

# **CHAPTER-1**

## **INTRODUCTION**

### **1.1 Background of the study**

Nepal is a country bordered by the two giant nations India in the east, south and west and China in the north. Geographically it lies between 26 22” – 30 27” north latitude and 80 4” – 88 12” east longitude. Naturally, the country is full of natural beauty with amazing mountainous, green hills, beautiful lakes, running rivers, etc.

Public and private enterprises are actively contributing for the economic growth of the nation. Public enterprises are government owned business organizations established with the objectives of providing public service and setting up infrastructure for economic development. On the other hand private enterprises are established with the primary motive of profit generation at the same time contributing for national economic development. Hence both enterprises play vital role for the overall economic development of the nation.

While reviewing the past trend of business performance, one can easily unfold the bitter truth of deteriorating financial condition of most of the public enterprises ultimately leading to liquidation or restructuring. Thus financial sickness has been a matter of big issue for the public enterprises. There are different reasons for the deteriorating economic condition of the public enterprise. Some reasons are unhealthy interference of political parties on the public enterprise, unstable management team, unplanned financial decision, political instability in the country etc. Despite plenty issues, revenue planning is one of the important issues of every public enterprises. Nepal Airlines Corporation (NAC) being one of the public enterprises is selected for studying revenue planning since its financial position is becoming unhealthy.

### **1.2 History of air transportation in Nepal**

The aviation history of Nepal started in early 1950's. In 1951, neighboring Indian aircraft of Indian Airways started service between Kathmandu and Patna and used to

land on a mere cow grazing place called Gaucharan in Kathmandu. There are tales that a pilot waiting to land and there had to buzz the airfield several times to shoo the cows off it before landing. Until 1951, only a few foreigners had visited into Nepal. They were mainly British officers of the Gorkha troops, a few stray scholars and friends of the Royal family. The civil aviation service started in Nepal in 1953 with three old American -made DC-3 Dakotas belonging to an Indian company. The airline provided international service between Kathmandu and Patna and domestic service in Kathmandu, Pokhara, Bhairawa, Biratnagar. After five years, Royal Nepal Airlines Corporation (RNAC) was established in 1<sup>st</sup> July 1958 with a single Douglas DC-3. There were only 96 personnel then. At the beginning, its service was limited to Simara, Pokhara, Bhairawa and Biratnagar in the Domestic Sector. The facilities provided at that time were limited.

NAC introduced two Dakota at the end of 1959 and one in 1960. It increased international service by providing service to Indian cities like Delhi, Kolkata and Patna and to Janakpur, Rajbiraj, and Gorkha in domestic side in 1960. Since the aircraft Dakota was older, it bought one Fokker Friendship F-27 aircraft directly from Fokker Company of Netherland in 1966. NAC lost Fokker Friendship F-27 aircraft after 5 years in January whilst flying to Delhi. Then it brought two HS-748 aircrafts popularly known as AVRO aircraft between January and February of 1971. It extended service to Lukla in 1971. In early part of 1970s NAC entrusted its management to a team of Air France executives under special management cooperation. The entry of Air France management into NAC was landmark decision of top management which heralded a new era of development for NAC. Air France management completely revolutionized domestic travel by introducing famous Canadian built STOL capability Twin Otter aircraft. They also bought two brand Swiss built PC-6 aircrafts. They completely grounded DC-3 aircraft which was later sold as scrap. French management also introduced SITA telex in the airline and thus revitalized entire NAC communication system. SITA telex speeded NAC reservation system and connected NAC with almost 100 airlines of the world which were at that time members of SITA. Twin Otter aircraft connected far flung and the remotest parts of the country which did not only change the economic conditions of the local people but promoted remarkably trekking and mountain tour in those areas. Under French management for the first time NAC bought a brand new B-727 Jet aircraft directly

from Boeing company and introduced Bangkok flight, the capital of Thailand. Bangkok flight opened a new gateway for Nepal in the east which provided faster connection to travelers going to Far East, Australia, USA, Canada etc. It gave a total face lift of international trade of Nepal which was hitherto dominated by Indian goods and products and they were soon taken over by goods and products of Japan, Hongkong, Singapore. Bangkok Flight also changed the life style and fashion taste of the upper and middle class group people of Kathmandu valley in particular and other important cities of Nepal in general.

Before the arrival of Air France management, the style of working of NAC was typical domestic airline style. Many staffs were sent to Air France Training Center for formal and informal training. Air France management brought remarkable change in cabin service of international flight of NAC and first time they introduced bar service in all international flights which became very popular among the traveling public. Under Air France management, the NAC fleet size was two Pilatus Porter, six Twin Otters, two AVRO and one B-727 Jet aircraft. All aircrafts bought were brand new and had been directly purchased from manufacturer of aircraft. Unfortunately Air France agreement was terminated in 1973. Otherwise perhaps NAC could have benefited a lot under Air France management. After the departure of Air France management, the management of NAC was entrusted to Nepali managers. The Nepalese managers tried to work on the sound foundation laid by Air France management in early part of 1970s. Revenue and cost were managed properly.

It was during this period that NAC bagged BGRD charter Flight and to operate that flight smoothly NAC also bought a used Combi B-727 aircraft. During this period NAC also added one used Twin Otter aircraft in its asset and bought a brand new Pilatus Porter aircraft as a replacement of Pilatus Porter which it had lost whilst flying to Phaplu. Encouraged by the performance of Delhi and Bangkok Flights NAC launched its operation to Colombo with the objective to provide sea and mountain holidays to European tourists. The Flights to Colombo could not be proved to be profitable despite of heavy promotional expenses. Thus the short period between 1974 and 1978 could be considered a good period in NAC history where overall NAC management was stable and financial situation remained reasonably very sound. In late 1979 one more Twin Otter aircraft joined NAC.

Thus by end of 1979,NAC fleets size was two Pilatus Porter, seven Twin Otters, two AVRO,two B-727 aircrafts.

NAC brought one AVRO aircraft under British aid and added three Twin Otters and lost one Twin Otter whilst flying from Tumlingstar to Kathmandu. NAC expanded its external flights to Hong Kong, Singapore, Dhaka, Rangoon, Karachi and Dubai during 1980 decades. The achievements of 1980 decades were successful with introduction of two new technology state-of-the-art- B-757 aircrafts .It was during that time that NAC truly became an international airline by adding twice weekly flights to London and Frankfurt. During that period it also commenced regular chartered flights to Nagoya of Japan. NAC ,in collaboration with Chinese airlines company ,also commenced Lhasa flight on once a week .To strengthen domestic air transportation ,NAC also added more Twin Otter during that period.

NAC fleet size at the beginning of 1990 was two Pilatus Porter, ten Twin Otters, three AVRO, two B-727, two B-757. and operating in 37 points in domestic areas and 11 International Flight in Europe and Asia .

In 1990 and 2000 decades, the performance of NAC was not to the mark. The frequent change in executive head of NAC and careless to the performance given by the corporation was the main cause of getting behind. The number of aircrafts started to decline as there was no attention to replace the older or sold one. The national and international flights number reduces year by year. Thus Nepal Airlines Corporation (formerly known as Royal Nepal Airlines Corporation) is the flag carrier of Nepal. Its main base is Tribhuvan International Airport, Kathmandu.

### **1.2.1 The Corporate Purpose of NAC**

The objectives of NAC are as follows:-

1. To provide safe, efficient, regular and economical air service within and outside the country.
2. To develop air transportation.
3. To operate air transportation with business and other objectives and perform all activities related to air transportation.

4. To provide training about flight of aircraft and the other subjects concerning air flight.
5. To give and take help from international airlines companies.
6. To repair the aircraft of own or other airlines.
7. To be agent or contractor for the service of other airlines.
8. To establish sub branches to run air transportation, cafeteria., lodges, hotel, ware-house.
9. To extend both international and domestic airline service to benefit maximum Nepalese people by encouraging private sector to invest.

(Source: Adhikari, et.al, 2011:202)

### **1.2.2 Board member of NAC**

The committee of board is the most superior in NAC. The management committee has the main responsibility to implement the polices, directions and decisions made by board committee. The present board members of NAC are as follows:-

**Table1.1**  
**Current board members of NAC**

<b>S.N</b>	<b>Name</b>	<b>Post</b>
1	Manrupi Shahi	Head
2	Tek Mani Sharma	Member
3	Ranjhan Krishna Aryal	Member
4	Amar Narayan Mali	Member
5	Ashok Chandra Pokharel	Member
6	Bidur Raj Tiwari	Secretary

(Source: Corporate Department, NAC)

### 1.2.3 Management Committee of NAC

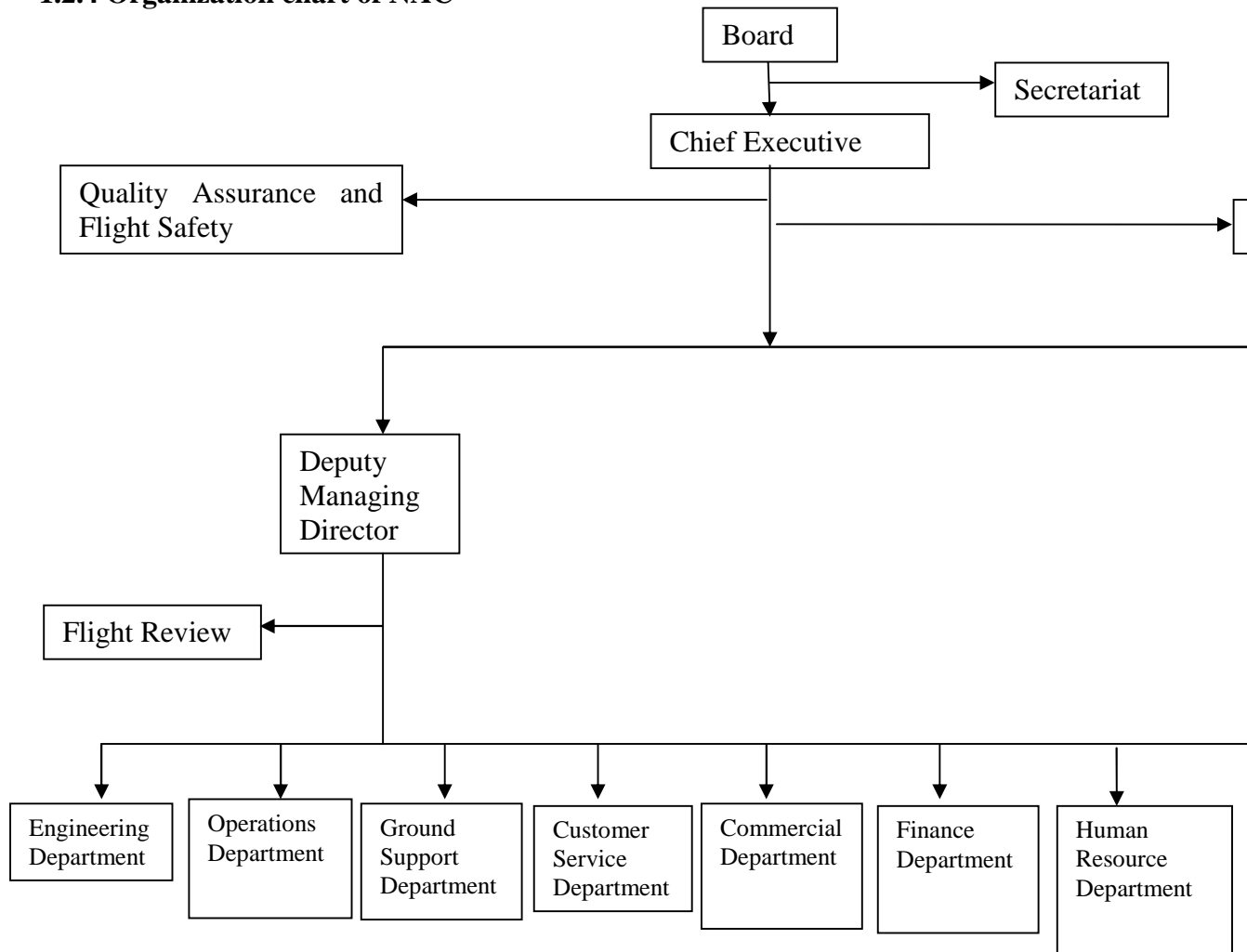
The management committee of NAC is responsible for the successful operation of the organization. The Present members of management committee of NAC are as follows:

**Table 1.2**  
**Current members of management committee of NAC**

S.N	Name	Post
1	Man Rupi Shahi	Executive Chairman
2	Ganesh Thakur	Deputy Managing Director(Technical)
3	Raju Bahadur K.C	Deputy Managing Director (Administration)
4	Dr.Mrs. Kiran Chettri	Director ,Flight Review Committee
5	Gobardhan Khadka	Director, General Service & Property Mangt. Department
6	Uma Bhatta	Director ,Human Resource Department
7	Mukti Prasad Jhosi	Director ,Engineering Department
8	Pradip Karki	Director , Customer Service Department
9	Ramesh Bdr. Shah	Director , Ground Support Department
10	Mayur Shumsher Jabara	Director , Finance Department
11	Madan Kharel	Director , Commercial Department
12	Saroj Kasaju	Director , Corporate Department
13	G.P.Dhakal	Director , Operations Department
14	Rabindra Pradhan	Director , Quality Assurance and Flight Safety
15	Ganesh Bdr. Chand	Actg.Director , Internal Audit

(Source: Corporate Department, NAC)

### 1.2.4 Organization chart of NAC



(Source: Aakash Bhairab, July 2009, NAC Publication)

### 1.2.5 Domestic Destinations of NAC

Since NAC is government based airline, it is providing air service in many parts of the country. The domestic destinations of NAC in Nepal are as follows:-

#### A. Central Regional Center

<u>Destination</u>	<u>Sector code</u>
1. Pokhara	PKR
2. Jhomsom	JOM
3. Manang	NGX
4. Lukla	LUA
5. Bhadrapur	

#### B. Eastern Regional Center

<u>Destination</u>	<u>Sector code</u>
1. Biratnagar	BIR
2. Bhojpur	BHP
3. Phaplu	PPL
4. Rumjatar	RUM
5. Taplejung	TPJ
6. Lamidanda	LDN
7. Tumlingtar	TMK
8. Kangedanda	KGL
9. Thamkharka	
10. Khanidanda	KDN

#### C. Western Regional Center

<u>Destination</u>	<u>Sector Code</u>
1. Nepalgunj	KEP
2. Bajhang	BJH
3. Bajura	BJR
4. Dolpa	DOP



- 5. Rukum RUK
- 6. Simikot IMK
- 7. Jumla JUM
- 8. Taicha TAL
- 9. Chaurijahari HRJ
- 10. Dang DNP

(Source: Corporate Department, NAC)

### 1.2.6 International Destinations of NAC

The main airline to connect Nepal with rest of the world is NAC. In past years NAC aircrafts had reached to many international destinations but due to lack of aircraft the international destinations of NAC have been limited to following destinations only:-

**Table 1.3**  
**Current international destinations of NAC**

S.N	Destination	Code	Flight No.
1	Bangkok, Thailand	KTM/BKK/KTM	RA 401/402
2	Delhi, India	KTM/DEL/KTM	RA 205/206
3	Hong Kong, China	KTM/HKG/KTM	RA 409/410
4	Kulalumpur, Malaysia	KTM/KUL/KTM	RA 415/416
5	Dubai, UAE	KTM/DXB/DOH	RA 229
6	Doha, Qatar	DOH/KTM	RA 230

(Source: Corporate department, NAC)

### 1.2.7 Ground Handling by NAC

At the present time when NAC fails to earn sufficient revenue by providing air transportation service, it is earning revenue from ground handling for foreign airlines. The revenue from ground handling has become a main source of revenue for NAC at present. NAC is doing ground handling for following foreign airlines:

**Table 1.4**  
**Ground Handling by NAC for current foreign airlines**

S.N	Name of Airline	Code
1	Air Arabia	G9
2	Air China	CA
3	Jet Lite	S2
4	Arke Fly	OR
5	Bahrain Air	BN
6	Biman B'desh Airlines	BG
7	China Easter	MU
8	China Southern Airlines	CZ
9	Dragon Air	KA
10	Druk Air	KB
11	Etihad Airways	EY
12	Fly Dubai	FZ
13	GMG Airlines	Z5
14	Gulf Air	GF
15	Indigo Air	6E
16	Jet Airways	9W
17	Korean Air	KE
18	King Fisher Airlines	IT
19	Oman Air	WY
20	Pakistan Int'l Airlines	PK
21	Qatar Airways	QR
22	Silk Air	MI
23	Spice Jet	SG
24	United Airways	4H

(Source: Corporate Department, NAC)

### 1.2.8 Current Aircrafts of NAC

The fiscal year 1988/89 was the year when NAC had maximum no. of aircrafts. At that time NAC had 19 aircrafts which is given in the table below:-

**Table 1.5**  
**Maximum aircrafts of NAC**

<b>S.No</b>	<b>Aircrafts</b>	<b>Quantity</b>
1	6 Pilatus Porter	2
2	HS748 (AVRO)	3
3	DHC- 6( Twin Otter)	10
4	B727	2
5	B757	2
	<b>Total</b>	<b>19</b>

(Source: Operation Department, NAC)

But the no. of aircrafts have been reduced due to various reasons. The current aircrafts of NAC are as follows-

**Table 1.6**  
**Current aircrafts of NAC**

<b>S.No</b>	<b>Aircrafts</b>	<b>Quantity</b>	<b>Operation</b>
1	Twin Otter DHC-6	7	3
2	Boeing B757	2	2
	<b>Total</b>	<b>9</b>	<b>5</b>

(Source: Operation Department, NAC)

### **1.3 Introduction of Revenue planning and management**

Revenue planning and management is one of the most important parts of any organization. It is starting point of overall planning process of business enterprise. Profit is the result of effective implementations of series of plans including revenue planning and management into actions. Thus the periodical analysis of revenue planning is essential for effective realization of profit.

