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***PATTERN OF RURAL COMMUNICATION
A SOCIAL NET WORK ANALYSIS***

ROLAND A. DEY

***DIVISION OF AGRICULTURAL EXTENSION
INDIAN AGRICULTURAL RESEARCH INSTITUTE***

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**PATTERN OF RURAL COMMUNICATION
A SOCIAL NETWORK ANALYSIS**

A THESIS

BY

ROLAND ASHOK DEY

submitted to the Post Graduate School,
Indian Agricultural Research Institute, New Delhi,
in partial fulfilment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

IN

AGRICULTURAL EXTENSION

1980

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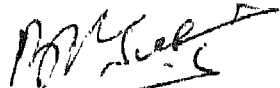
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C E R T I F I C A T E

This is to certify that the thesis entitled, "Pattern of Rural Communication - A Social Network Analysis", submitted to the Post Graduate School, Indian Agricultural Research Institute, New Delhi, in partial fulfilment of the requirements for the award of the degree of DOCTOR OF PHILOSOPHY IN AGRICULTURAL EXTENSION is a bona fide research work carried out by Shri. Roland Ashok Dey under my guidance and supervision. No part of the thesis had been submitted for any other degree or diploma. Such help or sources of information, as has been availed of, during the course of investigation, have been duly acknowledged by him.

Dated: May 1990


(B.P. Sinha)
Chairman
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C O N T E N T S

<u>Chapter</u>		<u>Page</u>
I	Introduction	1
II	Theoretical Orientation	9
III	Research Methodology	56
IV	Findings and Discussion	85
V	Summary and Conclusions	202
	Bibliography	(i-vi)
	Appendices	(vii-xvii)

List of Tables

<u>S.N.</u>	<u>Table</u>	<u>Title</u>	<u>Page</u>
1.	1.1(a-b)	Frequency, percentage and Mean distribution of Age and Occupation of the Total, Higher, Backward and Scheduled caste respondents.	86
2.	1.1(c-d)	Frequency, percentage and Mean distribution of Land holding and Family type of the Total, Higher, Backward and Scheduled caste respondents.	89
3.	1.1(e-f)	Frequency, percentage and Mean distribution of Education and Social participation of the Total, Higher, Backward and Scheduled caste respondents.	91
4.	1.1(g)	Frequency, percentage and Mean distribution of Socio-Economic Status of the Total, Higher, Backward Scheduled caste respondents.	95
5.	2.1(h-i)	Frequency, percentage and Mean distribution of Cosmopolitaness and Mass Media Use of the Total Higher, Backward and Scheduled caste respondents.	97
6.	1.3(j-k)	Frequency, percentage and Mean distribution of Extension Agent Contact and Participation in Extension Activities of the Total, Higher, Backward and Scheduled caste respondents.	100
7.	1.3(l-m)	Frequency, percentage and Mean distribution of Proportion of Network members as primary source of information for the Total, Higher, Backward and Scheduled caste respondents.	104
8.	1.2(n)	Frequency, percentage and Mean distribution of Information Acquisition Scores of the Total, Higher, Backward and Scheduled caste respondents.	106
9.	2.1(a-b)	Frequency, percentage and Mean distribution of Network size and Frequency of Contact of the Total, Higher, Backward and Scheduled caste respondents.	109
10.	2.1(c-d)	Frequency, percentage and Mean distribution of level of Involvement and Relational Diversity of the Total, Higher, Backward and Scheduled caste respondents.	114

List of tables contd.

<u>S.N.</u>	<u>Table</u>	<u>Title</u>	<u>Page</u>
11.	2.1(e-f)	Frequency, percentage and Mean distribution of Occupational and Educational Diversity of the Total, Higher, Backward and Scheduled caste respondents.	118
12.	2.1(g-h)	Frequency, percentage and Mean distribution of Caste Diversity and Density of Network of the Total, Higher, Backward and Scheduled caste respondents.	121
13.	2.1(i)	Frequency, percentage and Mean distribution of Degree of relationship of the Total, Higher, Backward, Scheduled caste respondents.	125
14.	3.1(a)	Zero-order correlation of Network variables with the Level of Involvement of the Total, Higher, Backward, and Scheduled caste respondents.	128
15.	3.1(b)	Zero-order correlation of the significant individual variables with the Level of Involvement of the Total, Higher, Backward and Scheduled caste respondents.	131
16.	4 A(1)	Path coefficients of the Network correlates of the Total respondents Level of Involvement.	136
17.	4 A(2)	Path coefficients of the Network correlates of the Higher caste respondents Level of Involvement.	139
18.	4 A(3)	Path coefficients of the Network correlates of the Backward caste respondents Level of Involvement	141
19.	4 A(4)	Path coefficients of the Network correlates of the Scheduled caste respondents Level of Involvement.	143
20.	4 A(5)	Stepwise regression of network variables of the scheduled caste respondents on their Level of Involvement.	145
21.	4 B(1)	Path coefficients of the correlates of the Total respondents Level of Involvement.	148
22.	4 B(2)	Stepwise regression of the correlates of Total respondents on their Level of Involvement.	151

List of tables contd.

<u>S.N.</u>	<u>Table</u>	<u>Title</u>	<u>Page</u>
23.	4 B(3)	Path coefficients of the significant correlates of High caste respondents Level of Involvement.	153
24.	4 B(4)	Stepwise regression of the significant correlates of High caste respondents on their Level of Involvement.	155
25.	4 B(5)	Path coefficients of the significant correlates of Level of Involvement for the Backward caste respondents.	153-159
26.	4 B(6)	Stepwise regression of the correlates of the Backward caste respondents on their Level of Involvement.	162
27.	4 B(7)	Path coefficients of the correlates of Scheduled caste respondents Level of Involvement.	164
28.	4 B(8)	Stepwise regression of the correlates of Scheduled caste respondents on their Level of Involvement.	166
29.	5	Zero-order correlation of the significant individual variables with the Information Acquisition of the Total, Higher, Backward and Scheduled caste respondents.	170-171
30.	6 (a)	Path coefficients of selected individual and network correlates of the Total respondents Information Acquisition.	173-174
31.	6 (b)	Stepwise regression of the correlates of Total respondents on their Information Acquisition.	181
32.	7 (a)	Path coefficients of selected individual and network correlates on the Information Acquisition of the Higher caste respondents.	183
33.	7 (b)	Stepwise regression of the correlates of High caste respondents on their Information Acquisition.	187
34.	8 (a)	Path coefficients of the correlates of Backward caste respondents Information Acquisition.	189
35.	8 (b)	Stepwise regression of selected individual variables of the Backward caste respondents on their Information Acquisition.	194-195

List of tables contd.

<u>S.N.</u>	<u>Table</u>	<u>Title</u>	<u>Page</u>
36.	9 (a)	Path coefficients of the correlates of Scheduled caste respondents Information Acquisition.	196
37.	9 (b)	Stepwise regression of the correlates of Scheduled caste respondents on their Information Acquisition.	200

CHAPTER - I

INTRODUCTION

Rural upliftment was one of the major crusades which Gandhiji pursued diligently with the mission of improving the conditions of millions who lived in the villages. His concept, was to serve as the foundation on which the national plans for development of independent India would be established.

Over the last four decades India's effort of planned change in its rural sector has been directed through scores of development programmes employing different approaches and assorted schemes designed to cater to various category of target groups. An assessment of these endeavours however, shows that with the exception of a few successes, a great many of the programmes have not accomplished their objectives to the desired degree of satisfaction. In fact the benefits of development have not 'trickled down' to the lower strata of society at large. The rural poor have found very little of value in these programmes.

The true measure of development is how it affects people; their attitudes and their quality of life. In the rural sector, one finds that there still exists a high percentage of the population which is below the poverty line, an increasing unemployment, and a growing perpetuation of an attitude of dependency is being engendered on the part of the poor. Dependency is

T-5182

the psychological antithesis of development. There are a host of factors which are responsible for the ultimate outcome of the various programmes. But the present study was not intended to investigate into these factors, instead was concerned with a somewhat inconspicuous problem which has been persistent; namely the innate lack of information about the various development programmes by the village people in general.

Information is a key resource in rural development and the communication of information a major function of extension. Almost every activity considered vital to rural development is information related or information dependent in some way. Quite often the practice which prevails in the working pattern of the extension personnel is to disseminate information relating to development programmes through the village or opinion leaders with the assumption that it would ultimately be delivered to the other members in the village. This basic tenant of the 'two step flow of information' theory has been found to be ineffective at least as far as development related information is concerned. The reason for this being, information that has economic impact often becomes proprietary or is controlled by those who have power or else it can lose its economic value when it becomes widely available.

Usually the village information environment does not have many channels functioning to bring development information to rural people. There are a number of social networks such as

neighbourhoods, traditional markets, religious congregations all of which form part of the traditional structure of rural communication and function for the most part; as they always have for traditional purposes. However, there are some kind of information that directly benefits people; e.g. availability of credit, the percentage of subsidy that different category of beneficiaries are entitled etc. are information of a developmental nature. But it is observed that information of such kind enters a village usually through members who are influential, resourceful and probably enjoy higher status.

Consequently these 'elite' members gain control of such information and probably as there may be a higher degree of homophily amongst the network members of such individuals who interact with each other; depending upon the intensity of relationship that links them with one another, the information is screened and does not trickle down to non elites who are not in their networks. Rao and Rogers(1930) testify from their study that homophilous network structures amongst members in a village causes new information to spread horizontally rather than vertically and therefore limits the flow of developmental information. Despite the paucity of empirical studies related to the problem under study there are a few subjectively relevant work which offer adequate support to the importance and need for such investigation. Schramm (1964) after reviewing many researches in communication conclusively stated that "great events can be carried effectively by grapevine communication but interpretive, explanatory, technical and persuasive

material are hopelessly distorted if carried at all by the grapevine communication." Similarly Yadava (1935) observed from the survey study of the IRDP in Haryana, that the beneficiaries of the various antipoverty programmes have very little access and exposure to mass media. Further hardly any respondent mentioned village leaders or opinion leaders as the possible sources of new developmental information.

