CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Nepal lies in southern Asia between India and China at 26^0 20'to $30^0$25' degree north and $80^0$04'to 88^0 12' degree East[1]. Nepal acquires a total of 1, 47,181 sq. km of area having 1, 43,181 sq. km of land and 4,000 km^2 of water. This is a landlocked country having 1.690 km of Indian boarder in southern, eastern and western side and 1.26km of Chinese border in northern side.

The lowest point of [1]the Nepal in Kechana kalan of Jhapa at 70 m from sea level and the world's highest peak mount Everest at 8,848m. Nepali climate varies from cool summers and serve winters in north to subtropical summers and mild winters in south. Terrain of Nepal is terai or Flat River plain in south, central hill region, rugged Himalayan's in north. Economy of Nepal is basically based on agricultures and irrigable land 11,700 sq km.

Modern Nepal has been unified on 1768 by hate Prithivi Narayan Saha. Eights years later the Saha regime was handed by Ramos for almost 103 years. In 1951 Nepalese Monarch ended the country old system of rule heredity premieres and Institute a cabinet system of government.

In April 2006 after nearly three weeks of mass protests organized by the seven party opposition and the Maoists the king allowed parliament to reconvene on 28 April, 2006. Following the Nov 2006 peace accord between the government and the Maoists. An interim constitution has been promulgated by the parliament and the government is having a duty of conducting constitutional assembly elections in 2008.

Population of Nepal is estimated to be 28 Million on 2007[2] as per the census of 2001 having a growth rate of 2.25. Age structure of Nepal is 38.3% in between 0-14 years, 57.9%[2] in between 15-64 years and 3.8% above 65 years. Life

[1] -www.eaeth.google.com

2. Central bureau of Statistics, 2002 National Report Vol.1,p47

expectancy of Nepal is around 60.0%, Nepalese having 80.6% Hindus, 10.6% Buddhist 4.2% Muslims, 3.6%Kirats and 0.9% others literary rate of Nepal is 48. 6% having 62.7% male& 34.9% female.

Nepal is among the poorest and least developed countries in the world with almost one- third of its population living below the poverty line. Agriculture is the main stay of the economy, providing a livelihood for three fourth of the population and accounting for 38% of GDP. Industrial activity mainly involves the processing of agriculture produce including jute, sugarcane, tobacco and grain. Security concerns relating to the conflict have led to a decrease in tourism, a key source of foreign exchange.

After the new political development the tourism sector has better improved in 2007. Nepal has considerable scope of exploiting its potential in hydropower and tourism area of recent foreign investment interest. Prospects for foreign trade or investment in other sector will remain poor, however, because of the small size of the economy, its technological backwardness its remoteness, its landlocked geographic location, its civil strike, and its susceptibility to natural disaster.

Nepal's population below poverty line as per the 2004 estimate in 30.0%. And GDP growth rate is 2.5% as on 2006. The unemployment rate is about 42% and inflation rate[3] is 8%. The major agriculture products are rice, corn, wheat, sugarcane, jute, root crops, milk, water, meat etc. And industries are tourism, carpet, textile, small rice, jute, sugar and oilseed mills, cigarettes, cements and brick production.

Major export commodities are carpets. clothes, leather goods, jute goods, tea, vegetable oil, grains etc, Major export partners are India 70%, US 10%, Germany 5 % etc. Major import commodities are gold, machinery and equipment, petroleum products, fertilizer and major import partners are India 65%, China 5%, Indonesia 4 % etc. Currency code of Nepal is Nepalese rupee (NPR) and exchange rate is 160 NRS = 100 IRC (Indian Currency) and 1US $ = 65 NRS.

Nepal is having international relations on the basis of bilateral agreements and multilateral agreements. Nepal is a founding member of SAARC and participated in non alignment group of countries. It has participated by more than fifty organizations and agencies of UN, SAARC, BIMESTEC and others.

With the invasion of democracy in 1990 the concept of liberalization and globalization has led to the competitive environment in the market of product and services in almost all sectors in business. The role of the government as a market regular but not a guard to the domestic industry only has given a large choice to the consumers. So the concept of quality has been a key factor in business after the implementation of free world trade concept through WTO (World Trade organization) in global market and SAFTA regional market.

As the process of globalization continues, companies may reach a point where all products are marketed internationally. There will no longer be a domestic and foreign market. In global markets there will be common marketing variables like ' buying behaviours of consumers' ' decision of purchase' 'is the company is licensed or quality certified' ' advertisement and promotion' ' Customer service of the company'

It should be doubtless to all of us and that liberal economic policies of our country, entrance into the WTO and implementation of SAFTA (South Asian Free Trade Agreement) has forced our country's economic into the network of global economy where we must address the need of the time to take the opportunities of the international market or we will be left out from the mainstream economy for years.

Being a member of World Trade Organization (WTO) and deploying the feature of WTO from 2010. Nepal through the Nepal Bureau of Standards and Meteorology (NBSM) has been a correspondent member of International Standardization Organization (ISO). With India and China positing themselves as technology and manufacturing hubs for the world, Nepal has to realize that relaying solely on tourism and agriculture to support the economy cannot be strategy. The nation has to develop long and short term plans to develop its

manufacturing, IT and education sector so that it can be benefit from the emerging knowledge based economy.

Regarding the heavy trade defect facing with the business partner countries and with the full fledged member of the WTO Nepal has opportunities and challenges both equally prevailing in the Nepal business sector. On of the one hand Nepal has to complete with the foreign and multinational companies and safeguard the national industries.

Also, the explore the business opportunities in the international and domestic sector the quality and its recognition in the product and service sector in the major challenge to face. Regarding the quality of the product and service the quality and standardization of the companies and organization can play a leading role. In this scenario the study of various aspects of quality and its standardization has been demand and supply both side.

Like beauty, quality is in the eye of the beholder and behind every set of eyes there is a different world. The term quality means different things in different perspectives. Some people say quality is fitness for use, In some other opinion Quality is conformance to specifications. In a different view it is not clear what it is, but it is something good. Actually speaking quality is feeling good to its user.

Doubtlessly quality is the world behind every professional consumer, user, manufacturer and all. Every one is looking after a quality [product and service. Every buyer goes for a quality product with some doubt in quality. Is it really so complex to get a quality product? If it is so it shows the need a study on quality. Ina situation where quality leads its role; it requires a world wide accepted and general standard of quality to facilitate the world wide marketing and trade.

Quality assurance is a most important factor for any product or service to be established and retain in any market. The term brunt name for consumer and brink building for the manufacturer or service provider is the drat way of quality assurance.

People looking for any product or service would certainly have questions on quality. How qualitative it is? How long would it last? Is there any defects? Does this like his/her requirement? Is there warranty? And finally what's the price? Are the questions being faced every marketer

Recognition of the quality and its assurance leads to the term Quality standard. The scope and coverage of the product along with its quality is reflected on its quality standard. On the basic of the product's scope and targeted market achievement of a quality standard has been an essential factor of marketing.

In a local, regional, national and in international level of marketing it becomes a first task to have a general quality standard as a first step of marketing. NS (Nepal standard), IS (Indian standard) and ISO (international standardization organization) are some of the quality standards popular in Nepali and in multinational market.

Nepal and Nepali product are in point of time that they most consider quality as a first factor of their product. Although quality itself is a relative factor. Assurance and guarantee of the quality as per the specification is a minimum criterion to sustain in domestic market as well.

ISO standardization is a founding stone for the companies working in global market as a self marketing tool. In such a scenario we should consider to the characteristic of the global market variables where quality. Standard & brand Name are the major ones.

For the first time Nepal industrial policy.1974 clearly recognized the need of wholesome improvement in the industrial production and productivity. The quantitative growth along with the quality product became the main focus. For this a strong need of standardization and quality control activities was felt inevitable and the same was addressed in the industrial policy 1974.

Quality enhancement can not be achieved without quality control and its effectiveness is greatly based on the standards. Hence a national standards body

was felt to be essential that looks after the activities concerning standardization and quality control for qualitative improvement in the industrial production and to enhance productivity.

Under the chairmanship of vice chairman of National planning commission "Nepal Quality Standardization Committee" was established in 1976. Nepal Institute of Standard (NIS) was established as a secretariat to this committee and NIS started the process of formulation of national standards.

In 1980 Nepal standard (certification marks) Act was introduced. Nepal Bureau of Standards and Metrology (NBSM) is the National standards body of Nepal. Under the "Nepal Standard Act 2037".Nepal Council for Standards (NCS) was formed as the governing body for Quality, Standards, and Testing & Metrology (QSTM) activities in Nepal. The 10^{th} five – year plan has further stressed on the following.

1. Promotion of system certification concept.
2. ISO 9001:2000 based system certification.
3. Pre – shipment inspection.
4. Promotion application of clearer production concept in industries.
5. Calibration of density, thermometer, time etc.
6. Promote application of cleaner production concept in industries.
7. Provide technical and administrative services to industries to upgrade the quality of products and systems.
8. To promote application of Hazard Analysis and critical control point (HACCP) concept in industries.

Although the concept of quality standards and branding of the products has passed a long way ahead. In the global scenario but in the Nepalese market it has not a big history. Most of the urban marketer has seemed to start class business in Nepal too. So it has an effect of growing departmental stories for purchasing of daily consumable goods, clothing and electronics products.

In case of middle level income group due to the effect of Fm radios, television and approach of telecommunication service the quality awareness and brand marketing is being popular and also a fashion too. In this situation the study of

the quality awareness in the Nepali product and service market has been a relevant subject of the study in the field of marketing.

1.2 Statement of the Problem:

The concept of quality terms of product and its scope in global marketing should be identified clearly. Quality standards and their identification and trust in the global market are the major concern of the day. In such scenarios I so is a solution of quality standards in the global market. So detailed study of the concept of ISO standards, their types, scope, coverage, future and response in the world markets of least developed countries (LDC) like Nepal.

Since our country has already got the membership of the WTO to enhance the trade and to contribute significantly in the Nepalese economy to capture a part of the world market a worldwide accepted and well-known trade mark of quality ISO can definitely contribute in this direction.

All the national markets have their own regulation and standards regarding the quality. As we are well aware that our country Nepal has its own Nepali quality mark called 'NS' Nepal standard as well as or big and most important business partner our great neighbour India has their own quality mark 'ISI' comprising 'IS' Indian standard. The relativity between the IS, NS and ISO should be clearly assed and their relative identification is another point to be taken into the consideration.

Another major concern in the respect of quality concern should be the aware ness of quality standards. The study of the aware ness of quality standards like NS ISI and I so in Nepali product market should be clearly assessed so the awareness of the quality standards in the Nepali market from the manufacture's and consumer point of viral is to be studied.

The researcher will try to study the awareness of the quality standards with the ISO standard holder companies and study of the awareness in the consumers will also be conducted. Also the study is concentrated on quality awareness of market players in Nepal.

In this study the major questions can be raised as follows.

1. Do the Nepalese consumer under stand ISO standard?
2. Do the term quality is under stood by Nepalese consumer?
3. Does quality affects marketing?
4. In current market scenario does Nepali consumer take cave on quality Or brand?
5. Are the Nepali consumers aware of quality standards?

The research study will be an attempt to identify the effect of quality standard on marketing and purchasing.

1.3 Objective of the Study

To achieve the basic objective of the country's economic growth with the national products and brands in the domestic and global market quality product and service has no doubt big effect. Quality standards, their confirmation to the specifications and building consumer awareness in Nepalese product and service market are the basic objectives. Industrialization of the domestic product and service plays a vital role in this regard. Industrialization mobilizes resources of land, labour, capital, knowledge and skill that ultimately give product, services and opportunities of employment to the people of the country.

The attempt of this research is to make a thorough study of the ISO standards and their relations with marketing. Also the study is concentrated on quality awareness of market players.

The main objectives of this study are as follows.

1) To identify the factors affecting quality of product and service in Nepalese consumer and service market.
2) To study the situation of quality awareness in Nepalese market.
3) To find out the coverage of ISO standards.
4) To study ISO standards and its input on Nepalese consumer market.
5) To suggest for improvement based on the finding of the research.

1.4 Focus of the study

A complete and through analysis of the term quality and its characteristics is a major concern of the study. The main focus of the study is to go through a study of ISO quality standards, its coverage, types and assurance. Relationship between quality of a product and service with respect to its market coverage comes under the study. Quality standards and their representations and assurances are also the major focus of the study.

An analytical study of the quality products with reference to their quality standards to the consumer is focus of this study. Whether the ISO Standards really mean the product and make significant difference in sales of the product or just works an added advantage as a marketing tool. Does the ISO standardization of the product change the perception of the Nepalese consumer or it is just a word to display. Answer to these questions is also to be focused in this study.

Consumer awareness is one of the important factors in the current sales and marketing strategies. The modern management theories focus on the strengthening the strengths and improving the weakness. Marketers always focus on the strengths of their product and service but never expose their weakness. Consumers have a difficult time to get ensured the value of the product and service what they have paid for. In the context the study of degree of awareness in the consumers group regarding the quality standards and their credibility has been the important part of the study.

1.5 Scope of the study

The scope of the study with referee to methodology fowled in the research design includes nature of data. Primary and secondary data collection and analysis as well as presentation of the data.

This study has a scope in all the sectors for the study, research and analysis and for the knowledge development. This study has a scope for the marketer and companies to have the quality standards and also to the consumers to have an idea regarding the quality standards.

ISO standards like ISO 9000:2000, ISO 9001:2000 and 9004:2000 were officially released on December 15, 2000, Now the series of the ISO 9000 family of international standards for quality management has been revised, Now available series are ISO 10000 series, ISO 12000 series, ISO 13000 series, ISO 14000 series, ISO 15000 series, ISO 16000 series, ISO 17000 series and ISO 19000 series. In each of the series a number of different product and service types have been covered.

1.6 Chapter plan of the study

The research study is mainly entitled five chapters that depend upon the various topics. The research will have following chapter plan on achievement of expected result.

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INTRODUCTION

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CHAPTER - TWO

REVIEW OF LITERATURE

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1.7 Limitations of the study

Since the study is mainly focused on the relative term that depends upon the end user and their concepts. End user concept is a combination of their knowledge, attitude, culture and social status. The research will have following limitation on achievement of expected result.

1. Quality being a relative concept reaching to an absolute conclusion is difficult and this is one of the limitations of the study.
2. Since the topic ISO standard is some what new in Nepali perspectives so the access to the actual data and information is another limitation.
3. A comparative study on quality awareness in Nepali market is also will be difficult since Nepal is a having reach in diversities.
4. Limited study on this field and limited publications may cause inconvenience in study.
5. The time required to get the verification of the international figures that ISO has achieved due to the lack of national accountable agency is also is one of the limitation.

1.8 Related Terminologies

1. Conformity Assessment:

Demonstration that specified, requirements relating to as product, process , system, person, or body are fulfilled. The subject filled of conformity assessment includes activities such as testing, inspection, and certification as well as the accreditation of conformity assessment bodies.

2. Inspection:

Examination of a product design, product process or installation and determination of its conformity with specific requirement or on the basis of

professional judgement, with general requirements. inspection of a process may include inspection of person, facilities, technology and methodology.

3. Testing:

Determination of one or more characteristics of an object of conformity assessment according to a procedure. “Testing" typically applies to material, products on process.

4. Calibration:

The set of operators which establish, under specified conditions, the relationship between values indicated by a measuring system or a values represented by a material measure and the corresponding known values of a measured.

5. Certification:

Third party attestation related to products, process, system or persons. Certification is applicable to all objects of conformity assessment expect for conformity assessment themselves, to which accreditation is applicable.

6. Accreditation:

Third-party attestation to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.

7. Attestation:

Issue of a statement, based on a decision following review, that fulfillment of specifies requirements have been demonstrated.

8. Specified requirements:

A specific requirement means need or expectation that is stated. Specified requirements may be stated in normative documents such as regulations, standards and technical specification.

CHAPTER TWO

Review of literature

2.1 Theoretical Frame Work

This research entitled ISO standards and quality concerns in Nepali product market has focused on two different concepts. The first ideology or concept is about quality standards with a major focus on ISO standard and next ideology is all about the quality concerns and awareness of the Nepalese consumer on the products and service. The major conceptual certifications are related with:

1. Quality
2. ISO
3. Quality standards
4. Quality certification and effects
5. Consumer market and awareness in Nepalese contest.

2.2 Various aspect of quality:

The term quality has a number of meanings. As per the prospective to be used it has a wide coverage on its meaning. Here is a discussion of a term quality from history to definitions.

2.2.1. A brief history of concept of quality.

The quality movements can tress it roots back to medieval Europe, where Crafts man began organizing into union called guilds in the late 13th century. Until the early 19th century, manufacturing in the industrialized world tended to follow this craftsmanship model. The factory system, with its emphasis on product inspection, started in Great Britain in the mid – 1750s and grew into the industrial revolution in the early 1800s.

In the early 20th century, manufacturers began to include quality process in quality practises. After the United States entered World War II, quality became a critical component of the war efforts: Bullets manufactured in one state, for example, had to work consistently in rifles made in another.

The armed forces initially inspected virtually every unit the product, than the simplify and speed of this process without compromising safety, the military began to use sampling techniques for inspection, aided by the publication of military- specification standards and training courses in Walter she wart's statically process control techniques.

By the last decade of the 20th century, TQM (Total Quality management) was considered of fad by many business leaders. But while the use of the term TQM has faded some what, particularly in the United States, its practises continue.

Since the turn of the century, the quality movement seems to have matured beyond total quality. New quality system have involved from the foundations of Deming, Juran and the early Japanese practitioners of quality, and quality has move beyond manufacturing into service, healthcare, education and government sectors.

The field of quality has its roots in agriculture. Early this century in Britain, R.A. fisher conducted statistical research to assist farmers in understanding How to optimally plant and rotate crops. This work subsequently inspired Walter Stewart at bell laboratories, Whose work subsequently motivated W. Edward Deming to devote his life to the teaching and improvement of quality methods Arguably, Deming has become the best known 'guru' of quality . Both Deming and Juan could find no interest in quality methodologies in the U.S. before World War II. However both statisticians were invited to Japan as consultants to 'spread the word' about quality. In Japan, they found a receptive audience for their ideas.

The Japanese fully embraced the concept of quality and its methodologies, and commenced to integrate these concepts into their industrial base. The results are well known; historians who study quality may ultimately view the improvement in quality of products in Japan during the post – war period due to the revolutionary ideas of Deming and Juan as legendary.

In the 1970s, the car industry began feeling the effect of Japanese quality \products. The first reaction of the American car manufactures was to limit the imports of Japanese cars , then to blame them for not talking more American cars (adding to the trade deficit) , and even resorting to scare tactics for those who bought Japanese cars.

The parking lots of the major car companies were a dangerous place for anyone with a foreign made car! It is interesting to note that the supervisors' manuals of 1955 included all the tools of quality improvement we teach today, but the employees believe that measuring production and quality was a means of manipulating the employees. Unions would not allow this type of activity.

Over the years many other companies began to understand the value of quality improvement. Some went on to win the Bald ridge Award for quality, some became ISO certified, and some even own the Deming prize!

However, many are still 'in the dark' about the value of their way of thinking. The time has come to all the stakeholders for their deep considerations on the quality of the product and service to make their users happy.

2.2.2 Definitions and contrasts on quality

During the last four decades, the Japanese have successfully utilized quality tools and methodologies as part of a successful effort to become a leading nation in the manufacture of a vast array of electronic, automotive, and other goods.

Prior to the 1950s, Japan was not known for production of quality, but their quality has continuously improved until today many American firms are using Japanese products as a standard against which to measure. How did this situation occur? How did the Japanese move to such a leadership position? And what can we learn from this multi-decade progression from low to high quality?