Revenue is the result of rendering service to clients or selling goods to customer .If any organization render service or it sells goods, it means it is earning revenue.

Arithmetically revenue can be defined as:-

$$\text{Revenue} = \text{Cost} + \text{Profit or (loss)}$$

Revenue is the income received by an organization for rendering service or selling products. So it can be understood that revenue is the price paid by clients for purchasing the product. So, arithmetically, it can be explained as follows:-

Revenue = Price x unit of goods sold

So, it is understood that to earn more revenue more goods should be sold or high price should be charged on the product. The organization whose goods or service are consumed by the consumer even at high price, then the organization is earning more revenue or if the organization is selling large units of goods or services, then the organization is supposed to earn high revenue. It is important for the organization to introduce new service or goods in the market or to attract more new clients to earn more profit.

Management is the philosophy which governs the people to work as policy, guidelines, and planning so that the profit can be earned. A management is the distinct process consisting planning, organizing, staffing, directing and control. So a good management is required in any enterprise to achieve its objectives.

This primary objective of any organization is to earn revenue. To earn revenue, planning of revenue should be done by management and the planning should be implemented, checked and controlled to achieve the objective of profit

#### **1.4 Statement of the Problem.**

Public enterprises are created for infrastructure development, to generate surplus for self expansion of their service and to contribute for national revenue. It is complicated to assess the efficiency of Public enterprise with their socio-economic development goals. So, the public enterprises must be careful in long run revenue planning. So, to cope with these it has felt a necessary to develop a proper revenue plan for the efficient operation of the corporation in long term perspective known as strategic planning rather than small short term tactical planning.

Since Nepal has good opportunity for tourism industry and air transportation is the easiest and quickest medium of transportation for the landlocked and mountainous country like Nepal, airline business should be the most successful business in the country. But the main airline of the country, NAC fails to utilize the opportunity. So

this study is conducted to reveal the cause why the revenue of NAC is decreasing year by year.

The present study tries to answer the following research questions.

- ) Is capacity utilization in NAC efficient or not?
- ) How effective was the revenue planning of NAC?
- ) How is the revenue determined in long term perspective?
- ) What steps should be taken to co-ordinate between other plans and profit plan for the overall improvement of NAC to compete in the market?
- ) Is actual revenue realized as expected in revenue planning?
- ) Is NAC is successful to take advantages of tourism year 2011 and Lumbini visit year 2012?

### **1.5 Objectives of the study**

The main objective of this study is to provide insight knowledge of management of NAC along with various revenue alternatives which can be planned by NAC to compete successfully in the market. The study will be done to fulfill the following objective.

1. To make analysis of sales service of NAC
2. To make a comparative study of revenue generated by NAC.
3. To evaluate the deviation between budgeted and actual sales.
4. To make comparative study between revenue and profit of NAC.
5. To recommend the further steps to be taken to improve the revenue planning and management in NAC for generating expected profit.

### **1.6 Significance of the Study**

NAC is an enterprise of great national concern. Since Nepal is mountainous country, NAC plays important role for the transportation sector. So citizen of Nepal, the business man engaged in tourism business, manufacturing industries are always paying attention about the operation of NAC. So the study of revenue planning and management of a service providing enterprise, Nepal Airline Corporation will be important for the following group and individuals.

- ) Present and perspective passengers
- ) Present and perspective investors
- ) Policy making authority
- ) Further researchers
- ) Government
- ) Present Staffs of Nepal Airline Corporation
- ) Manufacturing and tourism based industries

### **1.7 Limitation of the Study**

The study has the following limitations

1. The study is based on secondary data obtained from the concerned enterprise mainly of the last five fiscal years from 2062/63-2067/68.
2. The study is based only on revenue planning and management of NAC; it may not be applicable to any other enterprise.
3. Limited time dimension made difficult to make thoroughly analysis.

### **1.8 Organization of the Study**

#### **Chapter 1: Introduction**

The first chapter of the study dealt with introduction, which highlighted the background of the study, history of air transportation in Nepal, statement of the problem, Objectives, significance, limitations of the study.

#### **Chapter 2: Review of literature.**

The second chapter of the study presents reviewed of available literature. It highlighted on important research that has been carried out in similar areas by earlier scholars. It included various reviews from various sources like books, journals, article, reports and other thesis as well.

#### **Chapter 3: Research Methodology**

The third chapter provided an insight to research methodology used in the study. It focused on various sequential steps to be adopted by a researcher. It explained

research design, various research methods, and source of data, data collection techniques and analysis of that particular data for the view of profit planning.

#### **Chapter 4: Presentation and Analysis of Data**

The data collected from NAC was included in this chapter. Information was presented and analyzed by using various mathematical and statistical tools in specified form to meet the stated objective of study. This chapter included major findings of revenue planning of NAC.

#### **Chapter 5: Summary, Conclusions and Recommendations**

The final chapter described about summary, conclusion and recommendation on the basis of the results from data analysis. Lastly some important suggestions to the concerned organization for its betterment were also provided in this chapter.

In the final part of the study, bibliography along with appendix would be presented.

## **CHAPTER – 2**

### **REVIEW OF LITERATURE**

#### **2.1 Concept of Planning**

Planning is the foundation of business .It is the first phase of management functions and followed by organizing, staffing, directing and controlling. Planning is deciding in advance about future action. It gives answers to the questions of what, why, when, where and how the work should be done in the future. The purpose of the plan is to adjust necessary conditions to the predicted environment in order to obtain the greatest advantage for the company. The plan should be sufficiently flexible to meet unseen conditions. A coordinated plan could incorporate both immediate program and long-range objectives.

Planning is a blue print of business growth and road map of development. It helps in deciding objectives both in quantitative and qualitative terms.

According to Harold Koontz and Heinz Weihrich-“Planning involves selecting purposes and objectives of the actions to achieve them; it requires decisions making, that is choosing from making alternative future courses of action.”

According to Mary Cushing Niles-“Planning is the conscious process of selecting and developing the best course of action to accomplish an objective.”

“Planning is directed toward the establishment of desirable future objectives and the formation of an organizational structure to be followed in achieving them. Control results from the evaluation of individual and group effort in terms of the predetermined goals. The effective discharge of these functions is essential to sound business management and successful operations." (Niswonger & Fers, 1983:515)

"Planning is first function of management. It is performed continuously because the passage of time demands both re-planning and making new plans. Moreover, current feedback often necessitates newly planned actions to (a) correct performance deficiencies, (b) cope with unanticipated events that are unfavorable and (c) take



advantage of new developments. Management planning is a process that includes (1) establishing enterprises objectives and goals (2) developing premises about the environment of the entity (3) making decision to activate the plans and (4) evaluating performance feedback for re-planning. Management planning provides the basis for performing the four other functions- organizing, staffing, leading and controlling." (Welsch, Hilton & Gordon, 1998:4-5)

According to Stephen P.Robbins –“Planning is deciding in advance what to do, how to do it and who is to it .It provides the ends to be achieved.”

“It is true that some goals are achieved with relatively little planning, but in this modern age where many tasks have become quite complex, more technology is involved and more people want to be informed and participate in what’s going to be done and with the ever-increasing diversity of products and services ,planning has become necessity.”(Terry & Franklin, 1997:148-149)

Planning is the conscious process involved in selecting and development the course of action to accomplish an objective. Planning is the process of developing enterprises objectives and selecting a future of action to accomplish them and includes:-

- a) Establishing enterprise objectives.
- b) Developing premises about an environment in which they are to be accomplished.
- c) Selecting a course of action for accomplishing the objectives.
- d) Initiating activities necessary to translate plans in to action.
- e) Current re-planning to correct deficiency.

Thus it can be concluded that planning is selecting a specific course of actions. All planning involves anticipation of the future course of events and therefore bears an element of uncertainty in respect of its success. Management planning and control begins with the establishment of the fundamental objectives of the organization and continues as the process by which necessary resources are provided and employed effectively and efficiently towards the achievement of goals. Planning is essential to accomplished goals. It reduces uncertainty and provides direction to the employees by determining the course of action in advance.

### **2.1.1 Nature of Planning**

Hence planning is the backbone functions of the management. The natures of planning are as follows:-

- Planning is goal oriented process
- Planning is primary function of management
- Planning pervades all managerial activities
- Planning is an intellectual work
- Planning is directed towards efficiency

(Source: K.C, 2004:135-136)

### **2.1.2 Qualities of Planning**

If Planning is good, the organization can easily and quickly achieve its goals at lower cost but if planning is not effective, the organization cannot be successful. So, effective planning should be made .The qualities of effective planning are as follows:-

- ) It should be goal-oriented.
- ) It should be a realistic view of the expectation.
- ) Depending upon the activities, planning should be long range, intermediate range and short range.
- ) It should be result-oriented.
- ) It covers all the staffs of the organization and it should make the staff feel they all need to work together to achieve the goal.

### **2.1.3 Long range and short range planning**

Long range planning is closely concerned with the concept of the organization as a long living institution. It is quite important for broad and long living enterprises. Long range planning varying five to ten years. The short term planning is limited time dimensions usually it covers one year time period. Short term planning is used by the management as a substantial part of the long range plan.

### **2.1.4 Other Functions of Management**

Management is getting the things done through or with people. Except planning, other functions of management are as follows:-

#### **) Organizing**

Organizing is the act of bringing the resources of the organization like man, machine, money and method into one place so that they can be mobilized properly and the objective can be achieved.

#### **) Staffing**

Staffing means placing right person at the right place at the right time. The staffing includes man power recruitment, selection, development, motivation, maintenance and compensation of managerial personnel.

#### **) Directing**

Directing is the act of providing guidance to subordinates what, where, when and how the things to be done. It includes supervision, leadership, motivation, and communication.

#### **) Controlling**

The last and important function of management is controlling. Controlling is checking whether the achievement made is according to budget or not. If it is better than the budget, the staffs should be awarded and if it is as good as budget, it is all right and if it is worse than budget, the planning should be reformed.

## **2.2 Forecasting**

Forecasting is an attempt to find the most probable course of events or the best range of probabilities. It is used to predict future situation. According to Reekie and Crook , "Forecasting aims to reduce uncertainty about tomorrow , so that effective decisions can be made today by providing predictions of future values of variables from past and present information ,since the future is uncertain , no forecasting can be cent percent correct. There cannot be accurate prediction .But every firm tries to have as precise forecasting as possible." Forecasting refers to the systematic analysis of the past and current movements in the given time series so as to obtain clues above the future pattern of these movements. It aims at reducing the area of uncertainly that

surrounds management decision with respect to cost of sale, capital investment and the changes that could be occurred in business environment.

Sales forecasting is important for estimating revenue, cash requirement and expenses. According to Cundiff and Steel, "Sale forecasting is an estimate of sales during a specified period, which estimate is tied to a proposed marketing plan and which assumes a particular set of uncontrollable and competitive forces."

Forecasting is an important tool of management required in preparation of budget and decision-making activities.

### **2.2.1 Types of Forecasting**

Forecasting can be classified on the basis of action, level, time span, planning requirement and nature of forecasting.

#### **(A) On the basis of action**

##### **) Active forecasts**

The future situation is estimated taking into account the likely future actions of the firm. The sale will be affected if the firm does some actions like publicity, advertisement etc.

##### **) Passive Forecasts**

The future situation is estimated in the absence of any action by the firm to influence sales.

#### **(B) On the basis of time span**

##### **) Short term forecasting**

Forecasting is limited to short period, usually not more than one year, it relates to policies regarding sales, purchasing, pricing and finance.

) **Long term forecasting**

Forecasting covers a period of five, ten or even twenty years. The planning of new production unit or expansion of an existing unit needs analysis of long term sale forecasting.

**(C) On the basis of external and internal**

) **External forecast**

External forecast refers to the forecasting of aggregate sales of whole industry or trend of general business conditions. It is usually prepared by a company's research staff or by outside consultants.

) **Internal forecast**

Internal forecast relates to the operation of the particular firm. It includes various persons from sales groups, production group and financial group.

**(D) On the basis of level**

) **Macro level**

Forecasting is concerned with business condition over the whole economy.

) **Industry level**

Forecasting is prepared by different trade association which supplies the results to their members.

) **Firm level**

Forecasting is done by the firm itself .It is the most important type of forecasting from managerial viewpoint.

**(E) On the basis of nature of forecast**

) **General forecast**

General forecast made by the firm gives global picture and an understanding of the environment in which the business operates. The firm may find general forecast useful since it gives direction as well as magnitude of change.

## ) **Specific forecast**

The service or commodity forecasts and forecasting by area of sales may be called specific forecast. The firms also make specific forecasts for home and exports markets.

### **2.2.2 Forecasting Vs Planning**

Forecasting is our thinking about what will happen to us in the future whereas, planning includes program of intended future action and desired results. Many companies use and prepare forecasts but don't have a disciplined planning procedure. Other companies have procedure without using forecast as a part of their plan. The best arrangement is to use both techniques. It may be used to prepare a short-term forecast of sales and profit and projects them into future long range periods.

Planning is selecting the best course of actions to achieve an objective. It is decided in advance what ,how, when and who to perform the action in the future whereas forecast is an estimate of a future event achieved by systematically combining and casting forward in a predetermined way about the past.

“A forecast is not a plan; rather it is statement or qualified assumption of future about a particular subject (e.g. sales revenue) more explicit assumptions .A forecast should always set the assumptions upon which it is based. A forecast should be viewed as only one input into the development of a sales plan. The management of a company may accept, modify or reject the forecast. When comparing forecasting with sales planning, a sales plan incorporates management decisions that are based on the forecasts, other inputs and management judgments about such related item as sales volume, prices, sales efforts production and financing.”(Welsch, et.al., 2000:172)

Forecasting is a technical activity, usually assigned to technically trained staffs or specialists. Forecasting often provides some of the basic data that are useful in the planning process. The manager later with the help of forecast make planning which is achieved by the joint effort of all staffs of the organization. Although forecasted data may not be completely reliable, these data can be used in planning process because it gives some clue about the future. Forecasting assumption and techniques vary with the kind of planning needs. Most

managers are not familiar with the theoretical aspects and limitations of forecasting because they do not have the depth knowledge. Yet, many manufacturing companies have a forecasting function because it helps to reduce uncertainty of business environment. Management planning involves uncertainty and reliable forecast can help to reduce uncertainty in the planning.

## **2.3 Concept of Revenue**

Revenue results from rendering of services and sale of goods to customer. Revenues are measured in terms of the charge made to customers, clients or tenants for service and goods provided to them. It also includes interest, dividends, royalties paid by other organization. Revenue for non-profit organization can be donations from individual, government, income from activities related to government's mission, and income from fundraising activities, membership dues etc.

### **2.3.1 Business revenue (Operating revenue)**

Operating revenue is income from business activities of the organization like service rendered to clients or sale of goods.

### **2.3.2 Other revenue (Non-operating revenue)**

Non-operating revenue is the revenue from peripheral operation. For example, a company that manufactures and sells foods item would record revenue from the sale of food items as operating revenue .If same organization has also rented some part of its building, then it records revenue from rent as non-operating revenue and discloses it separately on its income and expenses statement to show that it is from something other than its main business.

### **2.3.3 Revenue Planning**

Revenue means income received from service rendered or sale of goods. Planning means deciding in advances. So, revenue planning means deciding in advance how much revenue will be generated in the future and selecting the best way to reach the target . It will be

always hard to find out exact sale that may be achieved in future but based on past and present data analysis, future sale is estimated and different activities are planned to achieve them.

Responsibility centers for sales district are often designated as revenue center. The revenue center for the sales budget is normally a sale zone or sales district i.e. the unit under the control of an area sales manager.

The revenue plan should be designed to coordinate with efforts of the sales department, production department and all other departments. Many factors must be considered when sales budget is established, including sales trends, limitations on the supply of merchandise or the company's market, competing products, the expected amount of advertising, and general level of the economy.

The factors influencing the level of revenues may be as external and internal factor.

) **Internal Factor**

These include promotional aids such as advertising, incentives to salesman, ability of the organization to satisfy demand, quality of finished product, and change in price.

) **External Factor**

These include the fluctuations in the size of population, the general level of prosperity, the extent and severity of competition in the market, change in fashion and tastes, degree of importance of new product, elasticity of demand for the product, government policy and regulation.

### **2.3.4 Revenue Planning Process**

Planner should complete the following process for planning the revenue. They are as follows:- (Welsch, et.al, 2000: 176-182).

#### **Step 1: Development of management guidelines for Revenue Planning**

All management participants in the sales planning process should be provided with specific management guideline to be followed in sales planning. Fundamentally, those



guidelines are to attain coordination and uniformity in the sales planning process. The guideline should emphasize enterprise objectives, goals and sales strategies. The guideline also should include general pricing policies, marketing strategies, pricing policies, product emphasis, and competitive position.

### **Step 2: Prepare Sales Forecast**

One or more sales forecasts should be prepared. Such separate forecast should use different assumptions, which should be clearly explained in the forecast. The management guideline should provide the broad assumptions. Forecasting methods are broadly classified as (i) quantitative (ii) technological and (iii) judgmental. These forecasting methods include time series smoothing, decomposition for time series, simple and multiple regressions and modeling. The forecasts should include strategic and tactical forecasts that are consistent with the time dimensions.

### **Step 3: Assemble Other Relevant Data**

In addition to steps (1) and (2), all other information relevant to developing realistic sales plan should be collected and evaluated. This information should relate to both constraints and opportunities. The primary constraints that should be evaluated are:

- i. Manufacturing capacity.
- ii. Source of raw materials and supplies, or goods for resale.
- iii. Availability of key people and labor force.
- iv. Capacity availability
- v. Availability of alternative distribution channels.

