CHAPTER-I
INTRODUCTION

1.1 Introduction:

One of the most potent ideas in the social sciences is the notion that individuals are embedded in webs of social relations and interactions. Human beings are social animals and are influenced by other fellow humans in all facets of life. The process of homosapiens transforming into social beings is also a tale that reflects the socialization process. Having each other as points of references and driven by the inherent need to conform to the larger society, human beings have evolved into social entities. In this process of evolution, not only physiological transformation has happened, but it is also coupled with various prominent changes in the social traits.

Deviating from the wild ways of the animals human beings carved a distinct path for themselves. Human beings have come upon various social processes that were conducive to live in groups and lead a life regulated by institutions that stabilize the social interactions between its members. This process also paved the way for formation of various social institutions like family, marriage, religion, polity, and economy; an entirely new way of life or “culture” that made man distinct from other animals.

Human beings now had to formulate a system of production to survive. Productive activity, or work, thus came into being. Work occupies substantial proportion of human lives. It provides status, economic reward or a means to realize self potential. In traditional cultures food gathering and food production was the type of work occupied by the majority of the population. In larger traditional societies, carpentry, stonemasonry, and shipbuilding etc
became prominent. In modern societies where industrial development exists, people work in a much wider variety of occupations.

These activities pursued for procuring the means to satiate the worldly needs of human beings. These activities are what we call ‘work’. Work, in sociology, is defined as the carrying out of tasks, which involves the expenditure of mental and physical effort, and the objective of which is the production of goods and services that cater to human needs. An occupation, or job, is work that is done in exchange for a regular wage or salary.

Over the years the ways of work have evolved from being predominantly physical work to those focusing primarily on the intellect. Along with the evolution of the concept of work, the concept of exchange and the need for market also emerged. Economic transactions which began as barter system eventually became small local markets called ‘santhe’ or ‘shandi’ which were organized in regular intervals – either once a week or once in two weeks. But, with the growth of population and to cater to the diverse and recurring needs of the people, markets eventually evolved and acquired the present form of formal market transactions involving money as a medium of exchange.

The evolution of markets also brought with it changes in terms of the interactions, the commodity traded and the medium of exchange. This change can be traced in distinct stages. The first stage, which can be described as the nascent stage comprised the old market place where people (both buyers and sellers) gathered and exchanged products they needed.

The second stage marks the institutionalization of the market setting. Markets became more formal. The roles of buyer and seller were demarcated. The seller set up a shop and displayed the products while the buyer visited these shops to procure the required good in exchange for money. Unlike the
first stage, these markets were not transitory, but were located in a particular place permanently.

The next stage can be termed the ‘machine guided market stage’. What distinguishes this stage from the earlier two stages is that, the face to face interaction which was prevalent in the earlier forms of market is missing here. The products are bought and sold without any face to face interaction between the buyer and the seller. This form of transaction uses a machine like a computer or mobile to display the wares available and in the same way, the buyer pays using a number (like credit or debit card numbers). The whole transaction takes place without the need for physical presence of the buyer, the seller or the product during the trade.

Another emerging form is that of virtual markets where there is no tangible product at all. One example for this kind of markets is the financial market speculation which includes stock market trading. In the initial stages of market transactions there were just the producers and the consumers. The product reached the consumer directly from the producer. Whereas now, there are many phases and people involved before the product can reach from the producer to the final consumer. Various players now have a role in this transaction. New roles like middle men, to market regulator have now come up.

Stock market trading is one of these relatively new forms of work. In its execution, it comprises activities that involve more of intellect than manual labour. It is a relatively new mode of vocational pursuit taken up by humans. It is new because as a profession, it is in existence only from the first part of the 17th century. The economic activity of trading in stocks, which began in 1611 in Amsterdam, has now spread to include all nations of the world in its ambit.
Financial markets are different from other markets. As stated earlier, the objects which are traded in these markets are not ordinary commodities. They are contracts such as stocks, stock options, bonds, or certificates of deposit, which are all intrinsically valueless promises to deliver physical commodities at some future date, possibly contingent on some event which may or may not occur. The value of such promises is affected by the uncertainties associated with their fulfillment. The uniqueness of this kind of market lies in the trust that the buyers and sellers have. Moreover, these markets are also distinct in the sense that there is a mediator who facilitates this transaction, without whom, the exchange cannot take place at all. Transactions have moved on from being person based trust to concept based trust. This shows the extent to which the markets have evolved.

