a year because of the sensitivity of the service.
- Private PCO's provide the services at different rates especially more than that of NT. Thus, margin rate has to be fixed by NT.
- Since NT is well equipped with latest and advanced technology, most of the billing systems are computerized, but some time subscriber's bills are loaded with high charge mainly because of mixed line conversation and lack of proper handling.

Similarly, Neupane (2001) has conducted a research on the topic "A Study on Profit Planning in Nepal Telecommunication Corporation'', with the following objectives.

- To examine the practices and effectiveness of profit planning in NT.
- To examine the present comprehensive profit planning system applied by NT.
- To analyze the various function plan formulated and implemented in NT.
- To evaluate the targeted variable and actual variable of NT.
- To analyze the financial position of NT with the help of ratio analysis.

The major findings were as follows:

- There seems to be lack of systematic profit planning and control. Plans are prepared on 'ad-hoc' basis
- The sales revenue of NT is increasing year by year but the unit price of the increase is not stable.
- Actual production lines are more variable than budgeted production line.
- Profit pattern of NT is on increasing trend.
- Variable analysis is completely ignored in the corporation.

The recommendations were as follows;

- Long term objectives shall be clearly formulated.
- Sales budget should be made on the realist ground.

- NT should open unit price the effective programs of cost reduction and control.
- NT must restructure its capital structure.
- CVP must restructure should be considered which formulating profit plan.
- Variance analysis should be effective.

Similarly, Poudyal (2002) submitted another study on PPC in NT Dec 2002.

Some major findings of Poudyal were as follows:

- NT is lacking the proper System of Performance report.
- NT has not a de quality considered control able and inconsolable variables affecting the organization.
- The sales plan and achievement is satisfactory to some extent.
- Financial Performance of NT is not so good.
- NT does not consider the use of flexible subjective.

Another study conducted by Lamichhane (2003) has conducted a research in Dec 2003 on the topic, “Budget as Tool of Profit Planning of Public Utility Enterprises” (A case study of Nepal Telecommunication Corporation).

Some major findings of the studies were:

- According to balance sheet of NT, there is huge amount of cash and bank balance lying idle, this indicates some deficiency to analyze its liquid assets.
- NT’s budget is not realistic to its sales and production achievement.
- Idle capacity of installed telephone lines is in increasing trend, which affects to generate revenue.
- Without considering CVP analysis, sales budget and pricing strategy were made.
- NT has maintained sound liquidity to pay the current debt and maintained well financial health.

- NT prepares program budget, however due to lack of adequate knowledge of PPC, it is facing some problems in profit planning system.

Bajracharya (2004) had conducted a research on topic “An Evaluation of Study of Nepal Telecommunication Development in Nepal” 2004. In this study, the dissemination tried to portrait the following.

The government of Nepal has focusing on the development of telecommunications by giving high priority in each development plans. However, the telecommunication development of Nepal is lacking financial resources, technical know how and problem between management and administration. In the process of development of telecommunication sector, foreign aid has contributed to the establishment of a training institution to train the telecommunication technician of Nepal.

Bhatt (2006) has conducted a research on "Revenue planning and cash management of public utility in Nepal (A case study on Nepal Telecom)", was submitted to office of the Dean, faculty of management Tribhuvan University with the following objectives.

- To analyze the gap between budgeted and actual revenue and its trend.
- To examine cash collection and disbursement.
- To review cash flow from operating, financial and investing activities.
- To have information, control and security over cash balances and payment system.

Some major findings of studies were;

- The lack of accurate and proper sales forecast is one of the important contains that affect the financial performance of the company. In Nepal Telecom there is consistency between planned sales line and actual sales. The analysis of distributed sales line and revenue shows that the achievement is highly consistent. So, if the company forecasts the

expected sales accurately. It can manage the various activities accordingly.

- Sales budget shows ISD sectors sales revenue is main sources of Nepal Telecom which contributes more than 40% in average.
- Because of high demand of telephone line there exist small gap between actual production and actual sales in lines. The local calls are increasing at this stage but the revenue per line is decreasing. It is due to bad governance and slow economic growth correlation and coefficient value shows that there are positive correlations between budget and actual sales units and Rs, by the regression line, it is clear that future revenue will increase with compare to budgeted if other things remaining same etc.

Bhatt's recommendations towards the corporation are:

- Nepal Telecom should be made effective plan and programmed and it should be analysis on the basis of company's ability. It is because the company made maximum pay on adhoc basis. So, system of proper sales forecast and budgeting needs to be adopted and followed.
- Revenue per line decline is due to bad governance and show economic growth, and not due to increase of lines, thus, Nepal Telecom should followed management by objectives techniques to maintain co-ordination cooperation and self motivating among departments and employees.
- Installation capacity of Nepal Telecom is not fully utilized but the demand of telephone line is higher. If installed capacity is utilized, then revenue will be increased and operating expenses will be gone down.
- Nepal Telecom is paying a huge amount as interest on long term loan which is not good for company. So it should emphasized internal financing to minimize such burden. A Nepal Telecommunication corporation was converted to company act and to reduce burden of

paying interest, the company must restructure its capital structure and for this it can issue the shares and can refund the debt.

- Nepal Telecom should try to reduce overdue amount of receivables. Nepal Telecom should provide incentive to staff to encourage them for collection of overdue amount of receivable and it should be establish separate department for collection old debt that will help to monitor collection revenue in revenue collection any kind of pressure (especially political), nepotism and biases should strictly be discouraged.

Karki, (2007) has made a study entitled, "Revenue planning in service oriented company," A case study of Nepal Telecom limited.

The main objectives of the study are to search and highlight the role of revenue planning in the performance of N.T.C. therefore the major objectives of the study are as follows.

- To sketch out the use of the revenue planning tools and techniques.
- To examine the use of planning in managerial short run and long run decision making.
- To point out short Cumming in sales budgeting and planning.

Some Major findings of the studies were:

- No plans and programmed has been made about possible consumption of telephone industries.
- Nepal Telecom has not adopted of practice of preparing monthly revenue earning reports.
- The revenue plan prepared by the branches and sub branches were not taken as reference for preparing of central revenue plan.
- There are consistency between planned sales and actual sales, their correlated was high.
- Planned sales revenue was highly and positively correlated. The correlation of actual sales revenue is also positive and high.

- The analysis of category wise revenue plan shows that achievement in domestic, noncommercial and industrial categories are highly consistent. But the achievements in remaining categories are fluctuating.
- Nepal Telecom has been making efforts to bring operating loss down to 10% since 1990/00 but actual loss crossed about 2% in the analysis period.

### **2.3 Research Gap**

This topic is also called the difference between previous researches and the current research. Most of the past research studies are about profit planning and development of NTC. The previous research didn't clear unit price and its impact on profit of NTC. So, there exist research gap between the present and past researches. This research is conducted to fill up this research gap.

This research is a case study research. It is mainly based on secondary data. This study has tried to review and identify the impact of unit price on service oriented public enterprises i.e. NTC. So, this study will be fruitful to those interested persons, parties, scholars, students, civil society, teacher and government for academically as well as policy perspectives.

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

Research is a systematic and organized effort to investigate a specific problem that needs a solution. This process of investigation involves a service of well thought out activities of gathering, recording, analyzing and interpreting the data with a purpose of finding answers to the problem. Therefore, research is an ongoing and ever growing activity. It don't only to solve a problem existing in the work setting but also to add or continue to the general body of knowledge in the particular area of interest. Research methodology is the way to solve systematically about the research problem. The major contents of research methodology are as follows.

- ) Research design
- ) Population and sample
- ) Source of data
- ) Data collection procedure

#### **3.1 Research Design**

In order to make any type of research, it is necessary to set research design which fulfills the objectives of the study. Generally, research design means well-define procedure and techniques, which guide to study and profound ways for research variability. It is the planned structure and strategy of investigation conceived so as to obtain answers to research questions. The research study attempts to analyze the unit price and its impact on service oriented enterprises. Hence, descriptive as well as analytical research design has been employed. Descriptive research is essentially a fact finding approach and abstracting generalization by the cross- sectional study of the current situation. Analytical approach is followed to parametric and non- parametric test of data. It is the process of microanalysis and appraisal of the data.