These five factors require evaluation and coordination among the heads of the different various functional areas while developing a revenue plan.

### **Step 4: Develop the strategic and Tactical Sales plan.**

Based on the information obtained from steps (1), (2) and (3), the management should develop a comprehensive revenue plan. The process recognizes the importance of management goals both strategic and tactical. The four different approaches widely

used as follows (i) sale force composite, (ii) sale division manager's composite, (iii) executive decision, and (iv) statistical approaches.

### **Step 5 : Securing Managerial Commitment to Attain the Goals in the Comprehensive Revenue**

Top management must be fully committed to attaining the sales goals that are specified in the approved revenue plan. This commitment requires full communication to the sales manager of the goals; approve marketing plan and strategies by sales responsibilities. The commitment must be strong and ever present day-to-day operations.

### **2.4 Concept of Profit**

Profit is the primary measure of success of the business enterprise. It is the main tests of the business enterprises performance. Simply starting profit is the excess of income over cost of production, but the term profit is very controversial and there are several different interpretations about this.

According to Hawley F.W.-“Profit is the reward for risk taking in business”

“An economist well says that profit is the reward for entrepreneurship for risk taking. A labor leader might say that is a measure of how efficiently labor has produced and that it provides a base for negotiating a wage increase. An investor will view it as a gauge of the return on our money. An internal revenue agent might regard it as base for determining income taxes. The account will define it simply as the access of film revenue other expenditure of producing revenue in given fiscal period”. (Lynch & Williamson, 1992:99-100)

According to some theories, profits are the factor payment for taking the risk for agreeing to take what is left over after contractual have been made. In the second type of profit theory are viewed as a wage for the service of innovation

A view of state that the entrepreneur is special type of labor and profit is a special form of wages. The entrepreneur earns profit for organizing and coordinating the other factors of production such as land, labor and capital for the purpose of producing service or goods. Several economists have different views in respect of the term profit.

Profit is obtained by subtracting the cost from revenue. In the perfect competition market, profit is earned with the help of innovation, so this motive is residual after distributing the reward to all the factors of production. It can be represented as.

$$\text{Profit} = \text{Total Revenue} - \text{Total Cost}$$

So profit is key elements in the enterprise system that the system would fail to operate without profit. Even in planned economics, where state ownership rather than private has been typical the profit the profit motive increasingly been as a spur to efficient resource use. So profit is the primary measure of business in any economy. If a firm cannot make profit it cannot obtain capital cannot secure other resources, such as manpower materials, machines and profit is planning important role in every business.

#### **2.4.1 Concept of Profit Planning**

Profit planning represents an overall plan of preparation which covers a definite period of time. It consists of the operating budget, the financial budget and the approbation budget

Profit planning has the ultimate objective of attaining optimum profits as indicated by many successful theories. The most reasonable approach to attaining optimum profits is to plan profit as percentage of capital employed to produce them and to manage the enterprise with the objective of achieving the planned percentage.

According to Nanometer Jack D. and Schmidgall Raymond S. “ the profit plan tells to manage how much money remains to be spent in each expenses category and profit plan along with actual according information become the basic for developing the next fiscal year budget.”

In a summary, profit planning means developing of objectives, goals and moving an organization efficiently to achieve the objectives and goals. Profit plan is flexible and depends upon the size of the organization. So the format or rules regarding profit plan also varies according to the nature of business organization.

#### **2.4.2 Concept of Profit Planning and Control**

The comprehensive profit planning & control is defined as a systematic & formalized approach for performing significance phase of the management planning and control functions. Specially, it involves:-

1. The development and application of broad and long range objectives for the enterprises.
2. The specification of enterprise's goal.
3. A long range profit plan developed in broad terms;
4. A short -range profit plan detailed by assigned responsibilities (division, products project.)
5. A system of the periodic performance report detailed by assigned responsibilities;
6. Follow-up procedures.

The concept of comprehensive budgeting course and its use in planning, organizing and controlling are all the financial and operative activities of the forth coming period. (Lynch and Williamson, 1995:142)

#### **2.5 General Concept of Budgeting or Planning**

Budgeting is a comprehensive statement of intentions expressed in financial terms for the operation of both short and long period. It is a plan of the firm's expectation and is used as a basis for measuring the actual performance of managers and their units.

"Budgeting or planning is the first essence of management and all other functions are performed within the framework of planning. Budgeting means deciding in advance what is to be done in future. Budgeting starts from forecasting and predetermination

of future events. Budgeting is the whole concept of any business organization with proper and effective planning. No firm can accomplish its predetermined goals and objectives. Hence it is a life blood of any organization which makes them efficiently run towards the competitive environment. " (Agrawal and Kundom, 1989:348)

Budgeting is a forward planning. It serves basically as a device (tool) for management to control the activities. It is the best sources of communication and an important tool in the hands of management. Since, budgeting deals with fundamental policies and objectives, it is prepared by top management. A formal budget by itself will not ensure that a firm's operations will be automatically geared to the achievement of the goals set in the budget. For this to happen, the top-level managers and lower level employees have to understand the goals and support them and co-ordinate their efforts to attain them.

Therefore, it can be said that budget is a tool, which may be used by the management in planning the future course of action-and in controlling the actual performance

### **2.5.1 Essentials of an Effective Budgeting**

An effective budgeting system should have some essential feature to ensure best results. The following are the chief characteristics of an effective budgeting.

#### **) Sound Forecasting**

Forecasts are the foundation of budgets, these forecasts are discussed by the executives and when most profitable combinations of forecasts are selected they becomes budgets. If the forecasts are sound, better result would come out of the budgeting system.

#### **) An Adequate and Planned Accounting System**

There should be proper flow of accurate and timely information in the enterprise which is must for the preparation of budgets. This can be ensured only by having an adequate and planned accounting system in the firm.

### **) Efficient Organization with Definite Lines of Responsibility**

An efficient ,complete and best organization is imperative for budget preparation and its operation. Thus a budgeting system should always be supported by a sound organization structure demarcating clearly the lines of Authority and responsibility. Not only this, there should be a true delegation of authority from top to low levels of management. This will provide adequate opportunity to all executives to make decisions and also to participate in the function of budget preparation. Thus, an efficient organization helps not only in budget preparation but it also plays important role in budget co-ordination and operation.

### **) Formation of Budget Committee**

As mentioned earlier, budget committee receives the forecasts and targets of each department as well as periodic reports and finalizes the departmental budgets. Thus in order to make a budgeting system more and more effective, a budget committee should always be set up.

### **) Clearly Defined Business Policies**

Every budget reflects the business policies formulated by the top management. In other words budgets should always prepare talking in to account the policies set for particular department or functions. But for this purpose, policies, should be precise and clearly defined as well as free from any ambiguity.

### **) Availability of Statistical Information**

Since budgets are always prepared and expressed in quantitative terms. It is necessary that sufficient and accurate relevant that should be made available to each department. Such data may not be available from accounting system alone and therefore they may be processed through statistical technique. These data should be as far as possible, reliable accurate and adequate.

### **) Support of Top Management**

If a budget program is to be made successful, the sympathy of each member of the management team towards it should starts preferably from top i.e. chairman. The enthusiasm for budget operation as well as direction for it should initiate and come from top.

### ) **Good Reporting System**

An effective budgeting system also requires the presence of a proper feedback system. As work proceeds in the budget period, actual performance should not only be recorded but it should also be compared with budgeted performance. The variations should be reported promptly and clearly to the appropriate levels of management.

### ) **Motivational Approach**

All the employees or staff other than executives should be strongly a properly motivate towards budgeting system. In an organization it is needed to make each staff member feel too much involved in the budgeting system. To meet this end motivational approach towards budgeting should be followed.

## **2.5.2 Purposes of Budgeting**

Some purposes for the application of budgeting are:

- ) To state the firms expectations in clear and facilitate for attainability.
- ) To communicate expectations to all concerned with the management of the firm so that they are understood, supported and implanted.
- ) To provide a detail plan of action for reducing uncertainty and for the proper direction of individual and group efforts to achieve goals.
- ) To coordinate the activities and efforts in such as way the use of resource in maximized decreasing the cost of production.
- ) To provide a means of measuring the performance of individuals and units and to supply information on the basis of which the necessary corrective action can be taken

## **2.5.3 Types of Budget**

Budget can be classified in many ways, but here it is classified according to revenue and expenditure

### **(i) Revenue Budget**

Revenue of any organization is generated from the income yielding activities.. Therefore while preparing the resources deployment plan and non-funded business activities plan, the organization make the estimation of the revenue in advance during the period for which the plan is developed. Revenues of the organization are generated in the following forms:

- ) Service charge
- ) sale
- ) Interest income
- ) Commission and discounts
- ) Dividend
- ) Foreign exchange income
- ) Non-operating income
- ) Other income

### **(ii) Expenditure Budgeting**

The expense planning and controlling are very necessary for supporting the objectives and planned programs of the firm. An expense is related with profit, It is real fact, that the minimization of cost is maximization profit. So the expenses must be planned carefully for developing a profit plan. In the organization there are generally following types of expenses:

- ) Salary
- ) Wage
- ) Interest Expenses
- ) Personnel Expenses
- ) Office Operating Expenses
- ) Expenses meeting the loss in Exchange Fluctuation
- ) Non-operating expenses
- ) Expenses for provision for loan loss
- ) Expenses for provision for staff bonus



## **2.5.4 Limitations of budgeting**

### **1. Budget plan is based on estimates**

The success or failure of budget depends to a large extent upon the accuracy of basic estimates of forecasts. It should always be remembered a certain judgment is always present in such estimate forecasts. This aspects of budgeting should always be kept in view while interpreting the results there of.

### **2. There is danger of rigidity**

As budget estimates are quantitative expression of all relevant data, there is tendency to attach some sort of rigidity or finally to them. Budget estimates relate to business conditions which may be constantly changing, and it becomes imperative to change the budget estimates in the light of changed business conditions.

### **3. Budgeting is not substitute for management**

It should always be remembered that budget is not a substitute for management; it is essentially a tool of management. It is totally misconception to think that the introduction of budgeting is alone sufficient to ensure success and to guarantee future profits.

### **4. Budget execution is not automatic**

Budget will not ensure its proper execution. It is very much required that each executive must feel the responsibility and should make efforts to attain the budgeted goals.

### **5. Budgeting is a costly affair**

The installation of budgeting system is an elaborate process involving too much time and costs. Normally, it is costly that small concerns cannot afford it. He for a large concern, it is suggested that there should be some correlation between the cost of operate a budgeting system and the benefits derived from it.

## **2.6 Review of the previous thesis**

An attempt has been made to know about the researches made by previous researcher about NAC. It helps me to know what researches have already been done about NAC and what I have to find more about NAC.

Prabal Shrestha(2008) made a research on “Marketing analysis of airline services with reference to Nepal Airline Corporation”, an unpublished master level thesis submitted to Shankhar Dev Campus, Faculty of Management, T.U. It had the following major findings:-

- 1.NAC is one of the complex organizations due to its nature of service and wide area of marketing activities.
- 2.NAC owns very less Boeings and Twins Otter for international and domestic sector .Due to the growing market it is losing opportunity to grab and hold the existing market.
3. There are a lot of conflicts inside NAC whether to purchase or lease the Boeing.
- 4.NAC competitors have been offering its flight service in fewer prices than NAC. So, it should reform the price policy so that it can attract the economy class people.
- 5.Due to lack of planes there is no excitement in the staffs to promote the product. In the field of promotion it has done very less or say nothing in the market.
- 6.It had done hardly anything in the field of market search and their implementation .Researches made are also not for the long run.
- 7.Government handles all the recruiting process for the permanent job and in this process many political pressure play roles which can never be fair and effective.
- 8.Nepalese customers prefers to low price then gradually to prompt service, quality service etc.
- 9.Information announced in Nepali medium through Radio Nepal regarding flight schedule is quite traditional.NAC should search new ways of advertisement.
10. Government fixes the price of domestic sector .This also made loss to NAC in the domestic sector. Government should give subsidies or authority to NAC to fix the ticket price for domestic sector.
11. Foreigners buy ticket on the basis of recommendation of the travel agents and hotels. So, NAC should advertise in travel agent and hotel too.

The major recommendations of Mr. Shrestha’s research are as follows:-

1. NAC should buy at least two Boeing and Twin Otters to capture the market share.
2. If NAC cannot purchase the Boeing immediately, it should try to give reliability and punctuality service by its remaining two Boeing and Twin Otters.
3. As other airlines are cutting off its price of tickets, NAC should try to minimize its ticket price.
4. Increasing rate of tourists in Nepal and increasing rate of Nepalese people going to other countries for employment have made NAC more important for the growing market.
5. The sales office of NAC should be effective. It should be fair and quick.
6. NAC had been doing very less effort in promotion in this 21<sup>st</sup> century. It is the communication age. So NAC must promote its service and products as much as it can.
7. While recruiting the staffs it is all controlled by Nepalese government which is totally wrong. Government only recruit there political people who don't have enough knowledge about NAC. It should be free from political interference.
8. There is also huge gap between old and new generations' staffs. So they should have interactions with each other.
9. All the computer of marketing department should be interconnected with each other. It makes easy and effective while doing any work and also the staffs will be updated above their own department.

Kabita Subba(2008) made an research on “Relationship between Nepal Airlines Corporation and Travel Agencies”, an unpublished master level project report submitted to Himalayan White House Int’L College . It had following major findings:-

1. Osho World Travel Nepal has been the top travel agency according to the sales amount. It has remained in the top position from 2003/04 to 2006/07. In the second position Gandaki Tours and Travel during the same period.
2. The third position has been occupied by Fast International Travel & Tours in 2003/04, Union International Tours & Travels from 2004/05 to 2006/07.

3. Similarly Union International tours and travels was placed in the fourth position in 2003/04, Fast International Travels and Tours in 2004/05 and 2005/06;Dyanamic Travels in 2006/07.
4. The fifth position was occupied by Experience Nepal in 2003/04,Himalayaland Travel and Tours in 2004/05,Dyanamic Travel in 2005/06;Rainbow Travels in 2006/07.
5. Osho World Travel Nepal sales amount has decreased in the year 2004
6. While observing the sales figure trend of Union International tours and travels, Nepal Airlines Corporation should feel proud of travel agencies. The trend analysis shows Union International Tours & travel sales amount has increased every year from 2003/04 to 2006/07. The sales figure of Union International Tours and Travel in year 2003/04 was approximately 78 million and the sales figure in the year 2006/07 is approximately 156 million. The sales figure has increased by double from the year 2003/04 to 2006/07.
7. Dynamic travel sales trend is also in increasing trend. Dynamic Travel sales figure has increased each year and that is also by large amount. The journey of Dynamic Travel from year 20032/04 to 2006/07 is really observable. The sales amounts have increased from 21 million to 129 million. The sales figure has increased by six times. It is good to know that the progress of Dynamic Travel and Tour and maintaining the relation with Nepal Airlines corporation.
8. Rainbow Travel and Tour is also like that of Dynamic Travel. The sales figure has increased each year and that is also very large increment in the journey from year 2003/04 to 2006/07 with Nepal Airlines Corporation. The sales amount of Rainbow Travel was 10 million in year 2003/04 but while coming up to year 2006/07 the sales figure has increased to 80 million. The sales amount has increased by almost 8 times which is not a joke.

The major recommendations of Miss Subba's research are as follows:

1. Nepal Airlines Corporation can further improve its services quality as most people complain about their service quality.

2. Nepal Airlines Corporation has limited number of planes so it could be better if it can increase the number of planes.
3. Formalities of airlines with its agencies are very lengthy so Nepal Airlines Corporation should make the formalities easy and easily adoptable. It takes days to complete the formalities.
4. Major income of Nepal Airlines Corporation depends upon the sales of Travel Agencies so Nepal Airlines Corporation should keep these things in mind and make better rules and regulations.
5. Many Air Stations has been cut down by NAC now as compared to past years but in spite of it sales figure of travel Agencies has increased every year. So it is recommended to increase the number of planes and air station.

Rakesh Shakya (2009) has made a research on “Strategic audit of Nepal Airlines Corporations”, an unpublished master level project report submitted to Himalayan White House International College. It had following major findings which are given below:-

1. NAC covers 24 domestic destinations of the country as well as 6 destinations in the international sectors. Most employees believe that the number of aircraft are not enough to cover domestic sectors
2. Inadequate attention on corporate planning and emphasis for conduction of financial review on time.
3. The degrading NAC culture is the major weakness of Nepal Airline Corporation. Most employees feel low level of recognition of the contribution made by them. The system of “talkative and being in front” is widely practiced by employees where most who performs such activities are not good performers in terms of job activities and they believe the rating and evaluation of staff does not seem to be consistent and objective.
4. Top management of the corporation is guided by the experts in aviation as well as tourism industry.
5. The aviation industry is highly competitive in nature requiring huge investment and high risk.

6. NAC structure is functional in nature. All the functional strategies are found to be satisfactory which aims at achieving its mission but the implementation of strategies are at low level.
7. Objectives are defined in terms of goals and are found to be guided by mission statement but they need to fulfill the SMART criteria of being objective.
8. The government assistance to procure new aircrafts along with Public Private Partnership (PPP) and Nepal Tourism Year 2011 will provide great opportunity to the corporation.
9. The major competitors of the corporation are found to be Yeti and Buddha airlines in domestic sector and gulf, Qatar and Thai Airlines in international sector.
10. In terms of PEST analysis the corporation faces problems from political change, global financial crisis and change in weather.
11. The financial performance in terms of financial ratios shows inability to perform in well perceived manner.
12. NAC's overall performance degraded in terms of route coverage, fleet strength, traffic growth and market share.