Therefore, a study of communication processes based on social relationships and their interactions would enable one to examine the rationale of social transformation as well as the structures which govern individuals and the information itself. For in the development of society, communication processes cannot be seen in isolation from the particular societal arrangement under which they have developed and restrictions through which they exert their influence. Structural constraints are societal obstacles that restrict the opportunities of individuals who lack the basic resources; namely the rural poor, to participate fully and equitably in the development process and in the sharing of benefits of a given social system. Inherent in the notion of structural constraints is a situation of inequality in allocation of society's goods and a process of conflict and power struggle. These are identified as 'structural' in the sense that the individual alone cannot affect them but suffers the consequences. It would be therefore, futile to try and examine the pattern of communication apart from its social

structural setting.

Human relationships represent the symbolic forms which in turn constitutes a social reality. And it is commonly believed that, 'how we communicate determines how we relate, just as how we relate determines how we communicate'. Hence social relationships provide the channel and the behavioural setting within which information is transmitted and used. Similarly the community provides a useful framework for social and intellectual interaction where information processing takes place between the members. For both development and communication takes place within communities including the other diverse activities of human beings which takes into account the rules, sanctions, status, power, economic motives, customs beliefs values and rituals. All these are a part of the context of human communication and at the same time, change in these elements all serve to define progress towards development. Therefore these structures and channels and the rules which govern the way they function, all are essential in assessing the effectiveness of communication in a social system.

Communication constitutes the major substance of the relationship between the members of a group. Some scholars also suggest that the social interrelationships amongst a group of members is synonymous to the communication network which ultimately governs or controls the flow of information of common

interest within their social surrounding. The role of networks in the study of communication is increasingly recognized by scholars (Rogers 1977) and to comprehend the individual in his social setting, Fischer et al. (1977) advocate the need to understand the fine mesh of social relations between the persons and society, that is, we must understand social networks. Thus it warrants to explore the extent to which the social networks in a village can be utilised for identifying the structural features of rural information environment and reduce the disparities in the level of information and its distribution among the different segments of the village community.

In the present study an attempt has been made to find out the existent pattern of communication in a village by employing the social network notion. Wherein the communication amongst individuals is being interpreted on the basis of their social relational characteristics. A whole village approach was selected for the present investigation. Keeping in view the problem stated above this study was carried out with the following objectives:

1. To study the existent pattern of communication in a village by means of the social network.
2. To find out the socio-personal profile of the villagers on the basis of selected variables.
3. To describe and compare the interpersonal communication structure in terms of social network indices, such as ACTIVITY, DIVERSITY and DENSITY.

4. To ascertain the relationship among the individual and network variables with the level of involvement in each of the three caste category of respondents.
5. To determine the relative influence if any, of the network and individual variables on information acquisition across the three caste group of respondents.

Scope and Limitations of the Study

The application of social network indices employed in this study will not only generate insight about the communication pattern and its characteristics but the information environment in the village in general. It will also help to reflect the nature of interaction across the different strata of the village community, the adjustment process between the dominant and dependent groups and the extent to which the social interrelationships are effective in acquisition of development information. It would also ascertain which of the network indices are useful in the study of communication pattern and crucial in affecting better information acquisition among members in a village community.

However, the study has some general limitations, such as

1. Being a student's research project it has the constraint of time, finance and resources such as specific computer programmes appropriate for communication network analysis which restricted the design and dimension of the study to

only a single village. And thus the implication of the findings of this investigation could be limited to whole village studies.

2. Identifying the limits or extent of a personal network.

The discretion about the number of steps and links in the network should be in relation to the social situation and the nature of subject being investigated. Since there is no standard method evolved in the social network approach the limits of the network are limits of analytical convenience.

Layout of the Dissertation

The dissertation has been presented in five chapters. The first chapter is devoted to the introduction of the present study in light of the importance of the problem it addresses, it includes the objectives, scope and limitations. In the second chapter an attempt has been made to present an orientation about the notion of social network and the indices selected for the study in their theoretical perspective. The third chapter deals with the research methodology adopted for the investigation. The findings and discussion have been presented in the fourth chapter. The summary of the study with the implications drawn from the findings have been given in the fifth chapter. This last chapter is followed by references and a set of appendices.

CHAPTER II

THEORETICAL ORIENTATION

In this chapter, an attempt has been made to present the concepts selected for the study in their theoretical perspective, the logical order of the contents are as follows:

(a) Genesis of the concept of 'social network'

Definition and relative views.

Historical development of the notion of social network.

Theories relevant to the concept of social network.

Commonly accepted indices used in the measurement of network features.

(b) Conceptual framework developed for the study.

Definitions and related views on social network

Barnes (1954:43), conceived of social network as a 'field of social relations', the network essentially concerns with interpersonal links or relationships rather than with the definition and analysis of group membership. He conceptualised the social network as, 'a set of points which are joined by lines. The points of the image are people and the lines indicate which people interact with each other'.

Epstein (1961); described a network being made up of pairs of persons who interact with one another. In terms of social categories he considers them as approximate social equals,

ignoring the slight differences in social status that might be existing between them. Since it is essentially 'personal' the network allows many different configuration and these in turn may provide the basis for a typology of networks.

Jay (1964) defined social network as, 'the totality of all the units connected by a certain type of relationship with emphasis on the characteristics of relationship among the members of the unit'.

Gutkind (1965:59-60), believes that the social network concept allows for the documentation of how individual and group manipulate various roles both simultaneously and separately.

Boswell (1966) is of the view that social network may be seen as representing a series of ongoing set of social relationships, encompassing the general structure of informal relationships. Explaining further he adds that this varying categories of social encounters may lead to establishment of social relationships. Intensity and interconnectedness of the members are the contents of the relationships.

Mitchell (1969:2) defined the notion of social network as a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behaviour of the persons involved.

Leinhardt (1977:1) describes social network research as the investigation of social structures that is accomplished by studying patterns in the relational ties between social entities. It is this concentration on the pattern arrangement or organization of social relations that distinguishes social network research from more traditional approaches to the study of social structures.

Social network is a sociological concept which permits scrutiny of the processes of individual interactional behaviour and interprets the social behaviour on the basis of the social relational linkages in a wide variety of social situations, emphasis being not on the attributes of the members in the network but on the distinguishing properties or characteristics of the linkages in their relationship to one another.

HISTORICAL DEVELOPMENT OF THE SOCIAL NETWORK CONCEPT

The use of social network as a conceptual tool of analysis emerged as a response to growing doubt amongst the social anthropologists. In their course of investigation directed in the 'structural-functional' approach they found that it was inadequate in explaining the changes transpiring through societies undergoing transformation, particularly social change in complex societies. The necessity thus felt was to evolve concepts which would express the relatively unstructured quality of social relationships in large scale societies or to the optative element

in social relationships. Radcliffe-Brown (1952:190) in his study of primitive society used the word 'network' in a metaphorical sense to define the social structure as 'a network of actually existing social relationships'. But though it evoked an image of interconnections of social relationships, he did not specify the properties of these interconnections which could be used to interpret social actions, except at the abstract level of 'structure'.

Barnes (1954) in his analysis of a Norwegian fishing village, was the first to use the notion of social network systematically rather than a metaphor to describe an order of social relationship, particularly in the analysis of what he termed as the 'third field' of kinship, friendship and social class which was important in understanding the social behaviour of the people. The interest being in the morphological features of the network itself and their implications for social behaviour. He also distinguished between the unbounded social network and the bounded social network centered on a single person 'ego' - called set. Thus the step to interpret social action on the basis of the relationship of the linkages in a network, set the process of conceptual elaboration which raised the notion of social network from a metaphor into an analogy making it analytically useful.

Bott (1955) took the initiative to use the notion of social network analytically in her study of conjugal roles in urban families, correlating the morphological characteristics of the family network with the allocation of conjugal roles

within the family. However, she did not consistently make the distinction between the social field and ego centered relations, but differentiated the network into 'close knit' and 'loose-knit'.

Epstein (1961) is perhaps the first person to distinguish between the different parts of a network as 'effective' and 'extended' network of an individual according to the amount of interaction.

Adrian Mayers (1966) in his analysis of an election campaign in India, developed the idea of the 'action set' - a temporary group recruited through various channels to serve some short-term end.

Srinivas and Beteille (1964) highlighted the usefulness of the network concept in analysing complex societies that are undergoing rapid change, such as India, where the boundaries of traditional groups are changing and networks link individuals and groups in the village to external organizations and individuals. The two useful observations were that, the networks are becoming more 'loose-knit' in India and secondly that networks exist in all societies.

Boissevain (1963) contributed to a concept which treated personal networks as the general social matrix out of which various forms of quasi-group, groups and corporate groups can be differentiated in certain circumstances.

Philpott (1963) writing about the network of Montserratian immigrants to Britain, relates the density and exclusiveness of their networks to their fulfilment of financial and social obligations to the relatives they left behind.

During the same period, the studies of Mitchell (1969), the analyses of Wheeldon (1969), Kapferer (1969) and Boswell (1969) employed the network concept in varying urban based situations. Harries-Jones (1969) showed how links of common rural origin, kinship and proximity was used to establish a local branch of political party in an African town and how the various political leaders involved mobilized 'action-sets' for a particular purpose.

In the United States, there is a great body of literature on 'graph' theory and studies on kinship friendship by Lazarsfeld and Merton (1954); Eisenstadt (1956) and Cohen (1961) etc, followed by experimental research with small groups and with forms of communication' in them, studies of diffusion and communication flow which have been summarised by Katz, Levin and Hamilton (1963) and Mitchell (1969). But only Katz (1953 & 1956); Cohen and Marriott (1958); Hammer (1963-64); Jay (1964) and Adams (1967) have written explicitly about social networks.

Caplow (1955) in his brief analysis of networks used the word 'ambience' instead of network, describing many properties of networks namely size, density, articulation, elasticity,

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Caplow (1955) in his brief analysis of networks used the word 'ambience' instead of network, describing many properties of networks namely size, density, articulation, elasticity,

duration and homogeneity. He classified networks according to the origin of the contact i.e. place of residence, work or voluntary association.

Lesser (1961) made a closely related point namely that for diffusion to occur there must be 'patterned relationship between and within societies'. He related this to the term 'field' used by Barnes and not to the network idea.

Kadushin (1966 and 1968) used a closely related concept the 'social circle'. His work is of special importance in the study of total networks', i.e., networks that are not defined by selection of a particular person or group, as the focal point or 'ego'. Instead he deals with clusterings of interaction based on and which contributes to emergence of shared interests concerning cultural goals, power and influences. This emphasis that 'social circles' exist because their members share common interests.