### **3. 2 Population & Sample**

#### **3. 2.1 Population**

Every business organization that provides manufacture services and goods receptively for selling purpose they should fixed its price of goods and serves per unit such as:

Transport Business	—————→	Rate Per passenger km
Hospital	—————→	Rate Per bed
Cinema Hall	—————→	Rate per visitors
Sugar Factory	—————→	Rate Per quintal of sugar

Unit price may be different of same organization according to nature and quality of produce or services. No one-unit price will be suitable ever of any organization. Every organization should change its price of produce according to change in external and internal environment. The population of the study comprises all the business organization of the country.

#### **3. 2.2 Sample**

Nepal Telecom has been changing its unit price time to time. Unit price of Nepal Telecom are so complex. Impact analysis of the unit price change has become so challenging work due to complexity in unit price. In present situation, the unit price of different service of Nepal telecom is so interesting matter. Due to above different causes the NT is taken into the sample for this study. The present study is under taken for The present study is under taken for the Period of seven year i.e. form the fiscal year 1998-99 to 2004-05 and on this study the impact of unit price change of NT's services are identified.

### **3. 3 Nature and Sources of Data**

Here, mostly used secondary data is used, which are collection from the official documents and questionnaires. The data has collected from different sources as follows.

- Annual report of NTC.

- Published and unpublished relevant document of NTC.
- Official records.
- Website of NTC.
- Previously submitted thesis.
- Magazines and booklets published by NTC.
- Different libraries.

While the primary data is collected by distributing questionnaires consisting of 8 questions to 10 people of management level and other staff of NT .

### **3. 4 Data Collection Procedure**

Data and information is the main resources of research. For this study, different technique and procedure have been adopted to collection necessary information and data. The study is primarily base on secondary data. The secondary data were collected visiting organizations, browsing websites, visiting libraries, reading Periodicals newspapers, magazine and previous related unpublished documents.

### **3. 5 Method of Data Analysis**

The collected data, which was in raw & crude form it, should be arranged, managed, analyzed, and presented in proper tables and formats. To analyze the collected data statistical tools are used.

#### **3. 5.1 Statistical Tools**

Except the financial tools, different types of statistical tools have been used to reach in conclusion of this research study. The result of this study has been systematically tabulated, compared, analyzed, and interpreted with figure. The relevant and required statistical tools are used to analyze the relationship between unit price of service and other variables.

#### **a) Coefficient of Correlation (r )**

In practice, some types so many variables shows of relationship between each other. If the two variables are so related that the change in the value of one variable is accompanied by the change in the value of the other variable, then they have said to have "correlation." Hence, correlation is a statistical tool, with the help of which we can determine whether two or more variables are correlated. If they are correlated, there must be the degree and direction of correlation. Generally, it is denoted by 'r'. The correlation analysis is the technique used to measure the closeness of the relationship between the variables. Correlation analysis is defined as the statistical technique, which measure the degree of relationship between variables. Correlation analysis does not tell us anything about the cause & effect relationship. Correlation can be either negative or positive.

The correlation can be classified as follows:

- a. Simple correlation
- b. Multiple correlation

In the present study, only simple correlation has used. So here describe only about simple correlation.

The study of relationship between two variables is called simple correlation. It is denoted by 'r'. If both variables move in the same direction then the two variables are said to be positively correlated. On the other hand, if both the variable move in opposite direction then the correlation between the two variables are said to have negative correlation. The value of correlation coefficient always lies between +1 to -1.

A value of +1 indicates that the correlation is perfectly positive. Similarly, a value of -1 indicates a Perfect negative relationship between the variables. The

value of zero shows that there is no relation between the variables. The zero correlation coefficient means the variables are uncorrelated.

In this research study, the degree of relationship between unit price of service and other relevant variables such as sales revenue, profit, No. of service user are measured by the correlation co-efficient. There are different methods of studying correlation between variables such as scatter diagram, Karl Person's coefficient of correlation and spearman's rank correlation.

In this study, Karl Person's correlation coefficient is used for measuring of association between the two variables, say x, and y. symbolically,

$$\text{Correlation coefficient (r)} = \frac{N\phi_{xy}Z(\phi X)\phi Y}{\sqrt{N\phi_x^2 Z(\phi X)^2} \sqrt{N\phi_y^2 Z(\phi Y)^2}}$$

Where,

N = No. of Year

X = 1<sup>st</sup> variable

Y = 2<sup>nd</sup> variable

In this study, the simple correlations between following variables is analyzed.

1. Unit price of local service and revenue of local service
2. Unit price of STD service and revenue of STD service
3. Unit price of ISD service and revenue of ISD service
4. Unit price of local service and profit of NT
5. Unit price of STD service and profit of NT
6. Unit price of ISD service and profit of NT
7. Unit price of Post Paid mobile and its revenue.

#### **b) Co-efficient of Determination ( $r^2$ )**

The coefficient of determination is the measure of the degree of linear association or correlation between two variables, one of which happens to be

independent and other being dependent variables. In other words, the square of the value of correlation coefficient is called coefficient of determination, which measures the Percentage of total variation in dependent variable as explained by independent variables. It is used for the interpretation of the value of correlation coefficient. The coefficient of determination is denoted by  $r^2$  and the value lies between 0 and 1. The  $r^2$  is always a positive number. It cannot tell whether the relationship between the two variables is positive or negative. If  $r^2$  is equal to 0.9045, which means that 90.45% of total changed on dependent variables is due to the effect of independent variable and remaining 9.55% change on dependent variables is due to other factors. The  $r^2$  is defined as the ratio of explained variation of total variation.

$$\text{Coefficient of determination } (r^2) = \frac{\text{Explained Variation}}{\text{Total Variation}}$$

### c) Probable Error (P.E.)

Probable errors of the correlation coefficients are applicable for the measurement of reliability of the computed value of the correlation coefficient (r)

It is defined by,

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1Zr^2}{\sqrt{N}} \\ &= 0.6745 \times \text{S.E} \end{aligned}$$

Where,

r = Correlation coefficient

N = No. of pairs of observation

$$\text{S.E.} = \frac{1Zr^2}{\sqrt{N}} \quad (\text{Standard error})$$

1. If the value of  $r < \text{P.E.}$ , the value of r is not significant.

2. If the value of  $r > 6 \times \text{P.E.}$ , there is significant relation between variables.
3. If  $\text{P.E.} < r < 6 \times \text{P.E.}$ , there may be mode unit price relationship between variables.

In this study, P.E. has been calculated to determine the reliability of correlation coefficient between the variables.

## **CHAPTER-IV**

### **DATA PRESENTATIONS AND ANALYSIS**

Generally, to find conclusion by analysis, researcher should collect data in crude form after that, it is essential to present the data in systematically in a certain table and format. Without presenting data systematically, data analyzing job cannot be complete.

This part includes descriptive analysis about the various unit price and its causes of changes. The basic objective of presenting and interpreting the data is to highlight the impact of unit price change on sales and profit. During the study period, some other relevant data are also present in table to find the impact of unit price change.

#### **4.1 Causes and Effects of Unit Price Change of Nepal Telecom**

Organization should change their unit price to survive and continue their services. Due to change in external as well as internal environment, organization should change its unit price as per change. Change may be two types. Unit price increase and unit price decrease. By the study of past trends, we found NT has decreased its unit price day by day. The main causes of unit price decrease are as follows.

##### **a) Objective of NT**

The main objective of NT is to provide reliable, simple, and fast services to the customer at cheap unit price. This is also the one reason to decrease its unit price NT aims to provide cost effective telecommunication services to every corner of the country as well as the entire world. Therefore, NT is decreasing its unit price of services to achieve goal. People of both rural and urban area are

benefited by this move. Conclusively we can say due to the objective of providing its services to every corner of country at cheap cost, that the company has decreased its unit price.

The use of new innovative high capacity plant increases the capacity of providing services. Due to the easy access of high-tech plant, NT is being able to increase its service capacity. Considering the new competition, NT is decreasing its unit price day by day.

### **b) Competition**

Some new organization has come in Nepalese telecom market as competitor of NT. Such as "United Telecom Limited (UTL)", "Spice Nepal Pvt. Ltd (SNPL)", STM etc. This competitor's are also expanding its services in Nepalese market slowly. If NT does not consider seriously about the competition, problem may arise for NT in future, So NT has use price decrease strategy as weapon to hit its competitors. In the past time, NT was entertaining monopoly market in communication sector. NT also wants to establish monopoly market in future. Thus, NT is using price decreasing strategy price by considering future competition.