The major recommendations of Mr. Shakya's research are as follows:-

1. Foreseeing the challenges of aviation sector at 2011 i.e. Visit Nepal Year 2011 (NTY 2011), NAC must act in time to develop in terms of size and reach. NAC should tap right technology in order to meet the challenges created by advancement in technology and communication.
2. NAC should initiate the strategic to utilize the idle fleet either increasing the domestic destination and proper marketing or should lease those aircraft to other airlines company so as to increase its revenue.
3. The corporation must act in time to obtain advantage like visit Nepal year 2011.

4. NAC should either go for horizontal growth, i.e. increasing geographical location or should go for acquisition.
5. NAC should continuously improve within the flight service for its customers and monitor its external environments.
6. It is also suggested that NAC should act strategically in the market and have periodic review of its share of market pie. It must think strategically of increasing its market share.
7. The finance department should redirect the strategic which will help for efficient portfolio investment of financial resources and the proper of keeping of books of accounts and auditing of financial records.

Samiksha Nakarmi (2010) made a research on “Marketing Analysis of Nepal Airlines Corporation.”, an unpublished master level project report submitted to Himalayan White House Int’L College. It had following major findings :-

1. NAC has fifty years glorious history and is associated with people as national flag carrier.
2. NAC has broad network accessing remote areas in domestic sector.
3. NAC has Safe flying image.
4. NAC has deteriorating performance owing to lack of fleets causing low reliability and punctuality problems.
5. If there is slightly ups and down in operation .It results in stoppage in air services which directly hampers the tourism industry, but NAC is only the airline providing services even in their internal as well as in external problems.NAC indirectly uplifting the tourism industry.NAC is leading airline for carrying tourists in the country in this cutthroat competition also.
6. There are poor employee morale, rigid structure and overweight bureaucratic system in NAC.
7. There is limited fleets and inadequate management attention to Domestic sectors.

8. NAC is working in close collaboration with Nepal Tourism Board, government private sectors in presenting Nepal's tourism product in domestic and international market.
9. NAC's tariffs are determined on the basis of the sectors.
10. Fares are decided on the basis of the classes like business class, economy class on which facilities, comfort and luxury are provided accordingly.
11. NAC also undertake different price discrimination offering such as discounts, Interline, AD (Travel agents), subsidy etc to increase their market share.
12. NAC also undertake aggressive campaigns like undercutting their prices , cheap value price to undercut the competition to trigger the purchase immediately to meet the competition of private airlines so that they can consolidate their position in the market.
13. The main promotional activities of NAC are done through travel agents, media people and front line office staffs as well.
14. NAC has adopted different distribution channels for marketing their services to target audience like (a) consolidation: The direct sale of ticket from the counter to the passengers on the airline desk. (b)Travel agent: Customer approach travel agent, GSA, PSA, BSP agents who book the ticket from the airline and take commission. (c)Direct through home leased system: Phone and online booking.

The major recommendations of Miss Nakarmi's research are as follows:

1. In domestic sectors, works are done manually under chart files except for tourist sectors like Pokhara and Lukla that are computerized. So, NAC should try to adapt new computer technologies so that work can be done easily and effectively.
2. NAC should launch an innovative range of promotional schemes in market like providing hotel packages, frequent flyer schemes, advance purchase schemes etc as an immediate promotional schemes.



3. The immediate challenge for NAC in international and domestic sector is to offer a fixed, reliable and a punctual schedule. The cancellation and delay of flight adds to passengers' dissatisfaction. NAC should try to make the flight on time.
4. There is need of adding new aircrafts in international sectors as NAC is connected to only six different sectors.
5. There is need of additional aircrafts with 40-60 seat capacity in domestic sectors as domestic aircrafts can carry only nineteen passengers at a time.
6. There is need to appraise the existing situation of NAC. The absence of shared vision, rigid and lengthy system and structure, low morale staffs calls for the need of harmonizing 7-S elements:- strategy , structure and systems-considered the 'hardware' of success and style, skills, staff and the shared values the 'software. The soft element style, which means that the employee share a common way of thinking and behaving and shared values, is missing. The extensive system and structure is impeding flexibility and timely decision making process which is so very important to survive the competition within the industry.

Anita Shrestha (2011) made a research on “Human resource management of Nepal Airlines Corporation”, a graduate level project report submitted to People Campus .It had following major findings:-

1. The superior and the subordinates do have a cordial relationship. They were co-operative and helping. They work as a small family group. Sometimes the dispute may arise due to the misunderstanding but it is solved by mutual understanding.
2. Company has a certain motivating tools to the employees to perform the job with their best effort. It is not exactly based on the performance of the staffs but on the regular basis of promotion.
3. However the staff is not satisfied with the salary and with other facility. Almost half the number of the staff was on the side of not satisfied at all with the salary and the facility being provided

4. The working environment was peace and pleasant. This had also made the staff feel better in the job.
5. There are frequent changes in executives and interference of the government in is common in the organization.
6. The major issues in Human Resource are traditional and non directive HR, interference and inefficiencies, lacking work culture and motivation, labor relations with management.
7. The topic of privatization of NAC continued to come up regularly at planning meetings--just as it had for the past twenty years. Some felt that the airline would be better equipped to deal with its obstacles if it could operate as a private corporate entity, instead of being restrained by the necessity of answering to the Nepal
8. The challenges regarding HR are integrated manpower planning, search for qualified employees, increasing employment security, performance management,

The major recommendations of Miss Shrestha's research are as follows:-

1. There is dissatisfaction of the staff regarding the basic salary that they get after doing hard job. So the salary of the staff should be reviewed and increased as to a prevailing in the market. The staff dissatisfaction can retard the progress of the company.
2. There is the lack of recreational activities like providing paid holidays to good staff, organizing the games etc. This can help to keep the staff mentally and physically fit.
3. The authority should make appraisal of performance made by the staff. The Staffs are complaining they are not appraised and feel less motivated.
4. The company should prepare and execute appropriate working time schedule for the staff. To some extent this will help to increase the efficiency of the staff to work.
5. NAC should not be privatized because if it is privatized first the employee working in the organization may lose the job and NAC after being privatized it may charge high price on the ticket of domestic sector which is not good for the poor people.

## **2.7 Research Gap**

Most of the researchers had conducted their research work on comprehensive profit planning and control of various banks and manufacturing organization. There is less research on service providing organization and there is even less research in area of revenue sector. So this research is completely new which is done in the revenue planning and management of Nepal Airline Corporation which is concerned by whole nation being the country's national airline corporation. Some of the researcher have done research about marketing polices, human resource management, audit of financial reports of the corporation etc. So it is believed the study of revenue planning Nepal Airline Corporation is the new study.

## **CHAPTER-3**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research question. It is an integral system that guides the researcher in formulating, implementing and controlling the study. This research study of present work is descriptive and as well as analytical approaches. It is based on historical data which covered five fiscal year ranging from 2062/63- 2066/67. This study is the examination and evaluation of revenue planning process of Nepal Airlines Corporation. Therefore the study is closely related with sales budget and other accounting statement. Analytical method is used to present information and data. Apart from quantitative data presentation, the research also presents qualitative aspects and these aspects are described in word detail where it is supposed to be necessary. Quality aspects of this study include view of the top level management as well as employee of NAC in implementation of revenue plan and the reasons behind being successful or failure in achieving the target are also the course of this research work as well.

#### **3.2 The Population and Sample**

This research work is related with budgeting aspects of NAC. The focus is made towards studying the various aspects of budgeting adopted by NAC for fiscal year ranging 2062/63-2066/67.

#### **3.3 Sources of Data**

The data were taken from five fiscal years ranging from 2062/063 to 2066/ 067 which was collected from directly from the records of the related company. For the purpose of the analysis of budgeting practice, data were taken from recently covered period as

possible. This study is mainly based on secondary data and interactions with responsible persons.

### **3.4 Data collection Techniques**

For this study some techniques and procedure were adopted to collect necessary data and information. Since, this study is related with revenue planning, the relevant data were collected from secondary source covering budget of NAC, booklets, magazines, journals and similar previous study. Direct meeting and conversation through telephone were used for necessary information

### **3.5 Data Analysis Tools**

For the research work all the data are the input for research process. And systematic processing requires an appropriate analytical tool. Data are main raw material for analytical study, so one should first manage and arrange, accumulate and present all the data in appropriate table and formats in systematic manner.

For this research study these analytical tools are used:

#### **3.5.1 Financial Analysis:**

Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationship between the items of the balance sheet and sources and uses of fund. In this research various types of financial tools are employed for the analysis financial aspects which are as follows:-

##### **(a) Net Profit Ratio:-**

This ratio is also called Net profit margin ratio. This measures the overall profitability of a business by establishing the relationship between net profit and net sales. It is calculated by dividing net profit after tax by Net sales. It is expressed in terms of percentages. Arithmetically, it is expressed as:-

$$\text{Net Profit Margin} = \frac{\text{Net profit after tax}}{\text{Net sales}} \times 100\%$$

## **(b) Cash flow analysis**

The statement shows cash inflows & out flows of a firm for a specified period is called the statement of cash flows. It demonstrates where the cash has come from during the year and what the firm has done with the available cash. Therefore cash flow statement shows a picture of cash movement occurred in and out from a firm during a year in a summarized way. It gives a picture of sources & application of cash of a firm for a year.

### **3.5.2 Statistical tool**

#### **(a) Arithmetic mean:**

Arithmetic mean or simply a 'mean' of a set of observation is the sum of all the observations divided by the number of observation. Arithmetic mean is also known as the arithmetic average.

#### **(b) Standard Deviation:**

Standard Deviation is the most popular and most useful measure of dispersion and gives uniform, correct and stable results .It is the positive square root of average sum of squares of deviations of observations from the arithmetic mean of the distribution.

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

Where

- (i) n = total frequency
- (ii) X= mid value of classes
- (iii)  $\bar{X}$  = Mean Value

#### **(c) Variance**

The square root of the standard deviation is known as the variance. It is denoted by  $\sigma^2$ .

**(d) Coefficient of Variation:-**

Standard deviation is the absolute measure of dispersion .The relevant measure of dispersion based on the standard deviation is known as the coefficient of standard deviation.

$$\text{Coefficient of variation} = \frac{\sigma}{\bar{X}}$$

The coefficient of dispersion based standard deviation multiplied by 100 is known as the coefficient of variation (c.v).It is calculated by:

$$\text{Coefficient of variation} = \frac{\sigma}{\bar{X}} \times 100$$

**(e) Correlation**

Correlation is the measure of relationship between two or more variables. Two variables are said to have "correlation" when they are so related that the change in the value of one variable is accompanied by the change in value of other. If the relationship is direct between two variables, then it is positively correlated and if the relationship is inverse between two variables, then it is negatively correlated. .The correlation can be measured by various method .The most popular method named Karl Pearson's coefficient is used to determine the coefficient of correlation between two or more variables. The formula for computing Karl Pearson's correlation coefficient ( r ) using direct method is as follows

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \times \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where

x = Dependent variable

y= Independent variable

r= correlation coefficient

n= No of time period

#### **f) Probable error (P.E)**

Probable error of the correlation coefficient by P.E. is the measure of testing the reliability of the calculated value of correlation coefficient. If  $r$  be the calculated value of correlation coefficient from a sample of  $n$  pair of observation, then P.E. is denoted by

$$P.E = 0.6745 \frac{1 - r^2}{\sqrt{n}}$$

It is used in interpretation whether calculated value of  $r$  is significant or not

- (1) If  $r < P.E.$ , it is insignificant so perhaps there is no evidence of correlation.
- (2) If  $r > 6 P.E.$ , it is significant.

#### **(g) Regression Analysis**

When two or more sets of data are closely related, one often wants to know both the form of the relationship and the strength of the relationship. It is the one of the most powerful tools of statistics, which being uses in the estimation of the strength of the relationship between two variables.

Regression Analysis is used as a tool of determining the strength of relationship between tool variable. Thus it is a statistical device, with the help of regression analysis we can estimate or predict the value of one variable when the value of other variable when the value of other variable is known. The unknown variable which we have to predict is called independent variable .The analysis used to describe the average relationship between two variables is regression analysis.

#### **(h) Testing of hypothesis**

Hypothesis is the presumption or quantitative statement of the population parameter which may be true or false. In order to make proper decision about the quantitative statement of the population, testing of hypothesis technique is used. The testing of hypothesis is carried out by using only sample information.

A hypothesis is defined by Webster as “a tentative theory or supposition provisionally adopted to explain certain facts and to guide in the investigation of others.”However in statistics, hypothesis means a statistical statement about the values of one or more parameters of the population.After setting the hypothesis ,it is necessary to test the reliability of such



statistical statements. For this purpose, an experiment is conducted by using sample information and the hypothesis is rejected if the results obtained are improbable under this hypothesis. If the results are not improbable, the hypothesis is accepted. The procedure of drawing such conclusion based on sample information is known as testing of hypothesis.

The following steps are followed to test the hypothesis:-

**1. Formulation of null hypothesis:** The first step in the decision-making procedure is to state the null hypothesis ( $H_0$ ). The null hypothesis is a hypothesis of no difference. It is usually formulated for the purpose of being rejected. The null hypothesis is set as:

$$H_0: \mu = \mu_0$$

**2. Setting of Alternative hypothesis:** The researcher has to specify a hypothesis that will be accepted if null hypothesis is rejected. Such hypothesis is called alternative hypothesis which is denoted by  $H_1$  or  $H_A$ . The general procedure of setting the alternative in testing the specified value of the population mean ( $\mu = \mu_0$ ) is one of the following three alternatives.

(i)  $H_1: \mu \neq \mu_0$

(ii)  $H_1: \mu > \mu_0$

(iii)  $H_1: \mu < \mu_0$

**3. Choosing appropriate statistical test:** In statistical testing of hypothesis lots of statistical tests (tools) have been developed like Z-Test, T-Test, F-Test, CHI-SQUARE-Test etc. However, for rational decision about the hypothesis, appropriate test statistics should be used.

**4. Providing critical value for the test:** After formulating the statistical hypothesis and selecting appropriate statistical test, the next step is to specify level of significance ( $\alpha$ ) and the sample size ( $n$ ) which are required to find critical value.

**5. Making decision:** If calculated value obtained from statistic test is greater than tabulated value obtained as critical value, the null hypothesis is rejected otherwise accepted.

## **CHAPTER-4**

### **PRESENTATION AND ANALYSIS OF DATA**

#### **4.1 Sales Budget**

Sales budget are the primary step in developing the overall budget procedure. Sales are the primary source of cash and all other functional budgets are prepared on the basis of sales budget. The budget is usually presented both in unit and rupees. The sales plan is that step which opens the door of financial plan. It is an estimate of sales for future. When actual sales are not far from the planned sales then it is known as good plan. The efficiency of planner or planning expert can be evaluated from the comparison between actual and budgeted sales.

Since Nepal Airlines Corporation is transportation based service providing organization, the sale for the corporation are passengers service and cargo services. The corporation has the practice of preparing passenger and cargo service budget. After the passenger and cargo service budget are prepared, other budget and plans are prepared.

#### **4.2 Budgeted passenger services and achievement**

The budgeted passenger services of NAC are compared with actual passenger services to find out the deviation between the budgeted passenger service and actual passenger service. The following table represents budgeted passenger service and actual passenger service achievement of NAC.

**Table- 4.1**  
**Budgeted passenger services and achievement**  
**(Rs in millions)**

<b>Year</b>	<b>Budgeted passenger service</b>	<b>Actual passenger service</b>	<b>Achievement</b>	<b>Variance</b>
2062/63	3192.57	3154.65	98.81%	(37.92)
2063/64	3868.03	4116.64	106.43%	248.61
2064/65	3895.83	1681.01	43.15%	(2214.82)
2065/66	4112.84	3231.32	78.57%	(881.52)
2066/67	4280.95	3107.5	72.59%	(1173.45)
Average	3870.04	3058.22	79.91%	(811.82)

(Source: Annual report of NAC)

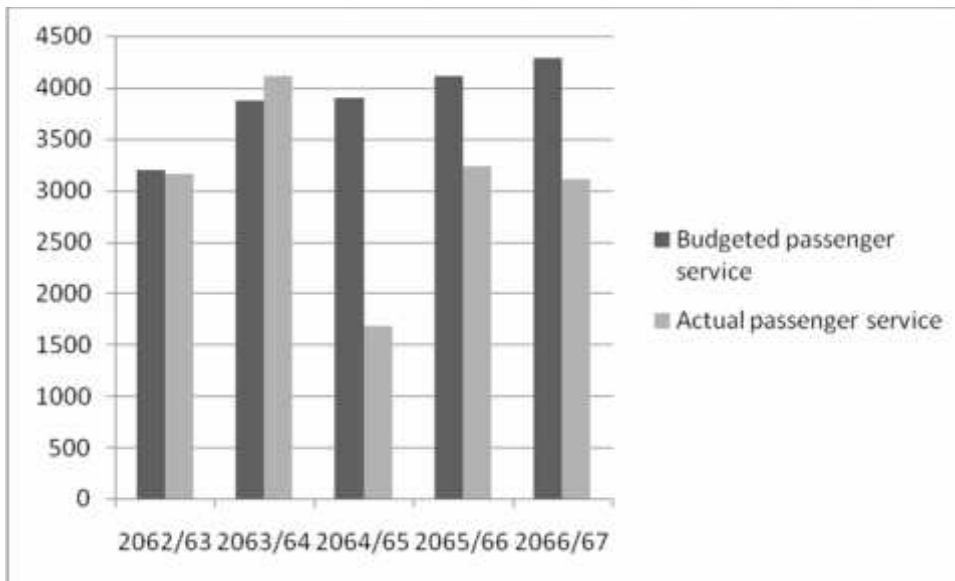
The above table is about budgeted passenger service and its achievement .It shows that the budgeted passenger services were in increasing trend whereas the actual services were in fluctuation. The actual services were below the budgeted services except in the year 2063/64. In the fiscal year 2063/64 the actual service was greater than the budgeted service by Rs. 248.61 millions and achievement percentage was 106.43 %.The lowest achievement by the corporation was 43.15% in the fiscal year 2064/65 and the variance was by Rs. 2214.8 millions because it was the year when there was high increase in fuel cost and out of two Boeing B757, one was grounded for repair and only one aircraft was in operation for almost 9 months in international sector.