Stock market, apart from being distinct in terms of the market structure, is also different with regard to its pursuit as a profession. First of all, it must be noted that stock trading can be termed a modern profession. It is modern because the economic activities involved in it are different from what is understood in the conventional sense - in terms of the goods, services, and the medium of exchange used. It can be called a profession because, it is “.....a special type of occupation...(possessing) corporate solidarity...prolonged specialized training in a body of abstract knowledge, and a collectivity or service orientation...a vocational sub-culture which comprises implicit codes of behaviour, generates an ‘esprit de corps’ among members of the same profession, and ensures them certain occupational advantages...(also) bureaucratic structures and monopolistic privileges to perform certain types of work...professional literature, legislation, etc”....(Jackson, 2010)
A market is a social structure for exchange of rights, which enables people, firms and products to be evaluated and priced. Stock market is different from other markets where goods and services are transacted (Aspers, 2005). These conventional markets are called as “Role Markets”. Here, the roles of the participating actors are fixed as either a buyer or seller of a commodity. Stock market, on the other hand are “Exchange Markets”. In exchange markets actors do not hold roles as buyers or sellers, which means that economic actors, individuals and firms, may switch roles so that one first is a buyer, and later a seller, of the same, or another, item. Stock Markets in this sense, is different from the conventional markets (Knorr, Karin, & Bruegger, 2002).

Trading here is also different and distinct from other markets; the medium of exchange (stocks to stocks or stock for money), the good transacted (virtual stocks) and the services rendered (mediation) are all distinct. Even the face to face interaction that happens in conventional markets during a trading transaction, is absent in the stock market context. The buyer, seller and the intermediaries rarely come into contact with each other. The operations are based on the unknown good, and a premise of potential demand and supply which is also speculative in nature. There is a paradigm shift in the complete understanding of the social institution of market.
This indiscernible social sphere of transactions and relationships has remained almost exclusive to certain sections. This is because such transactions are not easily feasible to the understanding of the common man and hence, his participation in it is thereby limited. This kind of economic transaction can be seen as an outcome of the gradual increase in abstraction in the market system spanning from the times of barter system, moving on to the usage of money as a medium of exchange and now to the new dimension of exchange where the value of the goods transacted fluctuates unpredictably.

It is in this context that there is a need to study the stock market sociologically in order to identify the structure, the functions and the actors in this market. It is also required to determine the prerequisites required on the part of the social actors for participation in this market. A sociological analysis is required in order to understand these prerequisites (social, financial or...
hereditary) for participation. Since there is a transition from the hitherto pursued easily observable transactions to a almost covert and invisible transaction, the need of the hour is to understand its nuances from a sociological perspective.

This study is an endeavour in understanding the social dynamics of the stock markets which has hitherto remained a domain of the economists and financial experts. The study explores the dynamics of the people and patterns involved in the stock trading pursuit using the Social network theory which is an effective tool in the attempt to provide explanations for analyzing interactions between people in the market, and thereby determining the important price dynamics created through social interactions.

The study focuses on the two important segments of market participants: the individual investors and the stock brokers. Set in the backdrop of the Bangalore stock exchange, the study explores the dynamics of trading by considering various facets like gender, networks, risk bearing aptitude, social referencing, time of trade etc.

1.2 Background of the study:

An individual in a social setting cannot remain as an isolated entity devoid of influences from others. An action seemingly independent of the influences of anybody else other than the actor herself also is highly influenced by various other social actors with whom the individual comes into contact. This is because as a member of society, we are either consciously or unconsciously being influenced by many other social actors whom we come across in our daily lives. An economic transaction such as trading in the market is also not any different from this. While making a transaction various influences are being weighed in the mind. These influences are from such social influences as the family, the peer group, vocational groups, the media
and various others with whom we are in contact in our everyday lives. These are the elements that drive the decisions and create the social dynamics of the trading arena.

1.3 Rationale of the study:

Market entry is an interesting decision to analyze. The phenomenal rise of stock market from the later part of the 20th century has caught the attention of everyone. Despite spectacular performance of the market in terms of the returns it offers, people have not taken to trading in large numbers. Neither have those who are into it, left it in large numbers during bad phases. This might be because entry into markets is influenced not just by the profit making motto. If profit making was the only criterion that influenced the investment decision, then the movement of the market which has never been predictable would itself serve as a big deterrent and even the currently investing members would cease to do so.