The term quality means different things to different people. For explain, a quality automobile may be one, which has no defects and works exactly as we expect. Such a definition would fit with an oft-repeated deification by J.M Juan

(1988):"quality is fitness for use." However, there are other definitions widely discussed. Quality as "conformance to specifications" is a position that people in the manufacturing industry often promote. Why? Presumably because manufacturing can do nothing to change the design: hence this definition.

Other promote wider views, which include the expectation that the product or service being delivered 1. Meets customer standards. 2. Meets and fulfills customers needs, 3. Meets customer expectations and 4. Will meet unanticipated future needs and aspirations. Still other simply ignore definition and say “I’ll know quality when I see it “It seems that we all know or feel somehow what quality is.

A product or service that exceeds our preconceived idea about the quality of that product or service is likely to be judged as having "high quality”. It is equally clear that the best of a group of bad products is not likely to be perceived as a quality product.

What is quality? Several definitions have been given previously. However, the definition will vary depending on the domain under consideration. The table below lists several different areas in our society and indicates some thing that might be considered to be related to quality in each.

AREA	EXAMPLES
Airlines	On time, Comfortable, low cost service
Health Care	Correct diagnosis, minimum wait time, lower cost
Food Service	Good product, Fast delivery, Good Environment
Postal Service	Fast delivery, Correct delivery, Cost Containment
Academia	Proper preparation for future, on time knowledge delivery
Consumer products	Properly made, defect free, Cost effective
Insurance	Payoff on time, reasonable cost
Military	Rapid development, decreased wages, no graft
Automotive	Defect free
Communication	Clearer, faster, cheaper service

What is the common denominator of these ten examples? Although the terms used to explain each area vary somewhat, almost all areas can be explained in terms of four basic parameters: cost, time, customer satisfaction and defects. It is easy to see that some these parameters are more important that defects be minimized. In all cases, the bottom line is customer satisfaction.

2.2.3 Different views on Quality.

A number of views on the definitions of quality have been found listed and described as follows:[3]

Quality is holistic and what you reach should never think you've grasped it.
Like beauty, quality is in eye of the beholder and behind every set of eyes there is a different world.

Quality is associated with a lasting value, whether it is for something's beauty, its usefulness or it's durability. Having the HIGHEST quality item, while desirable, certainly isn't necessary, if it costs too much money or cakes too much time to produce it.
Some lasting ability to do what is MEANT to do for whatever your goal is.
Quality is a continuous process.

To achieve quality you have to have measurable / definable goal. This can and usually will be different for each individual. Without measurable /definable goals you can not know if you are headed in the right direction much less if you have achieved your descried level of quality. When you reach those goals by your measure4ment you have achieved quality in the respect or area in which you were striving.

I think that quality is a collection of tools and / or concept that is proven to work well in the areas descried. (These will be different areas such).
Quality includes continuous improvement.

[4] Internet Encyclopedia site, www.wikipedia.com,collection of quality definitions, 2006

Quality striving for and achieving performance excellence: anything less can be an improvement opportunity.

2.2.4 Five ways of Looking at quality Definitions

This list is form Dr. David M. Dilts, PhD, CMA. Professor, Dept. of Management sciences, faculty of Engineering and professor, school of optometry, faculty of science at university of waterloo, Canada.

A. Transcendent Definition

1. Quality is neither mind nor matter, but a third entity independent of the two… even through quality cannot be defined, you know what it is. (R.M. Pirsig, zen and the Art of Motorcycle Maintenance, pp. 185- 213).
2. A condition of excellent implying fine quality as distinct from poor quality …Quality is achieving or reaching for the highest standard as against began satisfied with the sloppy or fraudulent. (B.W. Tuchman, The Decline of quality, New York Times Magazine, 2 November 1980, p.38).

B. Product Based Definition:

1. Difference in quality amount to differences in the quality of some desired ingredient or attribute. (L. Abbott, quality and competition, pp.126-127).
2. Quality refers to the amounts of the unpriced attributes contained in each unit of the priced attribute. (K. B. Leifler, Ambiguous changes in product quality. American Economic Review, December 1982, p.956).

C. User- Based Definition:

1. Quality consists of the capacity to satisfy wants. (C.D. Edwards, The meaning of quality, quality progress, October 1968,p.37)
2. Quality is the degree to which a specific product satisfies the want of a specific consumer. (H.L.Gilmore, product conformance cost, quality progress, June 1974, p.16).
3. Quality is any aspect of a product, including the services included in the contract of sales, which influences the demand curve. (R. Dortman and P.O. Steiner, Optimal Advertising and Optimal Quality, American Economic Review, December 1954,p.831).

4. In the finial analysis of the marketplace, the quality of a product depends on how well it fits patterns of consumer preferences. (A.A. Keuhn and R.L. Day, strategy of product quality, Harvard Business Review, November- December 1954, p.831).

5. Quality consists of the extent to which a specimen [a product – brand model-seller combination] possesses the service characteristics you desire. (E.S. Mayhnes, The concept and measurement of product quality, in Household production and consumption, p. 542).

6. Quality is fitness for use. (J.M. Jaran, ed. Quality control Handbook, p2).

D. Manufacturing- Based Definition:

1. Quality [means] conformance to requirements. (P.B. Crosby, Quality is free, p.15).

2. Quality is the degree to which a specific product conforms to a design or specification. (Gilmore, June 1974, p.16).

E. Value- Based Definition:

1. Quality is the degree of excellence at an acceptable price and the control of variability at an acceptable cost. (R.A. Broh, managing Quality for Higher profits, 1982, p.3).

2. Quality means best for certain customer conditions. These conditions are (a) the actual uses and (b) the selling price of the product. (A.V. fegenbaum, Total Quality control, p. 1).

2.3 Meaning and concept of ISO

International organization for standardization (ISO) is a worldwide federation of standard origination from 157 countries that defines international standards.

ISO is a Network of the national stands a institutes of 157 countries, on the basis of one member per country, with a central secretariat in Geneva Switzerland, that co-ordinates the system.

ISO is a non governmental organization : its member are not, as is the case in the United Nation system, delegations of national governments, Nevertheless, ISO occupies a special position between the public and private sector. This is because, on the one hand, many of its member institute are part of the governmental structure of their countries, or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations.

Therefore ISO is able to act as a bridging organization in which a consensus can be reached on solution that meet both the requirements of business and the broader needs of society, such as the needs of stakeholder groups like consumers and business society.

ISO is the world's largest developer and publisher of international standards. ISO is a network of the national standards institutes of 157 countries, one member per country, with a central secretariat in Geneva Switzerland that co-ordinates the system.

ISO is a non-governmental organization that forms a bridge between the hand, many of its member institutes are part of the governmental structure of their countries or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnership of industry associations.

Therefore ISO enables a consensus to be reached on solutions that meet both the requirements of business and the broader needs of society. ISO forms a bridge between the public and private sectors.

2.3.1 ISO'S Name

"International origination for standardization" would have different acronyms in different languages ("IOS" in English, OIN" in French for 'organisation international de normalisation', its founders decided to give it a short, all – purpose name. They choose "ISO", derived from the Greek ISOs, meaning

"equal". Whatever the country, whenever the language, the short from of the organization's name is always ISO.

2.3.2 ISO's Origin

In 1946, delegates from 25 countries met and decided to created a new international organization, of which the object would be "to facilitate the international coordination and unification of industrial standards". The new organization, SO, officially began operations on 23 February 1947, in Geneva, Switzerland.

2.3.3 Features of ISO Brand

A. Democratic :

Every full member of ISO has the right to take part in the development of any standard, which it judges to be important to its country's economy. No matter what the size of strength of that economy, each participating member in ISO has one vote. Each country is on an equal footing to influence the direction of ISO's work at the strategic level, as well as the technical content of its individual standards.

B. Voluntary :

ISO Standards are voluntary; ISO itself does not regulate or legislate. As a non governmental organization, ISO has no legal authority to enforce the implementation of its standards. ISO does not regulate or legislate. However, countries may decide to adopt ISO standards – mainly those concerned with health, safety or the environment – as regulations or refer to them in legislation, for which they provide the technical basis. In addition, although ISO standards are voluntary, they may become a market requirement systems, or of dimensions of freight containers and bankcards.

C. Market driven :

ISO only develops standards for which there is a market requirement. Experts from the industrial, technical and business sectors which have asked for the standards and which subsequently put them to use mainly carry out the work.

D. Consensus :

ISO standards are based on international consensus among the experts in the field. Consensus, like technology, involves and ISO takes account both of involving technology and of involving interests by requiring a periodic review of its standards at least every five years to decide whether they should be maintained, updated or withdrawn. In this way, ISO standards retain their position as the state of the art.

E. Globally relevant :

ISO standards are technical agreements which provide the framework for compatible technology worldwide. They are designed to be globally relevant-useful everywhere in the world.

F. ISO standards are useful everywhere in the world

ISO's "9000" series of certification specifies guidelines for quality management and quality system elements. A company that achieves and maintains ISO 9000 certification (there are periodic audits to ensure standards are being kept up) has demonstrated to a certifying body that its procedures are well defined and documented , and its quality control and problem resolution systems meet predefined standards .

There are three flavours of ISO 9000 certification. ISO 9001 is a quality assurance model for companies that design, produce, inspect ,test install and service items ISO 9002 is for companies that do everything listed under ISO 9001 except design products, and ISO 9003 is for companies that only inspect and test products.

Achieving ISO certification is neither a short nor an inexpensive task, yet companies are often required to undertake it. Increasingly, corporation and government are demanding that their suppliers hold ISO 9000 certification.

2.3.4 Who develops ISO Standards?

Technical committees comprising experts from the industrial, technical and business sectors which have asked for the standards and which subsequently put them to use develop ISO standards. Representative of government agencies,

testing, laboratories, consumer associations, non-governmental organizations and academic circles, may join these experts.

The experts participate as national delegations, chosen by the ISO national member institute for the country concerned. These delegations are required to represent not just the views of the organizations in which their participating experts work, but of other stakeholders too.

According to ISO rules, the member institute is expected to take account of the views of the range of parties interested in the standard under development. This enables them to present a consolidated, national consensus position to the technical committee.
Experts from the sectors that have asked for them to develop ISO standards.

2.3.5 How ISO standards are developed?

The national delegations of experts of a technical committee meet to discuss debate and argue until they reach consensus on a draft agreement. This is circulated as a draft international standard (DIS) to ISO's membership as a whole for comment and balloting.

Many members have public review procedures for making draft standards known and available to interested parties and to the general public. The ISO members then take account of any feedback they receive in formulating their position on the draft standard.

If the voting is in favour, the document, with eventual modifications , is circulated to the ISO members as a final draft international standard (FDIS). If that vote is positive, the document is then published as an international standard.

Every working day of the year, an average of eight ISO meeting is taking place somewhere in the world. In between meetings, the experts continue the experts continue the standards' development work by correspondence. Increasingly, their contacts are made by electronic means and some ISO technical bodies have

already gone over entirely to working electronically, which speeds up the development of standards and cuts travel costs.

2.3.6 Partnership of ISO

1. ISO's International partners

ISO collaborates with its partners in international standardization, the International Electro technical commission (IEC) and International Telecommunication union (ITU). The three organizations, all based in Geneva, Switzerland, have formed the world standards co operations (WSC) to act as strategic focus for collaborations and the promotion of international standardization.

ISO has a close relationship with the world Trade Organization (WTO) that participatory appreciates the contribution of ISO's standards to reducing technical barriers to trade.

ISO collaborates with the united Nations (UN) organization and its specialized agencies and commissions, particularly those involved in the harmonization of regulations and public policies, such as:

- CODEX Alimentations, on food safety measurement, management and traceability,
- UN Economic Commission for Europe (UN/ ECE), on the safety of motor vehicles and the transportation of dangerous goods,
- World Health Organization (WTO), on health technologies.
- International Maritime Organization (IMO), On transport security, and
- World Tourism Organization (UNWTO), on the quality of services related to tourism.

In addition, ISO cooperates with UN organization that provides assistance and support to developing countries, such as United Nations Conference on trade and Development (UNTAD), the United Nations Industrial development Organization (UNIDO) and the international Trade Center (ITC)

ISO's technical committees have formal liaison relations with over 600 international and regional agencies. ISO has reinforced its links, too, with international organizations representing different groups of stakeholder, including:

i. World Economic Forum (WEF)
ii. Consumer International (CI)
iii. World Business Council for sustainable Development (WBCSD)
iv. International Federation of Standards Users (IFAN)

Lastly, ISO also collaborates regularly with the major international organization for metrology, quality and conformity assessment.

2. ISO's Regional Partners

Many of ISO's members also belong to regional standardization organizations. ISO has recognized regional standards organizations representing Africa, the Arab countries, the area covered by the commonwealth of independent states Europe, Latin America, The pacific area, and the south East Asia nations. The regional bodies (Listed Below) commit themselves to adopt ISO standards as the national standards of their members.

i. African Regional Organization for standardization (ARSO)
ii. Arab industrial Development and mining Organization (AIDMO)
iii. European Committee for standardizations (CEN)
iv. Pan American Standards Commission (COPANT)
v. Euro Asian Council foe standardization, Metrology and certification (EASC)
vi. Pacific Area Standards Congress (PASC)
vii. ASEAN Consultative committee for standards and quality (ACCSQ)

2.4 ISO: A Process Oriented Quality Standard:

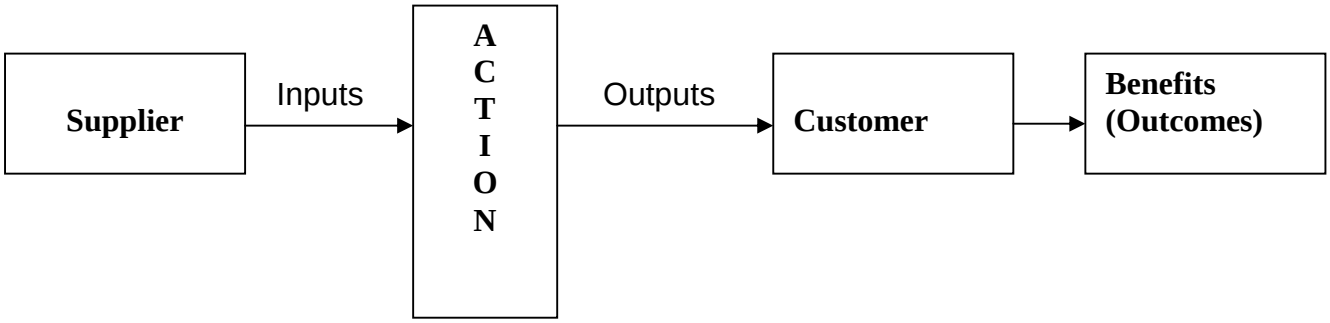
ISO standards mainly define and focus on the process of the product development and service delivery through the continuous improvement in the manufacturing and process and ser ice delivery process. ISO always focus and monitors in the improvement in the process involve. Let have a look in the concept of continuous process improvement.

Process improvement is the systematic effort to understand every aspect of a process in order to reduce rework, variation, and need less complexity being order to exceed customer experience.

When embarking on organizational improvement, the step is to be sure that will are doing the right thing rightly. This means that we have some knowledge on our customers. (i.e., what they need, want and expect). The next step to know how works get done in the organization, which includes the core process and knowledge of suppliers and customers. This knowledge prepares to begin process improvements.

2.4.1 Process Ingredients.

A process is a series of actions, which repeatedly come together to transform inputs into outputs. Inputs come from a supplier of the process, and outputs go to a customer of the process. The outcome (benefits) is a degree to which outputs meet the needs and expectations of the customers.



2.5 Meaning and Concepts of Quality Standards.

2.5.1 Introduction:

Quality standards assist companies control quality and maintain a high standard of customer satisfaction. Quality has become a lot more that, Quality standards can assist your company with good management practices reduce risk and increase profit margins.

A good quality system are not just to satisfy the accreditation process, but should be written with the company's business practices in mind and to enhance procedures and polices to ensure should operation.

The principles of the ISO quality system can be applied to every company, regardless of its size, type or industry. Having a good quality system in place will insure the products, services are of the highest standards, customers are happy and the future of the organization is heading in the right direction.

A new set of standards were released in nov.2001, these are known as ISO 9001:2000 ISO 9000 is primarily concerned with quality management. This means anything that affect a product or service required by a customer and what that organization does to ensure that a certain standard of quality is achieved and maintained.

Each company has different requirement and each has own reasons for following the quality system, however no matter what type of company it is the goal should be the same that are as follows:

A. Risk:

A quality system can assist company in determining its risk areas and implementing measures to reduce and control risk. By assign the critical areas of the business, documenting the processes and measuring against the standards, one will be able to [put in place contingency plans.

B. Improve Quality:

By measuring and controlling companies output, we can identify issues and implements appropriate measures to increase quality standards of the product. Customer satisfaction is the main objectives; an increase in product quality will insure continual customer support.

C. Measurement:

This refers to the measurement of effectiveness through out the organization. It is amazing how many companies do not have in place wage of measuring of effectiveness of their processes. It is also important to measure the company

against the opposition, the industry and most importantly the customers' satisfaction.

D. Productivity.

An increase in productivity can only be achieved by identifying deficiencies and implementing measures in improve these. It is essential to continually identify improvement opportunities and react to these promptly.

E. Profit.

An increase in productivities, quality, effectiveness and customer satisfaction will increase the bottom line. Organization will grow in market share and gain a reputation for quality, this means growth and profit.

2.5.2 ISO 9000

ISO 9000 is the first ISO standard certificate that has been most popular and helped in establishment of the ISO certification. ISO 9000 is one of the series of the quality management systems standards develop over a long period a time, beginning with quality standards in the defense industry. NATO began developing quality standards in late 1940s to enable a degree of harmonization between cooperating military forces.

These standards were consolidated and revised in DefStans (Defense standards) 05-08, 21, 05-21, 05-24, 05-28 between 1951 and 1973.Dominant system in the civil world includes BS 5750 (the British standards) and EN 29000 (The European standards) as well as unique local system, which have been developed in several countries and industries, such as QS 9000 in the motor industry. However, ISO 9000 is generally accepted as the standard for quality systems practise in most countries.

The purpose of ISO 9000 is to improve quality by assuring a basis for defining it. The series consists of guideline (ISO 9000 and ISO 9004) and standards (Quality assurance models 9001, 9002, 9003) the standards are voluntary; they are not a legal prerequisite to selling products become registered as meeting the criteria of

ISO 9000. Registration is ISO 9000 has become a de facto licence to market in world market.

The ISO 9000 standards have a degree of merit. The criteria define a comprehensive quality system. International business companies must certify their commitment to systematic, genuine, and tangible quality. Although the United States has created the prestigious Malcolm Baldrige national Quality Award, the world is committed to ISO 9000 standards. ISO 9000 offers a better long-term strategy for the international business.

The five standards in the ISO 9000, 9001, 9002, 9003 and 9004 have been adopted in more than 150 countries including all the developed nations, representing an accepted basis of quality systems requirements for product conformity assessment in the global market place. The ISO 900 standards are not product specific; on the contrary, they are process standards in managed and what it takes to produce quality output consistently.

One of the most critical differences between ISO and other quality initiatives is that ISO encompasses the entire product development effort from the strategic planning process through service. Another significant difference is that the application criteria are very specific and leave little room for interpretation, making them applicable to manufacturing, service and commercial operations. The ISO 9000 approach is founded on two concepts.

1. A quality System:

This concept establishes the rationale that if the production and management are right, the product will also be right. A quality system establishes a level of quality all the time. The system builds quality in rather than screening error out.