Thus, the notion of social network has been developed in social anthropology, to analyse and describe the social processes involving relationships across, rather than within, group and category limits. It attempts to distinguish between the distinct features and characteristics of relationships that makeup a network.

THEORIES RELEVANT TO THE CONCEPT OF SOCIAL NETWORK

According to Barnes (1972:2) there is no such thing as a theory of social network, but merely a basic idea. Bott (1971:330) is of the view that it is a kind of concept which can be used in many conceptual frames of reference. Kapferer (1973:167) asserts that there is no network theory in the sense of basic assumption together with a set of derived propositions which are interlinked and capable of being tested. According to him the notion of social network is simply a technique of data collection and analysis.

In fact, there is no writer among those using social network to analyse field data, who postulated a formal network theory. They simply postulated certain connections between behaviour and the characteristics of the social networks of the people studied. The propositions about behaviour couched in terms of concepts' derived from social networks, may have their rationale in common sense knowledge rather than theoretical formulations. But the popular concepts derived from the morphological and interactional characteristics have their roots in presupposition about the relationships between social links and behaviour.

The notions of social network when applied to sociological data do not explain anything in themselves. They must accord to some theoretical basis which provides certain specified assumptions and proposition underlying the network analysis to make it

useful. Otherwise as Wolfe (1974) categorically states that, "without any theoretical foundation the notion of social network would appear quite abstract, divorced from the realities of human life."

Social anthropological theories such as the structural functional, social exchange, action theory and role theory, have been found to have relevance to the concept of social network and were used by various scholars in their quest to understand behaviour in the social situations they studied. A brief description of each of the theories is given below to facilitate a better apperception of the situational analysis of the sociological aspects for which the social network notions were used.

The Structural-Functional approach was the dominant theoretical perspective in sociology in the decade between 1940-1950, the works of Evans-Pritchard and Fortes in particular were noteworthy. This approach was used in studies of small scale localized and closed societies, where behaviour was interpreted largely in terms of their membership of bounded groups or in small groups in terms of dyadic interaction. But generalizations about behaviour of people in terms of the positions they occupied in the social system, ignored individual deviations from the pattern. From the structural functional perspective, society was regarded as a system made up of interrelated parts and the behaviour in society was structured, implying that relationships between the members of the society was governed by roles and norms.

The over formalization and structural mode of analysis of the structural theory made it inadequate to explain the change transpiring through societies undergoing transformation particularly in case of social change in complex societies, which lacked single pervasive structural characteristics. It was unable to explain how norm consensus and norm directed behaviour was achieved and how the existing concepts of role and role relationship are modified.

These were the reasons for the emergence of the social network approach as an elaboration of basic structural functional notions, but majority of the workers who formulated their ideas initially had done so without the benefit of concepts derived from social network. They sought concepts and a framework which could reflect and explain the relatively unstructured quality of social relationships in large scale open societies.

There were several manifestations of this dissatisfaction with the structural theories which Whitten and Wolfe (1973:720) classified into two main types. The first, were theorists like S.F. Nadel (1957) and Robert K Merton (1949:57) who felt the necessity in improving the concepts of role and role relationships. The second type could be termed as; 'transactional theories' which included approaches that were concerned with the behaviour of individuals vis-a-vis one another. Amongst these, to name a few were G.M. Forster and Eric Wolf who elaborated on group theory, emphasized dyadic, patron-client and brokerage relationships. While others, like Thibault and Kelly (1950), Homans(1961)

and Blau (1964) developed 'social exchange approach,' which took most of the social and interpersonal relationships as subject to principles of marginal economic theory. A third group called 'action theory', formulated by Barth (1963), Bailey (1963), Boissevain (1963) and A.Mayer (1966); who were concerned with the way in which individuals manipulated their social relationships so as to be able to achieve certain ends. Since the social - exchange theory has greater relevance to social relationships between members in a community, it is being elaborated to enable better understanding of its bearing on the present study undertaken to determine the existent pattern of communication in a village.

The social exchange theory in anthropology attempts to relate the material and social life of people in natural settings. Sahlins (1965:139) specifies that the concept of reciprocity is the core of the theory that relates between material flow and social relations. The important aspect of exchange theory for network analysis is its demonstration, that any exchange can forge an interpersonal relationship which connects individuals in series of communicative, economic, manipulative and other types of relationships.

The strong point of the theory is its linkage with the political and economic elements of society; this alliance provides a framework within which social relationship qualities can be analysed. Another significant contribution is that it offers a frame of analysis both at the collective and individual levels.

The major functions of social exchange are saving and investment which is from a motivational perspective, the other being social integration which is a structural attribute.

According to Homans (1961) 'self interest' is the universal motive which initiates people to interact within one another modifying their behaviour in terms of positive or negative reinforcement that is provided by the environment. But his deductions was considered to be ad hoc as it was unable to explain basic sociological variables and overlooked social structural attributes. Blau (1964) through his work 'Exchange and Power in social life', remedied some of the inadequacies. He acknowledged that in the absence of any standard measure of value; the notion of exchange loses much of its meaning. He argues, that incentive to action is not only due to a rationalistic economic intent as usually assumed but people also find social approval, respect and compliance with their wishes inherently desirable. Blau's point of view is that, till the time the ideal norms of reciprocity prevails among exchange partners everything is well but when these norms are systematically infringed it creates imbalances and deprivation that hampers the smooth operation of a social system. This differentiates the sources of conflict and contention. The structural attributes are established as an outcome of recurrent social interactions and communication among individuals; integrating them into members of a group. Integration is defined in terms of intensive social interaction and differentiation in terms of restriction on social interaction.

Social associations establishes the network of interpersonal relations that integrate the individuals into cohesive social units. And though common values is generally believed to control social exchange relations they are not sufficient to integrate individuals into a network of social relations. It requires supportive social interaction which is strengthened by regular fact-to-face contacts; thus social integration is assumed to rest on social interactions between members.

It can be concluded that dyadic interaction is the starting point for any social exchange process. Hence the notion of social network develops its frame of analysis, based on the assumption; that an individual interacts simultaneously with a large number of people, including the indirect relationships into its theoretical constructs as well. Thus making the social network approach appropriate for developing a structural frame work for analysing processes, strategies and functions taking place in a social setting.

Commonly accepted indices used in the determination of social network features

The concept of network has thus far been used in several types of empirical studies but there has been considerable variation in the definition of the term itself and as well as the difference in emphases from one study to another. In the field situation, there appear certain commonly accepted terms and concepts relating to network features or properties which have

been found to be pertinent to the explanation of social behaviour.

The linkages in a social network can be classified into two distinct features namely; 'Morphological'; which refers to the patterning of the links among the members in the network in respect to one another. The concepts associated with this feature are density, range, anchorage and reachability. The other feature is 'Interactional' and refers; 'to the nature of the links themselves', the related notions are content, frequency of contact or interaction, durability, intensity and directedness. The choice of a particular concept will depend on the nature of problem that is to be elucidated. The notions selected for this study will be elaborated in greater details than those of the others that have been mentioned above.

MORPHOLOGICAL FEATURES

DENSITY: It is a measure that interprets the extent to which the members in a network are linked to one another or know each other. The state where each member is in direct contact or knows every other member in that network. Operationally, it is 'the ratio of actual existing links to the total number of possible links'. It was first employed by Kephart (1950:543) for determining interpersonal link among a set of points in a network. Other terms related to this concept are cohesiveness (Guimaraes, 1970), zone integration (Richards, 1974) and dispersion (Bott, 1956).

The implication of this notion of social network is that when relationship among a set of persons is dense, i.e., where majority of the members know one another or interconnected with each other through interactional links, the network is relatively compact and hence fewer links between the persons need to be used to reach the other members. The sociological perspective of dense networks is that they are likely to be more homogenous and possibly there would be conformity in terms of attitudes, beliefs, values and norms or collective behaviour compared to less dense networks. Whereas, from the point of view communication network density according to Yum (1983:573), provides a basis for inferring the potential for diversity of information Danowski (1975) suggested that density is the measure of the entropy of message types flowing in the network, as the density increases the content entropy decreases.

CONNECTEDNESS

It is the earliest feature of networks isolated for theoretical use. Bott (1957) was the first to employ it in her analysis for distinguishing the characteristics of couples social network. In simplified terms this notion tells that the extent to which people who all know one person also happen to know one another. Reader (1964:23) defines the term in the same way.

Connectedness takes 'indirect' as well as 'direct' network links into account. Its measurements is based on linkage distance

the number of links in the shortest path connecting two individuals, including the indirect links through other individuals as well as direct links between the two individuals. Thus each network members 'connectedness' (average linkage distance) is simply the sum of all the shortest step distances to all other members of the network divided by the total number of members of the network minus one. Connectedness is an important alternative to density because it takes into account the indirect, multistep linkages that are ignored in the density formula. It is a more accurate measure of the efficiency with which information flowing through a network would reach all members.

Reachability

The idea of reachability in a segment of a network as purported by Harary et al. (1965:32) is the degree to which a person's behaviour is influenced by his relationship with others and the extent to which he can use these relationships to contact individuals who are important to him and vice versa. It implies that a specified person in the network can be contacted within a stated number of steps from any given starting point. It also highlights the two dimensions related to compactness of a network

- (a) the proportion of people who can be contacted by each person in the network
- (b) the number of intermediaries that must be used to contact others.

The sociological significance of reachability lies in the way in which the links in a person's networks may serve as channels for the transmission of information including judgements and opinion especially when these serve to reinforce norms and bring pressure to bear on some specified person. This is particularly important where links of this kind lead back to ego, a point which scholars like Bott, Epstein and Philip Meyer have emphasized in their studies.

Range

It refers to the number of persons in direct contact with the person on whom the network is anchored i.e., ego combined with the social heterogeneity of the individuals concerned. This is a significant feature of a personal network especially if the emphasis is on mobilizing support for the ego.

Kapferer (1969:224) incorporated some of the aspects of the notion of range which is similar to 'span' but he applies it to 'reticulum' a term he associated with network. The 'span' of a person's network is the ratio of both the direct links an individual has with members of a network and the links these members have among themselves to the total number of links among the complete set of people in the network. It implies the extent to which a person in the network is able to reach or contact a sizeable proportion of the others in the network for any purpose, or an individual's ability to mobilize support from the network members for a specific purpose.