### **c) Sales Objective**

In the past, NT had established as a corporation, it was established as nonprofit motive. Its main objective of was to provide services at cheap price to people. To run organization smoothly, it should earn some profit. Profit is essential to expand business in future. Due to this cause, NT has been earning some profit from past time. NT was facing some difficulties and problems to provide quality service due to its type i.e. corporation. NT's activities had mostly affected by political interference because of being corporation. Therefore, in 1<sup>st</sup> Baishak 2061 B.S. NT was converted into public company, with the motive to provide quality services by commercializing telecom services. The impact of political interference became low since it converted into public company. Now,



NT performs its activities fully as business. Every business needs some profit for development and expansion. By selling more services, reasonable profit could be earned. NT wants to earn less per unit profit and maximize its sales. Therefore, NT is focusing its operation to provide more service all over the country in cheap unit price. Due to these moves, sales may increase.

#### **d) Invention in IT Sector**

New inventions are becoming in IT (information technology) sector. NT is using the devices, which are related to this sector. This invention provides many opportunities and threats for the business. By the use of these new technologies, the cost of services is decreasing. Therefore, NT is becoming able to decrease its unit price.

### **4.2 The Trend Analysis of Different Unit Price for Different Year**

Nepal telecom is mainly providing two types of phone services, basic telephone services (which distribute through landline) and other is mobile telephone services. Both telephone services provide internal and external services.

**A) Basic Telephone Services:** By using this service, user can make three types of calls.

- I. Local call:** Local call is known as the call, which is made to contact the person within the same district. User can use local call service within the district. Comparatively the unit price of local call is less than other services like STD and ISD.
- II. STD:** Generally STD refers as (Subscriber Trunk Dial). To communicate from one district to another district, customer can use STD service. The unit price of STD call is generally more than local call but less than ISD. STD unit prices are divided into sub groups based on distance in Km. Different unit price is charged for different subgroups.

**III. ISD:** ISD is known as International Subscriber Dial. This service is used to communicate from one country to another country. Customer can use ISD services to communicate to foreign country. NT is charging more unit price for this service comparing with other services. For instance Local call and STD. ISD unit price are also divided in subgroups on distance basis. Different unit price has been charged for different subgroup.

**B) Mobile Telephone Services:** If customer wants to use phone service 24 hour with personal contact with wireless moveable facilities then he/she can use mobile phone services. Through mobile phone service customer can use local call, STD, and ISD services. Rate for different service of mobile phone is more than basic telephone services. The definition for basic telephone service and mobile phone service is different for Local Call, STD, and ISD.

**I. Local call:** It is defined as to communicate within one zone by mobile; customer can use local call service. Unit price of local is comparatively more than STD and ISD services from mobile.

**II. STD:** It is defined, as the call made from one zone to another zone then it is known STD call. Unit price of STD is more than local call but less than ISD call. However, this definition has changed. The entire mobile user can use Local call service to communicate with mobile user everywhere in the country. This means all the mobile phones are local rest of other services that is landline service. When customer goes from home zone to another zone with moving mobile and receive phone in another zone, he/she should bear roaming charge for incoming and outgoing call. Nepal Telecom is cutting off the distance charges (domestic) for GSM Mobile (Pre-Paid & Post-Paid) and CDMA Prepaid Mobile phones from Aswin 01, 2064.

**III. ISD:** All the terms and conditions are same as basic telephone service.

#### 4.2.1 The level of Unit Prices in 1999

The tariff unit prices of Basic and Mobile telephone service are as follows:

- a) **Basic Telephone Service:-**Three types of services provide by Nepal telecom through basic telephone services. Local call and STD call which provide under internal services and ISD call under external services. Below tables presents the unit price of three services in different table.

**Table No. 4.1**  
**Time and Unit price Distribution for Local Call**

Local call	Peak hour (8:00 to 18:00)	Off hour (18:00 to 8:00)	Charges
1 call	3 minute	6 minutes	Rs. 1.00

*Source: NT Telephone Directory 1999*

Table No. 4.1 shows time duration per call for local call in peak hour and off-hour. In basic telephone service, the minimum monthly charge is Rs. 150 inclusive of the 100 local calls. Additional call after 150 free calls shall be charge Rs. 1 per call. The two different tariff slabs implemented during the day are peak hour from 08:00 am to 18:00 pm, off-hour from 18:00 pm to 08:00 am. The duration per call for there two categories are 3 minutes & 6 minutes per call respectively.

**Table No. 4.2**  
**Unit Price of Different Time and Different Groups of STD**

Group	Full Rate 07:00 to 18:00	Economy unit price 18:00 to 21:00	Discount unit price 21:00 to 07:00
A.	Rs. 1.20	Rs. 0.80	Rs. 0.60
B.	Rs. 2.40	Rs. 1.60	Rs. 1.20
C.	Rs. 4.80	Rs. 3.20	Rs. 2.40
D.	Rs. 7.20	Rs. 4.80	Rs. 3.40*
E.	Rs. 9.60	Rs. 6.40	Rs. 4.80

*Source: NT Telephone Directory 1999*

Table No. 4.2 shows the unit price, time, and group distribution of domestic long distance trunk (STD). For STD service, five categories depending on distances had been set. The three different tariff slabs were divided as follows. Full Rate was charged from 07:00 to 18:00, economy unit price was charged from 18:00 to 21:00, and discount unit price was charged from 21:00 to 07:00. The unit prices per minute charge for 5 categories are mentioned below. Full unit price, economy unit price and discount unit price at time specified above are as under. For district that falls under group A, were Rs. 1.20, Rs. .80, and Rs. .60 respectively. For district that falls under Group B, were Rs. 2.40, Rs. 1.60, and Rs. 1.20 respectively. For district, which falls under Group C were Rs. 4.80, Rs. 3.20, and Rs. 2.40 respectively. For district that falls under Group D were Rs. 7.20, Rs 4.80, and Rs.3.40. At last Rs. 9.60, Rs. 6.40 and Rs. 4.80 respectively for district that falls under Group E. STD discount scheme were 33% less of full unit price for economy unit price and 50% less of full unit price for discount unit price on Saturday also. District under different group are given in appendix.

**Note\*** by 50% less it should be Rs. 3.60 but in record of NT there is Rs. 3.40.

The above unit prices are for one minute each.

**Table No. 4.3**  
**Unit price of Different Group of ISD**

<b>Group</b>	<b>Unit price / minutes</b>	<b>Unit price / 6 seconds</b>
A	Rs.30.00	Rs.3.00
B	Rs.45.00	Rs.4.50
C	Rs.130.00	Rs.12.00
D	Rs.135.00	Rs.13.00
E	Rs.150.00	Rs.15.00
F	Rs.180.00	Rs.18.00

*Source: NT Telephone Directory 1999*

Table No. 4.3 shows unit price and group distribution of international trunk (ISD) for international ISD services. Six categories depending on distance had

been set. The Per minute charge for the six categories were Rs. 30 for group A, Rs. 45 for group B, Rs. 120 for group C, Rs. 135 for group D, Rs. 150 for group E and Rs. 180 for group F. International outgoing telephone calls were billed for each 6 sec. duration. Countries, which fall under different group, are given in Appendix.

**b) Mobile Telephone Services:** - Three types of services were provided by Nepal telecom through mobile telephone services. In table below, outgoing and incoming call's unit price are presented on different services.

**Table No. 4.4**  
**Unit Price and Time Distribution of Mobile Telephone Service**

Types of call	Outgoing call/minutes		Incoming calls/minutes	
	Peak hour	Off hour	Peak hour	Off hour
	07:00-21:00	21:00-07:00	07:00-21:00	21:00-07:00
Local call	Rs. 6.00	Rs. 3.00	Rs. 3.00	Rs. 1.50
STD	Rs. 12.00	Rs. 6.00	Rs. 3.00	Rs. 1.50
ISD	Rs. 6.00+ITR	Rs. 3.00+ITR	Rs. 3.00	Rs. 1.50

*Source: NT Telephone Directory 1999*

Table No. 4.4 shows unit price of outgoing and incoming call per minute in peak hour and off-hour for different service through mobile telephone service. The monthly rental charge for mobile service is Rs. 1000. 50-minute free call facility is also available. For outgoing mobile calls per minute of local call are Rs. 6.00 and Rs. 3.00 for peak hour and off-hour respectively. Similarly for STD mobile telephone call are Rs. 12.00 and Rs. 6.00 for peak hour and off-hour respectively. For ISD mobile call are Rs. 6 plus international trunk unit price (ISD) as basic telephone service and Rs. 3.00 plus ITR as basic telephone service has charge in peak hour and off hour respectively. The two different tariff slabs implemented during the day are peak hour from 07:00 to 21:00 and off-hour from 21:00 to 07:00.