2. Third Party Registration:

Quality system registration by a third party occurs when a properly accredited "register" organization assesses whether a quality system, as documented and implemented, satisfies the requirements of the appropriate ISO standards.

The implementation of ISO 9000 practices across entire industries provides safety and quality professionals with an excellent opportunity to incorporate workplace safety programs into their quality management systems. A proactive safety program can be easily integrated into any existing ISO 9000 based system. The "Quality System Requirement", Section 4 of the ISO 9001, has 20 clauses, which stipulate the conduct foe a good quality management system.

2.5.3 Criticisms of ISO 9000 Quality Standards

The ISO 9000's biggest virtue, its universality, is also its greatest vice. By setting norms that are attainable across a broad range of industries and cultures. ISO 9000 falls far short of the quality that world class corporation's demand of themselves and their suppliers. ISO 9001, the most detailed standard in the series, consists of just seven pages of often vague directives. Its governing principles can be summed up in three words- documentation, documentation and documentation.

To become registered, a business must prove that it follows its own procedures for inspecting production processes, updating engineering drawings, maintaining machinery, calibrating equipment, training workers and dealing with customer complaints. But ISO 9000 makes no demands or assurances about the quality of a company's products, and the standard virtually ignores the mantra of modern quality management, continuous improvement.

Companies do not have to show that they know how to reduce cycle time, cut inventories, or speed up delivery. Nor do they have demonstrated that their customers are happier than they used to be, or even that their customers are happy at all. In other words, may critics contend that ISO standards do not really require high quality, but simply a well documented level of uniform quality where a company could be in total compliance with the standards while manufacturing shabby products?

But it is true that While ISO doesn't explicitly require continuous improvement, the management review, internal audit, and corrective action clauses merge into a

cycle of improvement processes beginning with a static document of procedures. The cycle continues with a constant internal check for discrepancies from documented procedures, a correction process that must reveal the root cause of problems, and a review by management, which is charged with tracking trends and identifying means of improvement.

In addition, meticulous documentation and documentation control employees t think about what they are doing and to talk about their responsibilities with others, in this manner eliminating non-value added activities, while encouraging consistency and cooperation among different departments and levels within the organization.

Other critics view the ISO approach as yet another attempt to keep foreign competitors out of the EU's unified market. This perception is absolutely false. Even worse, it is self defeating. ISO 9000 is a tool that Europeans are using to help unify their economies. When it is approached as an opportunity instead of as a burden, it can make an important contribution to a company's competitiveness.

Perhaps, in amore perfect world, the Baldrige Award criteria which do demand quality products, satisfied customers, and continuous improvements would become the international quality standard. While US companies try to reaffirm their commitment to quality and concentrate on the Baldrige Award, few companies are actually ready or willing to play that league. Still a Baldrige Award is no guarantee of commercial success.

2.5.4 Benefits of ISO 9000 Registration.

ISO 9000 standards do not really tell how the design a more efficient washing machine or build a more reliable unclear missile. Instead, they provide a frame work for showing customer's how a company tests products, trains employees' keeps records and fixes defects. The ISO 9000 should not be thought of as another variant of total quality management, but as a set of generally accepted accounting principle for documenting procedures.

Many still do not really understand what quality means and how not committed them selves to it. ISO takes the mystery out of quality and provide the clearly defined process for achieving a competitive quality assurance and management system. ISO 9000 registration ensures that companies benefit from higher productivity and quality, increased customer satisfaction, lower insurance rates and personnel costs.

Not only does a fully documented quality management system. Ensure that customer's requirements are met; it ensures that the organization's requirements will also be met, both internally and at an optimum cost.

The ISO 9000 registration is a good way to measure your progress and monitor your maintenance of that status. It can bring marketing benefits but really should be regarded as the beginning of the continuous improvement process rather than the end. The British standards institutions estimate that, through ISO 9000 implementation, registered firms reduce operating cost s by an average of 10%.

ISO 9000 has now being adopted by over 150 countries, and is becoming a passport to international trade. This worldwide acceptance has caught American companies of Guard. Currently there are 15000 European companies that are ISO certified. In the United States the biggest problem surrounding ISO 9000 is ignorance.

Nepal does not follow the ISO series. But Nepal has also been a member of ISO. The certified member body of Nepal for ISO certification is Nepal bureau of standards of Metrology (NBSM). Law regarding the import of products other them food products requires no standards. For food product, the importer is required by law to have a sample tested by the food research laboratory under the food act and Nepal standard (Certification Mark) act. Nepal has established its own standards for various food products.

Example of benefits standards provide.

Standardization of screw threats helps to keep chairs, children, bicycles and aircraft together and solves the repair and maintenance problem caused by a

lack of standardization that were once a measure headache for manufactures and product users.

Standards establishing and international consensus on terminology make technology transfer easier and safer. They are an important stage in the advancement of new technologies and dissemination of innovation.

Without the standardize dimension of freight containers, international trade would be slower and more expensive.

Without the standardization of telephone and banking cards, like would be more complicated.

A lack of standardization may even affect the quality of life itself: for the disabled, for example, when they are barred access to consumer product, public transport and buildings because the dimensions of while chairs and entrances are not standardized.
Standardized symbols provide dangers warnings and information across linguistics frontiers.

Consensus on great jobs various materials give us common reference for suppliers and client in business dealing.

Agreement on a sufficient number of variations of a product meet most current applications allows economies of skill with cost benefit both producers and consumers. An example is the standardization of paper sizes.

Standardization of performance or safety requirements of diverse equipment makes sure that users' needs are met while allowing individual manufacturer the freedom to design their own solution on how to meet those needs.

Standardized computer protocols allow products from different vendors to "Talk" to each other.

Standardized documents speed of the transit of goods, or identify sensitive or dangerous cargos that may be handled by people speaking different languages.

Standardization of connections and Interfaces of all types ensures the capability of equipment of diverse origins and the interoperability of different technologies.

Agreement on test methods allows meaning full comparisons of products, or plays an important part in controlling pollution- whether by noise, vibration or emissions.

Without the international agreement contained in ISO standards on metric quantities and units, shopping and trade would be haphazard, science would be unscientific and technological development would be handicapped.

2.5.5 Difference between ISO 9001 and ISO 14001

The vast Majority of ISO standards are highly specified to a particular product, material, or process. However, ISO 9001(quality) and 14001 (Environment) are “Generic management system standards”. “Generic “means that same standards can be applied to any organization, large or small, whatever its product or service, in any sector of any activity, & whether it is a business enterprises, a public administration or a government department.

ISO 9001 contains a generic set up requirements for implementing a quality management system & ISO 14001 for an environmental system. Generic standards can be applied to any organization.

The ISO 9001 and ISO 14000 families are between ISO’s best known standards ever. ISO 9001: 2000 and ISO 14001 (1996: 2004 versions) are implemented by some 887770 organizations in 157 countries.

The ISO 9000 family addresses” *quality management”.* This means what the organization does to full fill:

1. The customers quality requirements and
2. Applicable regularity requirements, while aiming to
3. Enhance customers satisfaction and
4. Achieve continual improvements of its performance in pursuit of these objectives.

The ISO 14000 family addresses environmental management. This means what the organization does to minimize harmful effects on the environment of its environmental performance.

2.5.6 ISO 22000 Standard

The ISO 22000 international standard specifies the requirements for a food safety management system that involves the following elements:

1. Interactive commutations
2. System management
3. Prerequisite programmed
4. HACCP principles

A commutation along the food chain is essential to ensure that all relevant food safety hazards are identified and adequately controlled at each step with in the food chain. This implies commutation between organization both upstream and downstream in the food chain. Commutation with customers and supplies about identified hazards and control measures will assist in clarifying customer and supplier requirements.

The most effective food safety systems are established, operated and updated within the framework of a structured management system and incorporated into the overall management activities of the organization. This provides maximum benefits for the organization and interested parties. ISO 22000 has been aligned with ISO 9001 in order to enhance the compatibility of the two standards.

ISO 22000 can be applied independently of other management system standards or integrated with existing management system requirements. ISO 22000 integrates the principles of the Hazard Analysis and Critical Control Point

(HACCP) system and application steps developed by the codex Alimentation Commission.

By means of auditable requirements, it combines the HACCP plan with prerequisite programmers. Hazard analysis is the key to an effective food safety management system, since conducting a hazard analysis assist in organizing the knowledge required to establish an effective combination of control measure.

ISO 22000 requires that all hazards that may be reasonably expected to occur in the food chain, including hazards that may be associated with the type of process and facilities used, are identified and assessed. Thus it provides the mean to determine and document why certain identified hazards need to be controlled by a particular organization and why others need not.

ISO is developing additional standards that are related to ISO 22000. These standards will be known as the ISO 22000 family of standards. At the present time, the following standards will make up the ISO 22000 family of standard:

1. ISO 22000 – food safety management systems – requirements for any organization in the food chain.
2. ISO 22001 –guidelines on the application of ISO 9001:2000 for the food and drink industry (replaces : ISO 15161: 2001)

2.5.7 ISO 27001 Standard

ISO 27001 specifies the requirements for establishing , implementing , operating , monitoring , reviewing , maintaining and improving a documented information security management system within the context of the organization's overall business risks . It specifies requirements for the implementation of security controls customized to the needs of individual organizations or parts therefore. ISO 27001 covers all types of organizations (e.g. commercial enterprises, government agencies, not –for profit organization)

ISO 27001 is designed to ensure the selection of adequate and proportionate security controls that protect information assets and give confidence to interested parties.

ISO 27001 is interested to be suitable for several different types of use including the following:

1. use within organizations to formulate security requirements and objectives;
2. Use within organizations as a way to ensure that security risks are cost effectively managed ;
3. Use within organizations to ensure compliance with law and regulations;
4. Use within an organization as a process framework for the implementation and management of controls to ensure that the specific security objectives of an organization are met ;
5. Definition of new information security management processes ;
6. Identification and clarification of existing information security management processes ;
7. Use by the management of organizations to determine the status of information security management activities ;
8. Use by the internal and external auditors of organizations to determine the degree of compliance with the policies , directives and standards adopted by an organization ;
9. Use by organization to provide relevant information about information security policies, directives, standards and procedures to trading partners and other organizations with whom they interact for operational commercial reasons;
10. Implementation of business-enabling information security;
11. Use by organizations to provide relevant information about information security to customers.

2.5.8 HACCP Standards

Hazard Analysis and Critical Control Point (HACCP) is a systematic approach to identifying and controlling hazards (i.e. microbiological, chemical or physical) that could pose a danger to the preparation of safe food.

HACCP involves:

1. identifying what can go wrong
2. planning to prevent it
3. making sure you are doing it

In simple terms, it involves controlling the safety of ingredients and supplies coming into a food business and what are done with them there after. Since 1998 it has been a legal requirement in developed countries for all food business in most of the companies to have a food safety management system based on the principles of HACCP. Meeting this requirement can be achieved in a number of ways that test suit the business.

The main benefits of HACCP are:

1. save your business money in the long run
2. avoids you poisoning your customers
3. food safety standards increase
4. ensures you are compliant with the law
5. food quality standards increase
6. organizes your process to produce safe food
7. organizes your staff promoting team work and efficiency
8. due diligence defense in court

2.6 ISO Certification and effects.

2.6.1 ISO Certification: Cost and Benefits

Why to get ISO certification?

Butwal Cement factory gets ISO 9001: 2000

The private cement factory Butwal cements Mills private limited has obtained ISO 9001:2000 certificates. The press release issued by the company says, the certificate of international standards was conferred to the company based on the

standard of work place environment it was maintaining and manufacturing process it was following.

ISO certification ensures product quality (Sales Agent news)

Choosing suppliers, especially if what they're selling is a high quality product, and well consistently remain show? Foe many such companies, the answer is found in their ISO Certification.

There are three flavors of ISO 9000 certificating. ISO 9001 is a quality assurance model for companies that design, produce, inspect, test, install and service items. ISO 9002 is for companies that do every thing listed under ISO 9001 except design products and ISO 9003 is for companies that only inspect and test products.

Achieving ISO certification is neither a short nor an inexpensive tasks, at companies are often require to undertake it. Increasingly, corporations and governments are demanding that their suppliers hold ISO 9000 certifications.

For a company better quality control is a key to its certification efforts. Customers have more confidents in the companies' products because of the ISO standards, and their faith has manifested in more business. With ISO certification, the company has seen a significant percent of growth in sales.

Sales aren't an only part of the business to benefit from ISO certifications. Problem resolutions has to be clearly defined, with root causes identified, documented and corrected. This has reduced warranty cost tremendously. Failures will be cut by a good percent, and problems are dealt with quickly because appropriate processes are in place. Further more, with the comprehensive documentation required by ISO certification, roles were will defined. A lot of companies don't realize how much work can be duplicated as they grow.

2.6.2 Quality certification for reduced costs:

The cost of quality, it's a term that's widely used- and widely misunderstood. The "Cost of quality" isn't the procedure of creating a quality product or service. It's the cost of NOT creating a quality product or service.

Every time work is redone, the cost of quality increases. Obvious examples include:

I. The reworking of a manufactured item.
II. The retesting of an assembly.
III. The rebuilding of a tool.
IV. The correction of a bank statement.
V. The reworking of a service such as the reprocessing of a loan.
VI. Operation or the replacement of a food order in a restaurant.

In short, any cost that couldn't have been expanded in quality were perfect continuous to the cost of quality.

Total quality costs:

Quality costs are the total of the cost incurred by:

I. Investing in the prevention of non conformance to requirements.
II. Appraising a product or service for conformance to requirements.
III. Failing to meet requirements.

General description of quality cost:

1. Prevention costs:

The cost of all activities specifically designed to prevent poor quality in products or services. Examples are the cost of:

I. New product review
II. Quality panning
III. Supplier capability surveys
IV. Process capability evaluation.
V. Quality improvement team meeting.
VI. Quality improvement project.
VII. Quality education and training.

2. Appraisal costs:

The cost associate with measuring, evaluating or auditing products or services to assure conformance to quality standards and performance requirements. These include the cost of :

I. Incoming and source inspection/ taste of purchased material.
II. In-process and final inspection/ test
III. Product, process or service audits.
IV. Calibration of measuring and test equipment.
V. Associated supplies and materials.

3. Failure cost:

The cost resulting from products or services not conforming to requirements or customers/ users needs. Failure costs are divided into internal and external failure categories.

3.1. Internal failure cost:

Failure cost occurring prior to delivery or shipment of the product, or the furnishing of a service, to the customer. Examples are the costs of:

I. Scrap
II. Rework
III. Re-inspection
IV. Re-testing
V. Material Review
VI. Downgrading

3.2 External failure cost:

Failure cost occurring after delivery or shipment of the product and during or after furnishing of a service to the customer. Examples are the cost of:

I. Processing customer complaints.
II. Customer returns.
III. Warranty claims.
IV. Product recalls

Total Quality Cost:

The sum of the above cost i.e. Prevention, Appraisal and failure cost. These represents the difference between the actual cost of a product or service and

what the reduced cost would be if there was no possibilities of substandard service, failure of product or defects in their manufacturer.

2.7 Quality aspect in Nepalese consumer market.

2.7.1 Introduction:

Nepal is having one of the smallest economies in the world market scenario. The own manufacturing industry is also smallest one and is dependent in most of the raw materials to other customers. Due to the difficult and developing economies situation our own products are not so competitive in comparison to the other market players in the domestic as well as in international market scenario.

But due to the open market situation Nepali consumer have choice in products. Various multinational and national companies are playing in Nepali market and trying to establish themselves. The term quality is coming together with the term brand in recent years. In another way the term quality is being represented by the term brand.

Now the marketing is almost focused in selling brand rather than quality standard and quality parameters. In consideration with the growing economic activities political and legislation system of Nepal is playing major role in Nepal's present contest. A short overview of the same has been seen to be notable at this contest of situation.

2.7.2 Political and economic Situation:

Nepal's economy has relatively limited market potential. Per capita income among the words lowest. The country is landlocked, which is a barrier to industrial development and undermines it foreign trade potential. Since 1996 an ongoing Maoist insurgency has further impeded socioeconomic development. Nonetheless, since the advent of a democratically elected government in 1991, the country has undertaken economic reforms and negotiated triacetates with India that considerably enhance its attractiveness both as a science poll regional and multinational investment as a market for multinational brands of goods and services.

Nepal's hydropower, aviation, environmental, tourism, computer hardware and telecommunications market all offer sales and investment opportunities for multinational and joint venture firms. The large and growing India market to which Nepali experts now enjoy duty-free access for all but a very few products, also makes Nepal a potentially attractive business location.

2.7.3. Situation of Nepalese Market.

Although the government of Nepal is open to foreign direct investment, bureaucratic delays, inefficiency, and pervasive corruption often distort policy implementation. The government is aware of deficiencies in Nepalese investment climate and has slowly moved toward more investors- friendly arrangements. Privatization of state-owned corporation is currently stalled. In addition to government policy considerations, foreign companies most also considered the political risks brought about the ten years old Maoist insurgency, which has some what seen top target foreign organizations and investments in Nepal.

There are four major growth sectors in Nepal: Tourism, Transport (particularly air transport), telecommunications and Hydropower generations. Tourism is one of the traditional foreign exchange earners for Nepal. However, the limited availability of airline seats on routes reaching Kathmandu had hampered expansion over the past several years. The other three sectors are all in the process of being privatized by the government of Nepal.

After the restoration of democracy 'Loktantra' due to the historic April 'Jana-Andolan' of 2006, rays of hope are there in the direction of positive growth of economy.

2.7.4 Aspect of quality in Nepalese context.

The term quality and quality always come together in open market environment. Deposit of the different hurdles faced by Nepalese business player a significant growth in business sectors has been observed due to the sectors are open for the private players.

2.7.5 Consumer Behaviour and business Practice:

Entering any Asian market involved commitment, patience, hard work and an almost in human tolerance for frustration. The rewards are high however, as long as you understand the market. This understanding can be achieved by working with local agents' valid and well-targeted market research and experience gained through personnel meeting and physical observation. Don't depend always on your staff, go and look for your self at times. Most local business practice are summarized here,

We will never know more about the consumer than locals. We should know enough to fill comfortable. Locals are looking to make money like every marketer. They are looking for advice on how to make money, not how much you know about them. They will always know much more!

A. Referrals are prevalent throughout Asia. Business is done through intermediaries, usually family. Some of these intermediaries level are not essential for the business on the just complicate things. However they are essential for partnership.

B. Face is key. Most Asian business people rate people by external factors such as their perceived wealth. There is less emphasis on your capability in doing a job.

C. Business people are less direct. If they don't like you or your offering, they will not tell you directly know into your face. They will tell by ignoring your follow up channels, calls and meetings. At this situation you are meant to 'take the hints' that they want to go ahead at the contest.

D. Nepali business people are usually infinitely patient. If you approach them, you are expected to convince them of your offering, not the other way around. You are expected to get to know them personally. Personal relationships are key.

2.8 Review of literature.

The term review of literature is mint for the study based on experience rather than ideas or theories. There fore the review of experience generated by various

authors. Exports and thesis has been reviewed in this section to share their ideas experience and knowledge.

Review from books:

2.8.1. Jack A, (2002) "What is 'Quality' & how much for you need? Jack & Mauldin, Texas. A business manager working in a multinational company for almost 20 years and observing the strive for Quality products and services by his customers have formulated seven rules[5] of Quality as follows.

Quality Rule No.1- Only the "customer" can define what Quality is.

The first thing we need to understand is "who are your customers?" This does not mean specific names of individual customers. Every business has different segments of the business and segments are defined by what are the specific requirements of a certain set of customers. Take the example of motor vehicles. Companies don't have just one type of vehicle. Some people want a sports car. Some want a vehicle that can carry a large family. Some are interested in efficiency. Some need a pickup.