Anchorage

It refers to the point of orientation of a social network particularly in field work where it becomes necessary to specify the context and a reference point. An individual whose behaviour the observer wishes to interpret is usually taken to be the point of anchorage of a network. Consequently this has resulted in terms such as 'ego centered' the notion on which Epstein(1969) Adrian Meyers (1966) and Pauw (1963) based their studies of social network. Mitchell (1969) calls it as 'personal' or 'egocentric' network. But Barnes (1969) distinguishes the partial network, which is an extract from the total network; where relational ties are of a particular kind. He uses the term 'star' for a specified individual on whom the anchoring of a partial network is necessary. Thus the set of persons with whom the individual has direct contact together constitute the 'primary star' and the same set of people and their interrelationship represents the primary zone of the ego. The order of the star and zone that is to count for the behaviour of the ego will depend upon the issue that is taken for the study.

CONTENT: It refers to the interactional aspect of the links in a person's network which concerns the meanings the persons in the network attribute to their relationship. These links occurring out of various social interaction between dyads, comes into existence for some purpose or interest which either or both the partners consciously recognize. Thus the relational ties

between individuals are distinguished by their content or the nature of information exchanged.

Gluckman (1955:19, 1963:27) differentiated the network links which contain only one focus of interaction calling it 'uniplex' or single stranded relationship from those which contain more than one content called 'multiplex' or multi-stranded relationship. The perception of the strands in a relationship depends upon the objective of the study and analysis.

The implication of multiplexity in network relationships is that, people who are bound in more than one ways are more secure and more likely to be mobilised for support than single stranded ties.

The idea of multiplexity also relates Frankenberg's notion of 'Social redundancy' (1966:273) to the personal network. Such relational links are analogous to a multi-channel communication insofar as effect on social behaviour is concerned, since people interact with one another in many different contexts are less likely to withdraw completely from contact with one another as people in a single stranded relationships are able to do.

Multiplexity of relationship has relevance to the morphological features of personal network. Srinivas and Bettelle (1964:167) observed that "traditionally, the interpersonal networks in a village were of a multiplex nature with a tendency to become closed. But the situation is changing in contemporary India, new interests and increased mobility tend to create

relationships with people who have diverse social and economic interests with the result that the network of social relations cannot be confined to within the village, caste or kin group". Similarly Barnes (1954:44) and Gluckman (1955:19) had suggested that the social networks in small scale societies was characterised by a tight mesh and tend to be multiplex. The above assumptions can be related to the social-exchange theory: which contributes to the interpretation of interactional linkages forged between individuals in a social setting.

Frequency

The frequency of interaction between the members in a personal network entails the regularity of contact; according to Reader (1964:22), is a possible factor in interpreting social behaviour. But on the contrary a high frequency of contact may not necessarily imply high intensity in social relationships or a possible influence over the behaviour. As such this feature seems to be of marginal relevance to network analysis in general.

Directedness

This aspect of social relationship has seldom been incorporated in the analysis of social network features but it is of immense value and can contribute significantly in determining the content and direction of information flow its influence on individuals and the extent of reciprocity among others in the network. It helps to distinguish the kind of relationship

between members in a network, particularly in employer-employee, patron-client relationships which might constitute a link which may not be of a reciprocal nature. It can determine the extent and direction of influence of a person on another.

INTENSITY

The intensity of a link in a personal network refers to 'the degree to which individuals are prepared to honour obligations or feel free to exercise the rights implied by that relationship' (Mitchell, 1969:27). Face to face interaction is not a necessary condition for the obligations entailed in a relationship to be honoured. Factors that are likely to contribute towards intensifying network relationships are common local origin, easy accessibility, physical proximity and extent of influence. Its measure or empirical estimate is difficult to assess, and as yet there has been no definite norm developed.

CONCEPTUAL FRAMEWORK

In this section of the chapter, a systematic attempt has been made to develop a conceptual framework for the study undertaken, keeping in view the objectives as well as its relevance to the field situation.

The orientation of the social network concept with the nature and pattern of communication amongst the members in a village is founded on the proposition that, 'communication between

individuals is the primary unit, instrumental for initiating and establishing a social relationship'. This interactional relationship is termed by sociologists as a 'social act' - the smallest unit of directly visible action which has a shared meaning for the transceivers.

This is further grounded on the conviction that interactions between people is the basic element of social structure, which Blau (1964) refers to as the differentiated interrelated parts in a collectivity. The connections among as well as within these parts are the social relations of people that finds expression in their interactions and communication.

There is a general belief that common values control social exchange relations, but they are not sufficient to integrate individuals into a network of social relations. Instead it requires supportive social interactions to actively link the persons together.

Social relationships channel the process of communication and through recurrent social interactions individuals become integrated into a network of interpersonal associations, which may transform into groups or cohesive social units over a period of time. Society is the organic form of such social relationships that interlinks people into a structure.

Social exchange is characterised by different types of interactional processes that vary in terms of their informational content. However, interactions may differ according to the

relationship that the participants have with each other in a social network. The intensity or restriction in terms of the type of social interactions, differentiates both, the kind of relationship and the degree of integration that exists amongst the members in a network.

Social exchange refers to voluntary actions of individuals that are motivated by the return that such acts are expected to bring from others. This element of expectation creates a condition of certain kind of risk and uncertainty in the social environment in which people interact with one another. They are not sure whether the services, support at time of crises, and social approval which they bestow on others, will ever be reciprocated or not. In order to minimize these uncertainties encountered in social life situations, the members try to develop a level of trust in their interactional relationship. The likelihood of increasing this trust is brought about by discharging the reciprocal obligation to one another. Obviously these exchange processes which generate trust in a relationship characterises some kind of investment which implies commitment between the interacting individuals. This reciprocal exchange with commitment to one another is one of the factors that contributes to sustained relationships between members in a social system. The objective outcome of such relational linkage reflects the intensity and degree of interrelationship that exists between the participants in a social network.

A network of social relationships provides a socio-cultural environment within which every individual operates, but he is not completely constrained by it. Instead in any situation there is a finite number of possible relational contacts available to the individual. This is because there appears to be more adherence to a belief in the 'right of man' to select the way of life which is most appropriate to his own circumstances and to the attainment of his basic needs. Homans (1961) substantiates this point by stating that: "people modify their behaviour in term of positive or negative reinforcement provided by their environment. This takes into account the personal choice and possible manipulation of the different associations that the individual makes in the 'interest of self,' as well as the motivation in the return that is expected from such interactional processes with one another.

For this reason, interactions differ according to the associations that persons have with others in their social settings. Implicit in this social exchange relationship is the notion of the value of 'self identification' and fulfilment by proper manipulation of the opportunities afforded by the social environment prevailing in a particular situation.

The notion of social network therefore rightly provides a useful framework to study the pattern of interpersonal communication among the members in a village, in a manner that is consistent with the empirical nature of their social environment. Moreover, it also concurs with the approach in analysis of

communication networks which Rogers (1981:141) defines as, 'a method of research for identifying the communication structure in which relational data about communication flows are analysed using some type of interpersonal relationships as the unit of analysis.'

It therefore makes it legitimate to base the analysis of the present study on 'social relationships', the characteristics of which are measured by selected social network indices that could serve as determinants in assessing the extent of information exchange and acquisition potentiality that these indices possess.

And thus, the underlying postulation is that, 'the nature of social exchange or interaction among the members determines the composition and form of interpersonal relationship in the network, the distinctive features of which inevitably reflects the 'informational strength' or its potential capacity for information input. Hence the knowledge of an individuals network relationship, the nature and type of interactional exchanges shared among the members is helpful in ascertaining the extent and type of information to which the members have an access from such relational ties.

Yet another reason which subscribes to the preference for using the social network approach is that, it is consistent across different levels of analysis. Whether it be between dyads, small groups, cliques or members in a formal organization, it

encompasses the interactional situation with the existent social setting rather than, investigating the process in isolation. It provides a better perspective for examining the rationale for the social exchange and the rules and structural factors which regulate the participants and the content of information in the communication process.

Hence, any attempts that may be made to investigate the pattern of interaction among the members in a village with the help of the social network concepts must visualise the process of social communication in the context of the traditional caste system rather than the usual concepts of the communication tenets that are predominantly based on western thoughts and an alien socio-cultural norms.

The caste stratification has been the all pervasive structure dominating every aspect of human activity in the Indian society. Not only does it regulate the pattern of social behaviour of every individual in different situations of work and leisure, it also edifies the norms and values that have assimilated over the centuries. Therefore, it provides the most appropriate perspective for understanding the various social interactional processes among the members of different castes. There does exist certain distinguishing features of social exchange in the Indian context which are different from those that are oriented to the western concept of social relationships.

Foremost among these features, is the stratified and hierarchical structure where individuals are ranked and ascribed their status in society according to his 'jati' or caste group. The reciprocal dependence among the different jatis was regulated by clearly defined norms. The social communication between the jati was characterized by the asymmetrical interpersonal relationship because of hierarchical division. In the Indian society the concept of 'equals' in communication is not inherent, since the source is viewed as higher and held in high esteem by the receiver who assumes a lower status. The asymmetrical and vertical top-down interactional process among the members had contributed favourably towards creating an environment for efficient communication and division of labour. Unfortunately with the advent of the jajmani system and during the course of social change that took place this changed into a highly rigid and restricted system leading to the widening of the social and economic distance between the members of those jatis who were superior and had the advantage of controlling more physical, social and economic resources from those who were inferior and disadvantaged segment of the society.

On the contrary such social hierarchical features are not found in the western society and the notion of communication was considered as 'a dialogue between equals with a view to persuade.' These are some of the basic differences that must be borne in mind particularly when pursuing any kind of generalization about the process of social communication in the context

of interactional exchange in an Indian village situation.

The present time however shows that the social milieu in the villages is undergoing a transition of varying magnitude. The economic forces are assuming predominance over the traditional social factors, reducing it to a secondary position as far as the attainment of basic needs is concerned, with the result a marked degree of ingression among the members of different class and caste is observed. This is attributed to the change from a status bound ascriptive social order to one where there is greater scope for contractual relations based on personal choice and circumstantial factors. Increased social mobility and socio-political interventions have also contributed to the loosening of social boundaries. In the pursuit of better employment and enhanced economic opportunities it has resulted in drawing people from different jati backgrounds into a network of interpersonal relations.