It is essential to delineate the stock market as being open or closed system. The entry into stock market trading at the outset might appear as being a system open to all. But, a closer scrutiny of the market prerequisite shows that it is not so. To begin with, stock market trading requires that the participant has liquid finance to spare for the purpose of trading. It is not just an investment like any other where the returns is assured. Because of the speculative nature of the investments, the investor must have enough financial backing to be able to tide through in times of distress. Hence possession of money becomes the first prerequisite.

Secondly, in order to invest in the markets a minimum awareness about the operations of the market is required. Along with this, it becomes essential to track the portfolio (a list of stock owned by an investor at any
given point of time) on a regular basis. This calls for the investor being educated. Even though, the portfolio can be managed with professional help, the choice of the professional itself requires that the investor have some knowledge about the market. Therefore, education can be seen as a second prerequisite.

Finally, the factors of urban location and computer knowledge can be seen as playing a major role. Urban location is considered because the proximity to a stock exchange facilitates the availability of trading services along with required professional help whenever necessary. Computer knowledge is essential because it is mandatory to carry on stock trading in demat form (dematerialized form or in the electronic form instead of the earlier method of holding stocks in physical form).

The study of investors becomes important to understand who finally gets to access the market and benefit from it. Markets are not made by disembodied individuals or machines but by social beings embedded in network. Moreover, a study of investor behavior in such a volatile stock market backdrop is needed because as a group of people the numbers of investors have not decreased in spite of market volatility. In this scenario it is important to understand the motivations and decision-making styles of these individuals as members of a group. It cannot be expected for a holistic theory aimed at explaining how the financial markets function, to neglect how the investors, as one of the fundamental actors of the markets, make their decisions as to participate in trading activity.

Individual investors, who hold a large share of the market, are a significant group to be studies because they are able to sway the market and have emerged as powerful players. The study of investor behavior has
attracted researchers who have attempted to explain investor behavior in various ways. This study gains prominence in the present context where exogenous determinants like demand and supply seem insufficient to generate the currently observed level of market activity. Even though there seems to be an absence of any external stimuli which would lead to swings in price or volume of trade, the present activity shows great fluctuations. Moreover, a scrutiny of available theories gives compelling reasons to expect volume and volatility to be limited. Further, it is evident that these theories fail to answer questions when applied to the present situation in financial markets. This necessitates a study of market activity from Sociological perspective.

Stock markets have, for long been the research domain of financial economists who gloss over social relations on the assumption that social connections are marginal sources of friction in financial markets (Rooij, Lusardi, & Alessie, 2007). The choice of stock exchange is usually deemed to have material financial consequences. A study considering why an investor chooses a certain exchange is important. It is essential to consider factors such as physical proximity to the exchange, the language used for communication and such other factors, the influence of which is not evident at once. To illustrate this point, as noted in this research work, an investor residing in Bangalore, can choose to invest in the Bombay stock exchange (BSE), the National stock exchange of India (NSE) or the Bangalore stock exchange (BgSE). The choice of BSE of NSE would call for the knowledge of Hindi or English on the part of the investor. While BgSE would be more appropriate for an investor from the state of Karnataka as communication in Kannada – the state language is possible.
Visualizing the market from sociological perspective enables an understanding of the structure of the stock markets. It enables an enquiry into the qualifications an actor must possess to do the role of an investor. It also enables to probe into the claim of profit maximization motto and see how far the players in the market are driven by the motto of maximizing profit or utility in the market transactions and further understand the prominence of social relationships which shapes the activities of the players. There is a need to approach stock markets from various sociological perspectives, where markets may be viewed as social rather than exclusively economic structures. Not only are these markets characterized more realistically as social structures, but conceptualizing them as social phenomena implies that the full range of sociological research methods, qualitative and quantitative, may be used to study them, thus gaining valuable insights.

**Over view of literature:**

Overview of literature is important at this juncture as it gives a direction to the present work by describing how the proposed research is related to prior research in the field. Further, it also paves the way for understanding the existing body of knowledge; look for gaps and also to avoid duplication of work. Most importantly, it aids in developing and justifying the proposed methodology of the research. The following section is a highlight of some of the important literature pertaining to the study area. A detailed literature survey is presented in the chapter 3 of this work.

**1.1.1 Economic sociology and studies on financial market:**

The Sociology of Financial Markets approaches financial markets from a sociological perspective. It seeks to provide an adequate sociological
conceptualization of financial markets, and examines who the actors within them are, how they operate, within which networks, and how these networks are structured. Patterns of trading, trading room coordination and global interaction are studied to help better understand how markets work and the types of reasoning behind the existence of such patterns (Knorr-Cetina & Preda, 2005).