It can be concluded that the corporation's performance towards achieving the budgeted passenger service was not satisfactory as it hit the target 1 time out of 5 times.

It can be also shown through a diagram which is given below:

**Graph -4.1**

**Budgeted and actual Passenger Services**



The above diagram indicated that the budgeted passenger services were in increasing trend but the actual passenger services were in fluctuation. The actual passenger service was greater than budgeted passenger service only in the fiscal year 2063/64.

#### **4.3 Calculation of Mean, Standard Deviation, Coefficient of Variation and Probable error**

The tools like arithmetic mean, standard deviation, Coefficient of variation and probable error were used to know about the nature of variability of the budgeted and actual passenger services in the different fiscal years.

**Table- 4.2**  
**Mean, Standard Deviation, Coefficient of Variation**  
**(Rs in millions)**

Statistical tools	Budgeted Passenger Services	Actual Passenger Services
A.M	3870.04	3058.22
Standard Deviation( )	370.79	782.13
Coefficient of Variation (CV)	9.58 %	25.57 %
Probable error (P.E)	0.3	
Correlation( r )	-0.03	

(Source: Appendix -1)

The table 4.2 shows the arithmetic mean, standard deviation, coefficient of variation of the budgeted passenger services were 3870.04, 370.79 and 9.58 % respectively. Similarly, the mean, Standard deviation, Coefficient of Variation of actual services were 3058.22, 782.13 and 25.57 % respectively. The arithmetic mean of the budgeted services was greater than actual service. It means the corporation was not successful to achieve the targeted passenger services. The standard deviation of actual passenger services was greater than budgeted services. Standard deviation is a tool to indicate how much variation or “dispersion” there is from the arithmetic mean. A low standard deviation shows that the data points tend to be very close to the mean whereas high standard deviation shows that the data points are spread out over a large range of values. So it means the variation in the range from the mean was greater in the actual passenger services than in the budgeted services. Similarly coefficient of variation of the actual passenger services was greater than the budgeted services. Less C.V means less variability, more stable and more homogeneous but the largest CV means just opposite. Thus the budgeted passenger services were more uniform than the actual services.

Two variables are said to be correlated when change in one variable influences to change in other variables. The correlation analysis determines the degree of

relationship between two variables. The correlation can be measured by various method .The most popular method named Karl Pearson’s coefficient was used to determine the coefficient of correlation between the budgeted and actual passenger services. The calculated value of r is -0.03 which means there is low negative correlation between the budgeted and actual services.

The probable error is used to measure the reliability and test of significance of correlation coefficient. If  $r < P.E$ , it is insignificant, i.e there is no evidence of correlation. If  $r > 6 P.E$ , it is significant. Similarly if  $P.E < r < 6 P.E$ , nothing can be concluded. Here the probable error is 0.3 .So it can be concluded that value of correlation is less than probable error ( $-0.03 < 0.3$ ) which mean there is no evidence of correlation.

#### 4.4 Test of significance of correlation coefficient

To test the significant of correlation of coefficient T-test can be used. Here sample size is less than 30 so T statistic can be used.

Here

$$r = -0.03$$

Null hypothesis ( $H_0$ ):  $\rho = 0$  i.e. the variables in the population are not correlated.

Alternative Hypothesis:  $H_1: \rho \neq 0$ , i.e. the variable in the population are correlated.

(two tailed test)

Test Statistic,

$$\begin{aligned} t &= r \times \frac{\sqrt{n-2}}{\sqrt{1-r^2}} \\ &= -0.03 \times \frac{\sqrt{5-2}}{\sqrt{1-(-0.03)^2}} \\ &= -0.03 \times 1.73 \end{aligned}$$

$$|t| = -0.05$$

$$= 0.05$$

Degree of Freedom =  $n-2 = 5-2=3$

Critical value: The tabulated value of t at 5% level of significance for two tailed test and for 3 d.f is 3.182

Decision: Since calculated value of t is less than the tabulated value of t, the null hypothesis  $H_0$  is accepted. It means the variable in the population are not correlated

#### 4.5 Calculation of Trend by Fitting Straight line Trend, Least Square for Actual passenger services Trend and possible services of NAC

**Table: 4.3**

Fiscal year (X)	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68	2068/69
Passenger services (Y)	3062.62	3154.65	4116.64	1681.01	3231.32	3107.5	2860.82	2804.21

(See: Detail in Appendix -4)

Since No. of year is even the third year (i.e 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable passenger service 'y' and independent variable year 'x' (i.e time) be represented by

$$Y = a + bx \dots\dots (i)$$

Where a = y intercept

b = slope of the trend line or amount of change that comes in y for a unit change in x

To find the variale of a and b the given below two equations have to be solved.

$$y = Na + b \quad x \dots\dots\dots (ii)$$

$$xy = a \quad x + b \quad x^2 \dots\dots\dots (iii)$$

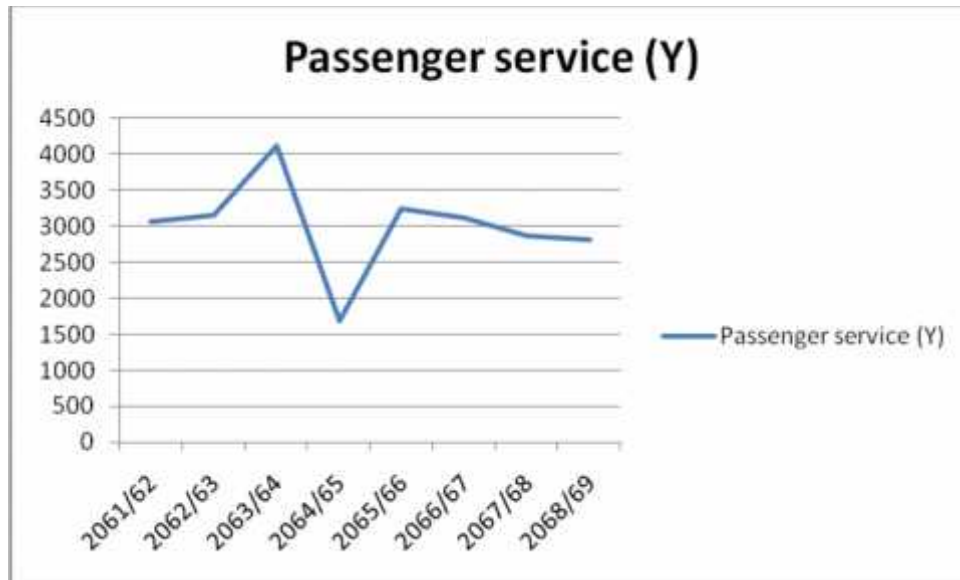
When when  $X = 4$  i.e in the year 2067/68

If the trend does not change and it is the year 2067/68 ,the corporation will earn Rs 2860.82 millions .

Similarly, when  $X=5$  i.e in the fiscal year 2068/69, the corporation will earn Rs 2804.21 millions.

**Diagram: 4.2**

**Fitting of trend line by using least square method for actual and possible passengers services.**





## 4.6 Budgeted Cargo services and achievement

Table-4.4

### Budgeted Cargo services and achievement

(Rs in millions)

Year	Budgeted cargo service	Actual Cargo Service	Achievement	Variance
2062/63	185.19	124.38	67.16%	(60.81)
2063/64	214.01	120.76	56.43%	(93.25)
2064/65	210.09	82.49	39.26%	(127.60)
2065/66	155.66	92.92	59.69%	(62.74)
2066/67	205.72	78.52	38.17%	(127.20)
Average	194.13	99.81	52.14%	(94.32)

(Source: Annual report of NAC)

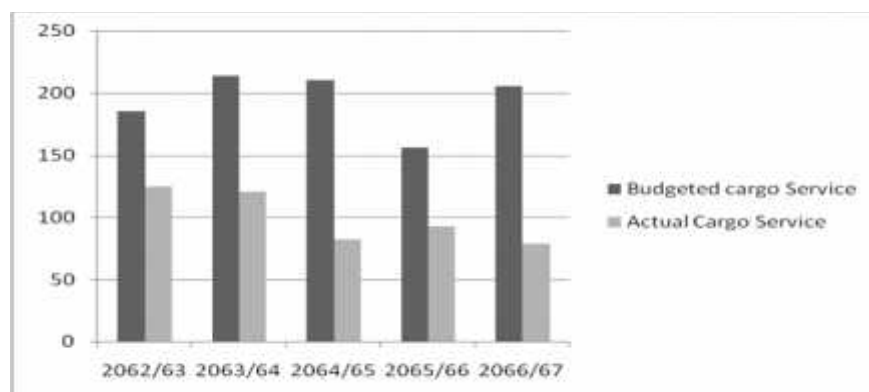
The above table is about budgeted cargo services and its achievement. The budgeted cargo services was in increasing trend from year 2062/63 to year 2064/65 but it decreased in year 2065/66 and again increased in the year 2066/67. The actual cargo services were in fluctuation. The highest achievement by the corporation is 67.16% in the fiscal year 2062/63 and the variance was by Rs.60.81 millions and the lowest achievement is 38.17 % in the fiscal year 2066/67 and the variance was Rs. 127.2 millions.

It can be concluded that the corporation was not successful to achieve the budgeted cargo services. The achievement percentage was decreasing year by year .Targets were set in high expectations. It can be said that the targets were not set on a realistic basis.

It can be also shown by diagram which is given below:

Graph-4.3

### Budgeted and Cargo Services



The above graph indicated that the budgeted cargo service were greater than actual cargo services in each fiscal year.

#### **4.7 Calculation of Mean, Standard Deviation, Coefficient of Variation and Probable error**

The tools like arithmetic mean, standard deviation, Coefficient of variation and probable error were used to know about the nature of variability of the budgeted and actual cargo services in the different fiscal years.

**Table-4.5**

##### **Mean, Standard Deviation, Coefficient of Variation (Rs in millions)**

Statistical tools	Budgeted cargo Services	Actual cargo services
A.M	194.13	99.81
Standard Deviation( )	21.65	19.2
Coefficient of Variation (CV)	11.15 %	19.24 %
Probable error (P.E)	0.3	
Correlation( r )	-0.03	

(Source: Appendix-2)

In the table shown above, the arithmetic mean, standard deviation, coefficient of variation of budgeted Cargo services are 194.13, 21.65 and 11.15 % respectively. Similarly, the mean, standard deviation, coefficient of variation of actual services are 99.81, 19.20 and 19.24 % respectively. The arithmetic mean was greater in the budgeted cargo services than in the actual cargo services. The standard deviation in the budget cargo services was greater than in the actual cargo services which mean that the variation was greater from mean in the budgeted cargo services than in the actual services. Similarly coefficient of variation was greater in actual cargo services than in budgeted cargo services .It means the budgeted services were more stable than actual services. The calculated value of r is -0.03 which tells there was low negative

correlation between budgeted and actual cargo services. The probable error was 0.3 .So it can be concluded that value of correlation is less than probable error (-0.03 < 0.3) which means there was no evidence of correlation.

#### 4.8 Test of significance of correlation coefficient

To test the significant of correlation of coefficient T -test can be used. Here sample size is less than 30 so T-test was used.

Here  $r = -0.03$

Null hypothesis ( $H_0$ ):  $\rho = 0$  i.e. the variables in the population are not correlated.

Alternative Hypothesis:  $H_1: \rho \neq 0$ , i.e. the variable in the population are correlated. ( two tailed test)

Test Statistic,

$$t = r \times \frac{\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$= -0.03 \times \frac{\sqrt{5-2}}{\sqrt{1-(-0.03)^2}}$$

$$= -0.03 \times 1.73$$

$$|t| = -0.05$$

$$= 0.05$$

Degree of Freedom  $= n-2 = 5-2 = 3$

Critical value: The tabulated value of t at 5% level of significance for two tailed test and for 3 d.f is 3.182

Decision: Since calculated value of t is less than the tabulated value of t ,the null hypothesis  $H_0$  is accepted. It means the variable in the population are not correlated

**4.9 Calculation of Trend by Fitting Straight line Trend, Least Square for Actual cargo services Trend and possible services of NAC**

**Table:4.6**

Fiscal year (X)	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68	2068/69
Cargo services (Y)	179.72	124.38	120.76	82.49	92.92	78.52	49.25	31

(See: Detail in Appendix: 5)

Since No. of year is even the third year (i.e 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable cargo service 'y' and independent variable year 'x' (i.e time) be represented by

$$Y = a + bx \dots\dots (i)$$

Where a = y intercept

b = slope of the trend line or amount of change that comes in y for a unit change in x

To find the variable of a and b the given below two equations have to be solved.

$$y = Na + b \quad x \dots\dots\dots (ii)$$

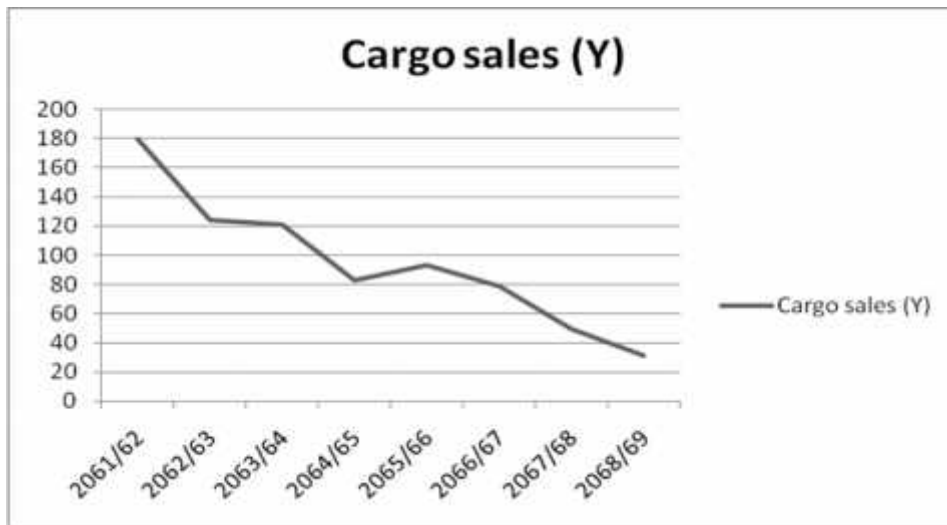
$$xy = a \quad x + b \quad x^2 \dots\dots\dots (iii)$$

When X =4 i.e in the year 2067/68 and if the trend does not change, the corporation will earn Rs 49.25 millions as cargo service in the fiscal year 2067/68.

Similarly, When X=5 i.e. in the fiscal year 2068/69, the corporation will earn Rs 31 millions as cargo service in the fiscal year 2068/69.

**Diagram: 4.4**

Fitting of trend line by using least square method for actual and possible cargo services.



In respect to Nepal Airlines corporation the revenue is not only the passenger services and cargo services but also other income items because it renders many services expect air transportation .The combined revenue of Nepal Airline corporation is called operating revenue.

#### 4.10 Budgeted Operating revenue and Achievement

**Table: 4.7**

**Budgeted Operating revenue and Achievement (Rs. in millions)**

Year	Budgeted Operating Revenue	Actual Operating Revenue	Achievement	Variance
2062/63	3,795.64	4,355.73	114.76%	560.09
2063/64	4,391.78	5,645.49	128.55%	1,253.71
2064/65	4,640.50	3,104.36	66.90%	(1,536.14)
2065/66	5,609.34	5,449.70	97.15%	(159.64)
2066/67	5,287.52	5,349.24	101.17%	61.72
Average	4744.956	4780.90	101.70 %	35.94738

(Source: Annual Report of NAC)

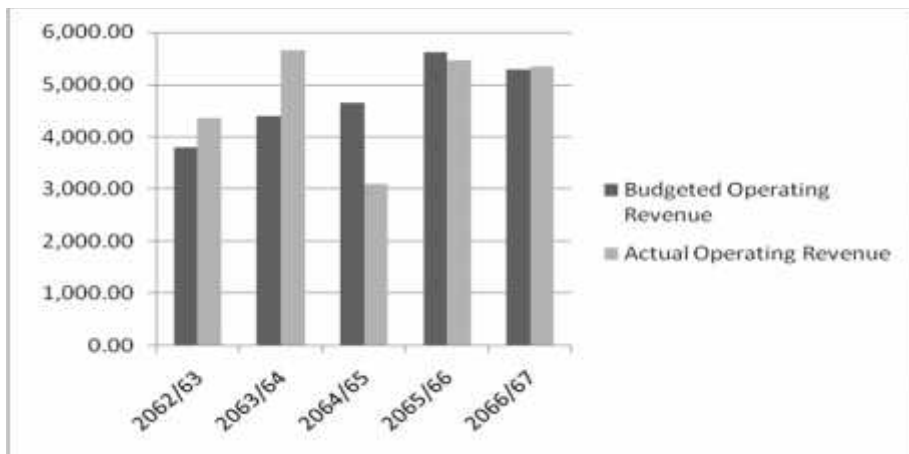
The above table shows about operating revenue and its achievement. The highest achievement was 128.55% in the fiscal year 2063/64 with Rs 1253.71 millions more due to the effective management and smooth operation of the aircrafts for almost a year.