Different segments of the industry have different customers and different needs. Quality is the segment customers' perception of the end result. Make sure you know what segment(s) you intend to focus on and look to see what is important to the specific customers within those segments.

Quality Rule No. 2- Understand what specific are more important to your customers.

One of the key lessons from the Japanese companies in the 80s was focusing on how important each feature of a product was for their customers within the identified segment. We don't see many brands of car cassettes but they are more common in vehicles where something is needed on trips. Companies learned to break down their product to individual components and find a relative value of the components.

How many cars we see now without cup holders? We will pass over selecting specific pickup if it does not have place to hold our soft drinks. Correct traditional color marking or a large frame for capability? Your product should have feature that are much more important to them and they will not consider your view of "top

quality" if they don't meet the customers expectations. Clearly understand which features are more important to your customers and document it.

Quality No: 3: understand what the scope of the customers' expectation of quality.

You can buy the best camera in the world but if you cannot get it serviced or fixed when needed, you will be very unhappy with the company. Even if the service people are not polite to you when you bring it in can cause customer dissatisfaction. if you buy an exceptional dog that is known to produce similar quality kids but you realize later she has abscess scars (Bad patches) all over her, you will be very unhappy with the breeder selling you the animal and you will not consider that a quality animal .

There are more things than just the initial sale of a product that can go into a customer's decision of how much quality your supply has. Shame on us for not looking at the products closer before buying. Shame on the seller for dumping products with extreme bad patches under their name at a production scale.

Quality Rule No. 4- Understand what the objectives are that define your quality program and how you will measure your success or failure.

Imagine a company that makes TVs that has someone at the end of the assembly line looking for a TV that works well out of all the TVs that have come off the line. Companies and customers expect consistent quality from the products they buy. After World War II, the Japanese had a terrible reputation for everything being cheap and trashy. The US sent over Quality specialists to help them improve their quality. One of the experts was Dr. Deming.

Quality became a religion with Japan companies and by the 1980s they produced the ultimate in quality products and took major business away from the rest of the world until the world got the message that quality was king. The real problem is consistently producing a specific line. If a customer buys a good item from you one year and comes back next year and finds nothing like the first, the customer will not associate you as a producer of quality. You must define objectives for your product line and identify how will measure if you are successful or not. You have to have some measurement associated with your objectives that helps tell you if you are on track or missing the boat.

Quality Rule No.5 – Understand what process you are doing to produce the existing quality items.

One of the biggest mistakes we can make in trying to produce a certain quality product is by not being consistent in the steps taken to produce it. In all companies associated with quality processes, they first get a stable process of steps so they know how those steps are associated with the quality of the output product.

Once the process is stable and you see are not getting the quality you want, you analyze the process steps to see where changes can be made to improve the quality, make the change and continue to measure. If you are constantly changing how you produce the items, what you changed to them and the maintenance you do, you will never know why one modification is good or why another modification was great. Getting consistent quality products requires consistent process steps.

Quality Rule No. 6 – The best quality is not always the best answer.

A Harvard professor wrote an article titled- Beware of the Good "Quality". He made a very good point that the best quality is not always the most appropriate answer. His example was a very fine restaurant that made the best hamburger you could image and sold them for $15. He then compared it to McDonalds "Big Mac" hamburger for $2. No one would ever say that the Big Mac was even close to the top quality of the fine restaurant yet McDonalds was selling billons of them and had made many millionaires out of selling Big Mac.

The difference was in what the potential customers were looking for. That was consistency in the quality of the hamburger, fast service, and low price and available everywhere. The best product is not always the correct solution according to who your customer is and what category of the meat goat industry they are in. A good quality product that is very productive and healthy at a reasonable price could be a much better focus that trying to have next market champion.

Quality Rule No. 7 – What is considered quality today may not be quality tomorrow?

Quality is not a goal that stays the same year after year. A "high quality" product today may have an advantage in the market but in the future it will be expected in all similar products. You must always be evaluation your product and trying to understand what would make a better product. That certainly does not mean we should try to have larger and cheaper products always.

That is not necessarily the improvements needed. It is up to you and maybe your association to determine where the most beneficial improvements could be made in the manufacturing. Don't hold your breath on the associations taking a leadership in this area at this time.

Finally, it is difficult to tell what a quality product is or how much is needed. Marketer must seriously look at who your potential customers are and what are their most important requirements. Determine the objectives for "quality program "and how you will measure your results. Stabilize the processes and follow in trying to deliver the desired quality. When the measurements show for the need of improving, analyze the process for the most appropriate correction step.

2.8.2. Edwards, C.D., (Oct. 1968) "The meaning of Quality." Quality progress,

Meaning and concept of quality

The term quality being a relative concept and its meaning and concept possesses different meanings in different perspective. A number of meaning and concepts have been studies under this conceptual under standing.

"Quality is neither mind nor matter but a third quality independent of the two even though quality can not be defined, you know that it is."[3]

ISO 9000 defines quality as "degree to which a set of inherent characteristic fulfils requirements."

The terms quality is defined in the different basis as follows:

1. Customer based: fitness for use, meeting customer expectations.
2. Manufacturing based: conforming to design, specification or requirement, having no defaults.
3. Product based: The product has something that other similar products do not that adds value.
4. Value-based: The product is the best combination of price and features.

Based on the above definition the term quality is a relatives and its meaning various along with the reference of its uses as per the situation and condition. Although in any situation the ultimate goal of the [4]human society is happiness with its lifestyle. Hence the quality means the product or service that's use me its users happy.

Review from magazines:

2.8.3. Discover ISO, What standards do? Geneva, 2004

What is ISO Standards Do?

ISO Standards:

I. Make the development, manufacturing and supply of products and services more efficient, safer and cleaner.
II. Facilitate trade between countries and make it fairer.
III. Provide governments with a technical base for health, safety and environmental legislation, and conformity assessment.
IV. Share technological advances and good management practice.
V. Disseminate innovation.
VI. Safeguard consumers and user in general, of products and services.
VII. Make life simpler by providing solutions to common problems

Source: Discover ISO, What standards do?, Geneva, 2004

2.8.4. NBSM, Guidelines for "Nepal Standard". Balaju, Kathmandu, 2000

Nepal standard 'NS'

Nepal standard has been formulated and issued to the products if they comply the tests conducted by Nepal government. Nepal Bureau of standards and Meteorology (NBSM) is working as a government agency to examine issue and supervise the product ' standard the comply as per the specifications. The Nepal standards mark issued by the NBSM can be used by the manufacturer in the product itself. One has to follow the following 11steps to obtain the Nepal standard

[4] R.M.Pirsing, Zen and the Art of Motorcycle Maintananc,pp.135-213

The manufacturer has to fill up the prescribed application from to be obtained the from NBSM.

1. Submission of completely filled from to NBSM along with the industry's registration certificate, quality manual and VAT registration certificate.
2. Having been satisfied with the submitted documents NBSM conducts a preliminary inspection of the industry.
3. In the preliminary inspection , observation is made to confirm , how far , the quality manual has been followed by industry in its day to day activities
4. all possible tests of the collected sample are made in laboratory of the industry during the inspection and the duplicate samples are also tested in the laboratory of NBSM
5. along with required suggestion, technical help and comments , the industry is asked to correct the non-compliance
6. The samples are also collected from market and are tested in the laboratory of NBSM against the Nepal standards for that product ;
7. A surprise inspection of the industry may be carried out by the designated inspector of NBSM as when necessary ; the industry is asked to submit two to three weeks test result of the product tested in the industry's own laboratory
8. sample collected during surprise inspection , are tested both in the laboratory of the industry and of NBSM if the test results are complied and put forward to the committee of senior members of NBSM under the chairmanship for the director general to discuss upon the matter concerning the issuance of the license to use NS mark to the industry in question ;
9. all pros and cons are duly considered by the committee before granting a license to use Nepal standards mark on the product ;
10. the license is issued to the producer after receiving required fee and having signed on a bond to follow the directives given by NBSM;
11. The industry is also required to seek labeling approval from NBSM before using NS-mark on its product ;
12. The post license activities such as surveillance and inspection of the industry are conducted in order to ensure the commitment of the

organization for quality production. In case of the noncompliance the license shall be withheld or suspended or cancelled depending upon the nature of nonconformance ;

Nepal bureau of standards and meteorology (NBSM) have assured some feature of 'NS' quality certification mark as listed in **Annex-2**

2.8.5. Indian Standards, the Bureau of Indian Standards (BIS), New Delhi India, 2002 **"Indian Standard 'ISI' mark."**

The Bureau of Indian standards (BIS) , the national standards body of India is involved in the development of technical standards (popularly known as Indian standards), product quality and management system certification and consumer affair. It resolves to be a leader in the matters concerning standardization, certification and quality In order to attain this Bureau strives:

1. To provide efficient timely service
2. To satisfy the customers need for quality of goods and services ;
3. To work and act in such a way that each task performed as individual or as corporate entity , leads to excellence and enhances the credibility and image of the organization .

BIS would achieve this objective by working in close cooperation with all concerned organizations and by adopting appropriate management system, motivating and ensuring active participation of all employees. To achieve the above objectives, the function 12 of BIS has been defined as follow;

1. **Formulation of Indian standards** for products and services by bringing together and coordinating various interest groups like manufactures, consumers, technical experts, testing personnel and other interested. The standards so prepared are known as Indian standards (IS) and are considered as legal documents. The first Indian standard formulated was for the national flag (IS 1) .so far BIS has published about 18000 Indian standards covering various products codes of practices , terminology etc. for various industrial and economic sectors . The Indian standards are used not only by the industry but also by the government, students, consumers and regulatory authorities .

2. Certification schemes

A. product certification scheme is a scheme where by manufacturers of products interested in producing their products as per relevant Indian standards are permitted to use the standard mark of the bureau (the popular ISI mark) on their products after obtaining a license from the bureau. The scheme is voluntary in nature for most products .however, the government has insisted on ISI marking about 136 products which affect the health and satisfy of consumers or are products of mass consumption like LPG cylinders, food colors and additive, cement packaged drinking water etc.

B. Certifications for Indian importers is a similar schemes operated for importers who are desirous of using the standards mark (ISI Marks) on imported product. The government of India has also stipulated that some of the product be imported into the country only after approval of BIS is obtained.

C. ECO Marks: BIS grants license to environment friendly product under this especial scheme. For obtaining the ECO marks certificate the product should conformed to additional requirements specified in the Indian standards.

D. IECEE & IECQ Certification: BIS is a national certifying body (Issuing and recognizing) under the international electronically commission (IEC) system for conformity tested and certification of electrical equipment (IECEE). The product categories for which BIS has IECEE acceptance are tables and cords, capacitors as components, low voltage, high power stitching equipments, installation of protective in the electronics entertainment. BIS is also the national authorized institution and national standards organization under the IEC system of quality assessment of electronic components (IECQ).

3. Management system certification:

Under the management system certifications, the bureau operates the following for certification schemes-

1. Quality management system certifications. (ISO 9001 Certification)
2. Environment management system certification
3. Information security management system certification (ISNSM based on ISO/ IEC 2700)
4. Food safety management system certification (FSMS based on ISO 22000)

4. Hallmarking of Gold jewelry:

India is the largest consumer of gold and the purchaser of gold jewelry is the common consumer. The Hall marking of gold Jewelry in tainted to insure that the consumer gets gold jewelry of the purity declared was launched on 11 April 2000 at the behest of the government of India. The certification of purity of gold jewelry is done in accordance with the Indian standards ISI 1417 (Specification for gold and gold alloys, jewelry/ Art hate- Fineness and marking). The standards are equivalent to the international standards ISO 9202:1991 jewelry- Fineness of precious metal alloys. The scheme is voluntary in nature.

Review from thesis:

2.8.6. Mr. Keshav Raj Gnyawali, (2008) on "Quality awareness of ISO Standard & NS Standard in Nepalese Consumer Market."

The objectives of the study are as follows:

- To know about quality of product & service in Nepalese Consumer Market.
- To find out the coverage of ISO Standards.
- To suggest for improvement based on the finding of the research.
- To differentiate between ISO, NS & ISI.

The major finding of this study is as bellows:

- People get assure with the quality products and services in different way. Whatever be the method people feel good to use good quality products and devices.
- SO being a well established and widely recognized for quality management systems certification.
- Looking in to scope and effects of quality assurance and brand building in the entire business sector it is concluded that ISO has a very good scope in quality management system and helps in brand building because ISO certification itself has been developed as a quality management brand world wide.
- We are lacking in the quality standardization related activities and are in a right time to work together from all the stakeholders for the prosperity of the people or we left out.
- Coverage of ISO standards and quality management system has become a good tool for better management and efficient use of resources. Hence

ISO standards are for better management, efficient use of resources and maximize productivity.

2.8.7. Mr. Bharat Raj Sharma (2065) on "A Study on Distribution System of 'DEXN' Product in Nepal" The objective of the study are as follows:

- ❖ To identify source of employment without investment on the basis of membership.
- ❖ To provide information about distribution method in both market.
- ❖ To analyze direct distribution networking & distribution rules & regulation of DEXN.
- ❖ To evaluate membership hierarchy and remuneration.
- ❖ To put further suggestion and recommendation on the basis of finding.

The major findings of this study are as below:

- ❖ It only produces ISO certified products.
- ❖ DEXN Networking is the time relevant business.
- ❖ It provides maximum bonus (71%) and cash incentives to members.
- ❖ It does no allocate amount for advertising.

2.8.8. Mr. Govind Awasthi, (2065) on "Study of telecommunication services & customer care in far-western region with reference of Nepal telecom."

The objectives of this study are as follows:

- ❖ To present & predict service provided by N.T.C. in Far-Western Region.
- ❖ To analyze evolution of this services in recent periods.
- ❖ To analyze marketing strategies of NTC from customer aspects.
- ❖ To analyze customer care followed by Nepal Telecom in same region.
- ❖ To put forward necessary suggestion and recommendations for customer care service with reference to Nepal Telecom's service of far western region.

➢ Findings from the study can be point out as below:

- ❖ Nepal telecom has been played vital role to expand the telecom overall country but it can not provide qualitative service.
- ❖ Customer information system of Nepal Telecom is not reachable.
- ❖ Low quality of CDMA and GSM service.

CHAPTER-THREE

Research methodology:

3.1 Introduction:

Research methodology is a way to systematically solve the research problem. It facilities the research work and provides reliability and validity to it. Research methodology employed. In this study is presented below.

3.2 Research Design. :

The present study is descriptive in nature. The main aim of this study is to revel the ISO standards and consumer consensus survey in terms of quality of the product and services as per the quality mark they have acquired. Therefore a descriptive and survey research design is applied for this study.

3.3 Nature and sources of Data.

The data used in this study are primary and secondary nature. The only and ultimate source of the primary data is the respondent and the respondents for the study are the buyers or the product and users of the services selected for the study. This all the data required for the study are collected directly from the buyers of the product as well as the purchaser of the product and service user. All the information and data collected from the various sources for the survey analysis are the primary in nature.

3.4 Sampling plan.

Sampling plan consists of following sampling method.

3.4.1 Target Population:

The target population of the study consists of customers as well as the users of various products and services in different part of our country. The customers taken into consideration are from the Dhangadi and Mahendranagar municipality within the Kailali and kanchanpur districts.

3.4.2 Sampling Unit

The research is only done taking consideration of male and female customers and users of the various product and services of Kailali and Kanchanpur district.

Taking in consideration to the difficulty of the subject the respondent have been selected that have at least completed the high school level of education and involved in the activities of use of services and products by purchasing for them or family.

3.4.3 Sample Size:

The target population of the study is large. From the whole population only hundred samples from customers of their products and user of the service are surveyed.

3.4.3. Sampling Method

Judgemental sampling method is used in this study. Samples have been selected by this method. The logic behind using judgemental sampling for this study is a large size of population and considering the complexity of the topic and survey questionnaire. In addition, time and research constraints have compelled the researcher to adopted Judgemental sampling method. Due to the complication of the subject an educated and intellectual and at least higher secondary completed users have been selected.

3.5 Data Collection Procedure:

The data has been collected through a self administrated questionnaire survey at respondent's place at mutually convenient time and also by attachment through the mails sent to different persons who use internet. The respondents were support by oral explanation at point where they get confused or unable to understand any content of the questionnaire. Sample of questionnaire is given at Appendix4. A few additional probing questions have been were asked for clarity for the answers.

3.6 Methods of Analysis:

The collected data are thoroughly checked, complied and presented in appropriated table and graphs and charts to facilitate analysis and interpretation. Analysis is done descriptively as well as statistically. For the statistical analysis statistical tools as they are required are used.

3.7 Statistical tools:

Statistical methods are the mathematical tools used for the analysis and interpretation of memorial data. In this study, certain statistical tools have been used to compare the figures and to draw meaning full conclusion. The relationship between different variables related to consumer awareness quality standards would be traced out using statistical tools. The basic statistical tools related to this study are as follows:

1. Bar chart.

A bar chart, also known as bar graph, is a chart with rectangular bars of length proportional to that value that they represent. Bar charts are used for comparing two or more values. The bars can be horizontally or vertically oriented.

2. Pie chart.

A pie chart is a circular chart divided into sectors, illustrating relative magnitudes or frequencies or percentage. In a pie chart, the arc length of each sector is proportional the quantity it represents.

3. Mean.

The mean value is a single value with range of the data used to represent all of the value in the series. Symbolically,

$$\overline{X} = \frac{\sum x}{N}$$

Where, $\overline{X}$ = Arithmetic average

$\sum X$ = Sum of total value of data

N = Number of value of data

4. Standard deviation.

It indicated as root mean of the squared deviation from the average. The formula is given below.

$$\sigma = \sqrt{\frac{\sum d^2}{n}}$$

5. Coefficient of variance

The coefficient of the variation of the relative major of dispersion. Which is defined as the ratio of the standard deviation to the mean expressed in percent.

$$C.V. = \frac{S.D.}{Mean} \times 100$$

6. Probable error.

After calculation of coefficient of correlation, probable error is calculated. It is used to find out coefficient of correlation is significant or not. The formula is,

$$PE_r = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

Where,

PEr = Probable error of coefficient of correlation

R = Coefficient of correlation

N = Number of samples.

7. Test of hypothesis.

To test the validity of our assumption, if sample size is less than 30, t-test is used. For applying t-test in context small sample, the "t" at a certain level of significance for value of "t" exceeds the table value "say 0.05" we infer that the difference is significant at 5% level. But if "t" is less than the concerning table value of the "t" the difference is not treated as significant.

Similarly, to test the validity of our assumption, if sample size is more than 30, Z-test is used. For applying Z-test in the context of large sample, the "Z" value is calculated first hand compared with the table value of "Z" at certain level of significance. If the calculated value of "Z" exceeds the table value at some level of significance "say 0.05" we infer that the difference is significant at 5% level. But if calculated value is 'z' is less than the concerning table value of the "Z" the difference is not treated as significant.

The formula used in testing the significance of difference between two means for small sample (N<30) is as follows:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where,

$$S^2 = \frac{1}{n_1 + n_2 - 2}\left[\sum(x_1 - x_1)^2 + \sum(y_2 - y_2)^2\right]$$

$$S^2 = \frac{1}{n_1 + n_2 - 2}\left[n_1 S_1^2 + n_2 S_2^2\right]$$

Where, S1 and s2 are actual S.D. S2 is unbiased estimate of Q2 and it follows t-distribution with (n1-n2-2) degrees of freedom.