Similarly incoming call per. minute for local call are Rs. 3.00 and Rs. 1.50 for peak hour and off-hour respectively. For STD, calls are 3.00 and Rs. 1.50 during peak hour and off-hour respectively. Similarly, for ISD call Rs. 3.00 and Rs. 1.50 during peak hour and off-hour. The corporation had started the mobile services in Kathmandu, Lalitpur, Biratnagar, Biragunj, and Pokhara on demand basis up to 1999. Customer of basic telephone, making a local call to mobile telephone will charged Rs. 1.00 per minute and no off-hour discount is applicable. Customer of basic telephone making STD call to mobile telephone will charge as per the existing domestic trunk tariff.

#### **4.2.2 Tariff Rates Effective from 15<sup>th</sup> June 2002**

On the occasions of 27<sup>th</sup> anniversary, NT had decided to introduced new tariff unit price effective from 15<sup>th</sup> June 2002. New tariff unit prices had implemented in basic telephone services and mobile phone services. The tariff unit prices of Basic & Mobile telephone service are as follows:

- a) Basic Telephone Services:** - According to new unit prices, significant change had become basic telephone services. Local per call duration decreased two minutes from three minutes. Five group of STD charge decreased to three group of STD charge. Significant changes were made on ISD also. New tariff unit prices of different services in three different tables are given below.

**Table No. 4.5**  
**Time and Unit Price Distribution of Local Call**

<b>Local call</b>	<b>Business hour (08:00-18:00)</b>	<b>Normal hour 18:00-22:00 (06:00-08:00)</b>	<b>Off hour 22:00-06:00</b>	<b>Charges</b>
1call	2 minutes	4 minutes	8 minutes	Rs. 1.00

*Source: Annual Report of 2000/01*

Table No. 4.5 shows the time duration for local call divided into 3 groups. They are, business hour, normal hour, and off-hour. The significant change were made in basic telephone service is the increase in the minimum monthly charge rental from Rs. 150 to Rs. 200 inclusive of the number of free calls, which has also been increased from 100 to 175 calls. Additional calls after 175 free calls be charged Rs. 1 per call. The three different tariff slabs implemented during the day, are business-hour from 08:00 am to 18:00 pm, normal-hour from 18:00 pm to 22:00 pm as well as from 6:00 am to 8:00 and off-hour from 22:00 pm to 06:00 am. The duration Per. calls for t three categories were 2 minutes, 4 minutes and 8 minutes per calls respectively.

**Table No. 4.6**  
**Time and Unit Price Distribution of STD**

Group	Business hour 08:00-18:00		Normal hour 18-22 & 6-8		Off hour 22:00-06:00		Saturday 06:00-22:00		Pulse unit price
	Unit price/ min	Pulse	Unit price/ min	Pulse	Unit price/ min	Pulse	Unit price/ min	Pulse	
0-50 km 'A'	Rs. 2.50	24sec.	Rs.1.7 0	35.2se	Rs. 1.00	60sec	Rs. 1.25	48sec	Rs. 1
50-200 km 'B'	Rs. 5.26	11.4se	Rs. 3.53	17.0se	Rs.2.0 8	28.8se	Rs. 2.63	22.8se	Rs.1
Above 200 km 'C'	Rs.9.00	6.6sec	Rs. 6.00	10.0se	Rs.3.6 0	16.6se	Rs. 3.26	13.2se	Rs. 1

*Source: Annual Report of 2000/01*

Table No. 4.6 shows the unit price, time, and group distribution of domestic long distance trunk (STD). For STD services, three groups depending on distances of 0-50 km, 50-200 km and 200 km upwards, had been set. The charge per- minute for the three categories during the business, normal and off-hour at time specified above were as follows. For distances from 0.50 km. Rs 2.50, 1.70 and 1.00 respectively. For distance from 50 to 200 km were Rs. 5.26,

3.53 and 2.08 respectively. For distances above 200 km were Rs. 9.00,6.00 and 3.60. Saturday unit price are 50% less of business hour's unit price. Rate Per minute is calculated on approx. basis. However, NT was charged unit price on pulse basis.

**Table No. 4.7**  
**Time and Unit Price Distribution of ISD**

Destination	Business hour 08:00-18:00		Normal hour 18-22 & 6-8		Off hour 22:00-06:00		Unit price/pulse
	Unit price/ min	Pulse	Unit price/ min	Pulse	Unit price/ min	Pulse	
India Trans Border	Rs. 5.00	12sec	Rs. 5	12 sec	Rs. 4.61	13 se	Rs. 1.00
India- Terrestrial link via micro wave (using country code 91	Rs. 30	2sec	Rs. 30	2 sec	Rs. 15	4 sec	Rs. 1.00
SAARC & India Via satellite (using country code 910	Rs. 45	4sec	Rs. 45	4 sec	Rs. 45	4 sec	Rs. 3.00
Asia/Australia/ Europe North America	Rs. 75	2.4sec	Rs. 75	2.4 sec	Rs. 75	2.4 sec	Rs. 3.00
Rest Countries	Rs. 90	2.sec	Rs. 90	2.0 sec	Rs. 90	2 sec	Rs. 3.00

*Source: Annual Report of 2000/01*

Table No. 4.7 shows the time, unit price and destination distribution of international trunk (ISD). For ISD call, only two-tariff call structure has been



fixed, except India and SAARC countries. The Per minute call charge for all Asian countries except SAARC countries including Australia, Europe and countries of North America had been fixed as Rs. 75. For all other countries, the pre minute call charge were Rs. 90. Trans border calls and calls through terrestrial links to India were charged Rs. 5 and Rs. 30 per minute respectively. All calls to SAARC countries and to India through satellite links were charged Rs. 45 per minutes. Trans border links was available only in following destination with access code '699'

- i) Biragunj to Raxaul.
- ii) Biratnagar to Jogbani.

Discount scheme only in off hour are effected in calls through terrestrial lines to India a by 50% (i.e. Rs. 15 Per minute) Now the unit price for India is Rs. 15 per minute.

**b) Mobile Telephone Service:** According to new unit price launched in 2000/01, unit price of every service has reduced. Reduced unit price of different services are given in table.

**Table No 4.8**  
**Unit Price and Time Distribution of Mobile Service**

Types of Call	Air Time Charges		Distance charges	
	Off Peak (22-08)	Peak (08-22)	Off Peak (22-08)	Peak (08-22)
Outgoing call/minutes	Rs. 2.00	Rs. 4.00	Rs. 3.00	Rs. 6.00
Incoming call/min. from PSTN	Rs. 1.00	Rs. 2.00	-	-

*Source: Annual Report of 2000/01*

Table No. 4.8 shows the Airtime charge and distance charge of mobile phone services in different daytime. Monthly rental charge has seen reduced to Rs. 1000. However, 50 minutes free call facility was removed from the services. For outgoing mobile calls, the airtime charges per minute for business hour (15 second / pulse) and off-hour (30 seconds / pulse) are Rs. 4 and Rs. 2

respectively. Similarly, for incoming calls, the airtime charges per minute for business hour (50 sec. / Pulse) and off-hour (60 sec. / pulse) are Rs. 2 and 1 respectively. National trunk calls made through mobile phones shall be charge Rs. 10 Per minute at business hour (airtime charge Rs. 4 + STD charge Rs. 6) and Rs. 5 at off hour (airtime charge Rs. 2 + STD charge Rs. 3) respectively. For mobile service business hour denotes a span from 08:00 am to 22:00 pm and off-hour from 22:00 pm to 08:00. Saturday unit price charges are same as of hour unit price. International trunk calls made through mobile phone shall be charge as basis phone service charge of ISD call plus airtime charge.