With reference to the study on market by Sociologists, it can be observed that these studies did not happen all of a sudden. It was not even an off shoot of an event or episode that triggered such studies. It took sufficient time for the Sociologists to make a shift in their focus from the conventional anthropological and ethnographic studies on aspect like community, culture to other institutionalized activities like market

The history of sociological interest in securities markets is akin to the general history of sociological interest in markets. Studies on the securities and futures markets (Rose, 1951), an institutional analysis of the American stock market was conducted Burk (1982) and futures markets (Abolafia, Baker, 1966, 1988), are some instances.

Work in social studies of finance emphasizes not only the social and cultural dimension of financial activities; but focus also on technical and economic dimensions such as pricing and trading. These studies seek to investigate the symbolic aspects of financial markets. Financial markets affect not only economic and social structures but also societal cultural images and frameworks of meaning. Barbara Czarniawska demonstrates how representations of gender relationships are a case in point. Arguing that financial markets are not simply neutral with respect to questions of gender
but enhance certain images and interpretations of men and women (Czarniawska, 2004).

The field of sociology focuses on networks of outcomes of social interactions. Economic sociology considers behavioral interactions of individuals and groups through social capital and social "markets". Sociologists, such as Mark Granovetter have developed core principles about the interactions of social structure, information, ability to punish or reward, and trust that frequently recur in their analyses of political, economic and other institutions. Granovetter examines how social structures and social networks can affect economic outcomes like hiring, price, productivity and innovation and describes sociologists’ contributions to analyzing the impact of social structure and networks on the economy (Granovetter, 2005).

From the 1980's onwards, a number of economic sociologists developed empirical investigation on the social structure and cultural characteristics of financial markets. Research works in this area includes the contributions from Douglass (1977) Baker (1981), White (1981), Abolafia (1984), Uzzi (1996), Grullon and Ikenberry (2000), Barber and Odean (1999), Ryan (2004) and Zuckerman (2004). However, classical roots to works on the markets in general and financial markets in particular can also be noticed. We can find attempts by Sociologist to understand the general way that market operates. Some of these studies are Weber's approach, works addressing markets as "networks" and "markets as parts of fields." Parsons and Smelser also provide valuable insights.

Financial markets have been a subject of sociological inquiry since, at least, Max Weber's Die Borse. (Weber, 1925/1978) Weber was especially interested in the markets and he tried to develop what he termed Sociology of
Weber’s writing demonstrates his belief that stock exchanges fill a crucial role in the modern capitalist machinery and they can be organized in very different ways, depending on the state of the state, experience of the businessmen in operation on stock exchanges and so on. He emphasized the legal and ethical dimension of the dealings in the modern stock exchange, but was also fascinated by its political role - its role as a "means to power" in the economic struggle among nations. Weber argued that "the price on the market is a result of economic struggle. The struggle over prices, he explained, has two aspects that must be separated. On the one hand, there is a "struggle of competition" between those who are potentially interest in an exchange; and on the other hand there is an 'interest struggle" between the two parties who end up in an exchange.

Durkheim speaking about different kinds of economic institutions considers stock exchanges to be institutions relating to exchange. Durkheim opines that it is impossible to separate the economic element from social life and ignore the role of society. As opposed to economic man, he writes, "real man--the man whom we all know and whom we all are--is complex in a different way: he is of a time, of a country; he has a family, a city, a fatherland, a religious and political faith; and all these factors and many others merge and combine in a thousand ways, converge in and interweave their influence without it being possible to say at first glance where one begins and the other ends" (Durkheim, 1912/1961a).

Roy & Porter, (1981) attack the efficient Market Hypothesis by arguing that there is more volatility in the market even though all market participants have access to the same information, which is further incorporated in the price. Westphal and others (1997) show that decision-making criteria increasingly deviates from efficiency considerations as policies
become institutionalized through cumulative adoption or the reduction in uncertainty about market value that results in increasingly positive market reactions.

In recent years, it has been identified that the ways in which people systematically depart from optimal judgment and decision-making are more of aspects of human nature. Another study conducted suggests that loss aversion - the tendency to be more sensitive to losses than to gains- and narrow farming-the tendency to focus on narrowly defined gains and losses- play an important role in determining how people evaluate risky gambles.