Similarly, the formula used in testing the significance of difference between two means for small sample (N>30) is as follows:

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where,

$$S^2 = \frac{1}{n_1 + n_2 - 2}\left[\sum(x_1 - x_1)^2 + \sum(y_2 - y_2)^2\right]$$

$$S^2 = \frac{1}{n_1 + n_2 - 2}\left[n_1 S_1^2 + n_2 S_2^2\right]$$

Where, s1 and s2 are actual S.D. S2 is an unbiased estimate E2 and it follows z-distribution with (n1-n2-2) degrees of freedom.

CHAPTER - FOUR

DATA COLLECTION, ANALYSIS AND PRESENTATION.

4.1. Introduction.

The research is a descriptive type of conclusive research design since the research problem starts from defining quality and identifying quality standards and its effect. The research gas explored many concept of quality and related concepts of ISO standardization in the earlier chapter in "Review of Literature"

Consecutively research is conducted by secondary sources of information i.e. publication of institutions, research of organizations, government journals and regulations, and different research and information available on e-library and documents and articles whatever have been accessible to researcher.

The research has a concentration on analysis of quality standard's effects on marketing in domestic & multinational market scenario. In this research, case study of the consumer on quality awareness of the product and service has also been analyzed.

4.2. ISO

ISO (International Organization for Standardization) is the source of the ISO 9000 and ISO 14000 families of quality and environmental management standards and some 15000 international standards for business, government and society.

ISO is a network of national standards industries from 146 countries working in partnership with international organization, governments and industry, business and consumer representatives. The central secretariat of ISO is in Geneva of Switzerland.

4.2.1. What for ISO?

ISO's international standards and deliverables support:

I. Facilitation of global trade,
II. Improvement of quality, Safety, Security, Environmental and consumer protection, as well as the rational use of natural resources,

III. Global dissemination of technologies and good practices,
All of which contribute to economic and social process.

Through the network and collaboration of its national members, international liaisons, regional cooperation's and partner organizations, ISO constitutes a leading platform for the production of globally and market relevant international standards.

ISO's consensus building mechanism, multi sector coverage and ability to efficiently disseminate and promote its range of deliverables and recognized and relied up on by industry, public authorities, consumers and other stake holders, thus helping to materialize the aim of "One standard, one test and one conformity assessment procedure accepted everywhere" In this way, ISO contributes to a more efficient and sustainable world economy.

Key objectives with Global vision

1. Developing a consistent and multi- sector collection of globally relevant international standards.
2. Ensuring the involvement of stakeholders.
3. Raising the awareness and capacity of developing countries.
4. Being open to partnership for the efficient development of international standards.
5. Promoting the use of voluntary standards as an alternative or as a support to technical regulations.
6. Being the recognized provider of international standards and guides relating to conformity assessment.
7. Providing efficient procedures and tools for the development of a coherent and complete rang of deliverables.

The Key objective and action for implementing them results expected were unanimously approved by the ISO General Assembly at its 27th meeting in Geneva, Switzerland, on 15-16 September 2004, as the ISO strategic plan 2005-2010 as "standards for a sustainable world."

ISO standards meet the following criterion:

1. Respond effectively to global regulatory requirements, market need and scientific/technical developments:
2. Do not distort markets nor have adverse effects on fair competition.
3. Do not stifle innovation or technological developments:
4. Do not give preference to the requirements of specific countries or regions: and
5. Are performances- based than design prescriptive?

4.2.2 Coverage of ISO standards

The international organization for standardization (ISO) covers such items as mechanical, Machinery, Chemistry, Coatings, Construction, Aerospace, Metals, Aerospace, Fuels, Energy, Transportation, Information, Image Technology, Quality, Merriments, safety, Environment, Medical and consumer goods. Including ISO 9000:2000, ISO 9001:2000 and ISO 9004:2000 which were officially released on December 15, 2000 and now form the new core series of the ISO 9000 family of international standards for quality managements. These revisions include:

1. Merging ISO 9001:1994 and ISO 9003:1994 into a single ISO 9001:2000 standard.
2. Merging ISO 8402:1994 and part of the content of ISO 9000-1 into new ISO 9000:2000 standard.
3. Revising ISO 9004-1:1994 into a new ISO9004:2002 standard.

4.2.3 Popular Standards:

A list of popular ISO standards have been listed as follows:

Table 4.1: Popular ISO Standards

ISO 10007	Quality Management Systems- Guidelines For Configuration Management
ISO 10012	Measurement Managements systems- Requirements for Managements processes and measuring Equipment
ISO 13002	Geometrical product specification (GPS)-Indication of surface Texture in technical product Documentation

ISO13485	Medical Device- Quality Managements systems- Requirements for Regulatory purposes
ISO 14000 SERIES	ISO 14000 series on Environmental Management
ISO 14001	Environmental Management systems- Requirements with Guidance for use
ISO 14004	Environmental Management systems – General Guidelines on principles, systems and supporting Techniques
ISO 14644-1	Clean rooms and Associated controlled Environments –part 1. classification of Air cleanliness
ISO14644-2	Clean rooms and Associated controlled Environments- part 2: specification for Testing and monitoring to prove continued compliance with ISO 14644-1
ISO 14971	Medical Device- Application of Risk Management to Medical Devices
ISO 19011	Guidelines for quality & environmental management system auditing.
ISO 2859-1	Sampling procedure for inspection by Attributes.
ISO 5725 set	Accuracy of measurement method & result set includes : ISO 5725-1, 5725-2,5725-3, 5725-4,5725-5, & 5725-6.
ISO 9000	Qualuity management systems – fundamentals & vocabulary.
ISO 9000 collection 1	ISO 9000 collection 1-includes most current revisions of ISO 9000, ISO 9001 & ISO 9004.
ISO 9000 collection 2	ISO 9000 collection 2 – includes ISO 9000 series documents.
ISO 9000 Compendium	International standards for quality management
ISO 9001	Quality management systems requirements.
ISO 9004	Quality management systems- Guidelines for performance improvements
ISO HDBK TECH DRAWINGS V1	Technical drawings volume 1 : Technical drawings in general-mechanical engineering drawings- construction drawings.

Source: Survey report on ISO standards, Institute of health & society (IHS), Englewood USA, 2007

4.3 ISO Quality Management systems-Requirements

ISO 9001:2000 specifies requirements for a quality managements systems where an organization.

1. Needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements, and
2. Aims to enhance customer satisfaction through the effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and application regulatory requirement

All requirements of this International standard are generic and are intended to be applicable to all organization, regardless of type, size and product provided.

Where any requirement (s) of this international standard cannot be applied due to the nature of an organization and its product, this can be considered for exclusion.

Where exclusions are made, claims of conformity to this international standard are not acceptable unless these exclusions are limited to requirements within clause7, and such exclusion do not affect the organization's ability, or responsibility, to provide product that meets customer and applicable regulatory requirements.

4.4 special features of ISO standards

Special features of standards can be listed as follows:

4.4.1 Key Features of ISO standards are as follows:

Table 4.2: Features of ISO standards

CRITERIA	ISO STANDARDS
Market Coverage	- Multinational - Define and fosters uniform and systematic competence at every level of the business infrastructure - Reduces the number of different standards around the world for goods and services.
Goal	- Certifies adequacy - Steers for the foundation
Process	- Specifies an ongoing basic for assessment through regular audit and certification

Requirement	Flexible and less resource intensive

Source: Publicizing your ISO 9001:2000 or ISO 14001:2004 certification. ISO secretariat, Geneva, 2006.

4.4.2 Revision in the ISO standards

The revision to the ISO 9000 family of standards was adopted in late 2000. This was a much more substantial revision than that of 1994.

The 1994 family of standards (ISO 9001, 9002,9003 and 9004) was consolidated into a single standard ISO 9001:2000 with a new ISO 9004:2000 providing a set of guidelines for continuous improvement.

1. The standard has a substantially increased customer focus.
2. An attempt has been made to reduce the manufacturing bias.
3. The scope has been widened to include more management elements.

All the core requirements of the 1994 version of ISO 9001 continue to be present, but the new standard restructures these (and other elements) under four headings:

1. Management responsibility:
2. Resource management:
3. Process managements:
4. Measurement and analysis, improvement.

The aim of these changes is to encourage organization to think about their management process and react to the changing demands placed upon them. Management responsibility is extended to include a specific responsibility for ensuring continuous improvements and benchmarking (relying on ISO 9004:2000 for guidance) and for management reviews. There is a much greater emphasis on supplier relationships, customer satisfaction, market and competitor analysis on the development of improvement opportunities. Resource management is extended to focus very clearly on human resource management – especially the match of the skills of the individual to the requirements of the task. A major shift – based approach and consequently to minimized the extent of procedural

documentation required to support the system. Issues such as health and safety, the environment and financial management as part of the overall well being of the enterprise are also given prominence.

4.4.3 The ISO strategic plan 2005-2010

Between1994 and 2003, ISO experienced an explosive growth in membership. Total members increased by nearly 50% (from 100 to 147) and the number of full members increased by 20 units (from 76 to 96)- contributing to make ISO a truly global organization.

In the same period ISO's reach to different categories of stakeholders also increased dramatically, through both the national standards bodies' network and the extended co-operation with a large variety of international organization, including government and non- governmental entities.

Among the measures taken to cope with these growth trends and to support the engagement of stakeholders beyond the purely technical level (i.e. to provide input on new direction to be followed by ISO and on the setting of priorities), ISO council decided in march 2003, on a new method and timetable for the updating of ISO's strategy and its implementation.

Between May and October 2003, ISO organized a board consultation of the ISO members and stakeholders and of ISO's major international partners, to collect suggestions and expectations regarding ISO's strategy. The majority of
ISO members in turn organized extended consultation with their national constituencies to develop balanced national views.

A total of 41 consolidations revealed the existence among ISO's stakeholder of a converging view on the present and future role of ISO and on it's increasing importance as one of the essential mechanism to support a sustainable world economy. it was also reassuring to observe the level of consensus expressed by ISO's broad and composite range of stakeholder on many of the key objectives to be accomplished by the organization in the medium-long term. The ISO strategic

plan 2005-2010- standards for as sustainable world was developed by the ISO council on the basis of the input from the consultation, and approved by the ISO general assembly in Geneva, in September 2004.

The document proposes a global vision for ISO in 2010, seven key objectives [section 4.2.1] for 2010 with ex-pecked result and action for their achievement, and a description of ISO's added value.

4.4.4. ISO and developing countries

In the course of the 1950s and 1960s, an increasing number of new ISO member bodies came from the developing world. The international standard developed by ISO is of high value to developing countries. They offer indeed practical solution to a variety of issues related to technological know- how and of product, performance, quality, safety and environmental resources.

However , to take advantage of International standards and to participate in their development countries had to face substantial additional problems in comparison with industrialized nation , ranging from the lack of established industrial infrastructures and related technical component [including national standards , metrology and testing institution and facilities] , to the sever limitation of financial and technical resources.

The first landmark in ISO's attempts to respond to the need of these members was the establishment in 1961 of the DEVCO committee on developing country matters (initiated on the basic of a memorandum to ISO council from Mr.f. Hadas of Israel). Other initiatives followed. In 1967, a developing countries conference was held in Moscow and in 1968 a new category of correspondent member was established, so that developing countries could play a role in ISO's work without incurring the cost of full membership.
A further category of subscriber member was eventually added in 1992, allowing very small economies to maintain a link with ISO for a minimum fee.

Since the 1960s, the membership and role of developing countries within ISO has been continuously increasing.

In parallel, the attention of the organization to the needs of developing countries has substantially evolved, along with the undertaking of programs providing technical assistance and capacity building and a variety of initiatives to facilitate developing countries participation in international standardization.

4.5 ISO 9000 Series.

The purpose of ISO 9000 quality by assuring a basis of defining it. The series consists of guidelines (ISO 9000 and ISO 9004) and standards (Quality assurance models 9001, 9002, 9003). The standards are voluntary; they are not a legal prerequisite to selling products.

They have been so delivery positioned, however, that whoever hopes to sell the products can be registered as meeting the criteria of ISO 9000. Registration to ISO 9000 has become a de facto license to market in Europe and all over the world.

The ISO 9000 standards have a degree of merit. The criteria define a comprehensive quality system. International business companies must certify their commitment to systemic, genuine and tangible quality.

Although almost all the countries have their own quality standards, the world is committed to ISO 9000 standards. ISO 9000 offers a better long-term strategy for the international business.

The ISO 9000 series of standards with their content and applicability are as follows:

Table 4.3: ISO 9000Series Standards

Standard	Content	Applicable To
ISO 9000	Guideline for selection and use for appropriate standards for a given enterprise. The standards consists a general introduction; a set of definition; the contractual and non contractual situation; types of standards (9001 to 9003); pre-contract assessment; tailoring and reviewing a contract; and a cross reference list of quality system elements (between 9001 to 9004) This standard introduces the notion of degrees of demonstration that is associated with the proof any client may adequacy of the quality system and the conformity of the product with the specified requirements.	All industries, including software development
ISO 9001	Quality assurance in design, development, production, installation and servicing The standard is used when the contract (between supplier and purchaser, for example) specifically required design effort and the product requirements and stated principally in performance terms. It represents the fullest requirements, involving all th quality system elements detailed in ISO 9004 at their most stringent levels.	All industries, including software development
ISO 9002	Quality assurance in production and installation This standard is for use when the specified requirements for products are stated in terms of an already-established design or specification. Only the supplier's capabilities in production and installation are to be demonstrated.	Companies in the chemical process industries that are not involved in product design and after- sale service.
ISO 9003	Quality assurance in final inspection test The standard applies to situations where only the supplier's capabilities for inspection and tests conducted on the product as supplied can be satisfactorily demonstrated. IN this standard a significantly reduced member of the quality system elements of ISO 9004 are required, and at lower of stringency than for standard 9001.	Small shops; divisions within a firm; equipment distributors that inspect and test supplied products.
ISO 9004	Quality management and quality system elements It consists of a set of more than 90 quality system elements that should be considered when designing and implementing a quality system. The standard examines each of the broader categories of 21 quality system elements cross-referenced in ISO 9000, and the system standards.	All industries

Source: Publicizing your ISO 9001: 2000 or ISO 1401: 2004 Certification, ISO Secretariat, Geneva, 2008.

The five standards in the ISO 9000 series ISO 9000, 9001, 9002, 9003, and 9004 have been adopted in more than 150 countries including all the developed nations, representing an accepted basis of quality systems requirements for product conformity assessment in the global market place.

The ISO 9000 standards are not product-specific; on the contrary, they are process in managed and what it takes to produce quality output consistently.

One of the most critical differences between ISO or other quality initiatives is that ISO encompasses the entire product development effort from the strategic planning process through service. Another significant difference is that the application criteria are very specific and leave little room in interpretation, making them applicable to manufacturing, service and commercial operations.

4.6. ISO in figures

4.6.1 ISO in figures for the year 2006(At 31st December)

ISO in a number of disciplines as on date 31st Dec of 2006 are as follows:

Table 4.4: ISO in figures for the year 2006

member	158 103 46 9	–national standards bodies ,comprising –member bodies –correspondent member –subscriber member
Technical Committee structure	3,041 193 540 2,244 64	–technical bodies, comprising –technical committees –subcommittees –working groups and –ad hoc study groups
Staff Technical Secretariats Central Secretariat in Geneva	37 500 153 23	–member bodies provide the administrative And technical services for the secretariats() Of technical committees (SC). These services involve a full-time staff Equivalent of () person. –()full-staff from –()countries coordinate the worldwide Activities of ISO
	120	–()million CHF (Swiss frank) per year is the

Financing	 37 30 60 40	Estimated cost for the operation of TC/SC Secretariats financed by –()member bodies holding TC and SC Secretariats –()million CHF (Swiss frank)represents the Operational cost of the ISO central Secretariats financed –()through membership –()through sales of publications and Other income services
Development Of International standards	16,455 620,768	–()international standards and standards-Type document –these standards represent a total out put of ()pages in English and French (terminology is also often provided in other languages)
In2006	1,388 68,146	–international standards and standards-Type document published –this out put represents a total of ()pages For 2006.
Work in progress in 2006	1,035	-() new projects (work items) registered
Total at 31 December 2006	3,415 756 866 1,793	-()work items appear on the programme of work of work of the technical committee the break down is as follow : -work items at preparatory stage - committee drafts - draft international standards (DIS) and standards (FDIS)
Meeting in 2006	8 821 105 272 444	-() technical meting are in progress ,on average , each working day of the year somewhere in the world -() technical meeting were held in 28 country , comprising -() meeting of technical committee -() meeting of subcommittee -() meeting of working groups or ad hoc group
Liaisons	602	-() international organizations are in liaison with ISO technical committees and subcommittees
Electronic access to technical information	16,455 3,415 700,000	Complete information on ISO's standardization activities is available from ISO online . users will find there; -()Bibliographic data items on ISO international standards. - ()Bibliographic data items on draft ISO international standards.

		- Through ISO online, by accessing world standards service network (WSSN), user can also access developments within a number of international, regional and national standardizing bodies and on some bibliographic data related to () standards, technical regulations and other standards-type documents from all over the world.

Source: ISO Annual Reports 2006. ISO in figures, ISO Secretariat, Geneva, 2006.

4.6.2 Sector wise figures of ISO standards

Table 4.5: PRODUCTION BY TECHNICAL SECTOR

Sector as based on the International Classification for standards (ICS)	WORK ITEMS		INTERNATIONAL STANDARDS			
	New	Total	New	No Of Pages	Total	No Of Pages
Generalities, infrastructure and sciences.	70	409	91	4892	1432	52673
Health, Safety and Environment	46	173	86	4381	667	22271
Engineering technology	258	911	490	25802	4467	189165
Electronics, information technology and telecommunication	158	509	212	15278	2600	173151
Transport and distribution of goods.	109	342	136	5494	1791	48782
Agriculture and food technology	69	164	65	2071	980	21681
Materials technology	269	755	268	8510	4061	97580
Construction	41	116	25	1229	328	12005
Special technology	15	36	15	489	129	3460
TOTAL	1035	3415	1388	68146	16455	620768

Source: ISO annual reports 2006. ISO in figure, ISO secretariat, Geneva, 2006.

4.7 Consumer Awareness Analysis on Quality Standards

This chapter deal with presentation and analysis of data related to consumer awareness analysis of Nepalese product and service users. as mentioned in the in the search methodology 100 sample have been collected from Kailali and Kanchanpur working in professional areas having some income from their service .A list of 10 question has been distributed as presented in the **Annex-3** .the data

collection has been conducted as per the questionnaire survey by visiting the respondent's premises after having them exposed to the objective of the survey and necessary concepts provided to them. As mentioned in the research methodology a number of assumptions have been taken.

Assumption

While conducting the research and analyzing the data: following assumption have been taken.

1. All the respondents are well aware of the subjects like quality standards and their concepts.
2. All the respondents have provided the responses to the queries as per their well understanding sincerely.
3. The queries match to the level of understanding of the respondents.
4. The purchasing and selling activities follow general principals of market.
5. The statistical tools used and hypothesis taken match normally with the research and analytical methods.
6. The sample follows the normal distribution and the findings represents for population
7. The sampling methodology is correct based on the data to be collected for this type of research.

4.8 Respondent's profile

4.8.1 Scope of respondents

The questionnaire was prepared for identification on the concepts quality and awareness of the users on quality standards. The demographic information relating the specific age group has not been taken into considers but the respondents have been chosen in the middle age group between 20 to 40 years of age. The gender of the respondents has been specifically taken into consideration for the identification of the awareness on the quality on male and female consumers to the service and products. Responses of this questionnaire are presented in the following table.

Table 4.6 Gender wise profile

Gender	Consumer's	
	No	**Percentage**
Male	73	73%
Female	27	27%
Total	100	100%

Source: field survey.

The above table 4.1 depicts the gender wise profile of the respondent. As shown in table out of total 71.0% fall into the male group and 29% in female group.