#### 4.2.3 Tariff Rates of Year 2004

The tariff unit price of basic and mobile phone services are as follows:

- a) **Basic Telephone Services:** No change were made in Local call and STD call in 2004

**Table No. 4.9**  
**Time and Unit price Distribution of Local Call**

<b>Local call</b>	<b>Business hour (08:00-18:00)</b>	<b>Normal hour 18:00-22:00 (06:00-08:00)</b>	<b>Off hour 22:00-06:00</b>	<b>Charges</b>
1call	2 minutes	4 minutes	8 minutes	Rs. 1.00

*Source: Telephone Directory of NT 2004*

Table No 4.9 shows time & unit price distribution of local per call. No change was made in local call. The three different tariff slabs implemented during the day are business hour from 08:00 to 18:00, Normal hour from 18:00 to 22:00 as well as from 06:00 to 08:00 and off-hour from 22:00 to 06:00. The duration per calls for three categories was 2 min., 4 min. and 8min. per call respectively. Charge per call was Rs.1 as before.

**Table No. 4.10****Time and Unit price Distribution of STD**

<b>Group</b>	<b>Business hour 08:00-18:00</b>		<b>Normal hour 18-22 &amp; 6-8</b>		<b>Off hour 22:00-06:00</b>		<b>Saturday 06:00-22:00</b>		<b>Pulse unit price</b>
	Unit price/ min	Pulse	Unit price/ min	Pulse	Unit price/ min	Pulse	Unit price/ min	Pulse	
0-50 km 'A'	Rs. 2.50	24sec.	Rs.1.7 0	35.2se	Rs. 1.00	60sec	Rs. 1.25	48sec	Rs. 1
50-200 km 'B'	Rs. 5.25	11.4se	Rs. 3.52	17.sec	Rs.2.1 0	28.6se	Rs. 2.63	22.8s e	Rs.1
Above 200 km 'C'	Rs.9.0 0	6.6 sec	Rs. 6.00	10 sec	Rs.3.6 0	16.6se	Rs. 4.50	13.2s e	Rs. 1

*Source: Telephone Directory of NT 2004*

Table No. 4.10 shows time, unit price and group distribution of STD calls. For services, three categories depending on distances of 0-50 km, 50-200 km, and 200 km upward have been set. Per minute charge for three categories during business, normal and off-hour were as under. For distance 0-50Km. were Rs 2.50, Rs1.70, and Rs1.00 respectively. For distance 50-200Km., Rs 5.25, 3.52 and 2.10 respectively. In addition, for distance above 200Km. were Rs 9.00, 6.00 and 3.60 respectively. Saturday unit price are 50% less of business hour's unit price. Unit price per minute is calculated on approximate basis but NT was charged unit price on pulse basis.

**Table No. 4.11**

**Time and Unit price Distribution of ISD**

country	Business hour 06:00-20:00		Normal hour 18-22 & 6-8		Off hour 22:00-06:00		Unit price/ pulse
	Unit price/ min	Pulse	Unit price/ min	Pulse	Unit price/ min	Pulse	
India Trans Border link	Rs. 5	12sec	-----	----	Rs. 5.00	12 sec	Rs. 1.00
India- Terrestrial link (using country code 91) via micro wave	Rs. 30	2sec	-----	----	Rs. 15	4 sec	Rs. 1.00
SAARC & India Via satellite (using country code 910)	Rs. 45	4sec	-----	----	Rs. 22.5	8 sec	Rs. 3.00
Asia/Australi a/Europe North America	Rs. 75	2.4sec	Rs. 75	2.4 sec	Rs. 75	2.4 sec	Rs. 3.00
Other Countries	Rs. 90	2.sec	Rs. 90	2.0 sec	Rs. 90	2 sec	Rs. 3.00

*Source: Telephone Directory of NT 2004*

**Budget call:** Budget call (Reduced unit price) is an economic unit price scheme introduced on 1<sup>st</sup> Ashadh 2060 on trial basis available for all countries

except SAARC countries. There are two types of budget call, which are shown below.

<b>Budget call:</b>	<b>Unit price/min</b>	<b>Pulse</b>	<b>Unit price/pulse</b>
i) Using access code '1425'	Rs. 25.00	60 sec.	Rs. 25.00
ii) Using access code '1445'	Rs. 45.00	4 sec.	Rs. 3.00

Table No. 4.11 shows the time unit price and destination distribution of ISD call services. For ISD call only two tariff call structure has been fixed beside India and SAARC country same as before table No. 4.7 for India and SAARC country the only two different tariff slabs implement during the day are business hour from 06:00 to 20:00 and off-hour from 20:00 to 06:00. Trans border call and call through terrestrial lines to India shall be charge Rs. 5.00 and 30.00 in business hour and Rs. 5 and Rs. 15.00 off-hour respectively. All call to SAARC countries and to India through satellite, links shall be charge Rs. 45.00 in business hour and Rs. 22.50 in off-hour.

**b) Mobile Telephone Services:** NT has started prepaid mobile service to its customers. Unit price of postpaid mobile service is less than prepaid mobile service. Unit price of postpaid are presented in different table.

**I. Post Paid:** In the service, customer should paid bill after using service on monthly basis. This service provides also internal and external services. Here different unit price of different service are presented in table.

**Table No. 4.12****Time and Unit price Distribution of Post Paid Mobile Service**

Types of Call	Air Time Charges		Distance	
	Off Peak	Peak	Off Peak	Peak
Outgoing call/minutes	Rs. 1.80	Rs. 3.60	-	-
Incoming call/min. from PSTN	Free	Rs. 1.80	-	-
Saturday incoming call/min. from PSTN	Free	Rs. 0.90	-	-

*Source: Telephone Directory of NT 2004*

Table No. 4.12 shows the unit price and time distribution of local call by post paid mobile. For mobile service, peak hour denotes a span from 8:00 am to 20:00 pm and off peak hour from 20:00 pm to 8:00 am. For outgoing mobile calls, the airtime charge per minute for peak hour and off-hour are Rs. 3.60 and Rs. 1.80 respectively. Similarly, for incoming call the airtime charge per minute for peak hour and off-hour Rs. 0 and Rs. 1.80 respectively. For Saturday, incoming call is free for off-hour and Rs. 0.90 in peak hour.

**Table No. 4.13****Time and Unit price Distribution of STD**

Types of Call	Air Time Charges		Distance	
	Off Peak	Peak	Off Peak	Peak
Outgoing call/minutes	Rs. 1.80	Rs. 3.60	Rs. 3.00	Rs. 6.00
Incoming call/min. from PSTN	Free	Rs. 1.80	-	-
Saturday outgoing call/min.	Rs. 1.80	Rs. 1.80	Rs. 3.00	Rs. 3.00
Saturday incoming call/min. from PSTN	Free	Rs. 0.90	-	-

*Source: Telephone Directory of NT 2004*

Table No. 4.13 shows the STD call unit price by mobile service. National trunk call made through mobile phone shall be charge Rs. 9.60 Per minute in off hour (ATC Rs. 3.60 and STD charge Rs. 6.00) and per minute in off hour (ATC Rs. 1.80 and STD charge Rs. 3.00) respectively. Incoming call is free in off peak hour and Rs. 1.80 per minute charge in peak hour. Saturday unit price for incoming and outgoing are same as off peak hour.

**Table No. 4.14**  
**Time and Unit price Distribution of ISD**

Types of Call	Air Time Charges		Distance	
	Off Peak	Peak	Off Peak	Peak
Outgoing call/minutes				
1. India Via Terrestrial Link	Rs. 1.80	Rs. 3.60	Rs. 15.00	Rs. 30.00
2. SAARC Countries	Rs. 1.80	Rs. 3.60	Rs. 22.50	Rs. 45.00
3. Europe, Australia, USA	Rs. 1.80	Rs. 3.60	Rs. 75.00	Rs. 75.00
4. Rest of the World	Rs. 1.80	Rs. 3.60	Rs. 90.00	Rs. 90.00
5. Budget Call				
a. Access Code 1445	Rs. 1.80	Rs. 3.60	Rs. 45.00	Rs. 45.00
b. Access Code 1425 (min. 8 minutes charge is applied)	Rs. 1.80	Rs. 3.60	Rs. 25.00	Rs. 25.00
Incoming call/min.	Free	Rs. 1.80	-	-
Saturday outgoing call/min.				
1. India Via Terrestrial Link	Rs. 1.80	Rs. 1.80	Rs. 15.00	Rs. 30.00
2. SAARC Countries	Rs. 1.80	Rs. 1.80	Rs. 22.00	Rs. 45.00
3. Europe, Australia, USA	Rs. 1.80	Rs. 1.80	Rs. 75.00	Rs. 75.00
4. Rest of the World	Rs. 1.80	Rs. 1.80	Rs. 90.00	Rs. 90.00
5. Budget Call (Except SAARC Countries)				
a. Access Code 1445	Rs. 1.80	Rs. 1.80	Rs. 45.00	Rs. 45.00
b. Access Code 1425 (min. 8 minutes charge is applied)	Rs. 1.80	Rs. 1.80	Rs. 25.00	Rs. 25.00
Saturday incoming call/min. from PSTN	Free	Rs. 0.90	-	-

*Source: Telephone Directory of NT 2004*

Table No. 4.14 shows the unit price and time distribution of different destination for ISD services. International trunk call made through mobile phone shall be charge at peak hour and off peak hour by adding airtime charge and distance charge.