Therefore, for economic and socio-political purpose one may find a network of association having diversified and uniplex bonds between individuals from different class and caste backgrounds. But the kinship and affinal ties still tend to be more composite and multibonded, a feature which is characteristic of any jati group in the Indian rural society.

In the village setting, a variety of social affiliations among the members is observed each of which are differentiated by the nature of social exchange that exists between each

individual. The type of such interactional relationships that prevail can be characterised according to the classification described below;

Types of social exchange relationships

	Horizontal	Vertical
General	Friend-Friend	- Kinship based rank system - Patron client - Tribal-hierarchy
Balanced	Salesman-Customer	Employer-employee

most of the relational ties that is generally observed is within this broad framework.

Discernable amongst these, is the generalized vertical type of relationships that includes the most commonly prevalent kind of social pertinency in a rural village of India. The kinship ties are formed around actual biological affiliations and therefore are relatively close knit and continuously activated at least in principle. The characteristics of this a continuous behavioural stance towards the fellow kinsmen, limited social mobility, less flexible and greater surveillance (Katz 1966: 204). The kinship rank reciprocity is laid down by political groupings and becomes sui generis by virtue of customary duty (Sahlins 1965: 158). The caste endogamy in India

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prevents all members of society from being included into the category of kinsmen. Intercaste marriage is prohibited among members of different jati, thus preventing them from having any kind of kinship bond.

The patron-client and brokerage type of relationship occurs rather widely in villages and is second in importance to the kinship ties. Governed mostly by economic dependency which grows out of the imbalance and deprivation caused as a result of systematic infringement of the 'ideal norms of reciprocity'; differentiating people in terms of the resources they possess. This gives rise to the formation of power bases through which they may be able to exploit and have control over those deprived of such bases. There is an analytical difference between a 'patron' and a 'broker'. A patron possess himself the resources desired by his client, whereas a broker is able to obtain from another source (through personal contact) whatever resources are desired by his clients. The patron client and brokerage relationships have been widely reported in several ethnographic literature from both developed and developing countries. But the changes in this type of relationship is of significant importance in developing societies. South Asian studies indicate changing relationship resulting from economic and political changes. Institutions of electoral democracy has necessitated erstwhile patrons, in order to maintain a power base in the new political structure, to become patrons for the people at grass root level in an effort to secure a large

electoral base. The bureaucratic structures or institution for development are compatible with patron-client relationship, where the elite and politicians exercise their influences which may still be the reason for the widespread persistence of patron-client relationships in developing countries.

Likewise the other types of exchange relationships about which there are scarcely any studies conducted with particular reference to social network and nature of information exchange makes it difficult to generalise their characteristics.

But in terms of information flow or exchange among the members in a village the nature of interpersonal links is influenced by a multitude of factors. Basically it is the nature and content of the information and who benefits from it, which determines its path of spread. In the village situation a great volume of interaction takes place through the lateral communication network of friends, neighbours and coworkers etc. primarily it is a 'homophilous', interpersonal medium of communication. The lines of communication however, is generally observed to flow horizontally within social classes rather than vertically between those of different social class.

The main focus of the study is to ascertain the pattern of communication in the village. The research conceptions underlying the notion of social network adopted for the purpose does not make any distinction between the source and receiver. Information flows occur among participants in a network, each of whom are both, in turn, transmitters and receivers or 'transceivers'

a term used by Rogers (1931:76), making communication more a process of mutual information exchange.

The rationale therefore, is that the network of social relationships between the members in a village, constitutes the communication environment where information on diverse subjects form the basis for interaction. And the network indices of size, diversity, density and degree of relationship are assumed to provide useful insight about the potential that these features have for information input through varying levels of involvement. Each of these elements are considered as under:

Information: It will be used to refer to message-content the matter which is the basis for interactional process between the people. Information therefore represents the content that is exchanged among individuals when they communicate.

According to Rogers, (1931:43) 'information is a difference in matter-energy which affects uncertainty in a situation where a choice exists among a set of alternatives'. He states that network communication is especially important whenever individuals are involved in exchanging information to reduce uncertainty.

Sinha (1984:2) emphasizes the significant role of information, as means to an end in problem solving and decision making.

Uncertainty is reduced when a decision is made by choosing one of the alternatives from among others. Information contributes in reducing this uncertainty to an appreciable

extent. The seeking or giving of information thus underlies all social interaction either directly or indirectly. It is instrumental to all other functions of communication and a necessary component for every individual in adapting to his social environment.

Information needs for individuals vary in nature and content. Normally a person seeks information from his contacts within his personal network or from source(s) who may be among the peer group or opinion leaders. The personal network provides the focal individual the interpersonal support for deliberation. Social science researches show that where individuals want information, and where the information is especially likely to change their behaviour, they depend heavily on interpersonal communication messages that are transmitted through networks.

Level of Involvement

The different type of aspects such as personal, occupational, professional, opinion or general happenings for which an individual engages in interaction with another person, with whom he maintains some kind of relational link, is a measure of the extent of involvement there exists in that dyadic relationship. 'Link' is a communication relationship between two units (usually individuals) in a system, it is the basic datum in any type of network analysis. Links between a person and others with whom

he interacts comes into being for some purpose or interest which either or both of the dyads consciously recognise.

Every social relationship involves the idea of exchange in some form or the other. From a sociological point of view, Mitchell (1969:20); is of the opinion that the most important interactional aspect of the links in a person's network, is that which concerns the meanings which the persons in the network attribute to their relationships.

Earlier workers who have used the idea of 'content' have described it in slightly different ways. Adrian Mayer's (1966: 108) study of the 'action-set' and the diverse linkage in such networks states, 'that the links between the individuals (sometimes groups) are distinguished by their content, i.e. these vary between one or more of the following: kinship, occupational, caste, state, economic, religious links, and so on.' Barnes (1954:43) confined his analysis of the personal network to friendship, neighbours and kinship. When a number of individuals converse together recounting experiences, exchanging news of acquaintances and friends, discussing personal matters or ideas, Kapferer (1969:212) refers to this aspect of interaction as 'exchange' content. While Wheelton (1969:132) in her paper refers to the content as the 'normative' context; in which interaction takes place such as kinship, friendship common religious beliefs, economic obligation etc.

This adequately implies that the kind of informational content and the context of interaction, helps to a large extent in determining the intensity of relationship. And from the point of view of communication, that as many different types of informational content that are exchanged in a dyadic interaction; connotes a greater degree of integration in the relationship and consequently higher level of involvement between the dyads.

However, the role of the level of involvement in the acquisition of information has not been empirically analysed thus far, but it is assumed to have a limiting effect on the subject. The reason for such a view is that, if a person depends on an individual or a group of homophilous contacts in his personal network, as source for most of his information needs, he normally does not find the necessity to establish contact with others around him till such time that the information he obtains is instrumental in fulfilling his needs. This point of view is very much relevant to the 'general-vertical' classification of social exchange relationships such as patron-client, tribal and kinship, notwithstanding that it depends upon the intensity or integration of the relationship between the dyads. Therefore, the level of involvement is mainly a feature signifying the degree of intensity in the relationship that exists between the members in a network on the basis of the kind of informational content that transposes through their interactional links.

Network size

It refers to the total number of interactional links that an individual, has directly as well as indirectly with other persons in his social environment. They must be known to each other and maintain a regular interactional contact. This constitutes the network for an individual. It may change over time depending upon various situational factors. There is an element of individual choice in the make-up of a person's network, in that the individual seeks to establish and maintain contact with a number of persons in terms of his 'interests' in them. The type of relational ties they establish with others varies with the individuals own social situation and position. Not all the potential links that a person may have with another need to be activated consistently. Some relationships may be dormant until such time in a particular circumstances, that it becomes the basis for some social action. On the contrary the fact that links exist among people also does not imply that they will necessarily use these links to pass on a certain type of information.

Here again the 'interest of self' which is the pivotal concept of the 'social exchange theory' governs an individual to associate with another. While he finds no point in extending casual contacts with a large number of others. On the other hand, he may be morally obliged to accept the approaches of a number of other people, but will maintain personal contact with only those that he must, depending upon the situation in which

he is placed.

The importance of personal communication network as an influence on behaviour was first recognised by Georg Simmel (1964), but Boissevain (1974:27, 35) describes it more explicitly by stating that such networks form a social environment from and through which pressure is exerted to influence (an individuals) behaviour." He further suggests the proposition that 'persons with larger personal communication networks obtain more information from their networks and hence are likely to respond to this informational input in their behaviour.'

Apart from the nature of interactional content the information "strength" of an individual's communication network varies on the basis of the morphological features of the network such as the diversity on certain variables, the density and degree of relationship among the members. Empirical evidence in support for this is provided by Yum and Kincaid (1979) who concluded, "that the characteristics of immigrants communication networks (individual connectedness, integration and diversity) are better predictors of information acquisition than the usual demographic variables (age, education and occupation), except for English fluency."

For the purpose of this study the network size includes those persons with whom the respondent maintained a personal relationship i.e., those whom he could approach without hesitation directly in time of need and were in regular contact with

each other, referred to as the personal network.

NETWORK DENSITY

In terms of social interactional process the orientation of the notions of network density and diversity, which are the indices typifying the structural dimension of relational links between members in a network, exhibit the functions which are analogous to 'Homophily and Heterophily' the notions that govern the process of dyadic communication.

The most fundamental principle of human communication, is that 'exchange of information most frequently occurs between transceivers who are socially homophilous in certain characteristics'. This may come about due to the basis of choice between the interacting individuals, who naturally seem to gravitate towards others, like themselves because they share common meanings, viewpoints and a mutual value position, in such circumstances communication between them is likely to be effective. Homophily is, therefore, believed to facilitate a more effective communication and consequently strengthen interpersonal relationships.