Hong et al. (2001) conducted a study wherein they proposed that stock-market participation is influenced by social interaction. According to them any given "social" investor finds the market more attractive when more of his peers participate. They tested this theory and found that social households-- those who interact with their neighbors, or attend the church-- are substantially more likely to invest in the market than nonsocial households, controlling for wealth, race, education and risk tolerance (Hong & Stein, 2001).

Zuckerman develops and tests a theory of social structural factor responsible for variation in level of market activity. He emphasizes that the interpretation of material information is problematic, and that market participants do not converge on a single, best interpretation, as assumed by the efficient market hypothesis. The social structure, he continues is the system of classificatory distinctions made by market participants in the course of valuation of a particular stock. He further argues that to ascertain how a piece of information should be interpreted, market participants first note what type of asset is under consideration and then interpret the available news as
it would be interpreted when applied to other members of that asset class. Prices, according to him merely reflect the information that is revealed and interpreted outside the market. Market activity itself plays a limited role in determining market outcome. His works illustrates how structural sociology helps understand the structural bound on market efficiency (Zuckerman, 2004).

1.2 Social Network Studies:

The network perspective has been used in a wide range of social and behavioral science disciplines. Many topics that have traditionally interested social scientists can be thought of in relational or social network analytic terms.

Barabasi, in his work “Linked”, (2002) traces the emergence and evolution of networks. He provides a web-based view of nature, society, and technology, providing a unified framework to better understand issues ranging from the vulnerability of the Internet to the spread of diseases. He proclaims that networks are present everywhere and all we need is an eye for them. Linked is a work that spans across disciplines by stepping out of the box of reductionism.

1.3 Conceptual framework:

A coherent conceptual framework helps in better understanding of the subject, clarify issues and also to design solutions. The importance of this can never be undermined. This study is based on the theoretical framework of the sociological studies of Social network.
1.3.1 The concept of Social Networks:

The concept of social network is central to this research work. As such, a detailed examination of the concept is required. A social network can be defined as a social structure which is made up of a set of actors (such as individuals or organizations) and a complex set of the dyadic ties between these actors. The social network perspective provides a clear way of analyzing the structure of whole social entities (Wasserman & Faust, 1994).

Social networks and their analysis is an interdisciplinary academic field. Its emergence can be traced from various disciplines like Social Psychology, Sociology, Statistics, and Graph Theory. With respect to the sociological strands of the network studies, can be traced from George Simmel's early structural theories in sociology emphasizing the dynamics of triads and "web of group affiliations.

Jacob Moreno is credited with developing the first sociograms (A sociogram is a graphic representation of social links that a person has) in the 1930s to study interpersonal relationships. These approaches were mathematically formalized in the 1950s and theories and methods of social networks became pervasive in the social and behavioral sciences by the 1980s (Wasserman & Faust, 1994). Social network analysis is now one of the major paradigms in contemporary sociology, and is also employed in a number of other social and formal sciences. Together with other complex networks, it forms part of the nascent field of network science. (Borgatti & Molina, 2003).
1.4 **Stock Markets and social networks:**

The present study locates the stock markets within the context of the society and views it as a social network. From this social network perspective, a Stock market may be defined as a specific set of trading relationships, represented by linkages formed by transactions in a particular class (or small set of classes) of options, among a defined set of brokers and market makers.

A link is a recorded transaction between two actors. When multiple transactions occur between the same two actors, the trades are interpreted as one link, representative of a single trading relationship. The strength of a relationship is represented by the total volume exchanged in the relationship (Baker, 1984).

**Key concepts pertaining to social networks:**

As stated above, social networks are central to this research work. In order to comprehend the nuances of the social network in all its profundity, it becomes imperative to elucidate certain key concepts associated with the broader concept of social networks with reference to their usage in this work.

a) **Actor:** Social network analysis is concerned with understanding the linkages among social entities and the implications of these linkages. The social entities are referred to as *actor*. Actors are discrete individual, corporate, or collective social units.

b) **Relational Tie:** Actors are linked to one another by social *ties*. The defining feature of a tie is that it establishes a linkage between a pair of actors. Ties are employed in network analysis for various purposes like evaluation of one person by another, transfers of material resources, association or affiliation, behavioral interaction, movement
between places or statuses, physical connection, formal relations and biological relationship.

c) **Dyad:** A linkage or relationship which establishes a tie between two actors is a dyad. The tie is inherently a property of the pair and therefore is not thought of as pertaining simply to an individual actor. Network analysis is concerned with understanding ties among pairs and for such studies the *dyad* is the basic unit of analysis. A dyad consists of a pair of actors and the (possible) tie(s) between them. Dyadic analyses focus on the properties or pair wise relationships, such as reciprocity and multiplicity of ties. The dyad is the basic unit for the statistical analysis of social networks.