**Note: Time Band**

<b>Call Type</b>	<b>Peak</b>	<b>Off Peak</b>
Air Time Charge	From 8:00-20:00	From 20:00-08:00
Distance (STD)	From 8:00-22:00	From 22:00-08:00
Distance (ISD)	From 06:00-20:00	From 20:00-06:00

**ii. Prepaid Services:** In this service, customer should pay bill before using service in advance by recharging system. NT of different cost issues recharge card. Unit price of prepaid call are presented below in table.

**Table No. 4.15**  
**Airtime Charge /Minute**

<b>Call Types</b>	<b>Sunday to Saturday (24 hour)</b>
Outgoing	Rs. 4.68
Incoming	Rs. 2.34

*Source: Telephone Directory of NT 2004*

Table No. 4.15 shows the airtime charge per minute by prepaid mobile services. For outgoing, call Rs. 4.68 per minute charge throughout the Sunday to Saturday (24 hour) and incoming call Rs. 2.34 per minute. Distances charge of prepaid mobile service same as post paid service. Distances charge of prepaid service same as post paid service.

### **4.3 The trend analysis of Sales and Profit**

Trend Analysis of profit and Total Sales, with respect to Basic telephone service and mobile phone service

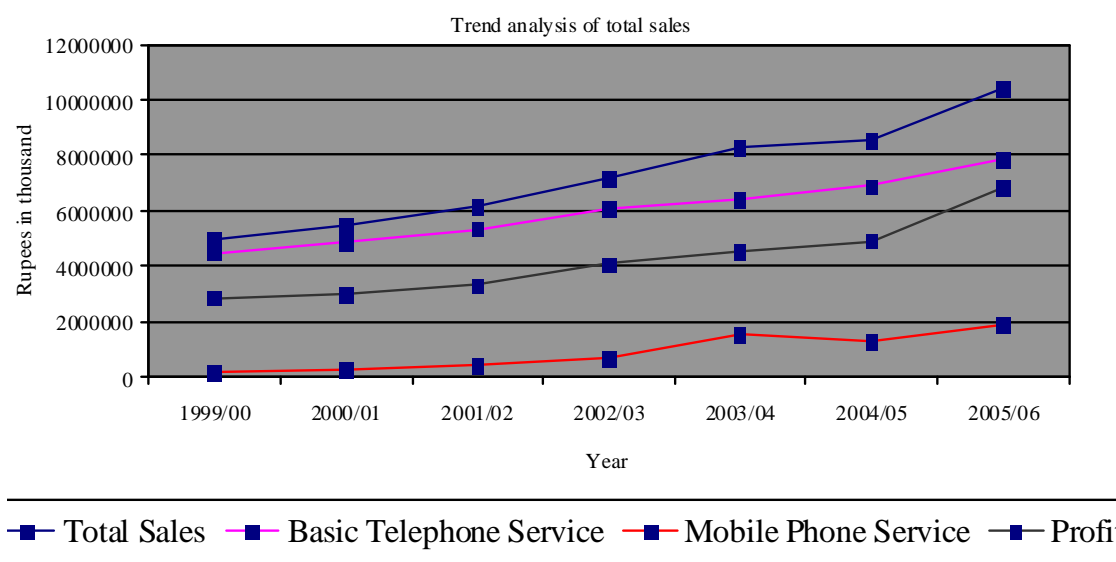
**Table 4.16**  
**Trend Analysis of Sales and Profit**

(In Thousand of Nepalese Rupees)

Year	Total Sales		Basic Telephone Service.		Mobile Phone Service		Profit	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	Increased (%)
1999/00	4956376	100	4491661	90.62	185285	03.73	2874560	10.78
2000/01	5487179	100	4906052	89.40	292804	05.34	3043015	05.87
2001/02	6159520	100	5346387	86.79	428558	06.96	3320063	09.10
2002/03	7208087	100	6062325	84.10	719164	09.98	4093119	23.28
2003/04	8312244	100	6396451	76.95	1575669	18.96	4550667	11.17
2004/05	8584114	100	6899674	80.37	1323088	15.13	4921529	08.15
2005/06	10413655	100	7897627	75.83	1915300	18.38	6843726	39.05

(Source Annual Report 2002/03,2005 and 2007)

**Figure 4.1**



Since, the total sale of the NT is increasing moderately until 2001/02. Then sales are increasing significantly until 2003/04. Overall, sales of NT are in fluctuating trend. Basic telephone service, which is the major source of sales, obtains more than 80 percentages of total sales. From which we can understand

that sales of NT is mainly related with the basic telephone service. From 1999/00 to 2003/04, the sales from basic telephone service are in decreasing trend. From the personal experience and talk with NT's top level personal, this is mainly by the customers preferences to mobile phone service despite of expensiveness with compared to basic telephone service. Other main factors are competition with UTL, Increasing user of net phone due to the chief service, Political instability, and assets stolen by many active groups. For instance, theft of telephone wire which interrupts the service of NT and revenue too.

From 2003/04 to 2004/05 sales from basic telephone service is increasing. The main reason of this increase, is the more use of this service due to the unit price decrease. For mobile phone service, in 1999/00 the contribution to the total sales was only 3.73%. This is due to the initial phase of mobile phone service. Since then the contribution to the total sales is increasing dramatically until 2002/03. The figure doubled in 2003/04 due to the new customer's preference on mobile phone service. In 2004/05, it is decreased by about 3% that is due to the disturbance on this service by government. In the case of profit, it is in fluctuating trend. It reached on peak 2005/06 with 39.05% increased in profit. The fluctuation in profit is the result of fluctuation on sales for that respective period.

Domestic telegraphs, International telegraph, international telex, Leased circuits, telex, Mobile& Internet, Interconnection PCC Card are other Source of Sales. These heading contributes the low sales in the total sales therefore these headings are not mentioned above.

#### **4.4 Correlation Coefficient analysis between unit Price, Revenue, and Profit Basic Telephone Service**

##### **A) Coefficient of correlation, between unit Price and Revenue of local call (Appendix-II)**

Correlation coefficient shows that unit price of Local Call and revenue from local call is positively and highly correlated. The value of correlation coefficient (r) is 0.8760.

##### **Coefficient of Multiple Determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (0.8760)^2 \\ &= 0.77 \end{aligned}$$

Since  $r^2 = 0.77$ , it shows that 77% of the total variation in the revenue has been explained by the unit price of local call service.

##### **Probable Error of the Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.8760)^2}{\sqrt{7}} \\ &= 0.06 \end{aligned}$$

Now,

$$\begin{aligned} 6 \times \text{P.E.} &= 6 \times 0.06 \\ &= 0.36 \end{aligned}$$

Since  $r = 0.8760 > 6 \times \text{P.E.}$ , it means r is highly significant. Hence, Conclusion is considered as true.

**B) Correlation Coefficient of between Unit Price of local call and Profit  
(Appendix-III).**

**Conclusion**

The computation of correlation coefficient shows that unit price of Local Call and revenue from local call is positively and highly correlated. The value of correlation coefficient (r) is 0.78.

**Coefficient of Multiple Determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (0.78)^2 \\ &= 0.61 \end{aligned}$$

Since  $r^2 = 0.61$ , it shows that 61% of the total variation in the revenue has been explained by the unit price of local call.

**Probable Error of the Coefficient of Correlation. (P.E.)**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.61)^2}{\sqrt{7}} \\ &= 0.16 \end{aligned}$$

$$\begin{aligned} \text{Now, } 6 \times \text{P.E.} &= 6 \times 0.16 \\ &= 0.96 \end{aligned}$$

Since  $r = 0.78 < 6 \times \text{P.E.}$ , it means r is more unit price significant. Hence, conclusion is correct.