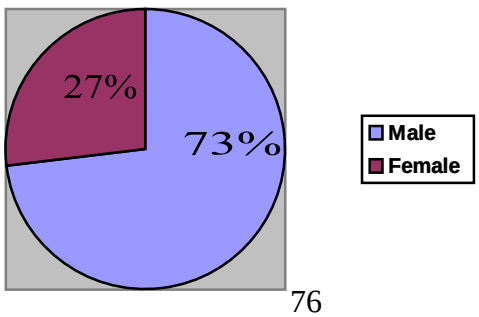
4.8.1. Outlet visited

Four corporate offices have been visited namely Dinesh group Dhangadhi, Nepal Bureau of standards and meteorology Dhangadhi Branch (NBSM), Shiv Shakti Group Mahendranagar, Dugar Group Dhangadhi, Nahata & Associates, Mahendranagar and Jagadamba groups Dangadhi, to get the respondents answers to the queries. So as to get the unbiased responses from the respondents the identification has not been mentioned. The researcher has personally visited the premise and respondents have been made aware on the subjects mentioned in the questionnaire.

4.8.2. Date collected (Primary)

A list number of 10 questions have been prepared and distributed to the respondent. Each question have four distant alternative closely related to the objective of the study. The list of respondents selections to the queries are listed in Anne-4. Among 100 respondents collected from field survey in 2007 for this thesis: 73 are Male and 27 are Female.

Figure 4.1: Percentage respondents by Gender Distribution.



4.8.3 Customized data (Primary)

The Respondent's answers to each query as per the gender distribution are as follows:

Question No	Options (M= Male, F= Female, T= Total												
	a			b			c			d			
	M	F	T	M	F	T	M	F	T	M	F	T	GT
1	16	5	21	14	10	24	20	10	30	23	2	25	100
2	24	13	37	1	1	2	3	2	5	45	11	56	100
3	47	24	71	22	2	24	0	0	0	4	1	5	100
4	15	6	21	26	8	34	24	10	34	8	3	11	100
5	8	1	9	52	19	71	4	2	6	9	5	14	100
6	38	18	56	31	7	38	4	0	4	0	2	2	100
7	48	22	70	5	2	7	20	3	23	0	0	0	100
8	2	0	2	28	4	32	38	19	57	5	4	9	100
9	40	15	55	18	5	23	3	0	3	12	7	19	100
10	2	1	3	2	4	6	25	8	33	44	14	58	100

Source: Field Survey

4.9. Objective wise Interpretation

This study with the survey has been guided by three objectives. In order to meet these objectives the collected data have been analyzed and interpreted on objective wise basic. These three objectives listed in chapter one which are guiding the survey are objective one, two and four.

4.9.1 Objective One

The first objective of this study is to identify the factors affecting the quality of product and service in Nepalese consumer and service market based on the awareness of the consumers on quality and standards, To achieve the objective the respondents are asked three specific questions on the questionnaire. The questions number one, three and ten are to get the answers based on this particular objective. The questionnaire to get the meaning of quality, quality standards and consumers method to convince themselves with the product and

service they are purchasing for posses good quality. The objective three has been supported by the descriptive study in this chapter in earlier sections.

4.9.2 Consumers' meaning to quality

To identify the consumers meaning to quality four alternative choices have been provided and the response to each query is as follows;

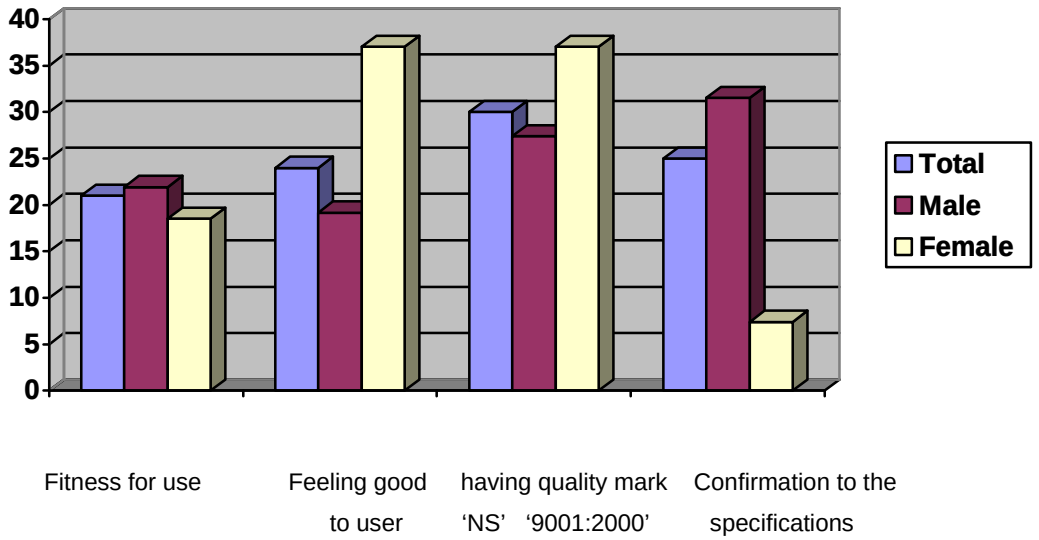
Table 4.8: Percentage of respondents for meaning to quality.

	Fitness for use	**Feeling good to user**	**Having quality mark 'Ns' or 'ISO 9001;2000'**	**Confirmation to specifications**
Total	21	24	30	25
Male	21.92	19.18	27.4	31.51
Female	18.52	37.04	37.04	7.41

Source; Field survey

The graph presentation of the above data (table 4.7) in bar chart is as follow:

Figure 4.2: Consumers meaning of quality



The largest consumer response on meaning to quality of product having NS or ISO 9001:2000 certification is 30% ,confirmation to the specifications is 25%,feeling good to user is 24% and fitness for use is 21% regarding gender response ladies in favour feeling good and quality mark by around 37%.

4.9.3 Consumers' Evaluation To Quality Standards

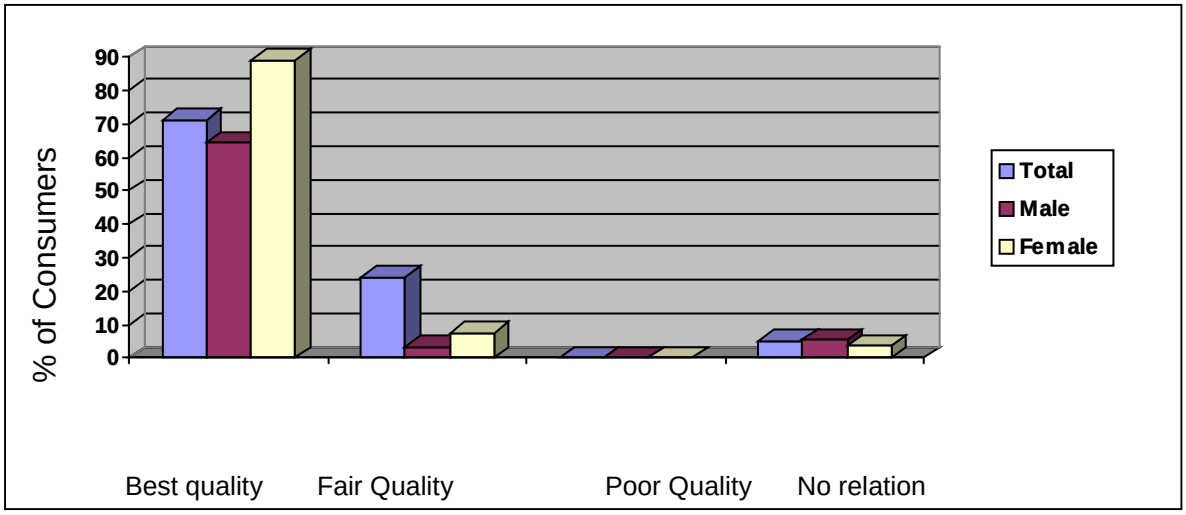
To identify the consumers meaning to quality standards four alternative choices have been provided and the response to each query is as follows:

	Product having best quality	Product is having fair Quality	Product is having poor Quality	No relation with Quality
Total	71	24	0	5
Male	64.38	30.14	0	5.48
Female	88.89	7.41	0	3.7

Source: Field survey.

The graphical presentation of the above data table (4.8) in bar chart is as follows:

Figure 4.3: Consumer's perception on quality standardized products.



Basis of selecting good quality product or services

The largest consumer response on the query against product or service having quality standards means product qualifies best quality is 71%, qualifies fairer quality is 24% , poor quality qualifies nil and no relation with quality qualifies for 5% regarding the gender response ladies have more belief on quality mark by 88.89%.

4.9.4 Consumers' Method to select quality products

To identify the consumers method to choose the good quality product, four alternative choice have been provided and the response to each as query is as follows:

Table 4.9: Consumers method to choose quality product and services.

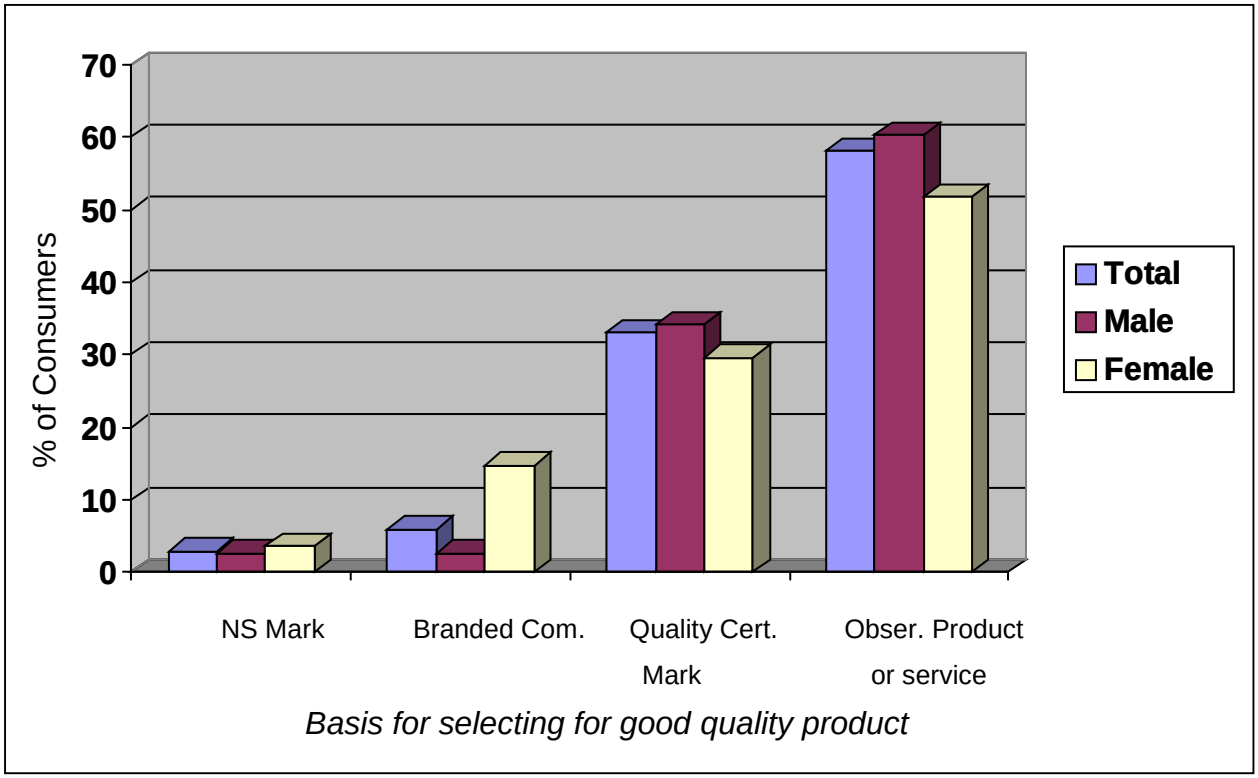
	Nepal made with 'NS' mark	**Brand of multinational company**	**Having quality certification mark**	**Observation and use of the product or service.**
Total	3	6	33	58
Male	2.74	2.74	34.25	60.27
Female	3.7	14.81	29.63	51.85

Source: Field Survey.

The graphical presentation of the above data in bar chart is as follows:

Figures 4.4: Consumers method to select quality products.

Consumers' method to choose quality products.



The largest consumer method of choosing quality product is only after observation and use of the product or service is 58%, having quality certification mark is 33%, Brand of multinational product is 6 % and Nepal made with 3%, analysing gender wise ladies favour on the products of multinational company than gentleman.

4.9.5 Objective Two:

The second objective of this study is to study the situation of quality awareness on Nepalese consumer based on the quality standards, manufacturing and brand. To achieve the objective respondent have been asked the three specific questions on the questionnaire. The question no 2, 6 and 7 are to get the answer based on this particular objective. The attempt of the question is to get the consumer the response on relation between quality of the product or the service w.r.t. quality standardized and non quality standardized products, what the consumers take care mostly while purchasing and loyalty of consumer between quality mark and brand name.

4.9.5. Consumers response on quality of the product or service having quality standard and not having it.

To identify the consumers' response to choose the good quality product, four alternatives choose has been provided and the response to each queries is as follows:

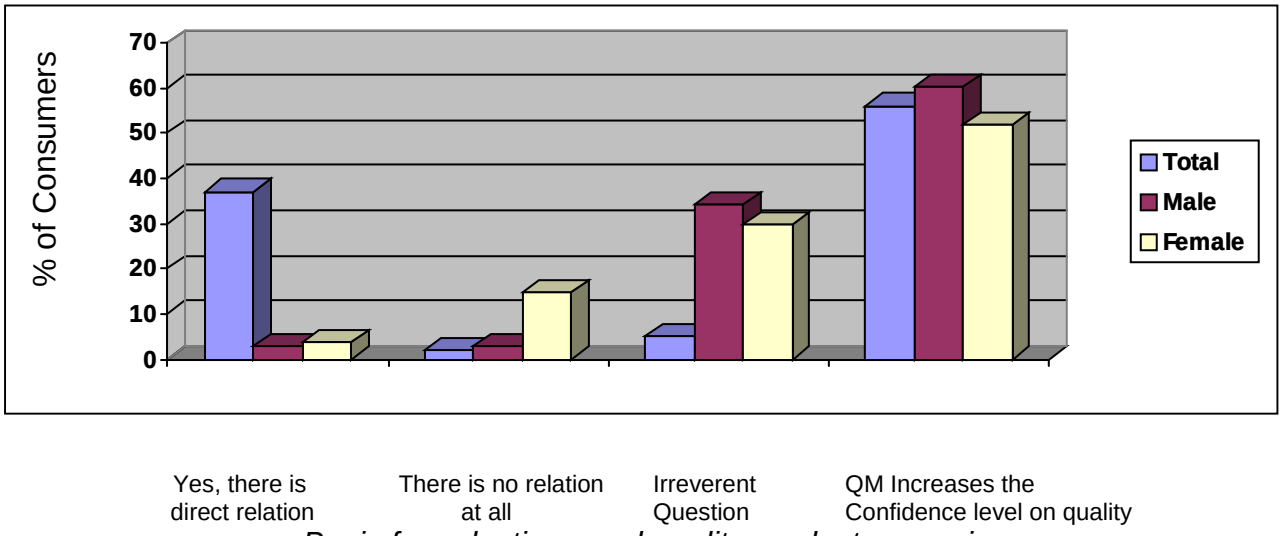
Table : 4.10:

	Yes, there is direct relation	**There is no relation at all**	**Irreverent question**	**QM increases the confidence level on quality**
Total	37	2	5	56
Male	32.88	1.37	4.11	61.64
Female	48.15	3.7	7.41	40.74

Sources: Field survey

The graphical presentation of the above data (Table 4.10) in bar chart is as follows:

Figure 4.5: Graphical representation of Consumers view on quality Vs quality marks.



Fifty percent of the respondents have a view that the quality marks increases there confidence level that the product or service they are purchasing has good quality. 37% of them see the direct relation between quality marked product or service and their quality and 2% of them have a view there is no relation even no meaning of quality marks. As a fact the question is irrelevant means there is nothing to ask if there is a quality mark in the company or product the quality of their product or service will not be questionable. With respect to the mail respondents females are more in favour of quality marked products.

4.9.6. Consumer's view towards quality on purchase.

To study consumer's view what do they take care on any product or service while purchasing four alternatives choices have been provided and the response to each query is as follows.

Table 4.11: Consumers care on quality factor while purchasing

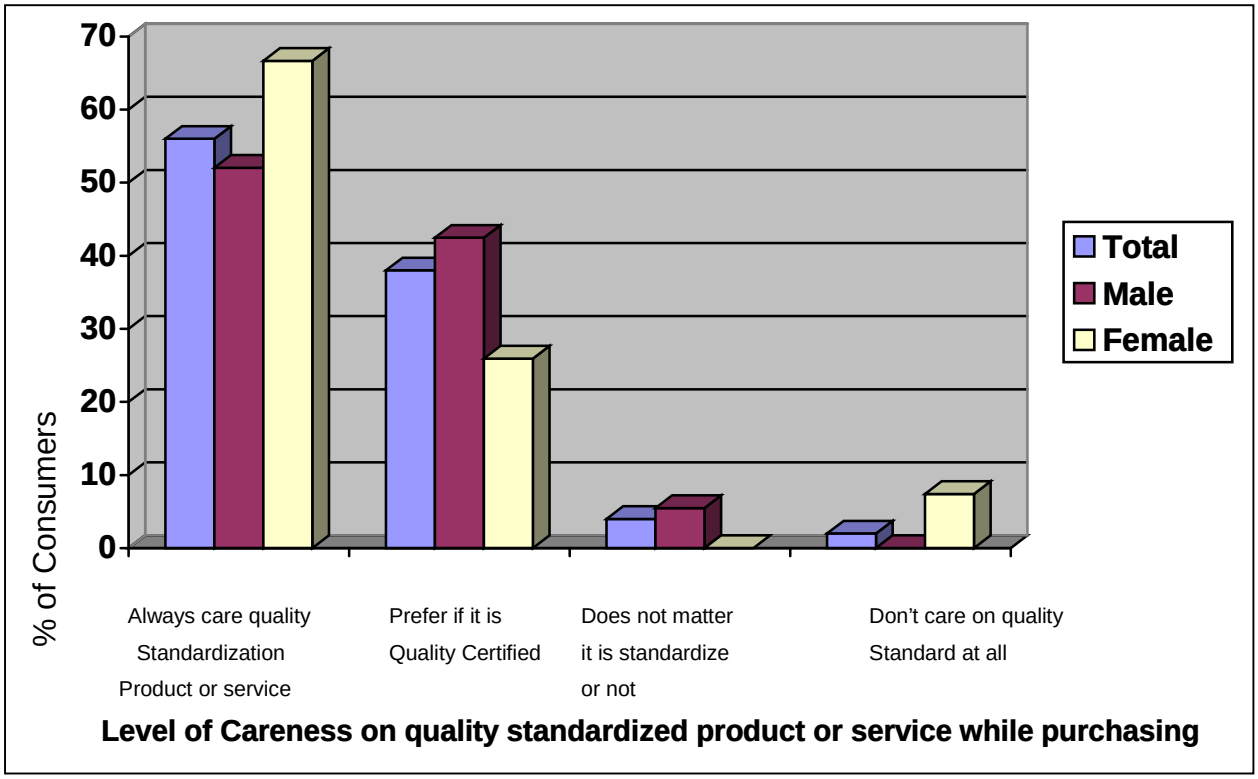
	always care quality standardization product or service	prefer if it is quality certified	does not matter it is standardized or not	don't care on quality standards at all
total	56	38	4	2
male	52.05	42.47	5.48	0
female	66.67	25.93	0	7.41

Source: Field Survey

The graphical presentation of the above data in bar chart is as follow:

Figure 4.6: graphical representation of consumers' method to select quality products.