The lowest achievement was 66.90% in the fiscal year 2064/65 with the variance of Rs.1536.14 millions because it was the fiscal year 2064/65 when a single aircraft was in operation for almost 9 months in international sector.

It is concluded though the corporation is not able to achieve the target of passenger service or cargo services, it is somewhat able to achieve the target of operating revenue .

**Graph-4.5**

**Budgeted and Actual Operating Revenue**



The above graph indicated that the actual operating revenue were greater than budgeted operating revenue in the fiscal year 2062/63 ,2063/65 and 2066/67 but it were less in the fiscal year 2064/65 and 2065/66

**4.11 Calculation of Mean, Standard Deviation, Coefficient of Variation and Probable error.**

**Table-4.8**

**Mean, Standard Deviation, Coefficient of Variation (Rs in millions)**

Statistical tools	Budgeted Operating Revenue	Actual Operating revenue
A.M	4744.96	4780.9
Standard Deviation( )	644.73	949.67
Coefficient of Variation (CV)	13.59	19.86
Probable error (P.E)	0.26	
Correlation( r )	0.38	

(Source: Appendix-3)

In the table above the arithmetic mean, standard deviation, coefficient of variation of budgeted operating revenue are 4744.96, 644.73, and 13.59% respectively. Similarly the arithmetic means, standard deviation, coefficient of variation of the actual operating revenue are 4780.9, 949.67, and 19.86% respectively. Since arithmetic mean of actual operating revenue is greater than that of actual operating revenue, it means the corporation was able to achieve the operating revenue. Since standard deviation of actual operating revenue is greater than that of budgeted operating revenue, it means there was high variation in the data from mean in actual operating than in budgeted revenue. Similarly the coefficient of variation of actual operating revenue was greater than that of budgeted operating revenue. It means the actual operating revenue is less stable than budgeted revenue. Since correlation is 0.38, it means there was low positive correlation between budgeted and actual operating revenue. Here  $r$  is greater than P.E (i.e.  $0.38 > 0.26$ ) but less than  $6P.E$  (i.e.  $0.38 < 1.56$ ). Since  $P.E < r < 6 P.E$ , nothing can be concluded from the correlation.

#### 4.12 Test of significance of correlation coefficient

To test the significant of correlation of coefficient T-test can be used. Here sample size is less than 30 so T statistic was used.

Here  $r = 0.38$

Null hypothesis ( $H_0$ ):  $\rho = 0$  i.e. the variables in the population are not correlated.

Alternative Hypothesis:  $H_1: \rho \neq 0$ , i.e. the variable in the population are correlated.

(two tailed test)

Test Statistic,

$$t = r \times \frac{\sqrt{n-2}}{\sqrt{1-r^2}}$$
$$= 0.38 \times \frac{\sqrt{5-2}}{\sqrt{1-(0.38)^2}}$$

$$= 0.38 \times 1.87$$

$$= 0.71$$

Degree of Freedom  $= n-2 = 5-2=3$

Critical value : The tabulated value of t at 5% level of significance for two tailed test and for 3 d.f is 3.182

Decision: Since calculated value of t is less than tabulated value of t, the null hypothesis  $H_0$  is accepted. It means the variable in the population are not correlated



### 4.13 Calculation of Trend by Fitting Straight line Trend, Least Square for Actual operating revenue Trend and possible Operating revenue of NAC

**Table-4.9**

Fiscal year (X)	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68	2068/69
Operating Revenue (Y)	4118.91	4355.73	5645.49	3104.36	5449.70	5349.24	5359.79	5556.71

(See:Detail in Appendix -6)

Since No. of year is even the third year (i.e 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable operating revenue 'y' and independent variable year 'x' (i.e time) be represented by

$$Y = a + bx \dots\dots (i)$$

Where a = y intercept

b = slope of the trend line or amount of change that comes in y for a unit change in x

To find the variate of a and b the given below two equations have to be solved.

$$y = Na + b \sum x \dots\dots\dots (ii)$$

$$\sum xy = a \sum x + b \sum x^2 \dots\dots\dots (iii)$$

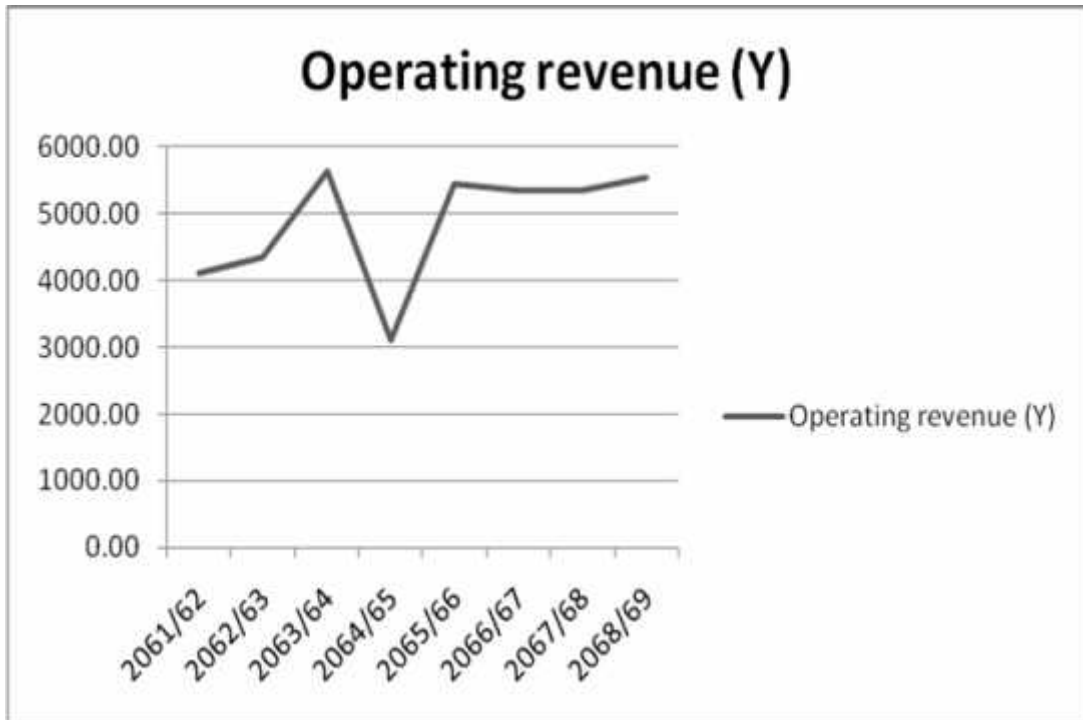
When when =4 i.e in the year 2067/68

If the trend does not change, the corporation will earn Rs 5359.79 millions as operating revenue in the fiscal year 2067/68..

Similarly, when X=5 i.e in the year 2068/69, the corporation will earn Rs 5556.71 millions as operating revenue.

**Diagram:4.6**

Fitting of trend line by using least square method for actual and possible Operating revenue.



The components of Operating Revenue are shown in the table below:

**Table-4.10**  
**Components of Operating Revenue**

(in millions)

Particulars	2062/63		2063/64		2064/65		2065/66		2066/67	
	Rs	%	Rs	%	Rs	%	Rs	%	Rs	%
Passengers Services	3,154.65	72.43	4,116.64	72.92	1,681.01	54.15	3,231.32	59.29	3,107.50	58.09
Excess Baggage Services	59.26	1.36	65.01	1.15	34.74	1.12	30.08	0.55	37.23	0.70
Cargo Services	124.38	2.86	120.76	2.14	82.49	2.66	92.92	1.71	78.52	1.47
Mail	0.35	0.01	0.24	0.00	0.17	0.01	0.21	0.00	0.10	0.00
Charter	71.58	1.64	5.27	0.09	15.19	0.49	12.87	0.24	14.98	0.28
Handling Charges	607.76	13.95	709.35	12.56	937.28	30.19	1,148.54	21.08	1,432.52	26.78
Interline Commission	6.88	0.16	12.27	0.22	5.44	0.18	2.01	0.04	1.39	0.03
Cancellation Charges	12.04	0.28	17.87	0.32	12.16	0.39	14.33	0.26	19.31	0.36
Traffic Compensation	5.77	0.13	8.96	0.16	5.37	0.17	2.20	0.04	0.92	0.02
Others	17.03	0.39	10.61	0.19	15.32	0.49	3.93	0.07	3.28	0.06
Insurance Surcharge	74.30	1.71	98.27	1.74	64.33	2.07	535.97	9.83	650.46	12.16
Fuel Surcharge	217.35	4.99	478.03	8.47	248.62	8.01	373.90	6.86	0.00	0.00
Prior Year Income	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Engineering Service	4.39	0.10	1.77	0.03	2.04	0.07	1.31	0.02	3.03	0.06
Catering Service	0.0027	0.00	0.44	0.01	0.08	0.00	0.11	0.00	0.00	0.00
<b>Total</b>	<b>4,355.73</b>	<b>100</b>	<b>5,645.49</b>	<b>100</b>	<b>3,104.36</b>	<b>100</b>	<b>5,449.70</b>	<b>100</b>	<b>5,349.24</b>	<b>100</b>

(Source: Annual Report of NAC)

From the above table it can be concluded that passenger services covered the bigger part of the operating revenue .The share passenger service in the operating revenue was the highest i.e 72.43 % in the year 2063/64 and the lowest i.e 54.15 % in the year 2064/65.The share of passenger services in operating revenue were 59.29 % and 58.09 % in the year 2065/66 and 2066/67 respectively which was not satisfactory in comparison with previous year 2063/64.

#### 4.14 Analysis of Ratio between Operating Revenue and Net profit

**Table No.4.11**

Ratio between Operating revenue and Net profit (Rs in millions)

<b>Fiscal year</b>	<b>Operating Revenue</b>	<b>Net profit</b>	<b>%Net Profit</b>
2062/63	4,355.73	36.75	0.84
2063/64	5,645.49	341.12	6.04
2064/65	3,104.36	-162.87	-5.25
2065/66	5,449.70	101.01	1.85
2066/67	5,349.24	126.23	2.36

(Source : Annual Report of NAC)

The table shows the clear pictures of operating revenue and net profit relationship of NAC. The table shows that operating revenue and net profit were in fluctuating nature. The highest operating revenue was Rs. 5645.49 and net profit was Rs 341.12 in the year 2063/64 with net profit ratio 6.04. The corporation faced loss of Rs.162.87 with the lowest operating revenue Rs 3104.36 in the fiscal year 2064/65 because there is a single aircraft operation for around nine months in international level.Net profit is in decreasing trend in NAC due to scarcity of aircraft , high competition, increase in fuel price, increase in fixed year. There was increase in net profit in year 2066/67 even the operating revenue is lower than that of year 2065/66 because there is less operating expenses in the year 2066/67.

**4.15 Calculation of Trend by Fitting Straight line Trend, Least Square for Actual Net profit Trend and possible Net profit of NAC**

**Table-4.12**

Fiscal year (X)	2061/62	2062/63	2063/64	2064/65	2065/66	2066/67	2067/68	2068/69
Net Income (Y)	56.94	36.75	341.12	(162.87)	101.01	126.23	76.72	74.87

(See:Detail in Appendix -7)

Since No. of year is even the third year (i.e 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable net profit 'y' and independent variable year 'x' (i.e time) be represented by

$$Y = a + bx \dots\dots (i)$$

Where a = y intercept

b = slope of the trend line or amount of change that comes in y for a unit change in x

To find the value of a and b the given below two equations have to be solved.

$$y = Na + b \quad x \dots\dots\dots (ii)$$

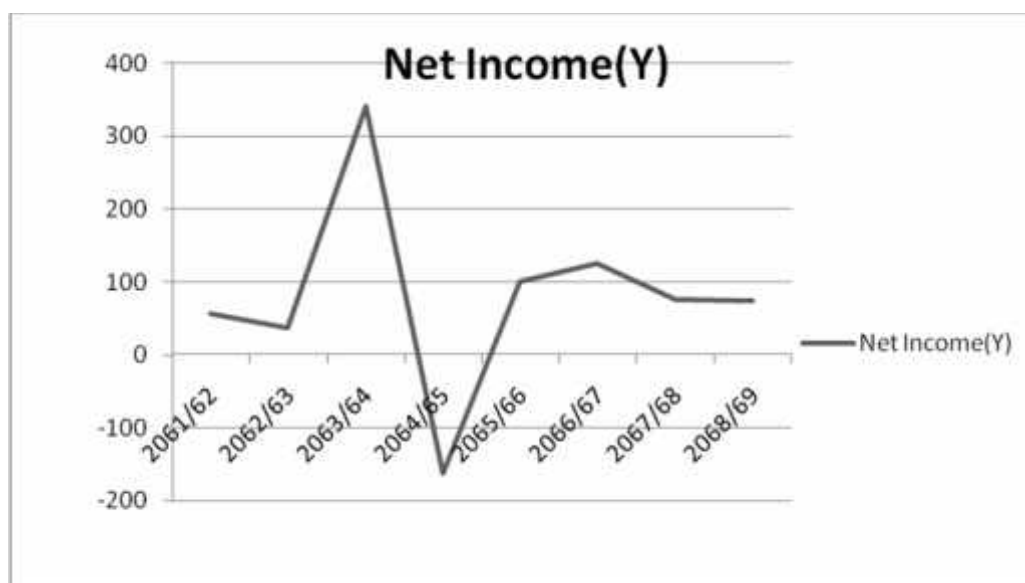
$$xy = a \quad x + b \quad x^2 \dots\dots\dots (iii)$$

When when  $X = 4$  i.e in the year 2067/68 and the trend does not change, the corporation will earn Rs 76.42 million as net profit

Similarly, when  $X = 5$  i.e in the year 2068/69, the corporation will earn Rs 74.87 millions as net profit.

**Diagram-4.7**

Fitting of trend line by using least square method for actual and possible Net income.



#### 4.16 Analysis of Cash Flow

**Table-4.13**

Fiscal Year	Cash from Operating activities	Cash from investing activities	Cash from Financial activities	Net Cash Flow
2062/63	175,601,397.16	(27,474,515.40)	(37,974,161.21)	110,152,720.55
2063/64	662,058,977.19	(52,482,849.13)	(760,991,676.90)	(151,415,548.84)
2064/65	(167,993,781.43)	(158,021,809.32)	379,623,015.32	53,607,424.57
2065/66	187,390,294.09	(22,587,861.29)	76,864,433.46	241,666,866.26
2066/67	115,054,064.75	(213,614,064.01)	(21,128,960.37)	(119,688,959.63)
Average	194,422,190.35	(94,836,219.83)	(72,721,469.94)	26,864,500.58

(Source: Annual report of NAC)

The table shows that the cash flow of NAC was in fluctuating trend. The average cash flow from operating activities was Rs 194,422,190.35. The cash inflow from operating activities in the fiscal year 2063/64 was Rs 662,058,977.19 which was higher than those in other years due to high passenger services. The cash outflow from operating

activities was higher in the fiscal year 2064/65 than in other years due operation of single aircraft for about nine months.

The cash flow from investing activities was cash out flow. The average cash outflow from investing activities was Rs 94,836,219.83. The cash outflow from investing activities in the fiscal year 2066/67 was higher than in other years due to high investment in the assets like Aircraft and Aero Engine, Ranp and Ground Equipment.

The cash from financing activities are also in fluctuating trend .NAC had high cash inflow i.e Rs 379,623,015.32 from financing activities in the fiscal year 2064/65. The cash outflow from financing activities was higher i.e Rs 760,991,676.90 in the year 2063/64 than in other year due to repayment of loan .

The net cash flow of NAC was in fluctuating trend. The average net cash flow for the study period is Rs 26,864,500.58. The net cash inflow were Rs 110,152,720.55, Rs 53,607,424.57 and Rs 241,666,866.26 in the year 2062/63, 2064/65 and 2065/66 respectively. Similarly the net cash outflow Rs 151,415,548.84 and Rs 119,688,959.63 in the year 2063/64 and 2066/67.

#### **4.17 Major Finding**

The Major findings of the research work are as follows:-

1. The revenue trends showed that the revenue were in fluctuation but the budgeted revenue were in increasing trend.
2. NAC had highest net profit i.e Rs 341.12 millions in the fiscal year 2063/64 but it had suffered loss of Rs 162.87 millions in the next fiscal year i.e 2064/65 due to operation of only one aircraft for almost nine months.
3. The average achievement was less than average budget in all sectors whether it was passenger services or cargo services.
4. The variation in the actual achievement was higher than in budgeted revenue. It shows the performance of the corporation was not up to the accepted mark.
5. Even the corporation is based on airline sector but the revenue of the corporation was largely depended on other activities like Ground Handling Charges, Insurance Surcharge, Fuel Surcharge etc.
6. The number of aircraft were decreasing every by year and the available aircrafts were not in the condition to provide service at time. It seems as if the

corporation has established not to provide air service rather to provide services to other airlines.

7. The actual revenue and budgeted revenue are not correlated i.e there were no trends like if budget revenue increase, the actual revenue also increase. It is found that actual revenue decreased many times when budgeted revenues increased. It seemed there was no connection between budgeted and actual revenue.
8. The corporation was failure to take advantages of event like Visit Year Nepal due to lack of enough aircrafts. The corporation attempted to purchase the aircrafts but it failed.
9. The management of the corporation was not stable. It changed with change in government in Nepal. Due to frequent changes in management, the management could not work to achieve the budgeted revenue.



## CHAPTER -5

### SUMMARY, CONCLUSION & RECOMMENDATION

#### 5.1 Summary

Nepal Airline Corporation is the main airline in this country. Since Nepal is a landlocked country with its complex geographical condition, NAC has its role to play in transportation sector. A country will be developed only if its economy is developed. For developing the economy, industrial sector should be developed. It will be really important for any industry to transport its manufactured products to the market at the right time. Similarly the sector which can help Nepal to develop is tourism sector. For the development of tourism sector the international as well as domestic transportation system play main role. So, there is great role of NAC in developing industry, tourism sector to develop the economy of Nepal.