**C) Coefficient of Correlation between Unit Price and Revenue of STD  
(Appendix-IV).**

Since  $r = -0.27$  it means, unit price of STD and revenue from STD are negatively correlated.

**Correlation of Coefficient of Multiple Determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (-0.27)^2 \\ &= 0.07 \end{aligned}$$

Since  $r^2 = 0.07$ , it shows that 7% of the total variation in the revenue has been explained by the unit price of STD call.

**Probable Error of the Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.27)^2}{\sqrt{7}} \\ &= 0.24 \end{aligned}$$

$$\begin{aligned} \text{Now } 6 \times \text{P.E.} &= 6 \times 0.24 \\ &= 1.44 \end{aligned}$$

Since  $r = -0.27 < 6 \times \text{P.E.}$ , it means  $r$  is more unit price significant. Hence, conclusion is correct.

**D) Coefficient of Correlation between Unit Price and Revenue of ISD call  
(Appendix-V)**

**Conclusion**

Since  $r = -0.77$ , it means unit price of ISD call and profit are high but negatively correlated.

**Correlation Coefficient of Multiple Determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (-0.77)^2 \\ &= 0.59 \end{aligned}$$

Since  $r^2 = 0.59$ , it shows that 59% of the total variation in the revenue has been explained by the unit price of ISD call.

**Probable Error of the Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.77)^2}{\sqrt{7}} \\ &= 0.10 \end{aligned}$$

$$\begin{aligned} \text{Now, } 6 \times \text{P.E.} &= 6 \times 0.10 \\ &= 0.60 \end{aligned}$$

Since  $r = 0.77 > 6 \times \text{P.E.}$ , it means  $r$  is significant. Hence, conclusion is positively correlated.

### **E) Coefficient of Correlation between Unit Price of ISD and Profit (Appendix-VI)**

#### **Conclusion**

Since  $r = -0.85$  it means unit price of ISD and profit are high but negatively correlated.

#### **Correlation Coefficient of Multiple Determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (-0.85)^2 \\ &= 0.72 \end{aligned}$$

Since  $r^2 = 0.72$ , it shows that 72% of the total variation in the profit has been explained by the unit price of ISD call.

#### **Probable Error of the Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.85)^2}{\sqrt{7}} \\ &= 0.07 \end{aligned}$$

$$\begin{aligned} \text{Now } 6 \times \text{P.E.} &= 6 \times 0.07 \\ &= 0.42 \end{aligned}$$

Since  $r = 0.85 > 6 \times \text{P.E.}$ , it means  $r$  is highly significant. Hence, conclusion is correct.



## **Mobile Phone Service**

### **Post-Paid Service**

#### **F) Coefficient of Correlation between Unit Price of local call and Revenue from Mobile Service (Appendix-VII)**

### **Conclusion**

Since  $r = -0.89$  it means unit price of local call and revenue are negatively correlated.

### **Correlation co-efficient of multiple determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (-0.89)^2 \\ &= 0.80 \end{aligned}$$

Since  $r^2 = 0.80$ , it shows that 80% of the total variation in the revenue has been explained by the unit price of outgoing local call.

### **Probable Error of Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.89)^2}{\sqrt{7}} \\ &= 0.05 \end{aligned}$$

$$\begin{aligned} \text{Now } 6 \times \text{P.E.} &= 6 \times 0.05 \\ &= 0.30 \end{aligned}$$

Since  $r = 0.89 > 6 \times \text{P.E.}$ , it means  $r$  is highly significant. Hence, conclusion is correct.

**G) Coefficient of Correlation between Unit Price of STD and Revenue from mobile service (Appendix-VIII)**

**Conclusion**

Since  $r = -0.89$ , it means unit price of STD and revenue from STD are negatively correlated.

**Correlation co-efficient of multiple determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (-0.89)^2 \\ &= 0.79 \end{aligned}$$

Since  $r^2 = 0.79$ , it shows that 79% of the total variation in the revenue has been explained by the unit price of outgoing local call.

**Probable Error of the Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.89)^2}{\sqrt{7}} \\ &= 0.05 \end{aligned}$$

$$\begin{aligned} \text{Now } 6 \times \text{P.E.} &= 6 \times 0.05 \\ &= 0.30 \end{aligned}$$

Since  $r = 0.89 > 6 \times \text{P.E.}$ , it means  $r$  is highly significant. Hence, conclusion is correct.

## **H) Coefficient of Correlation between Unit Price of local and Profit (Appendix-IX).**

### **Conclusion**

Since  $r = -0.82$  it means unit price of local call and profit are negatively correlated

### **Correlation Coefficient of Multiple Determinations ( $r^2$ )**

$$\begin{aligned} r^2 &= (-0.82)^2 \\ &= 0.67 \end{aligned}$$

Since  $r^2 = 0.67$ , it shows that 67% of the total variation in the revenue has been explained by the unit price of local call.

### **Probable Error of the Coefficient of Correlation (P.E.):**

Probable error of the coefficient of correlation (P.E.) is given by the formula

$$\begin{aligned} \text{P.E.} &= 0.6745 \times \frac{1 Z r^2}{\sqrt{N}} \\ &= 0.6745 \times \frac{1 Z (0.82)^2}{\sqrt{7}} \\ &= 0.08 \end{aligned}$$

$$\begin{aligned} \text{Now } 6 \times \text{P.E.} &= 6 \times 0.08 \\ &= 0.48 \end{aligned}$$

Since  $r = 0.82 > 6 \times \text{P.E.}$ , it means  $r$  is highly significant. Hence, conclusion is correct.

## Summary of Results

Indicators	$r$	$r^2$	P.E.	$6 \times \text{P.E.}$	Result
<b>Basic Telephone service:</b>					
A. Between Unit price & Revenue of Local Call	0.8760	0.77	0.06	0.36	Significant
B. Between Unit price to Local Call & Profit of NT	0.78	0.61	0.16	0.96	Significant
C. Between Unit price & Revenue of STD	-0.27	0.07	0.24	1.44	Insignificant
D. Between Unit price & Revenue of ISD	-0.77	0.59	0.10	0.60	Significant
E. Between Unit price of ISD & Profit of NT	-0.85	0.72	0.07	0.42	Significant
<b>Post Paid Mobile Service:</b>					
F. Between Unit price of Local Call & Revenue From Mobile	-0.89	0.80	0.05	0.30	Significant
G. Between Unit price of STD & Revenue from Mobile	0.89	0.79	0.05	0.30	Significant
H. Between Unit price of Local & Profit of NT	-0.82	0.67	0.08	0.48	Significant

## 4.5 Analysis of Primary Data

A questionnaire with 8 questions related with unit price was developed to know about fixation of unit price, factors influencing unit price. Altogether 10 set of questionnaire were distributed and questionnaires were duly filled and returned by the officers and employees of NT.

Most of the respondents (70%) said that, the major factors governing the unit price is Government Policy in NT. According to them, Board of directors fixes

the unit price and sends it to the government for implementation then government regulates it. Similarly, 70% respondents believe that Board of director's arte responsible for unit price fixation but government sets the limits and standard.

In response to the question-seeking how they find the unit price of NT, cent percent respondents believes it is appropriate with comparing with other competitors. A question regarding how often NT changes the unit price, 10 out of 10 told that there is no specific rule to change the unit price. NT usually changes its unit price on the special occasion like Dhasain and Tihar.

On a query regarding the main reason of unit price decrease, 50% respondents are sure that NT is focusing on customer's satisfaction. Where 30% believes that change has been introduced to cope with changing environment. Only 20% are convinced that it is due to objective of NT. In the view of 70%, respondent Cost Plus pricing is applied to determine the pricing.

Regarding the objective set by NT, 80% respondent told that NT sets sales maximization objective and 20% said that it is concentrated to maximize wealth. Cent Percent of respondent feels that unit price decrease by NT is creating significant impact to the customers.

#### **4. 6 Major Findings of the Study.**

- ) NT has changed its unit price due to various causes. For instance, they have to utilize maximum capacity, objective of NT, competition, political movement, new invention in IT sector etc.
- ) Government Policy is the major factors to govern unit price of NT.
- ) There is no specific rule to change its unit price but it usually changes its unit price in special occasion like Dhasain and Tihar.
- ) NT has applied sales maximization objective by satisfying its costumers.