Similarly, the notion of network density refers to the extent to which the members of a network are directly interconnected through one or the other type of relational tie i.e. where a large proportion of the members in a network know one another and relatively few links between the persons need to be used to reach the group. This implies that dense networks are

composed of homophilous link i.e. density captures the extent of homogeneity among the members in the network. An almost universal finding of network studies is that, 'individuals who are linked are of comparable socio-economic status, stated Laumann and Pappi (1976:57) and such similarities according to them facilitates interaction by enabling reciprocal exchanges. Rogers (1931:303) puts forward a proposition based on the conclusion from reviewing researches, that social characteristics, on which any two individuals are relatively homophilous, are important determinants of who interacts in a system. And according to him, findings suggest that the contents of network links affect the exact social variables determining who interacts with whom.

Higher density in a network may be an indication that most of the members' links are among themselves rather than to others outside the immediate network where new information so often originates. Thus Yum (1983:537) found that high density in the personal networks of immigrants in Hawaii was negatively related to the amount of information they had about a variety of social service agencies for immigrants in their community.

Further, higher values of network density reflect greater degree of interconnectedness among members and therefore owing to higher frequency of interaction between themselves, there is more likelihood of the members possessing the same information. This conforms to the observation by Danowski (1976:239), who states that, "when the individuals in a personal network are

highly linked with each other there is a higher frequency of information exchange among them, and are more likely to possess the same information." He further suggests that the measure of density provides a basis for inferring the potential for diversity of information and entropy of message types flowing in the network, thus as the density of network increases the content entropy decreases (Danowski; 1975).

Just as dense networks are least functional in acquisition of information because of their relatively being closed in nature and limiting the members access to new information. Likewise in terms of level of involvement also, dense networks restricts the member from interacting with individuals other than those from their network of friends. This results in comparatively smaller network size and presumably less diverse, reducing the potential for new information to flow into the network.

Hence a dense network is negatively related to both the level of involvement and as well as to acquisition of information.

NETWORK DIVERSITY: It is the degree to which the members of an individual's network are heterogeneous with respect to certain social characteristics. In terms of social network, diversity is a measure of social heterogeneity of an individual's personal contact exhibited over varied dimensions.

From the point of view of acquisition of information, network diversity provides an index of the potential for

information input. Therefore, a diverse interpersonal network is complementary to a diverse communication pattern, as it provides its members the exposure to various kind of information. Yum's (1984:103) study of immigrants revealed a significant, positive correlation between personal network diversity and level of information. Dervin (1971:17) found that more diverse interpersonal networks allow for a greater variety of informational input and are less likely to consist of only relatives or person with the same educational, occupational and ethnic background.

While from the demographic point of view, a personal network comprising of members from varying societal stratum implies a wider social context in its composition and the effect of their social position and personal characteristics is of principle importance. Such diversity can be attributed to greater social mobility and varied occupational opportunities, possibilities of it being more in heterogenous setting; usually found in urban centres.

But the situation in villages is contrasting, characterised by high level of illiteracy and limited scope for social and occupational opportunities evidently result in very low variance in the relevant socio-economic attributes, which effects the values for diversity among the participants in network. However, the spatial proximity to urban centres and with wider employment opportunities for the adjoining rural population, the possibility of diversity in certain socio-personal and economic attributes is anticipated to influence the morphological and interactional features of social networks.

Rogers is of the opinion that for information 'to trickle down', there must be optimal heterophily in a network in which information seeking dyads connect individuals of somewhat dissimilar status but yet similar enough to facilitate effective communication. Bhowmik (1972) found that information seeking (about agricultural) links among Indian villagers were more heterophilous (on socio-economic status and other characteristics) than were friendship links. This then amply supports the proposition that the information-exchange or acquisition in dyadic communication is related to the degree of diversity (heterophily) between the transceivers on relevant variables. The diversity index would capture the extent to which personal and social variables operate in a social network. For the purpose of empirical analysis, continuous variables such as age, occupation, education etc. the standard deviation of the values of each network member on a particular variable would measure diversity. While for discrete variables; such as caste, sex and relational diversity can be measured by the ratio of each persons links which are different to the total number of links.

Therefore for new information to diffuse, an optional heterophily on relevant socio-personal variables must exist among the network members. Accordingly, the relationship between diversity and the level of involvement can be assumed to have a positive association.

Degree of relationship

It refers to the average number of relationship that each member; in a individuals personal network, has with other members in the network. It implies the extent of integration in the relationship between the network other members i.e. apart from the focal individual whose network is being considered, to what extent do the other network members maintain a reciprocal inter-relationship with one another.

Degree of relationship is an attribute of the network and a function of the density of network. Because by itself the density only partly reflects network structure. There is all possibilities that two networks, with the same density may differ very much because of the difference in the number of persons in the network i.e., network size. In the larger of the two, people have more relations with one another than in the smaller one. (Niemeur 1973:47).

The measure of network density corresponds to the extent to which the 'network other' members; i.e. excluding the focal respondent, know each other and have communication links between them. But degree signifies the extent of integrated relationship that each member maintains with the other members in the network. This relational parameter has been considered keeping in mind the village situation, where normally everybody seems to know everyone else and engage in a casual or some normative context or the other. But it is not necessary that members in

T-5182

a particular individuals network, would maintain a personal and integrated relationship amongst themselves.

Therefore, degree signifies the extent of integration amongst the members in a respondents, network. This factor has yet received scant attention from earlier workers nevertheless its role does have significance when considered in the context of the social exchange theory.

The degree of relationship among the network members is perceived to have a positive association with the level of involvement, as it provides each member the possibility of extending contacts with the other members 'first order star', through him. This subsequently would enhance the access to such extended sources for the acquisition of information. Hence the degree of relationship among the network members is assumed to have a positive role in the acquisition of information.

Proportion of Network members as primary sources of information

This refers to the proportion of network members, who were identified as the primary source of information by the respondent.

It is generally observed that in normal circumstances, a person seeking information would first approach someone from amongst his personal contacts, before he approaches a source who is not a member of his network, depending upon the urgency,

be concluded that a greater proportion of the members in an individual's network, constitute his primary source of information, it is assumed that it would have a negative influence on the level of involvement and seemingly limit the access to new information and interpersonal sources other than those of his network.

Frequency of contact and Extent of Exposure

Both these variables are similar in nature and serve as a measure of the focal respondent's extent of exposure with their network other members and primary source of information respectively. However, it does not necessarily imply high intensity in social relationship.

The frequency of interaction is an obvious characteristic expected to have a role in social network and acquisition of information. But despite this assumption and its extensive use by interactionist sociologists, the relevance of frequency of interaction has been found to be marginal in network analysis and hardly reported in the case of information acquisition.

The probable reason could be the contextual nature of the information and the extent to which it is instrumental and important to the member(s) in a network. Apart from this the socio-psychological characteristics of the individual like aspiration, attitude, achievement motivation and other personal factors of the individual could also have their influence on limiting the relevant contribution of the frequency of contact on the subject

undertaken in the study. By the same logic, the frequency of contact is determined by the morphological structure of the network indices of density and diversity being the main variables. Dense networks would invariably have its members interacting with each other more often than compared to those who have less dense networks, probably on account of relatively greater diversity in the latter. Therefore, frequency of contact is directly related to higher density among network members and inversely to less density network.

But it would be premature to draw conclusions merely on the basis of network structure. Social and structural variables alongwith those of the personal and communication attributes of the individuals must not be overlooked, as they are the underlying factors which execute a significant contribution to information seeking behaviour. Thus on the basis of the contents of the network links, which is central to all human interaction, the interacting relationship of the different variables, social network, personal, structural, status, and communication of the participants is perceived in terms of the level of involvement and the acquisition of information.

Based on the substance reviewed in this chapter the appropriate variables and the research methodology followed in the present investigation is detailed in the next chapter.

CHAPTER III

RESEARCH METHODOLOGY

The premise of the study is that social relationships existing between individuals is linked by communication and the distinctive features of such relational linkages explain the nature of the existent communication pattern among the participants in a network. The study attempts to identify the network variables which distinguishes the communication structure among members of the different caste groups in the village and explore their potential for acquiring information relating to development programmes alongwith other selected socio-personal and communication variables. Accordingly the social network is being conceived as an interpersonal network, comprising of the set of persons with whom the respondent maintains a personal and regular communication link.

This chapter of the study therefore has been devoted to the discussion of method and techniques used in the investigation, which for convenience has been organised under the followings sections:

- I. Locale of the study and its description
- II. Variables and their measurement.
- III. Method of data collection
- IV. Statistical Analysis.

I. Locals of the study

The nature and objectives of the research undertaken necessitated a whole village approach as the most appropriate method to draw valuable inference about the study. The criterion for the selection of the village was as under:

1. A medium sized, multicasite village, whose socio-economic and cultural features should be a fair representative of the village conditions prevailing in the district.
2. The village should be conveniently located from the major developmental related institutions, such as the block, bank, cooperative society etc.
3. At least some of the residents in the village should have been beneficiaries of the ongoing development programmes.
4. The researcher should be acquainted with the local dialect and social customs of the village, which should be conveniently located so that frequent visits could be possible.

With the above criterion in view, the village Palpur Khas in Chakka Block of Allahabad district, was selected for collection of data for the study. A brief description of the district, block and village are presented in the succeeding sections.

ALLAHABAD DISTRICT

Situated in the south-eastern part of Uttar Pradesh, covering a geographical area of 7,255 sq.km. which is divided into three regions, viz. Jamunapar, Gangapar and Doaba each having dissimilar topographic conditions. The district consists of nine tehsils and 23 Blocks. As per the 1981 census, the total population was 37,97,083 of which the rural population being 30,23,445 accounted for 79.61 percent of the total population as compared to 81.54 percent in 1971. The total number of villages are 3990 of which 3,535 are inhabited; the population density works out to 505 per sq. km.

An important demographic feature of the district is that the scheduled caste constitute 19.15 percent of the total population. The total work force is about 9,43,714 forming 25 percent of the total population. Agriculturalists and farm labourers constitute a majority of this work population and of it 74 percent are dependent on land and land-based activities. Industrial workers, trade, commerce and services are concentrated in Allahabad city and its suburban industrial areas.

CHAKKA BLOCK: Physical Features

The N.E.S. Block, Chakka was established in April, 1959, situated in the south east of Allahabad 9 km away from it, with the subdivisional headquarters in Karchana.