Planning is the road map of management. It is deciding in advance what is to be done in future. It starts from forecasting and determination of future events. It is first essence of management and all other function are preformed within framework of planning. Planning is essential to accomplish goal. It reduces uncertainty and provides direction to the employees by determining the course of action in advance .If the planning is good , the organization can achieve the objective otherwise it fails to achieve them.

Revenue is the outcome of sale of service or goods produced. High revenue indicates the success of the organization and low revenue is the sign of the failure of the organization.

Revenue planning is establishing the revenue target and providing the best ways to achieve the target.

Nepal Airline Corporation is service providing public organization. Its main objective is to provide transportation service to the people inside and outside the country. Although it has service providing objective, it should pay attention to revenue side to

maintain and extend its services. So this study is focused on revenue planning and its management in NAC.

The five fiscal year data from 2062/63 to 2066/67 were taken for the study. The data are mainly of secondary nature. The data were analyzed by using statistical and financial tools. Descriptive as well as analytical methods were used to analyze the data. In statistical tools, mean, standard Deviation, coefficient of variation, probable error, correlation, regression, hypothesis test, were used and in financial tool net profit ratio and cash flow analysis were used. Different tables and charts like bar chart, pie chart and line chart were used to classify and analyze the data collected.

It is found after analyzing the data that the corporation was not successful to achieve the budgeted sales and it seemed there was no coordination between revenue planning team and actual performance measuring team. However, the corporation was able to make profit to some extent.

This study has been organized in five chapters consisting of Introduction, Review of Literature, Research Methodology, Data presentation analysis and Summary, Conclusion and Recommendation.

## **5.2 Conclusion**

Since the operation of Nepal Airline Corporation has significant impact in the economic development of the country, the corporation should work properly. It does not seem everything is good with NAC. The main sources of revenue of NAC are passenger service and cargo service. But it is sad to conclude that NAC was not able to achieve the budgeted passenger and cargo service. NAC, in the study period, achieved the budgeted passenger sales only in the year fiscal year 2063/64. The corporation not only became unsuccessful to reach the budgeted revenue but also suffered from heavy loss in the fiscal year 2064/65 due to operation of single aircraft for around nine months. There is high variation in actual passenger revenue than budgeted revenue. In respect of cargo sales the corporation never achieves the budgeted cargo sales. The share of passenger revenue in total operating revenue was

decreasing. It was 72.43 % share in the fiscal year 2062/63 and it was only 58.09% share in the fiscal year 2066/67. The actual cargo sales were decreasing year by year. The lowest achievement was in the fiscal year recent year 2066/67 by 38.17 %.

Since the corporation not only performs air service but also provides service to other airline companies, it is important to analyze the operating revenue which include revenue from passenger sales, cargo sales and also other revenue like ground handling, insurance surcharge, fuel surcharge, etc. It seems it will be incomplete analysis of revenue of NAC if only passenger and cargo sales are taken into analysis. It is important in the context of NAC to analyze the operating revenue to find about the revenue status of NAC as a whole.

In respect of operating revenue of NAC, it seems satisfactory performance of NAC because there are activities like ground handling, fuel surcharge, traffic compensation, interline commission etc to support the passenger and cargo sales.

It supposes to be that when budgeted revenue increases, actual revenue will increase. But in context of NAC there is no correlation between budgeted and actual revenue. There is no guarantee that when budgeted revenue increases, the actual revenue will increase or decrease. There is position of uncertainty in NAC about performance of actual performance to budgeted plans.

Since Nepal is celebrating tourism year in the year 2011 and it is going to celebrate Lumbini Tourism year in the year 2012, NAC has high scope to increase its business .So NAC should purchase at least two aircrafts to get the benefit of tourism year in Nepal.

### **5.3 Recommendations**

Based on the above study, it is concluded that the performance of NAC was not satisfactory. NAC should take seriously some steps to improve the situation .Therefore the following suggestions are made to improve NAC in the future:

1. NAC should purchase at least two aircrafts for international air service and two aircrafts for domestic service for regular and smooth operation because NAC's only 5 aircrafts are in operation out of total 9 aircrafts.
2. NAC should make proper provision for repair and maintenance of aircraft because due to frequent non operation of aircraft the passengers are losing faith on NAC.
3. Since it is world of competition, NAC should improve its marketing strategic to attract more international and domestic passengers by advertising Nepal to the world through electronic and magazine media.
4. NAC's budget revenue should be forecasted on the realistic ground. Forecast should include strategic and tactical forecast that are consistent with the time elements. The process of developing a realistic sales plan should be matching with the recruitment of the organization.
5. The budgeted sales should be prepared by analyzing the past achievement and considering demand determinates such as size of potential passengers, market regiments, seat capacity etc.
6. There should be good communication and coordination between the staffs of the budget department and account department.
7. NAC should develop specific goals for the coming budget. Such goals should address return on capital employed, net profit on sales increases, cost reduction.
8. NAC should gain risk taking behavior and should expand its service in international and domestic markets.
9. NAC should pay more attention on corporate planning and give more emphasis for financial review on time.
10. There should be continuous flow of information among various level of management and various group of employees. The goal with action plan should be communicated from top to low level.

11. The degrading corporate culture is major weakness of NAC. Most staff thinks that their actual work evaluation will not be done and there will be no punishment to the staffs who don't work well. So NAC should award the capable staffs and punish the staff if they cannot work properly so that they work properly and the budgeted revenue can be achieved.
12. The tendency of stealing property in NAC should be discouraged. It negatively influences the passengers, government and citizen of Nepal. So it is necessary to investigate who is responsible in stealing the property on NAC and the thief should be punished.
13. NAC should act strategically in the market and have periodic review of its share of market pie to increase its market share
14. There should not be direct or indirect political interfere in NAC. The capable staffs should be given opportunity to handle it.
15. The government should play vital role to purchase aircraft for NAC.
16. NAC should prepare good plan to take advantage of Lumbini Tourism year 2012 .

## BIBLIOGRAPHY

### Books

- Adhikari, Jhalakram; Pandey, R.M; Bhattarai, K.P; Adhikari, M.P (2011), *Nepal Bayusewa Parikshya Digidharsan*, Kathmandu: Ashis Books House Pvt.Ltd.
- Dongol, R.M. (2002), *Accounting for financial Analysis and planning*, Kathmandu: Taleju Prakashan
- Joshi,Shyam(2004),*Managerial Economics*, Kathmandu :Taleju Prakashan.
- Joshi, P.R. (2003), *Research Methodology*, Kathmandu: *Budhha Academic Enterprises Publishers and Distributors Pvt. Ltd.*
- K.C, F.B (2004), *Principle of Management*, Kathmandu: Sukunda Pustak Bhawan
- Koontz, Horold. & Dannel, Cyric, O. (1990), *Essential of Management*, New York: Mc Graw Hill Publishing Co.
- Lynch, Richard M. and Robert W.Williamson (1983), *Accounting for Management:Planning and control*, New York: Mc Graw Hill
- Niswonger, C. Rolloin and Fers, Philip E. (1983), *Accounting Principles*, Cincinnati Chicago: South Publishing House P . Ltd.
- Sthapit, Azaya B., et.al. (2007), *Statistical Methods*, Kathmandu: *Budhha Academic Enterprises Publishers and Distributors Pvt. Ltd.*
- Terry, George. R. & Franklin, Stephen G. (1997), *Principle of Management*, New Delhi: All India Traveller Book Sellers.
- Welsch, Glen A. (1984), *Budgeting, Profit Planning and Control*, New Delhi: Prentice Hall of India Private Limited
- Welsch, Glen A.; Hilton, Ronald W.; Gorden, Paul N. (2000), *Budgeting Profit Planning & Control*, New Delhi: Prentice Hall of India Private Limited.
- Wolf, Howard K. and Pant, Prem Raj (2002), *Social Science Research and Thesis Writing*, Kathmandu: *Buddha Academic Enterprise P . Ltd.*

### Unpublished Master level Thesis and Project Report

- Nakarmi, Samiksha(2010), *Marketing Analysis of Nepal Airlines Corporation*, Kathmandu: an unpublished master level thesis submitted to Himalayan White House Int’L College, P.U.
- Shakya, Rakesh(2009), *Strategic audit of Nepal Airlines Corporations*, Kathmandu: an unpublished master level thesis submitted to Himalayan White House Int’L College, P.U
- Shrestha, Anita (2011), *Human resource management of Nepal Airlines Corporation*, Kathmandu: a project report submitted to People Campus, Tribhuvan University.
- Shrestha, Prabal(2008), *Marketing analysis of airline services with reference to Nepal Airline Corporation*, Kathmandu :an unpublished master level thesis submitted to Shanker Dev Campus, T.U.
- Subba, Kabita(2008), *Relationship between Nepal Airlines Corporation and Travel Agencies*,Kathmandu: an unpublished master level thesis submitted to Himalayan White House Int’L College ,P.U.

## **Publications**

- “AAKASH BHAIRAB”, NAC (2010), Kathmandu: Corporate department of NAC
- “Annual Report”, NAC (2010), Kathmandu: Multi Graphic Press
- “Annual Report”, NAC (2011), Kathmandu: CFL Printing

## **Websites**

[www.ekantipur.com](http://www.ekantipur.com)

[www.nepalairlines.com.np](http://www.nepalairlines.com.np)

[www.nepalnews.com](http://www.nepalnews.com)

[www.thehimalayantimes.com](http://www.thehimalayantimes.com)

**Appendix- 1**  
**Budgeted and Passenger services**

(Rs. in millions)

Year	Budgeted passenger services(X)	Actual passenger services (Y)	$x = X - \bar{X}$	$x^2$	$y = Y - \bar{Y}$	$y^2$	xy
2062/63	3192.57	3154.65	-677.47	458971.02	96.43	9297.97	-65326.11
2063/64	3868.03	4116.64	-2.01	4.06	1058.42	1120244.43	-2131.65
2064/65	3895.83	1681.01	25.79	664.92	-1377.21	1896718.40	-35512.84
2065/66	4112.84	3231.32	242.80	58949.90	173.10	29962.23	42027.01
2066/67	4280.95	3107.5	410.91	168843.74	49.28	2428.12	20247.80
N=5	19350.22	15291.12	0.00	687433.63	0.00	3058651.15	-40695.78

**1 For budgeted passenger's services**

$$(a) \text{Mean of } X = \frac{\sum X}{N}$$

$$= \frac{19350.22}{5}$$

$$= 3870.04$$

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

$$= \sqrt{\frac{687433.63}{5}}$$

$$= 370.79$$



$$\begin{aligned}
 \text{(c) Corelaton of Variation (C.V)} &= \frac{\sigma X}{\text{Mean } X} \times 100 \\
 &= \frac{370.79}{3870.04} \times 100 \\
 &= 9.58\%
 \end{aligned}$$

2 for Actual passenger services,

$$\begin{aligned}
 \text{(a) Mean of } Y(\bar{Y}) &= \frac{\Sigma Y}{N} \\
 &= \frac{15291.12}{5} \\
 &= 3058.22
 \end{aligned}$$

$$\begin{aligned}
 \text{(b) Standard Deviaton}(\sigma Y) &= \sqrt{\frac{\Sigma(Y - \bar{Y})^2}{N}} \\
 &= \sqrt{\frac{3058651.15}{5}} \\
 &= 782.13
 \end{aligned}$$

$$\text{(c) Corelaton of Variation (C.V)} = \frac{\sigma Y}{\bar{Y}} \times 100 = \frac{782.13}{3058.22} \times 100 = 25.57\%$$

### 3 Calculation of Correlation of Coefficient

$$\begin{aligned}
 r_{xy} &= \frac{xy}{\sqrt{\Sigma x^2 \times \Sigma y^2}} \\
 &= \frac{-40695.78}{\sqrt{687433.63 \times 3058651.15}}
 \end{aligned}$$

$$= -0.03$$

#### 4 Calculation of Probable of error

$$PE (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times \frac{1 - (-0.03)^2}{\sqrt{5}} = 0.3$$

## Appendix-2

### Budgeted and Actual cargo services

(Rs. in millions)

Year	Budgeted cargo services (X)	Actual Cargo Services(Y)	$x = X - \bar{X}$	$x^2$	$y = Y - \bar{Y}$	$y^2$	xy
2062/63	185.19	124.38	-8.94	80.00	24.57	603.49	-219.72
2063/64	214.01	120.76	19.88	395.06	20.95	438.73	416.32
2064/65	210.09	82.49	15.96	254.59	-17.32	300.12	-276.42
2065/66	155.66	92.92	-38.47	1480.25	-6.89	47.53	265.24
2066/67	205.72	78.52	11.59	134.24	-21.29	453.43	-246.71
N=5	970.67	499.07	0.00	2344.13	0.00	1843.31	-61.29

#### 1 For budgeted cargo services

$$(a) \text{Mean of } X = \frac{\sum X}{N}$$

$$= \frac{970.67}{5}$$

$$= 194.13$$

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

$$= \sqrt{\frac{2344.13}{5}}$$

$$= 21.65$$

$$(c) \text{Coefficient of Variation (C.V)} = \frac{\sigma X}{\bar{X}} \times 100$$

$$= \frac{21.65}{194.13} \times 100$$

$$= 11.15\%$$

## 2. For Actual cargo Services

$$(a) \text{Mean of } Y(\bar{Y}) = \frac{\Sigma Y}{N}$$

$$= \frac{499.07}{5}$$
$$= 99.81$$

$$(b) \text{Standard Deviation } (\sigma Y) = \sqrt{\frac{\Sigma(Y - \bar{Y})^2}{N}}$$

$$= \sqrt{\frac{1843.31}{5}}$$

$$= 19.20$$

$$(c) \text{Coefficient of Variation (C.V)} = \frac{\sigma Y}{\bar{Y}} \times 100 = \frac{19.20}{99.81} \times 100 = 19.24\%$$

## 3 Calculation of Correlation of Coefficient

$$r_{XY} = \frac{xy}{\sqrt{\Sigma x^2 \times \Sigma y^2}}$$

$$= \frac{-61.29}{\sqrt{2344.13 \times 1843.31}}$$

$$= (0.03)$$

## 4 Calculation of Probable of error

$$PE (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = \frac{0.67}{\sqrt{5}} = 0.3$$

**Appendix-3**  
**Budgeted and Actual Operating Revenue**

(Rs. in

millions)

Year	Budgeted Operating Revenue(X)	Actual Operating Revenue(Y)	$x = X - \bar{X}$	$x^2$	$y = Y - \bar{Y}$	$y^2$	XY
2062/63	3,795.64	4,355.73	-949.32	901200.87	-425.17	180772.0802	403623.53
2063/64	4,391.78	5,645.49	-353.18	124733.29	864.58	747504.0892	-305350.03
2064/65	4,640.50	3,104.36	-104.46	10911.06	-1,676.54	2810784.401	175124.60
2065/66	5,609.34	5,449.70	864.38	747159.70	668.79	447282.7359	578093.10
2066/67	5,287.52	5,349.24	542.56	294375.69	568.34	323007.2037	308359.32
N=5	23,724.78	23,904.52	0.00	2078380.60	0.00	4,509,350.51	1159850.52

**1 For budgeted operating revenue**

$$(a) \text{Mean of } X = \frac{\sum X}{N} = \frac{23724.78}{5} = 4744.96$$

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

$$= \sqrt{\frac{2078380.60}{5}}$$

$$= 644.73$$

$$(c) \text{Corelaton of Variation (C.V)} = \frac{\sigma X}{\text{Mean } X} \times 100$$

$$= \frac{644.73}{4744.96} \times 100$$

$$= 13.59$$

2. for actual operating revenue

$$(a) \text{Mean of } Y(\bar{Y}) = \frac{\Sigma Y}{N}$$

$$= \frac{23904.52}{5}$$

$$= 4780.90$$

$$(b) \text{Standard Deviation } (\sigma Y) = \sqrt{\frac{\Sigma(Y - \bar{Y})^2}{N}}$$

$$= \sqrt{\frac{4509350.51}{5}}$$

$$= 949.67$$

$$(c) \text{Coefficient of Variation (C.V)} = \frac{\sigma Y}{\bar{Y}} \times 100 = \frac{949.67}{4780.90} \times 100 = 19.86\%$$

### 3 Calculation of Correlation of Coefficient

$$r_{xy} = \frac{xy}{\sqrt{\Sigma x^2 \times \Sigma y^2}}$$

$$= \frac{1159850.52}{\sqrt{2078380.60 \times 4509350.51}}$$

$$= 0.38$$

### 4 Calculation of Probable of error

$$PE (r) = 0.6745 \times \frac{1 - r^2}{\sqrt{N}} = 0.6745 \times 0.38 = 0.26$$

**Appendix-4**  
**Passenger services**

(Rs. in millions)

Fiscal Year(X)	Passenger services (Y)	x=X-A	x <sup>2</sup>	xy
2061/62	3062.62	-2	4	-6125.24
2062/63	3154.65	-1	1	-3154.65
2063/64	4116.64	0	0	0
2064/65	1681.01	1	1	1681.01
2065/66	3231.32	2	4	6462.64
2066/67	3107.5	3	9	9322.5
<b>N= 6</b>	<b>Y=18353.74</b>	<b>X=3</b>	<b>x<sup>2</sup>=19</b>	<b>xy=8186.26</b>

Since No. of year is even the third year (i.e. 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable passenger services 'y' and independent variable year 'x' (i.e. time) be represented by

$$Y = a + b x \dots\dots\dots (i)$$

Where a=y intercept

B= slope of the trend line of amount of change that comes in y for a unit change in x.