- ) Revenue from STD call is in increasing trends but unit price of increasing is less than revenue from local call.
- ) Revenue from ISD call is in zigzag trends due to internet phones operated by PCOs.
- ) Total operating revenue is in increasing trends.
- ) Net profit of company is in increasing trends but it is considered adequate for the development of corporation.
- ) Some mistakes are found in the record of source from where secondary data are collected.
- ) Comparatively, revenue from mobile service is in more increasing trends than basic telephone service. It means user of mobile service is increasing than basic telephone service.
- ) In Nepalese environment, there is fashion to carry personal mobile so that the revenue of mobile is in increasing trends.
- ) Monopoly of NT in communication sector is going to end. Competitor such as UTL, SNPL, and STM are also expanding its market.
- ) NT provides domestic service (included local & STD) and external service included ISD
- ) Unit price of local call of basic telephone service has increased
- ) Sales from basic telephone service are in decreasing trend.
- ) The two different tariff slabs (peak hour & off-hour) implemented during day are divided into three different tariff slabs (business hour, normal hour and off-hour) implemented during day, for local call.
- ) Minimum monthly rental charge has increased from Rs. 150 to Rs. 200 from 2059 Ashad 1 (June 15 2002) for PSTN.
- ) Minimum free local call has also been increased from 100 to 175 calls from June 15 2002 for PSTN.
- ) Local telephone service's unit price per call has not changed from Rs. 1.
- ) All unit price of different services are excluded from tax and telephone service charge (TSC)

- ) Unit price of STD charge is based on distance divided into different group.
- ) Up to 2002 June 15 NT used to charge STD unit price, based on per minute. In addition, from 2002 June 15 it is charged based on unit pulse.
- ) STD service was diverted into 5 group (categories) depending on distance but from 2002 June 15 to the occasion of 27<sup>th</sup> anniversary STD service is set in 3 categories depending on distance of 0-50 Km, 50-200 Km and 200 Km upward.
- ) Unit price of STD on Saturday are 50% less of full unit price for (Business hour)
- ) From 1999, Post Paid Mobile Phone service was started
- ) The monthly rental charge of post-paid mobile phone service has been reduced to Rs 500 instead of previous unit price of Rs. 1000.
- ) 50 minute free call facility has been removed from mobile service from 2002 June 15.
- ) On the auspicious occasion of His Majesty's 59<sup>th</sup> birthday, Incoming call from PSTN to mobile were made free from 7<sup>th</sup> July 2005 (Ashadh 23, 2062)
- ) Up to 2004 notable decreases of unit price are not made of STD service however; ISD service unit price has decrease.
- ) Comparatively, mobile phone call's unit price has decreases up to 2004.
- ) NT is capable to provide communication service to large population.
- ) Revenue from local call is in increasing trends.
- ) Basic telephone service, which is the major source of sales, obtains more than 80 percentages of total sales.
- ) Domestic telegraphs, International telegraph, international telex, Leased circuits, telex, Mobile& Internet, Interconnection PCC Card are other source of Sales.

## **CHAPTER-V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

In Nepal PES were established with the objectives of accelerating the rate of economic growth, mobilization of available resources, generate employment profit necessary for the development of the country. But, creative new Nepal is possible only when the political and economical situation could be favorable for development situation could be favorable for development for country. We can not imagine the concept of new Nepal is a present state of crisis, fundamentally rooted in a failure of productive organization associated with its economic and political under development. Most of the PES ineffectiveness due to lack of managerial efficiency for appropriate planning and control.

Nepal Telecom is a public utility concern entity, which is a leading corporation in the sector of Telecommunication was established under the communication corporation act 2028. To provide essential national wide, low cost reliable and readily available Telecommunication service to the general public, government offices, business organization and the country as a whole there by supporting for the country. Public enterprises are strong means to develop infrastructure. It helps to provide required goods and service anthem country. But majority of the Nepalese PES has failed to achieve financial capability and work efficiency and are still depend on government grants. For the purpose of research Nepal Telecom is selected as sample for the study. There are some objectives of the study. The main objective of the study is to find the unit price and its impact on service oriented public enterprises on sales revenue and profit of different services. What is the cause of unit price change of Nepal Telecom services? It has also tried to answer of certain question started in the statement of problem.



This study has tried to examine the sales and profit followed by NT and scope of the study is limited for 7 years FY 1999/00 to 2005/06. The study design of this study descriptive and analytical and research data has been collected mainly from secondary source. Related literature has been reviewed from the books, annual reports, thesis, government publications, journals, bulletin etc. For analysis and interpretation of the data, statistical tools are used for analyze such as correlation and trend analysis.

This study has been organized five main chapter i.e., introduction, literature review, research methodology, presentation and analysis of data, summary, major findings and recommendations. .

## **5.2 Conclusion**

After analyzing and studying in detail, the different unit price, and its impact, it can be concluded that NT has charged its unit price considering different causes. Main objective of NT is to provide reliable and fast services to its customer at cheap cost. Activities of NT are focused on customer service, unit price, and then profit. Therefore, NT is one of the successful organizations out of other public enterprises. NT is benefiting by using new technology. By utilizing more capacity and expanding its services in every corner of the country, NT is able to decrease its cost of providing services. NT is able to provide extra quality services at cheap unit price due to its cost decrease.

Unit price of local call has increase comparatively than before. NT has reduced local call duration from 2 minute to 3 minute. Unit price of STD was increasing during the study Period (i.e. 1998/99-2004/05). ISD unit price is in decreasing trends.

Needs of customer has categorized into three group. They are Basic needs, Comfortable needs and Luxurious needs. Basic telephone service falls in Basic needs. When price of basic goods changes, demand of that good is not affected

by the change. Similarly, unit price of NT's services has not effected to sales and profit so much. Although its unit price fluctuates (increase or decrease) but no. of service user is increasing day by day. Sales revenue and profit has effected due to unit price in some extent only.

Now days more people are traveling from one place to another place, one country to another country for employment purpose. Most people use telephone services to contact other person. Telecommunication services are reliable and faster than other medium of communication. Although NT fluctuates (except abnormal increase and decrease) its price, user of service user are increasing day by day. Revenue from service of NT is growing due to grow in service user. Profit is positively affected due to increase in revenue. It is complex task to show the impact of unit price on sales and profit due to complexity in unit price. Unit price is not only single factor, which affect the sales and profit. There are other many factors, which affects the sales and profit. Such as competition, alternatives services, service strike, special offer etc. there are lack of data of revenue in detail (E.g. revenue from BH, NH, and OH).

### **5.3 Recommendations**

It is a suggestive framework based on analysis of the study. It is hoped that these recommendations will be useful to the management of NT, other concerned offices, individuals, institutors and other, interested parties.

- NT should bring awareness program for public in village area to inform about unit price of different services. Many people are cheated by PCO in village area as well as urban area.
- NT should bring rules and regulations to punish those who charge unit price to public by adding more margin of profit.
- It would be better to charge unit price of local call on pulse basis for basic telephone services like STD & ISD.

- NT should decrease pulse duration of STD service from 30, 45 and 60 seconds to 10-15 seconds.
- Unit price of NT service is very complex, it should make it simple, so that general people know unit price easily. Only two-time duration can be implemented. I.e. peak hour and off-hour during the day in place of BH, NH, and OH.
- Telecommunication technology has been changing in the blink of eye. Choices of customers are also changing in accordance with the changing technologies. In this competitive and complex situation, NT and all its staffs should focus more towards customer care. They have to provide prompt and quality services because "customers are everything" in case of every business house and any service oriented organization. The mentality of all employees must be changed positively. Good employees should be recognized and rewarded.
- Since the unit price of local call of other mobile service providers are lower the Nepal Telecom has to reduce the unit price of local call.
- Other mobile service provider has been providing the call cost facility, NTC has to add this facility to be competitive in the communication technology market.
- No of customers of NTC are increasing day by day but the quality of mobile service has not increased. NTC should provide attention to improve the quality by installing additional capacity of mobile tower as the line increases.
- Due to rise in use of SMS services by the customers Nepal Telecom needs to reduce the national and international SMS price.
- To control the unnecessary use of service, some charge for transferring balance in mobile, as well as to show the balance amount should be implemented.
- Push to talk and call divert services can be introduced with some extra charges.