Demographic Features

The Block has 128 villages of which 94 are inhabited, having 60 gaon sabhas and 3 naya panchayats. It covers a total geographic area of 15,343 hectares. According to the 1981 census the total population was, 3,8813 of which 46,806 were males and 42,007 females. The scheduled caste numbered 25,639. The literate population is 21,714 of which 18,121 are male constituting 38.71 percent. While 3,533 females constituting only nine percent of the total population.

Agricultural Features

The net cultivated area in the Block is 9,743 ha, of which 3,854 ha, is irrigated, the major source being the river canal and tubewells. Four hundred and ninety seven hectares is under forestry and the area brought under use for other than agriculture is 2,443 ha. The soil is sandy loam and alluvial type with an annual rainfall of 1200 mm.

The cultivated area under the three major cropping season are as follows: Kharif (4,012 ha), Rabi (5,234 ha) and Zaid (447 ha). The breakup of different category of cultivators is as follows; marginal-3,251; small-14,180; 2 to 3 ha-583; 3 to 5 ha. - 369; and 5 ha and above - 201. Therefore majority of the farmers comprise of small and marginal land holders.

Institutions and Infrastructures

Within the Block area, following institutions exist providing various services:

Grameen Bank	One
Cooperative Societies	Three
Markets	Four
Fair Price Shops	Four
Agriculture Seed Store	Two
Veterinary Hospital	One
Artificial Insemination Centre	Two
Stockman Centre	Two
Maternity Hospital	One
Family Planning Centres	Fifteen
Ayurvedic Hospital	One
Primary Schools	Forty two
Junior High School	Seven
High School and Intermediate	Three
Post Office	Six

Development Activities of the Block

There are ten village development officers each covering six to seven villages. The major development programmes being implemented by the Block within which all the activities are:

- i) Integrated Rural Development Programme (I.R.D.P.)
- ii) National Rural Employment Programme (N.R.E.P.)
- iii) Training Rural Youth for Self Employment (T.R.Y.S.E.M.)

The Integrated Rural Development (I.R.D.P.) was initiated in 1980-81, in the beginning the main thrust was directed to agriculture and animal husbandry but since 1982-83 the emphasis turned to Industrial Business and Service Section (IBS). The distribution of beneficiaries under the different schemes of the I.R.D.P. for the period between 1980-1987 is given as under:

Component	80-81	81-82	82-83	83-84	84-85	85-86	86-87
Agriculture	95	70	139	153	128	91	61
Animal Husbandry	7	134	139	95	92	47	56
Minor Irrigation	11	13	24	4	10	11	3
Industrial Business (IBS)	11	153	573	373	425	547	724
Total	124	375	865	625	655	696	844

SELECTED VILLAGE: Physical Features

Palpur Khas, the village selected for the study is situated on the banks of the river Jamuna, 12 km south-east of the city of Allahabad. A 1.5 km., unmetalled road connects the village to the National Highway. Covers an area of 640 acres, with a total cultivated area of 382 acres of which only 131 acres are irrigated by the River Canal and 251 acres remains unirrigated. Of the remaining area, 131 acres are uncultivated, 5 acres are covered by a pond, 6 acres of fallow land and 95 acres are affected by floods during the monsoons. Only a portion of the village has the facility of street light connection.

Demographic Features

The village has a population of 974 people; 532 males and 452 females. Sixty three are of the higher caste, 697 of the backward and 214 belong to the scheduled caste. In all there are 161 households.

The literacy level is very low with only 883 males and 17 females who are literate, the village has no school.

SOCIO-ECONOMIC FEATURES

According to the castewise distribution of households there were 43 families from the higher caste, 30 from the backward caste which comprised of 13 different jati groups and 38 from the scheduled castes comprising of 4 jati groups. Farming is the major occupation followed by government service and independent occupation such as grocery shop, paan, cloth, and cycle repair shops.

There are 4 large farmers each owning ten acres or more; 16 medium farmers each owning five to ten acres of land; 79 small farmers with land holdings between one to five acres, 37 were marginal landowners with less than one acre and 19 were landless.

The village panchayat is dominated by the higher caste namely; Brahmins and Thakurs while the other castes represented are Nishad and Chamar. The Brahmins have a strong influence, particularly in obtaining financial loans and are the main money lenders. The Nishads (fishermen caste) are the largest single

jati group in the village. The scheduled caste members and their leaders were more aligned to the Thakur faction, but did not have any significant role in the village affairs. Instead they inclined to have stronger ties with external sources, who were providing them with employment opportunities and financial assistance.

DEVELOPMENT ACTIVITIES

The village has a poor record for having a high number of defaulters who have not repaid their loan borrowed from the bank and the village Cooperative Society. The village panchayat did not maintain a record of those who obtained IRDP loans but from the Block records the following information about the beneficiaries who had obtained loans and their breakup under the different schemes, is given below:

	<u>1985-86</u>	<u>1986-87</u>
Agriculture	1	2
Animal Husbandry	-	-
Industrial Business and Service Section (IBS)	34	26

In agriculture, the beneficiaries were given loans for hand operated chaffcutter. In the case of IBS, the loans were furnished for the purchase of boats, fishing nets, cloth vending, horse cart(ekka); pan shop, cycle repairing tools, loudspeaker set, four wheel carts for transportation and camel.

By way of extension and educational activities; the Block has not conducted any activity or programme in the village. Instead the Agricultural Institute has been the only agency carrying out some extension programmes which consists of field demonstration and distribution of seeds and fertilizers under the aegis of the Lab-to-Land programme. The World Council of Churches has sponsored a rural development programme for young farmers, preschool children and rural women which is carried out through the young Farmers Club and Shishu Vikas Kendra's. The various extension activities conducted include village and institutional trainings, field and home demonstration and screening of relevant film shows relating to agriculture and livestock management. Sewing-knitting, nutrition and dietary, preventive health and hygiene were the aspects taken up with the women members.

The village had one TV set owned by a Brahmin youth leader and about 35 to 40 percent of the households had transistors, however printed material was absent.

II. VARIABLES AND THEIR MEASUREMENT

The variables selected for the study are presented below alongwith the measurement techniques used.

Independent and Dependent variables with instruments used for their measurements

	<u>Variables</u>	<u>Instruments used</u>
(a)	<u>Personal</u>	
	1) Age	Chronological age
	2) Education	Scores assigned as per the Socio-Economic Scale of
	3) Family Type	Trivedi and Pareek (1963)
(b)	<u>Socio-economic</u>	with necessary modification
	4) Occupation	
	5) Total land owned	
	6) Social participation	
	7) Composite Socioeconomic status	
(c)	<u>Communication</u>	
	8) Cosmopolitaness	Scale developed by Ernest(1973)
	9) Mass Media Use	Schedule developed for the purpose.
(d)	<u>Extension</u>	
	10) Extension Agent Contact	Schedule developed for the purpose
	11) Participation in Extension Activities	
(e)	<u>Information Sources</u>	
	12) Proportion of Network members who serve as primary source of information for each respondent.	Value based on the proportion of respondents network size

- | | |
|---|------------------------------------|
| 13. Extent of Exposure which each respondent has with his primary source of Information | Schedule developed for the purpose |
| 14. Information Acquisition Scores. | Schedule developed for the purpose |
|
(f) <u>Social Network</u> | |
| 15. Network Size | Schedule developed |
| 16. Frequency of Contact. | for the purpose |
| 17. Level of Involvement. | |
| 18. Relational Diversity. | |
| 19. Occupational Diversity. | |
| 20. Educational Diversity. | |
| 21. Caste Diversity. | |
| 22. Density. | |
| 23. Degree of relationship. | |

The level of involvement and information acquisition were the dependent variable for the analysis of the social network and information acquisition aspects respectively.

Description of the measurement procedure

The method and procedure for the measurement of each of the variables are elaborated as under:

A. PERSONAL VARIABLES

The variables included in this group were age, education and family type of each of the selected respondents.

1. Age: Age was operationalised as the chronological full years completed by the respondents at the time of interview. It was determined by asking them as open end question.
2. Education: Education was operationalized as the number of years of formal schooling attended by the respondents. The scores assigned to the various levels of education are presented in Appendix I.
3. Family Type: The family type was dichotomized into 'joint' and 'nuclear' families. It was operationally measured by the SES scale, presented in Appendix I.

A nuclear family is composed of members of only one adult couple including minors and dependents.

A joint family is composed of two or more married couples living under a common roof having a joint cooking place.

B. SOCIO-ECONOMIC VARIABLES

Amongst the socio-economic variables included in the SES scale; occupation, total land holding and social participation were considered as separate independent variables envisaged to have some bearing on the research problem under study.

4. Occupation: An occupation is a social role that is determined by the general division of labour within a society-a set of activities centered on an economic role and usually associated with earning a living. It is

an important factor defining a person's social prestige, class, position and style of life. Occupation was operationally measured by the scores assigned as given in Appendix I.

5. Total Land Owned: Land owned refers to the total acres of land possessed by a respondent and was measured by an open ended question. The unit of land measurement in the area of study was 'bigha', which consisted of 20 biswas. The total area of land possessed by a respondent was converted to the standard unit of 'acres' and scores awarded as per the SES scale, which is given in Appendix I.

6. Social participation: The social participation refers to the respondents' relative involvement in formal organizations operational in the village or Block as a member of office bearer with regard to holding the position through nomination or selection and was measured according to the SES scale developed by Trivedi (1963). Weighted score was assigned to each category as given in Appendix I.

7. Socio-economic status: It refers to the position a respondent occupies in comparison to others with respect to his material possession, occupation, social participation in the formal organisations. The SES scale was modified for scores assigned to caste grouping, material possession farm power and animals possessed and education. Algebraic sum of scores on all the items constituted the total socio-economic score of the respondent.

The socio-economic status scores of all the respondents ranged from 5-40. By using the weighted cumulative frequency method, the total weighted cumulative frequency for all the respondents was obtained. In order to delimit the respondents into high, medium and low socio-economic status category, the total weighted cumulative frequency was divided into three equal parts. The respondents having cumulative frequency falling in the first part formed the group of low socio-economic status (5-1042). The respondents having cumulative frequency falling in the middle part (1126-1935) form the group of 'medium' socio-economic status. The remaining respondents cumulative frequency score falling in the last part (2151-3172) formed the group of high socio-economic status.