Consumers' Careness on quality standardized product or service while purchasing



The entire consumers do care on quality while purchasing any product or service .56% of the consumers have a view that they look for a quality standardized products .38% of the consumers have selected the option that they prefer the product if it is quality certified too. 4% of the consumers don't care on the standards and 2% does no care at all. But all the females care the quality standard products.

4.9.7 Consumers vision on quality Mark Vs. Brand

To study the consumers view of the products on purchase between products having quality marks vs. brand name questionnaire have been prepared and survey have been conducted .the response of the consumers is as follow :

Table 4.12: Consumers vision on quality Mark vs. Brand

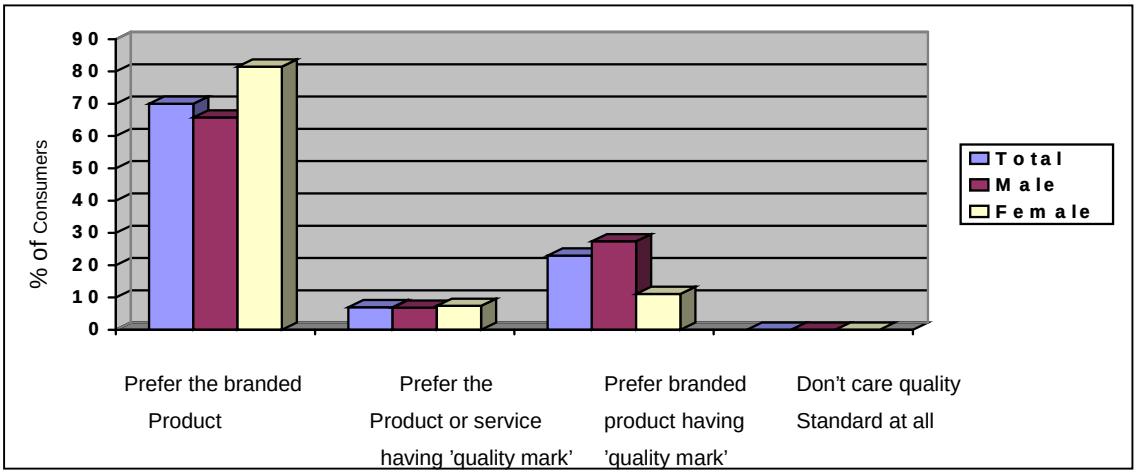
	prefer the branded products	**prefer the product or service having 'quality mark'**	**prefer branded product having quality mark**	**don't care quality standards at all**
total	70	7	23	0
male	65.75	6.85	27.4	0
female	81.48	7.41	11.11	0

Source: Field Survey

The graphical presentation of the above data in bar chart is as follow:

Figure 4.7: graphical representation of consumers' choice on quality marked products vs. Branded products:

Consumers' choice on product having quality mark and brand name.



Consumers' selection criterion while purchasing

In the survey the respondents have been observed to be loyal heavily on branded products than the quality marked products. Especially the ladies are seen to be more brand conscious than gentle man .70% of the total respondents have chosen that they prefer branded products and 81% of the ladies are in favour of branded product. 23% prefer the branded product having quality mark where gents share is 27.4% compared to 11.11% ladies.

4.9.8 Objective four

The fourth objective of this research is to study the impact of ISO standards in Nepalese consumer market. To achieve this objective four question have been asked with the Nepalese consumers in question number four ,five eight and nine

.the queries were to get the consumers view on the factor that makes their confidence level high while purchasing any product or service , quality of the service or product having ISO 9001 :2000 certification and not having it ,the credibility of ISO 9001 :2000 certification over NS certification and their opinion on the quality of the product or service having ISO 9001:2000 certification . Response and analysis of each query is as follow:

4.9.9 Consumers' opinion on the factors making high level of confidence to quality on purchase.

To achieve the result of the respondents on above mentioned query the results of the survey have been obtained as follow:

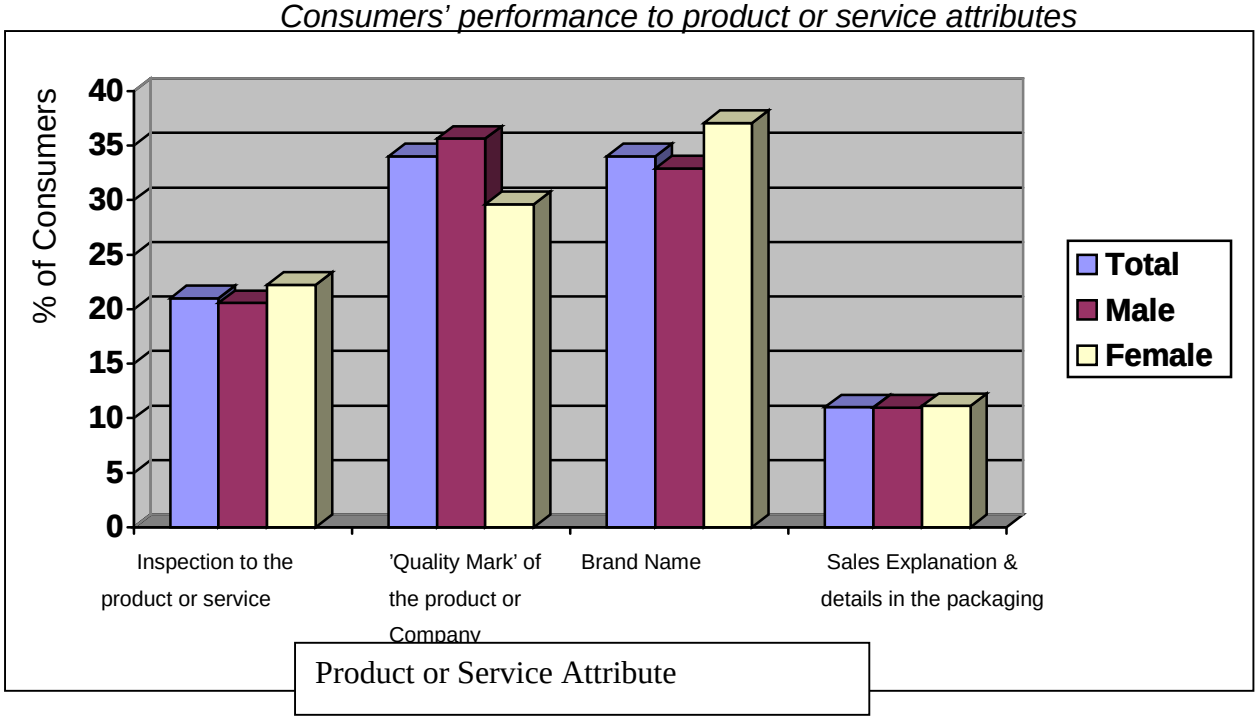
Table 4.13: Consumers view on factor that raises confidence on quality.

	inspection to the product or service	quality mark of the product or company	brand name	Seller's Explanation % details packaging
Total	21	34	34	11
Male	20.55	35.62	32.88	10.96
Female	22.22	29.63	37.04	11.11

Source: Field Survey

The graphical presentation of the above data (table 4.13) in the bar Chart is as follows:

Figure 4.8 Geographical Representation of customer's choice on the factor that raises level of confidence on quality of the products and services.



Product or Service attribute

While purchasing the products among the four important factors consumers confidence level is raised by 21% after inspection to the product or service, 34% by 'Quality Mark' of the product or company, 34% by Brand Name of the product or service provider and by 11% seller's explanation & details in the packaging. As per the response among males and females, ladies are more confident on brand name as compared to gentle man.

4.9.10 Consumer's views on quality to ISO 9001:2000 certifications.

To study the consumers view on quality of he products or services having ISO 9001:2000 certifications a specific question have been asked and the survey has been conducted. Consumer have been asked to provide their opinion whether there will be a significant difference between the product and services having and not having ISO certification, ISO does not assure quality and is a marketing strategy only. The response of the consumers is as follows:

Table 4.14 Consumer perception on quality of ISO 9001:2000 certified products and services.

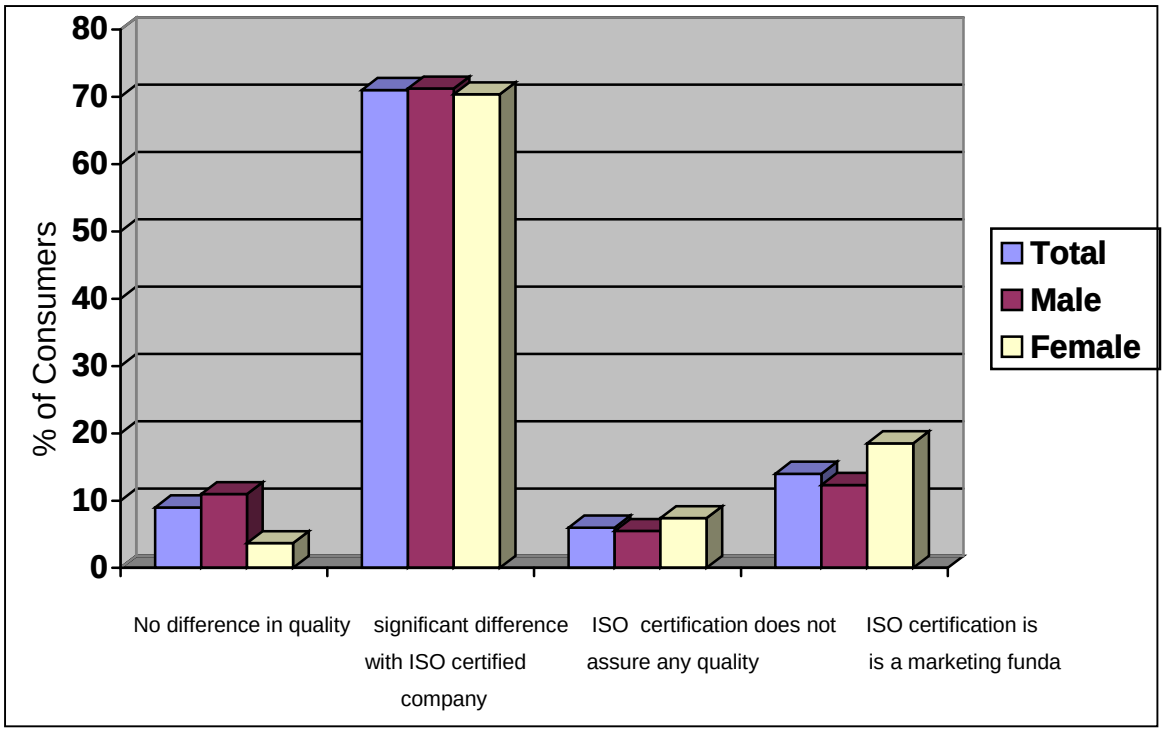
	No difference in quality	**Significant difference with ISO certified company**	**ISO certification does not assure any quality**	**ISO certification is a Marketing Funda**
Total	9	71	6	14
Male	10.96	71.23	5.48	12.33
Female	3.7	70.37	7.41	18.52

Source: Field Survey

The graphical presentation of the above data in Bar Chart is as follows:

*Figure 4.9: Graphical Representation of Consumer's perception to quality of ISO 9001: 2000 Certification***.**

Consumer's perception to quality on ISO 9001:2000 certified company's product or service.



71% of the total respondents have a view that there is a significant difference in the quality of ISO certified companies and compared to 9% having a view no difference in quality. 14% of the respondents have a perception that ISO certification is only a marketing strategy and 6% do not believe in ISO certification.

4.9.11. Credibility of 'NS' Vs. ISO 9001:2000 Certification.

To obtain the credibility of 'NS' marked products and ISO certified companies products, consumers have been asked a specific question whether NS or ISO both or none of them are believable. The response of the consumers is as follows:

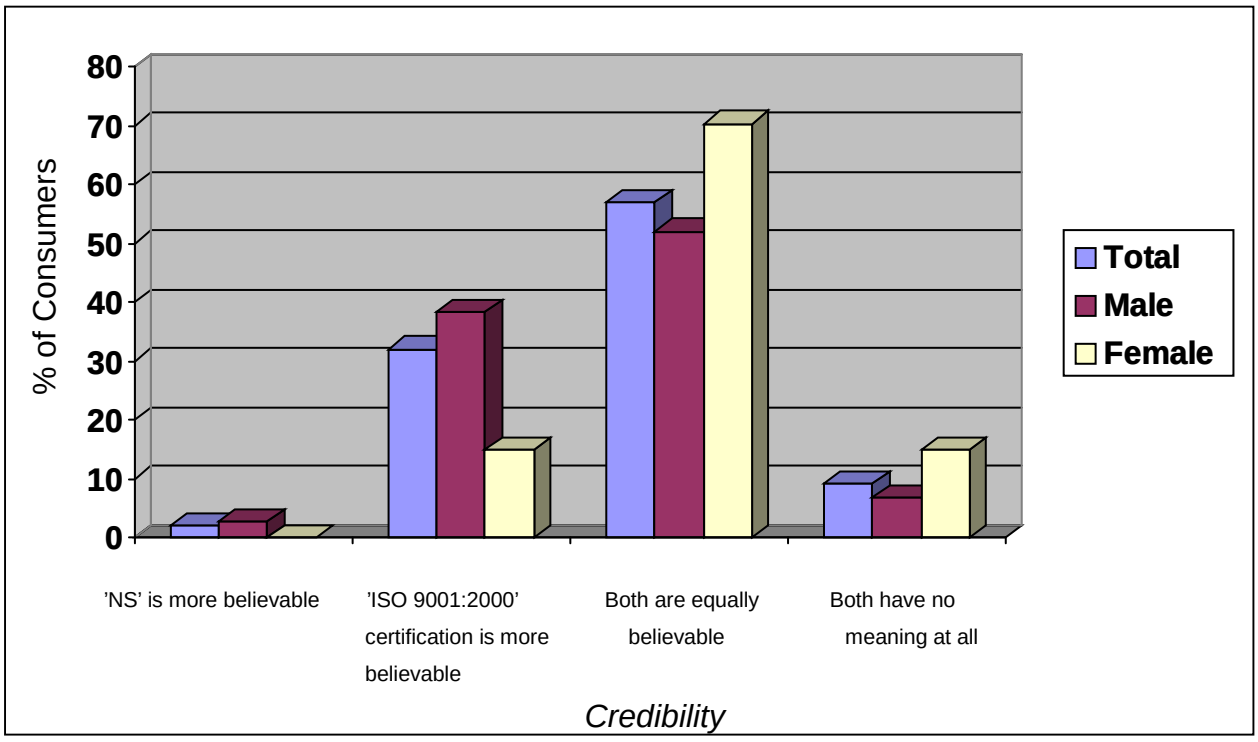
Table 4.15: Consumer's response on credibility of 'NS' Vs. ISO 9001:2000 certified products.

	'NS' is more Believable	'ISO 9001:2000' certification is more Believable	Both are equally Believable	Both have no meaning at all
Total	2	32	57	9
Male	2.74	38.36	52.05	6.85
Female	0	14.81	70.37	14.81

Source: Field survey

Figure 4.10: Graphical Representation of consumer's perception to quality of ISO 9001:2000 certifications.

Credibility of NS Vs ISO 9001:2000 Certified Company's product



'NS' have a credibility of 2% as compared t0 32% credibility of ISO 9001:2000 certified products. More than half 57% consumers have equal rating on both the products and 9% of the respondents do not believe both of them. Not a single lady has an opinion in favor of national quality standards over ISO certification.

4.9.12 Quality of ISO 9001:2000 Certified Products & Services.

To study the consumers view on quality of products and services of the ISO 9001:2000 certified companies. Respondents have been asked to choose on

option among four understand their view regarding the quality of the products and services of the companies having ISO certification. Survey has obtained following output:

Table 4.16: Consumer's View on quality of ISO 9001:2000 certified companies' products and services.

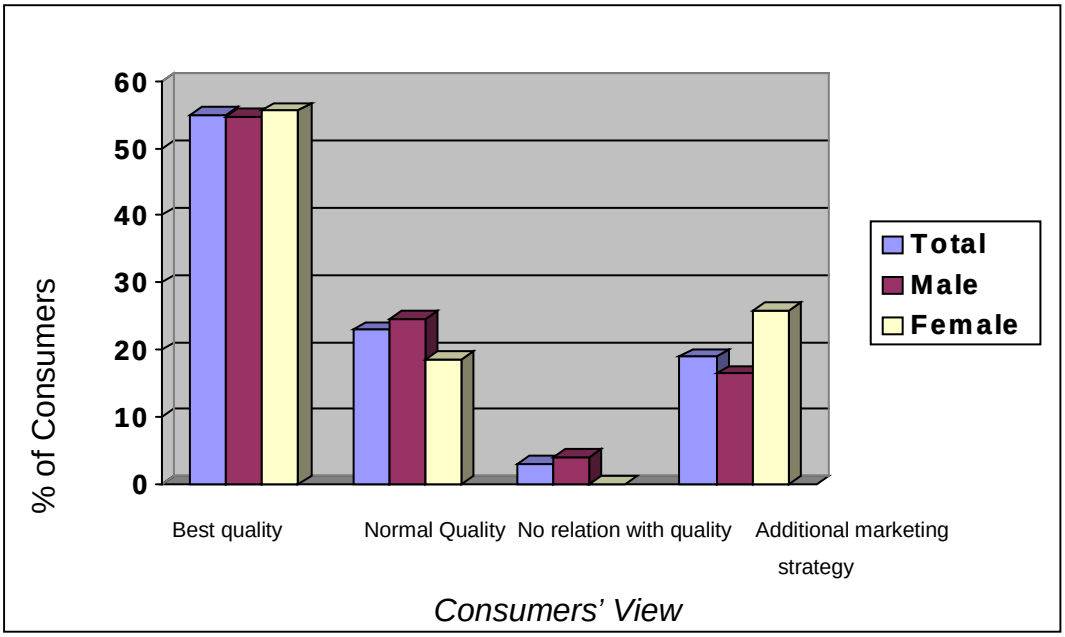
	Best Quality	Normal Quality	No Relation With Quality	Additional marketing Strategy
Total	55	23	3	19
Male	54.79	24.66	4.11	16.44
Female	55.56	18.52	0	25.93

Source: Field Survey

The graphical presentation of consumer's view on quality od ISO 9001:2000 certified companies product and services.

Figure 4.11: Graphical Representation of consumer's view on Quality of ISO 9001:2000 certified companies' products and services.

Consumers' view on Quality of ISO 9001:2000 certified companies' products and services



55% of the total respondents have a view that products and services having ISO 9001:2000 certifications are of best quality, 19% have a view that ISO certification have a relation with the marketing strategy of the company, 23% of the respondents have a view of normal quality and 3% think there is no relation with the quality of the products and services of companies having ISO 9001:2000 certification.

4.10 Major Findings

From this research study on ISO standards and quality awareness in Nepalese consumer market following distinct findings has been identified.

1. The term quality has a relative meaning and represents that people feel happy to have quality products and services. The people have different methods to confirm the quality in their own way.
2. ISO (International Organization for Standardization) is the non government organization having headquartered in Geneva standardizing quality management systems having ultimate objectives of world economic and social progress.
3. Quality assurance is a most important factor for any product or service to be established and retain in any market. The term Brand Name for consumer and Brand building for the manufacturer or service provider is the direct way of quality assurance. ISO certification is also a most important factor for quality assurance.
4. We have not developed ourselves in the global perspective of quality related activities but we are in a right time to develop awareness on the Nepalese consumers, manufacturing sector and service sector organizations for the proper understanding of quality concept, quality standards and quality marks.
5. ISO standard covers almost al the scope of human life through more than 15000 standards developed, recommended and implemented so far. ISO is publicizing quality management systems in ISO 9000 series, Environmental management system in ISO 14000 series, ISO 22000 series in food safety management systems and ISO 27000 series in information security management systems.
6. ISO has achieved an exponential growth in the decade of 1990 and the growth continued in the years 2000. ISO is striving with its proposal for global vision in 2010 with ISO strategic plan 2005-2010 standards for a sustainable world.
7. Nepali companies have started to adopt ISO standardization in the end of the decade 90's and have seen considerable growth in the years in 2000.