d) **Triad:** Triad represents the relationships among larger subsets of actors. Social network methods and models focus on the triad which is a subset or three actors and the (possible) tie(s) among them. The analytical shift from pairs of individuals to triads (which consist of three potential pairings) was a crucial one for the theorist Simmel, who wrote in 1908 that...the fact that two elements (in a triad) are each connected not only by a straight line-the shortest - but also by a broken line, as it were, is an enrichment from a formal-sociological standpoint (page 135).

e) **Subgroup:** A subgroup can be defined as any subset of actors and all ties among them. It includes dyads, triads and associated ties.

f) **Group:** The notion of group has been given a wide range or definitions by social scientists. For the purpose of this study, a group is the collection of all actors on which ties are to be measured. A group consists of a finite set of actors who for conceptual, theoretical, or empirical reasons are treated as a finite set of individuals on which network measurements are made.
g) **Relation:** The collection of ties of a specific kind among members of a group is called a relation. For any group of actors, we might measure several different relations. A relation refers to the collection of ties of a given kind measured on pairs or actors from a specified actor set. The ties themselves only exist between specific pairs of actors.

h) **Social Network:** A social network consists of a finite set or sets of actors and the relation or relations defined on them. The presence of relational information is a critical and defining feature of a social network.

i) **Structural and composition Variables:** There are two types or variables that can be included in a network data set: structural and composition. Structural variables are measured on pairs of actors (subsets of actors or size 2) and are the cornerstone of social network data sets. Structural variables measure ties of a specific kind between pairs of actors.

Composition variables are measurements of actor attributes. Composition variables, or actor attribute variables, are defined at the level of individual actors; gender, race, geographical location, income, etc are some of compositional variables used in this study.

**1.4.1 The concept of vocational and whole networks:**

A vocational network, as conceptualized in this research work, is used to refer to the social network that a person builds consciously for the purpose of gaining better leverage in the pursuit of stock market trading. The ‘vocation’ as used in this context is with reference to the trading activity which includes trading and mediation by brokers. The vocational network encompasses all those people with whom the ego has contacts for the purpose of trading.
Whole networks, on the other hand constitutes the complete and comprehensive network that an individual is embedded into as a member of the society. Whole network includes not only those people with whom the ego has direct face-to-face contact (family, peer group) but only those who are acquainted very remotely (fellow investors). Though the whole network might not directly influence the trading behavior of the ego, they nevertheless have indirect impact on the same.

1.4.2 The concept of gender and network affiliation dynamics:

If the sex of a person is biologically determined, the gender of a person is culturally and socially constructed through the process of socialization. During this process of socialization, individuals learn to conform to social norms. The process is so comprehensive that the social rules become internal to the individual, in the sense that they are self-imposed rather than imposed by means of external regulation and are thus part of the individual’s own personality. It may be conceived as an essential element of social interaction. The process of socialization also gives cues to an individual about whom to interact with. These internalized cues also affect the trading processes.

The dynamics of network affiliation and gender is studied in this work in order to identify the possible impact it might have on trading dynamics. The term ‘affiliation’ is used here to refer to membership or participation, such as when we have data on which actors have participated in the market events. The underlying assumption is that membership in trading groups or market events are an indicator of an underlying social tie.
1.4.3 The concept of multiplex networks:

The social network of an individual spans across a multitude of relationships. The structure of social networks includes different types of ties like friendship, kinship, economic exchange, etc to name a few. Social relations among these actors, however, are usually more complex and cannot be defined by patterns in a single kind of relationship. This is because the actors in a network are connected in multiple ways simultaneously.

The concept of multiplex networks is used in this research work to describe such complex set of relationships. There might exist a trading relationship with a friend in a particular context, while advice from the same person might be sought in a different context. These kind of networks with complex and multiple ties are termed as multiplex networks. Multiplex data describe multiple relations among the same set of actors. The measures of the relations can be directed or not; and the relations can be recorded as binary, multi-valued nominal, or valued.

Conclusion:

In this chapter background of the study, rationale of the study, conceptual and over view of literature gives a glimpse of the study directly or indirectly to this research with various dimensions. In coming chapter detailed review of literature has been covered, however the next chapter deals with the methods, techniques, primary and secondary data used for this study.