To find the variable of a and b the two following equations should be solved:-

$$y = Na + b \ x \dots\dots\dots (ii)$$

$$xy = a \ x + b \ x^2 \dots\dots\dots (iii)$$

Now, solve the equation

$$y = Na + b \ x$$

$$18353.74 = 6Xa + bX \ 3$$

$$\text{or, } 6a + 3b = 18353.74 \dots\dots\dots (iv)$$

Again,

$$xy = a \ x + b \ x^2$$

$$8186.26 = aX \ 3 + b \ X \ 19$$

$$3a + 19b = 8186.26 \dots\dots\dots (v)$$

Now multiplying Equation (v) by 2 and subtract (iv) from (v)

$$6a + 38b = 16372.52$$

$$6a + 3b = 18353.74$$

---

$$0 + 35b = -1981.22$$

$$b = -1981.22/35$$

$$b = -56.61$$

Now, substituting value of b in eq (iv)

$$6a + 3b = 18353.74$$

$$\text{or, } 6a + 3(-56.61) = 18353.74$$

$$\text{or, } 6a - 169.83 = 18353.74$$

$$\text{or, } 6a = 18353.74 + 169.83$$

$$\text{or, } 6a = 18523.57$$

$$\text{or, } a = 18523.57/6$$

$$\text{or } a = 3087.26$$

Now put the value of a and b in eq (i)

$$Y = a + bx$$

$$Y = 3087.26 - 56.61x$$

So when  $X=4$  and  $X=5$ ,  $Y=?$

Now,

$$(1) Y = 3087.26 - 56.61x$$

$$Y = 3087.26 - 56.61 \times 4$$

$$Y = 2860.82$$

$$(2) Y = 3087.26 - 56.61x$$

$$Y = 3087.26 - 56.61 \times 5$$

$$Y = 2804.21$$

So when  $x=4$  i.e. in the year 2067/68, the passenger services will be Y i.e. Rs

2860.82 millions

Similarly when  $X=5$  i.e. in the year 2068/69, the passenger services will be Y i.e.

Rs 2804.21 millions.



**Appendix-5**  
**Cargo Services**

(Rs. in millions)

Fiscal Year(X)	Cargo services (Y)	x=X-A	x <sup>2</sup>	xy
2061/62	179.72	-2	4	-359.44
2062/63	124.38	-1	1	-124.38
2063/64	120.76	0	0	0
2064/65	82.49	1	1	82.49
2065/66	92.92	2	4	185.84
2066/67	78.52	3	9	235.56
<b>N=6</b>	<b>Y=678.79</b>	<b>X =3</b>	<b>x<sup>2</sup>=19</b>	<b>xy=20.07</b>

Since No. of year is even the third year (i.e. 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable cargo services 'y' and independent variable year 'x' (i.e. time) be represented by

$$Y = a + b x \dots\dots\dots (i)$$

Where a=y intercept

B= slope of the trend line of amount of change that comes in y for a unit change in x.

To find the variable of a and b the two following equations should be solved:-

$$y = Na + b \ x \dots\dots\dots (ii)$$

$$xy = a \ x + b \ x^2 \dots\dots\dots (iii)$$

Now, solve the equation

$$y = Na + b \ x$$

$$\text{or, } 678.79 = 6Xa + bX3$$

$$\text{or, } 6a + 3b = 678.79 \dots\dots\dots (iv)$$

Again,

$$xy = a \ x + b \ x^2$$

$$20.07 = aX3 + bX19$$

$$\text{Or, } 3a + 19b = 20.07 \dots\dots\dots (v)$$

Now multiplying Equation (v) by 2 and subtract (iv) from (v)

$$6a + 38b = 40.14$$

$$6a + 3b = 678.79$$

---

$$0 + 35b = -638.65$$

$$b = -638.65/35$$

$$b = -18.25$$

Now, substituting value of b in eq(iv)

$$6a + 3b = 678.79$$

$$\text{Or, } 6a + 3(-18.25) = 678.79$$

$$\text{Or, } 6a = 678.79 + 54.75$$

$$\text{Or, } a = 733.54/6$$

$$\text{Or, } a = 122.25$$

Now, put value a and b in eq(i)

$$Y = a + bx$$

$$Y = 122.25 - 18.25x$$

So when  $X=4$  and  $X=5$ ,  $Y=?$

1.  $Y = a + bx$

$$\text{Or, } Y = 122.25 - 18.25x$$

$$\text{Or, } Y = 122.25 - 18.25 \times 4$$

$$\text{Or } Y = 49.25$$

$$(2) \quad Y = a + bx$$

$$\text{Or, } Y = 122.25 - 18.25x$$

$$\text{Or, } Y = 122.25 - 18.25 \times 5$$

$$\text{Or, } Y = 31$$

So when  $X=4$  i.e. in the year 2067/68, the cargo services will be  $Y$  i.e. Rs 49.25 millions

Similarly when  $X=5$  i.e. in the year 2068/69, the cargo services will be  $Y$  i.e. Rs 31 million.

**Appendix-6**  
**Operating Revenue**

(Rs. in millions)

<b>Fiscal Year(X)</b>	<b>Operating revenue (Y)</b>	<b>x=X-A</b>	<b>x<sup>2</sup></b>	<b>xy</b>
2061/62	4118.91	-2	4	-8237.82
2062/63	4355.73	-1	1	-4355.73
2063/64	5645.49	0	0	0
2064/65	3104.36	1	1	3104.36
2065/66	5449.70	2	4	10899.4
2066/67	5349.24	3	9	16047.72
<b>N=6</b>	<b>Y=28023.43</b>	<b>X=3</b>	<b>x<sup>2</sup>=19</b>	<b>xy=17457.93</b>

Since No. of year is even the third year (i.e. 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable Operating Revenue 'y' and independent variable year 'x' (i.e. time) be represented by

$$Y = a + b x \dots\dots (i)$$

Where a=y intercept

B= slope of the trend line of amount of change that comes in y for a unit change in x.

To find the variable of a and b the two following equations should be solved:-

$$y = Na + b x \dots\dots\dots (ii)$$

$$xy = a \sum x + b \sum x^2 \dots\dots\dots (iii)$$

Now, solve the equation

$$y = Na + b x$$

$$\text{Or, } 28023.43 = 6 \times a + b \times 3$$

$$\text{Or, } 6a + 3b = 28023.43 \dots\dots (iv)$$

Again,

$$xy = a \sum x + b \sum x^2$$

$$\text{Or, } 17457.93 = a \times 3 + b \times 19$$

$$\text{Or, } 3a + 19b = 17457.93 \dots\dots (v)$$

Now multiplying Equation (v) by 2 and subtract (iv) from (v)

$$6a + 38b = 34915.86$$

$$6a + 3b = 28023.43$$

---

$$0 + 35b = 6892.43$$

$$b = 6892.43/35$$

$$b = 196.92$$

Now, substituting value of b in eq(iv)

$$6a + 3b = 28023.43$$

$$\text{Or, } 6a + 3 \times 196.92 = 28023.43$$

$$\text{Or, } 6a + 590.76 = 28023.43$$

$$\text{Or, } 6a = 28023.43 - 590.76$$

$$\text{Or, } 6a = 27432.67/6$$

$$\text{Or, } a = 4572.11$$

Now put the value of a and b in eq(i)

$$Y = a + b x$$

$$Y = 4572.11 + 196.92x$$

So when X=4 and X=5, Y=?

Now,

(1)

$$Y = 4572.11 + 196.92x$$

$$Y = 4572.11 + 196.92 \times 4$$

$$Y = 5359.79$$

Again

(2)

$$Y = 4572.11 + 196.92x$$

$$Y = 4572.11 + 196.92 \times 5$$

$$Y = 5556.71$$

So, X=4 i.e. in the year 2067/68 the operating revenue will be Rs 5359.79 millions.

Similarly when X=5 i.e. in the year 2068/69, the operating revenue will be Y i.e. Rs 5556.71 millions.

## Appendix-7

### Net Profit

(Rs. in millions)

Fiscal Year(X)	Net Income(Y)	$x=X-A$	$x^2$	$xy$
2061/62	56.94	-2	4	-113.88
2062/63	36.75	-1	1	-36.75
2063/64	341.12	0	0	0
2064/65	-162.87	1	1	-162.87
2065/66	101.01	2	4	202.02
2066/67	126.23	3	9	378.69
N=6	Y=499.18	X=3	$x^2=19$	$xy=267.21$

Since No. of year is even the third year (i.e. 2063/64) can be taken as the assumed variable A.

Let the trend line between dependent variable net profit 'y' and independent variable year 'x' (i.e. time) be represented by

$$Y = a + b x \dots\dots\dots (i)$$

Where a=y intercept

B= slope of the trend line of amount of change that comes in y for a unit change in x.

To find the variable of a and b the two following equations should be solved:-

$$y = Na + b \ x \dots\dots\dots (ii)$$

$$xy = a \ x + b \ x^2 \dots\dots\dots (iii)$$

Now, solve the equation

$$y = Na + b \ x$$

$$499.18 = 6 X a + b X 3$$

$$6a + 3b = 499.18 \dots\dots\dots (iv)$$

again

$$xy = a \ x + b \ x^2$$

$$267.21 = a X 3 + b X 19$$

$$3a + 19b = 267.21 \dots\dots (v)$$

Now multiplying Equation (v) by 2 and subtract (iv) from (v)

$$6a + 38b = 434.42$$

$$6a + 3b = 499.18$$

- - -

---

$$0 + 35b = -64.76$$

$$b = -1.85$$

So,  $b = -1.85$

Now, substituting value of  $b$  in eq(iv)

$$6a + 3b = 499.18$$

$$6a + 3(-1.85) = 499.18$$

$$6a = 499.18 + 5.55$$

$$6a = 504.73$$

$$a = 84.12$$

Now put the value of  $a$  and  $b$  in eq(i)

$$Y = a + bx$$

$$Y = 84.12 - 1.85x$$

So when  $X=4$  and  $X=5$ ,  $Y=?$

Now,

$$Y = 84.12 - 1.85x$$

$$Y = 84.12 - 1.85 \times 4$$

$$Y = 84.12 - 7.4$$

$$Y = 76.72$$

Again

$$Y = 84.12 - 1.85x$$

$$Y = 84.12 - 1.85 \times 5$$

$$Y = 84.12 - 9.25$$

$$Y = 74.87$$

So when  $X=4$  i.e. in the year 2067/68, the net profit will be  $Y$  i.e. Rs 76.72 millions

Similarly when  $X=5$  i.e. in the year 2068/69, the net profit will be  $Y$  i.e. Rs 74.87 millions

## Appendix-8

NEPAL AIRLINES CORPORATION  
 COMPARATIVE BALANCE SHEET  
 FROM FISCAL YEAR 2062/63-2066/67

Particulars	2062/63	2063/64	2064/65	2065/66	
<b><u>SOURCES OF FUND</u></b>					
<b>Capital and Reserve Fund</b>					
Share Capital	162,283,800.00	162,283,800.00	162,283,800.00	162,283,800.00	
Investment From HMG	216,982,200.00	216,982,200.00	216,982,200.00	216,982,200.00	
Reserve & Surplus	(1,967,694,231.73)	(1,626,577,455.49)	(1,796,299,289.61)	(1,694,576,591.93)	(1
<b>TOTAL</b>	<b>(1,588,428,231.73)</b>	<b>(1,247,311,455.49)</b>	<b>(1,417,033,289.61)</b>	<b>(1,315,310,591.93)</b>	<b>(1</b>
<b>Medium &amp; Long Term Loan</b>					
Secured	875,706,259.34	260,000,000.00	700,000,000.00	900,000,000.00	
Unsecured	73,998,261.07	76,382,418.81	76,382,418.61	76,382,418.81	
<b>TOTAL</b>	<b>949,704,520.41</b>	<b>336,382,418.81</b>	<b>776,382,418.61</b>	<b>976,382,418.81</b>	
<b>TOTAL SOURCES OF FUND</b>	<b>(638,723,711.32)</b>	<b>(910,929,036.68)</b>	<b>(640,650,871.00)</b>	<b>(338,928,173.12)</b>	

<b><u>Particulars</u></b>	<b>2062/63</b>	<b>2063/64</b>	<b>2064/65</b>	<b>2065/66</b>
<b><u>APPLICATION OF FUND</u></b>				
Fixed Assets	262,674,213.25	290,043,208.66	408,890,535.61	308,890,535.61
Capital work-in-progress	-	-	-	-
Investment	14,588,836.60	6,165,330.00	6,165,330.00	6,165,330.00
<b>CURRENT ASSETS</b>				
Inventories	923,001,243.90	958,956,533.08	988,320,886.02	1,118,320,886.02
Debtor & Other Receivable	273,452,812.10	265,418,120.53	256,762,806.97	1,118,320,886.02
Cash & Bank Balances	575,686,179.90	424,270,631.06	477,878,055.63	777,878,055.63
Advance & Deposit	431,755,246.91	317,676,183.36	411,804,470.42	777,878,055.63
Loans & Advances To Staffs	29,976,032.72	30,015,507.97	30,825,090.32	30,825,090.32
<b>TOTAL CURRENT ASSETS</b>	<b>2,233,871,515.53</b>	<b>1,996,336,976.00</b>	<b>2,165,591,309.36</b>	<b>2,777,878,055.63</b>
<b>LESS:CURRENT ASSETS &amp; PROVISIONS</b>				
Creditors & Other Payables	1,162,008,912.26	1,197,462,025.84	1,514,594,246.60	1,614,594,246.60
Short Term Loan (Overdraft)	611,553,456.15	685,180,278.97	519,507,967.31	419,507,967.31
Provisions	772,067,175.22	741,859,815.18	541,859,815.18	841,859,815.18
Unearned Revenue	604,228,733.07	578,972,431.35	645,336,016.68	545,336,016.68
<b>TOTAL CURRENT LIABILITIES</b>	<b>3,149,858,276.70</b>	<b>3,203,474,551.34</b>	<b>3,221,298,045.77</b>	<b>3,521,298,045.77</b>
<b>NET CURRENT ASSETS</b>	<b>(915,986,761.17)</b>	<b>(1,207,137,575.34)</b>	<b>(1,055,706,736.41)</b>	<b>(743,419,989.14)</b>
<b>TOTAL APPLICATION OF FUND</b>	<b>(638,723,711.32)</b>	<b>(910,929,036.68)</b>	<b>(640,650,871.00)</b>	<b>(338,770,886.02)</b>



Appendix- 9  
NEPAL AIRLINES CORPORATION  
COMPARATIVE PROFIT AND LOSS ACCOUNT

Particulars	2062/63	2063/64	2064/65	2065/66	2066/67
Operating Revenue	4,355,730,384.62	5,645,486,573.06	3,104,363,972.61	5,449,695,382.45	5,349,240,612.00
<b>TOTAL REVENUE</b>	4,355,730,384.62	5,645,486,573.06	3,104,363,972.61	5,449,695,382.45	5,349,240,612.00
Operating Expenses:					
Flying Operation	1,955,151,342.79	2,604,451,238.52	1,458,630,225.32	2,376,117,184.79	2,294,398,511.70
Insurance Premium	186,283,117.65	164,400,110.13	99,230,140.06	160,672,822.38	127,492,929.90
Rental Expenses	203,127,568.60	226,779,744.62	90,409,793.06	176,530,811.85	201,275,696.70
Maintenance & Overhaul	619,917,110.77	537,712,122.75	745,065,762.96	1,014,022,800.68	780,270,419.50
Customer Service	158,953,630.26	250,841,329.60	127,095,529.53	175,342,575.43	170,841,105.30
Depreciation	34,606,369.98	33,509,421.19	39,060,145.34	62,502,409.26	53,430,367.60
Administration & General Expenses	717,003,672.44	682,286,389.39	740,493,707.17	1,084,959,217.07	1,197,448,713.60
Agency Commission	275,642,014.48	356,517,517.05	156,489,834.66	265,082,969.16	236,181,060.50
<b>TOTAL OPERATING EXPENSES</b>	4,150,684,826.97	4,856,497,873.25	3,456,475,138.10	5,315,230,790.62	5,061,338,805.20
<b>OPERATING PROFIT</b>	205,045,557.65	788,988,699.81	(352,111,165.49)	134,464,591.83	287,901,806.70
<b>OTHER INCOME</b>					
Other Business Income	96,453,136.04	119,774,078.39	166,852,311.42	107,021,311.90	35,334,413.70
Prior Year Income/(Expenses)	(124,597,038.19)	(147,421.51)	109,574,270.50	(10.00)	
<b>TOTAL OTHER INCOME</b>	(28,143,902.15)	119,626,656.88	276,426,581.92	107,021,301.90	35,334,413.70
<b>OTHER EXPENSES</b>					
Financial Charges	133,149,672.55	180,169,575.29	60,376,984.68	123,853,187.28	131,865,514.90
(Gain )/Loss on Foreign Exchange	(10,246,516.75)	126,283,459.34	26,809,911.87	(25,636,906.23)	23,062,406.20
<b>TOTAL OTHER EXPENSES</b>	122,903,155.80	306,453,034.63	87,186,896.55	98,216,281.05	154,927,921.10
Profit(Loss)	53,998,499.70	602,162,322.06	(162,871,480.12)	143,269,612.68	168,308,299.40
Staff Bonus Provision	3,999,888.86	44,604,614.44	-	8,596,176.76	
Profit (Loss) Before Tax	49,998,610.84	557,557,707.62	(162,871,480.12)	134,673,435.92	168,308,299.40
Income Tax Provision	13,249,631.87	147,752,791.98	-	33,668,358.98	42,077,074.80
<b>Profit (Loss) After Tax</b>	<b>36,748,978.97</b>	<b>341,116,776.24</b>	<b>(162,871,480.12)</b>	<b>101,005,076.94</b>	<b>126,231,224.50</b>