The first Nepali company manufacturing contact lens for the eye patients in *Til -Ganga* hospital in 1998. Although there are no official records of the ISO certification holder companies but there are unofficial records of almost 300 companies having ISO 9001:2000 certifications and almost a dozed of companies having ISO 14001 standards.

8. There is no legal provision on behalf of Nepal government on this issue and the agencies of India are providing the ISO certifications for Nepal agencies with no signal door entry and registration.
9. The level of understanding of the Nepalese stakeholder in reference to quality and its standards is very low. The role of National quality control agency is not visible and some effective steps are to be taken.
10. There is no central agency is benefiting by ISO certification in our country. No Nepali agency is benefiting by ISO certification and moral of NBSM officers in this issue is quite poor. Also the Nepalese companies are not being able to find out the good consultant and certification agency and perception of the standardization to the consumer is still below the line.
11. Regarding various management system certifications like quality management system, food safety management system those are being carried out by India based certification bodies whose accreditation status, scope, renewal, competency and validity are not at all known. In the absence of National Accreditation Board monitoring of such certification bodies activities are not possible.
12. The program of management system certification has not been able to take proper movement in our country. The quality management system certified companies have neither been able to improve by themselves nor been able to convey positive message to the public. This severely affecting the trade balance of the country by reducing the export and increasing the import making national economy in long danger.
13. Implementing the quality management systems effectively and efficiently it becomes wise for its certification through a recognized third party. While selecting a certification agency one should be very much careful because ineffective, incompetent, doubtful certification agency may mislead and reflect the image in own company.

14. In the tough global competitive environment national economy can flourish only when export promotion is enhanced. Export promotion can be enhanced only if technical barriers to trade can be eliminated. Technical barriers to trade can be eliminated by standards harmonization and conformity assessment activities recognition. Conformity assessment can get recognition and acceptability only when conformity assessment bodies enter into the unbroken chain of Mutual Recognition Arrangement and/or Multilateral Recognition Arrangement.
15. All the Quality Management Systems and Quality Certification Marks have been formulated and implemented for the progress and prosperity of human society, human life and health for the ultimate goal of total prosperity. So their proper understanding has to be taken by every individual and stakeholder. By the effective and honest implementation of the concept of quality products and services can yield quality life.
16. With the survey of 100 respondents Ladies have been found more quality conscious than gentleman. Almost 95% of the consumers do believe on quality certification and have a thought that the product or services having standardization either ISO or NS do not belong to poor quality. The credibility of the quality certification on ladies is more than the gentleman.
17. People normally confirm the quality product and services only after its use and second method of the quality assessment happens to be quality mark and brand. Looking in to the gender wise perception females has been observed more Brand conscious than males.
18. While comparing the loyalty of the consumers on quality mark Vs. Brand Name of the product Consumers have shown their loyalty on Brand Name rather than Quality Mark. A significant 23 percent of subscribes prefer branded products having Quality mark. Ladies have been even more loyal on Brand with respect to the males. As an obvious fact none of the consumer are careless on quality.
19. Consumers perception on ISO certification and quality have been observed that 71% of the consumers think there is a significant difference in the quality of the product and services rendered by the ISO certified company. Almost 6% of the total consumers do not believe on ISO certification with respect to quality.

20. To find out the relative Credibility between NS and ISO 9001:2000 certification Nepalese consumers do think more credibility on ISO certification than NS. 57% have a view to be equally believable on both standards and 10% think both of them have no meaning at all. None of the female respondents have opted NS to be more believable than ISO 9001: 2000.
21. Regarding the quality of ISO certified company's product and services more than half of the total consumers think ISO certification yields Best quality and 23% of the total consumers think ISO 9001:2000 certification yields Normal quality. Almost 20% consumers have a view ISO certification only an additional marketing strategy. And have been observed to be more loyal on ISO 9001:2000 certification.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIOS

5.1. SUMMARY

Nepal as a developing country is facing resource and trade deficit for the future development of the country from the decade long political struggle. Regarding the heavy trade deficit facing with the business partner countries and with the full fledged member of the WTO.

On the one hand Nepal has to compete with the foreign and multinational companies and safeguard the national industries. Also to explore the business opportunities in the international and domestic sector the quality and its recognition in the product and service sector is the major challenge to face.

Regarding the quality of the product and service the quality and standardization of the domestic companies and organization can play a leading role. In this scenario the study of various aspects of quality and its standardization has been important to the demand and supply both side.

Quality is the word behind every professional, consumer, user, manufacturer and all. Every one is looking after a quality product or service. Every buyer goes for a quality product and service. In a situation where quality leads its role, it requires a world wide accepted and general standard of quality to facilitate the worldwide marketing and trade.

The term Quality represents different meaning in different scenario for different people. It has been very difficult to find out an absolute definition of quality although the findings are interesting. Like beauty, quality is in the eye of the beholder and behind every set of eyes there is a different world. Some people say quality is fitness for use, in some other opinion Quality is conformance to specifications. As per the respondents of this thesis quality of the product or service is also having the quality certification like ISO 9001:200 or NS. In a different view it is not clear what it is, but it is something good. Actually speaking

quality is feeling good to its user. In any situation, the ultimate goal of human society is happiness in its own style. Hence the quality means the product or service that's use make its users happy.

ISO is a network of the national standards institutes of almost 160 countries, on the basis of one member per country, with a central secretariat in Geneva Switzerland which coordinates the system. ISO is a non-governmental organization. ISO occupies a special position between the public and private sectors.

ISO is the world's largest developer and publisher of international standards. ISO has published more than 15,00 International standards on a variety of subjects ISO has developed following management system standards very popular around the globe :

1. ISO 9001:2000 (Quality management systems)
2. ISO 14001:2004 (Environment systems)
3. ISO 22000:2006 (Food safety Management systems)
4. ISO 27001:2005 (Information security Management Systems)

The ISO 9000 and ISO 14000 families are among ISO's best known standards ever ISO 9001:200 and ISO 14001:2004 are implemented by some 890k organizations in 160 countries . The figure of ISO with 160 member countries and 15,00 International standards from Quality management systems to Information security system represents its coverage in all aspects of human life.

ISO management system standards are becoming popular around the world. The intention of these standards is to improve the performance of the organization in their related fields. The proper application if these standards yield a lot of benefits to the organization. But the use of these standards is becoming a fashion and the organizations are interests to get the certifications rather than its proper implementation. Although the certification bodies are accredited by Accreditation bodies for their competencies, but there is mo proper system of supervision of their words after the certification. In Nepalese context, till now there is neither accreditation body for management system certification nor any national certification body.

Consumers of the developing countries care normally on the quality of the products and services whereas the consumers of the developed and western nations care, whether there is an abuse of child labour, adoption of the concept of sustainable development and considerations of the environmental factors on production and service .

They also want the verification of their interest factors from an independent third party. So an international consumer relies not only on "Inspected Quality" and " controlled Quality" their need and interest is in the " in built consistent quality assurance" having international level quality management certification .

The management systems that are internationally accepted, appreciated and recognized in the international market scenario are ISO 9001 standard based on Quality Management system, ISO 14001 standards based on Environmental management system, HACCP / ISO 22000 standard based on Food. Safety management system OHSAS 18001 standards based on occupational Health and safety Management system.

In Nepalese context there is not a single agency having standard and actual statistics on ISO and other international quality management system certifications ; unofficially there are more than 200 industries/institutions certified for ISO 9001:2000 Quality management system and around 14 industries/institutions certified for ISO 14001 Environmental management system . Also one industry DDC (Dairy Development Corporation) is HACCP certified for food safety management system and no institutions are certified for OHSAS 18001 standard.

The management systems certification in our country are observed to be involvement of almost 17 different agencies from India and distribution of certificate and other activities coming to Nepal from there itself . In summary we can reach in a conclusion that neither there is a specifically distinct national policy and commitment towards it from the national level nor the ISO certified industries/institutions are able to provide positive message in this direction. Normally due to the lack of proper information to the certified industries/institutions, Incompetent consultant and ineffective use of certification

agency. The quality certification system has been unable to give proper benefit in the public front and to the society

For the proper use and implementation of any new concept in the society first of all it's depth knowledge and public awareness is important. In the developing countries like Nepal where there is not enough knowledge to the consumers on new product and service concepts and neither the experts nor policy makers bear the credibility. As a result of this situation knowledge, skill and experienced experts are sidelined by the police makers and its implementers.

Finally the major that affects the quality in consumer level is the consumers feeling, their class and level of information they have in themselves. The quality mark, Quality Standards and Brand name are other major factors that help to build up consumer's confidence level on the quality of the product and service they are purchasing.

The reference and labelling information in the packaging are other important factors that help to make understanding on the quality of product and service to consumers. The economic class, the personal beliefs and culture family type as well as the place of representation of the consumer also are the factors that develop some sort of quality perception on goods and services to the users.

The situation of quality awareness in the Nepalese consumer market is still in primitive stage where market is driving consumers rather than consumers drive the market. The economic situation, national development and prosperity of the nation and people are in very poor situation where people are not in a position to choose the products and services with reference to quality.

Although the respondents of this study seem to be aware of the quality situation but the national quality control system is not in and situation to regulate the market based on quality. People from the rural and sub-urban area, immature free market and a sort of monopoly and syndicate system represents some sort of quality awareness situation prevailing in the country.

5.2 Conclusion

Based on this research study and findings following conclusions can be drawn:

The growth of ISO, its achievement and strategic plans indicate the growth development and better scope of its recommendations. The number of Nepalese companies going for ISO certifications is still in negligible volume having more than 200 companies having ISO 9001: 2000, more than a dozen for ISO 14001. Adequate policies and procedures that are required to develop and maintain the quality of the products and services has not been formulated yet and the system of appraisal for the good quality providers and punishment for their contrary has not been developed.

Awareness and level of understanding on quality standards is below the line and the effort in this regard is minimum. National quality agencies has not been enhanced and developed and government is not giving attention in this direction. There is no proper gate to enter and register the ISO standards in our country and there is no proper regarding in this regard. This has ed to failure in the supervision and monitoring of the same and has reduced the credibility of the ISO standards in Nepal. India based agencies are doing the certification activities and Nepal based companies are out of track or no activity at all. Hence the beneficiary is someone else from activity of ISO certification. National accreditation body is out of track in this regard. Management system certification has not taken movement in our country and no one is able to benefit from it. It ultimately affecting the trade balance of country resulting the trade deficit. Implementation of the quality management system has not got proper belief in the mind of the stakeholders. The choice of the certification agency has also role on it.

Technical barriers to trade can be eliminated by standards harmonization and conformity assessment activities recognition; with conformity assessment bodies entering into the unbroken chain of mutual recognition arrangement and or multilateral recognition arrangement. All the quality management systems and quality certification marks have been formulated and implemented for the

progress and prosperity of human societies, human life and health for the ultimate goal of total prosperity. Survey has concluded that ladies are more conscious on quality than gentleman while purchasing. Almost all consumers have a belief on quality certification and credibility of international standardization and brand is more while that of domestic is poor From the survey it can be concluded that only the use of the product and service confirms quality. The next factor of quality confirmation is brand and quality marks. Female belief more on branded products.

All the consumers are careful on the quality of the products and service they are purchasing. Loyalty of the consumer on brand is high than on quality marks. Survey has concluded that there is a significant difference in the quality of the quality certified especially ISO certified companies product and services than non-certified product and services. ISO certification has a more credibility on Nepalese consumers than NS quality marks. Especially ladies highly rely on international brands and certification than domestic ones. Nepalese consumers take ISO certification as a quality products and services as well as marketing strategy. The balance is more leaned towards quality management systems.

5.3 Recommendations

From this research study we have identified a number of distinct findings and drawn conclusions. Based on above conclusions following recommendations can be made for the concern stakeholders for the benefits of all.

1. The product manufacturers and service provider are recommended to use the products and services by the themselves feel quality
2. Nepalese business sector should go for their products and services certified by ISO
3. Nepalese business sector recommended for ISO and NS quality standards and certification for their product and duly certified by NS and ISO to take the opportunities in due time and get benefited
4. We are in a right time to work from the public and private partnership to develop the credibility of quality standards that are being used from the

national and international organization and agencies like NBSM, BIS and ISO.

5. To explore the maximum efficiency of the resources all the managements of the companies are recommended to adopt ISO and other quality management methods in their companies.
6. The growth of ISO and its achievement and strategic plan indicate to adopt its recommendations to all the companies of any scale and their size for their benefit as soon as possible to make the growth sustainable.

7. The number of Nepalese companies going for ISO certifications is still in negligible volume and all the companies are recommended to adopt the national and international standards to gain the credibility of the activities they are doing

8. All the polices and procedures required developing and maintaining the quality of the products and services has to be formulated and their implementation has to be guaranteed . the system of appraisal for the good quality providers and punishment for their contrary should be assured consistently .

9. To raise the awareness and level of understanding on the quality standards different Medias, publications and workshop can be arranged and expert groups has to be used. While doing this credibility of the quality standards should be maintained by their confirmation to the specifications. National quality agency has to be enhanced and developed. Relation of the national quality agency (NBSM) has to be developed and activities should be increased with its regional and international partners.

10. All the activities of certification of ISO and other standards should be in monitoring from Nepalese central agency so that some sort of assurance to the public and national agencies moral will be enhanced. At least their will be records of the quality certified companies. Also the domestic organizations may have a good level of awareness on selecting a consultant and certification body. Also the certification agency and

consultancy will have a feeling of responsibility to the activities they are doing.

11. All the management system certifications have to be carried out by the Nepal based and registered agencies. Effective and recognized national accreditation board can be a good solution for effective monitoring of such activities.

12. It has been high time to understand the main motto of these quality Management systems and quality certification marks to consistently and consistently improve the quality level of products and service and reduce import of the same to avoid for a long term danger to the national displacement of the domestic industries.

13. While selecting a certification agency and to find out its credibility one should have clear information and have confirm on its legal identity accrediting organization, renewal of accreditation , scope of operation certified and registered auditor \ lead auditor , market reputation and listing in blacklist.

14. To inter into mutual recognition arrangement \ multilateral recognition arrangement conformity assessment bodies have to function as per the relevant international standards and guideline and shall demonstrate the continuous compliance to the same .In this perspective it is recommended that our conformity assessment activities are to be made competent and internationally traceable for our export promotion .for this purpose very first requirements is that not only the products and service quality but also the conformity assessment activities should be made the priority and focus areas of our national economic activities

15. All quality standards and marks like NS, ISO and other quality Management and quality certification systems should be implemented without delay and failure in full-fledged manner through the public private partnership honestly for the sustainable development and prosperity of the peaceful and developed world.

16. Like Nepalese ladies consumers all consumers should be conscious on quality on the product and service for what they are paying. Quality certification is an important factor to identify the quality and all

stakeholders are recommended to go for quality certification to their product and service.

17. Normally Nepalese people confirm the quality by its use, brand and quality marks .hence marketers are recommended to produce and provide good quality products and service, go for marketing with a good brand name with quality certification.
18. Branding has been more established and better way of marking and consumer do prefer branded products and service. So it is recommended to have a range of products and services having brand name along with quality certification for sustainable buiness development and growth. .
19. People do believe on ISO certification and some of the people thank as a marketing strategy hence it is recommended to work more for the quality certification for a sustainable business development and growth
20. Credibility of national quality mark, national quality control agencies and certification is relatively poor as compared to ISO and others. And hence national certification bodies should be enhanced and strengthen and Nepalese quality mark should be popularized and to be made more believable.
21. Most people do believe on ISO certification and some people take ISO Certification as marketing strategy and have no relation with quality. In this scenario all ISO certified companies are recommended primarily adopted ISO certification as a tool for sustained quality control method and secondarily as a marketing tool.

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Appendix I

Few words of quality

- Quality-A key to national prosperity
- Quality means customer satisfaction
- Quality- striving for excellence
- Quality-safeguard for the future
- Quality- true test of management performance
- Safeguard for the future
- Quality included conformance to standards
- Quality and productivity are two sides of a coin
- Quality at first instance
- Quality of survival and growth
- Quality is everybody's business
- Quality pays for itself
- Quality must be built into a product

Appendix II

Nepal Standard

NS

Quality certification mark

Feature

- Is an assurance of quality
- Is a good selling
- Protects against substandard goods
- Assist in export
- Saves costs in sampling ,inspection and testing

Appendix III

Questionnaire of the Survey.

The questionnaire has been prepared for a study of awareness to the Nepali consumer on quality standards especially ISO marks for the partial fulfilment of Master Degree in business studies. Your genuine and correct feedback helps to have a conclusion in the growing market.

(Note: The term 'Quality mark' specifies the product or service having Nepal standard 'NS' or 'ISO 9001:2000' etc provided by Nepal bureau of standards and Metrology or ISO.)

It is need not to mention your name and have a tick mark on correct or relatively correct alternatives.

Please mention your gender:

male		Female	

1. As per your opinion Quality means:

a) Fitness for use

b) Feeling good to its user

c) Having quality standard like ISO 9001:2000 company or 'NS' Mark.

d) Confirmation to the specification

2. Is there any relation between quality mark 'NS' or 'ISO 9001:2000 certified company' and quality of the product or service?

a) Yes, there is a direct relation

b) No, there is no relation at all

c) The question is Irrelevant

d) Quality marks increase the confidence level of quality.

3. Product or service having quality standards means:

a) Product is having best quality

b) product is having fairer quality

c) product is having poor quality

d) No relation with quality

4. in your opinion, what makes your confidence level to purchase a product or service?

a) Your inspection to the product/ service

b) A quality mark of the product or company

c) A “Brand name” of the product

d) Explanation of the seller and the product service information Provided in the packaging.

5. Will there be any significant difference in quality of the products or service of a company having ISO 9001:2000 certification?

a) There is no difference in quality

b) There is a significant difference in the quality having the ISO standards.

c) ISO standards does not assure any quality

d) ISO standardization is only a marketing Funda.

6. While purchasing any product or service, do you take care whether it is having quality standards or not?

a) I always care about the quality standard product and service.

b) I preferred the product if the product is quality standardized.

c) It does not maker if the product is quality standardized or not.

d) I don’t care quality standards at all.

7. While purchasing any product or service of “Quality mark” or “Brand Name” of the item to be purchased, what do you prefer?

a) I prefer the branded product.

b) I prefer the “Quality mark” product.

c) I prefer the branded product having a quality mark.

d) I don’t care at all.

8. In your opinion, between "NS” and “ISO 9001:2000” which is more believable.

a) “NS” is more believable.

b) “ISO 9001:2000” is more believable.

c) Both are equally believable.

d) Both have no meaning at all.

9. In your opinion, any product / service from ISO 9001:2000 certified company indicate

a) A product / service is having best quality.
b) A product / service is having normal quality
c) It does not have any relation with quality.
d) It is an additional marketing strategy only.

10. How do you confirm the product or service is having good quality?

a) Nepal made product with “NS” mark is of good quality.
b) A product of having brand of multinational company is of good quality.
c) A product having quality mark “NS”, “ISO 9001: 2000” or certification is good quality.
d) Observation and use of the product of service only confirms the quality.