C. Communication - Extension variables

8. Cosmopolitaness: The term refers to the degree to which the respondent had the opportunity to go out of his village for some purpose and thereby be exposed to or interact with others. Cosmopolitaness was empirically measured on the four point continuum developed by Ernest (1973).

The different centres of visit enumerated were not of uniform distance from the village of the respondents. The centres also differed in their importance from the point of view of their association in some way or the other with development activities and availability of information.

By asking the respondents open end question, response for each centre was obtained and the scores were totalled and taken as the 'Cosmopolitaness' score of the respondent. The score assigned for each centre under each point of the continuum is given in the Appendix I.

9. Extension Agent Contact (EAC) : It refers to the number of times the respondent had contact or was visited by the selected development personnel of the Block and government functionaries who are associated with rural development programmes. One point was awarded for each contact of the respondent with each personnel respectively during the period of six months preceding the date of interview. The total number of contacts made up the aggregate score of the respondent for extension agent contact.

10. Participation in Extension Activities (PEA): It refers to the participation of a respondent in selected extension activities; namely, Demonstrations, Kisan Goshti, Farmers Training Camps, Kisan Mela, and educational tours. This variable was empirically measured by giving a score ^{of} ~~one~~ for each of the activities in which the respondent reported to have participated in the last one year preceding the date of interview. The total score for each respondent was thus obtained by the type of score into the number of times that the individual participated.

11. Mass Media Use: This refers to the different types of mass media sources which the respondent used regularly or was exposed to, namely; the Radio, local newspaper, television, development or extension films or video films, and extension

publication material eg. pamphlets, charts/posters, folders etc. which would have been distributed by locally operating agencies or Block.

The selected media were listed and its use measured by means of a 3 point continuum which was given scores. The score obtained for each of the selected mediums was added to find out the total score of the respondents mass media use. The scores for each point on the continuum against each medium is included in the Appendix I.

12. Proportion of network members identified as primary sources of information

This refers to the persons in the network whom the respondent identified as his regular and primary source of information. The measurement of this variable was computed by taking the proportion of such members over the total number of members constituting the network size of the respondent.

A higher value of this index denotes greater dependence for information input on network members. While lower values are indicative of lesser dependence for information from network members, invariably leaving options for the individual to seek interpersonal sources from other than those of his network members.

13. Extent of Exposure: It refers to the amplitude of interactional opportunity that the respondent has with each of the individuals whom he identifies as his primary source of information.

This was operationalised by asking each respondent an open ended question, 'how often does he meet with each of his source(s)'. A four point interval index was developed to measure the frequency of contact. The frequency and the corresponding score for each is given as follows:

- Daily - (4);
- often in the week -(3)
- once in a week -(2)
- less often -(1)

The composite frequency index was computed by the sum of the product of the number of interpersonal source in each category of exposure and its score. This composite score was divided by the total number of individuals identified as sources of information. The maximum-minimum range of the extent of exposure was 4 to 1; higher value indicates greater exposure of the respondent with his source of information.

Information Acquisition:

The information acquisition score for each respondent was operationalised by asking him an open ended question, "what are the development programmes that are currently implemented by the Block?" On identification of the programme(s), the next step was to enquire how much the respondent knew about the programme, its detailed knowledge, by asking another set of questions, the responses to which were then assigned scores. It was computed with the help of a 4-point continuum which is as follows; never heard of -(1); aware but do not know -(2); aware

and know something -(3); and aware and know well-(4). As per the official records of the Chakka Block the following development programmes were being implemented:

- (a) Integrated Rural Development Programme (IRDP)
- (b) National Rural Employment Programme (NREP)
- (c) Training of Rural Youth for Self Employment (TRYSEM)

The range of the scores varied between 12 and 3.

NETWORK VARIABLES

Basis for the analysis of Social Network Data

In case of the social network indices used for interpreting the communication structure, the basic unit for the analysis are the respondents who constitute the universe of the study. As stated earlier, the notion of social network is used synonymously with 'interpersonal network', comprising of individuals with whom the respondent has communication on personal level. The orientation therefore is based on the 'personal network' i.e. looking at each respondents immediate social relationships with other members and the characteristics of these social ties from the point of view of the respondent. Thus the network originates and ends with the respondent, the analysis was accordingly limited to what Barnes (1969) termed as 'primary star', which is the set of direct links that a person has with others who invariably constitute the 'primary zone' of the network. The reciprocity of relationship was not considered for the analysis.

Network Variables Selected For the Study

The selected features which constitute the social network indices have been considered primarily for their assumed contribution to the level of involvement and the acquisition of information. These have been listed subsequently, describing clearly their operational measurement procedure followed to compute the individual value for the respondent on these indices respectively.

- 1) Network Size.
 - i) Frequency of contact.
 - iii) Nature of Social Exchange.
 - iv) Relational Diversity.
 - v) Occupational Diversity.
 - vi) Educational Diversity.
 - vii) Caste Diversity.
 - viii) Network Density.
 - ix) Degree of Relationship

Network size:

This refers to the number of persons whom the respondent mentions that he most often interacts on a personal level. This was operationalized by asking the respondent an open ended question; 'who are the persons with whom you most often interact?'

- a) in your village
- b) outside your village.

(please indicate the persons whom you can approach without hesitation in time of need or help, and as well as maintain regular social contact). 'Regular' refers to a personal contact of at least once in a period of 15 days on an average.

The total number of such persons mentioned by the respondents, measured the size of his network.

Frequency of Communication

This refers to how often the respondent normally interacted with each of his network members. The frequency and the corresponding score for each is as follows:

- | | |
|-------------------------|---|
| a) Once a day | 5 |
| b) Several times a week | 4 |
| c) Few times a month | 3 |
| d) Once a month | 2 |
| e) Few times a year | 1 |

The frequency of communication was measured by the sum of frequencies across all the persons, i.e. Type score x number of network members in each category of frequency. This composite score was then divided by the network size of the respondent to reduce the influence of it on the frequency of communication. Therefore, the score values closer to 5 implied a greater frequency of interaction that the respondent had with his network members on an average.

Nature of Social Exchange

This refers to the nature of social interaction that the respondent most often engages with each of his network members. It was operationalised by categorising the responses as:

- (i) Personal - discuss personal matter about self or concerning the family.
- (ii) Social - get together and discuss general affairs.
- (iii) Occupational - discuss aspects related to the occupation or work one does.
- (iv) Advisory - seek opinion or views on issues of importance.

The score was computed by the total number of categories of social exchange overall the network members, e.g. in a network size of 4, if the type of interactional exchange amongst the four members was only personal and social in nature, then the score will be 2.

This total score constitutes the level of involvement of the respondent with his network members in general. The maximum and minimum score ranged from 4 to 1. Higher values indicate greater level of involvement meaning varied types of message content is contained in the interaction between the respondent and his network members.

However, on the individual level, it can be computed by taking 'the proportion of different types of interactional content that respondents reports to exchange with each of the network others. Higher the scores, higher the level of involvement between the dyads. It also indicates whether the communication link between the dyad is multiple or uniplex in nature.

Network Diversity

Nature of relational tie, occupation, level of education and caste were the selected variables on which the extent of diversity among the network others was determined.

Relational Diversity

This refers to the different types of relationship that the respondent has with each of the network members individually; the different category of relationships that a respondent can have with his network members are:

- i) Relation
- ii) Friend
- iii) Neighbour
- iv) Occupational contact.

The operational measurement of the relational diversity is the total number of different relationships mentioned in each network which becomes the individuals own score for relational diversity.

Occupational Diversity

This refers to the different occupations of the respondent's network members.

It was operationally measured by assigning the score to each type of occupation. The scores used were in accordance with the Trivedi Socio-Economic Status scale (1963).

The variance of the occupational status of the network members was obtained by totalling the frequency of score values. The mean was computed by dividing the sum of score values by the network size. Subtract the mean value from each individual occupation score value, square the resultant value, the sum of these values are then divided by the network size to reduce the effect of it. This constitutes the occupational diversity of the respondents network. The more variance i.e. larger values, the more diverse the network in terms of the occupational status of the network members. On the contrary, lower values imply that the respondents network members do not vary much in their occupational background.

Educational Diversity

This refers to the extent of variance there is in the level of education of the respondents network members. The variance value was used as a measure of educational diversity of the members in the network. The operational measurement procedure adopted was the same as was done in the case of computing the occupational diversity. The scores used were:

illiterate	-	1
upto middle	-	2
upto intermediate	-	3
Graduate	-	4

A respondents network is considered to be more diverse if the variance value obtained is high i.e., the members in the respondents network are diverse in their level of education.

Caste Diversity

It refers to the number of persons belonging to different castes other than that of the respondents. A network is considered more diverse if it comprises of different caste members rather than just a single caste. The operational measurement was done by taking the total number members who were of castes other than that of the respondents as the index. The three category of caste designated were the higher, backward and scheduled caste respectively.

Network Density

It refers to the extent to which the members of a respondents network are interconnected i.e., 'know each other' and there exists a communication link between them. It provides a basis for inferring the potential for diversity of information. Higher density has less potential for diversity of information because of greater inter-connectedness.

This structural variable is a function of the number of actualized relationship amongst the network other members and the total number of persons involved in the network. Density index represents the percentage of potential links that are actualised.

Degree of Relationship

In the study this refers to the mean number of relationships that each network member; excluding the respondent, has with other members in the network. The necessity of determining the degree of relationship is because it provides a more substantive knowledge about the nature of relationship which individuals in a network share amongst themselves. It also has a sociological significance as far as the dissemination of information among the members in a network is concerned. And since the interpretation of a network is the relation existing between its density and the number of persons involved, the role of the degree of relationship also contributes to the process of information spread among the members in the network. The density is a function of two factors; degree of relationship and the total number of persons in the network.

The procedure for computing the density and degree of relationship was done from the individual data that was recorded in the chart developed for the purpose. The names of the network members mentioned by the respondent was entered individually into a set of circles. Reciprocity of relationship

between each of the members was not considered individually, but instead the respondent was asked to designate:

- (a) which pairs of individuals were known to each other a dotted line was drawn to join the two points
- (b) pair of individuals who maintained a strong communication link between themselves i.e. reciprocal relationship a solid line was drawn to connect such dyads.

Since it was a personal network most of the individuals were known to each other because majority were from the same village itself. The density of a network was computed by considering the dotted lines drawn over the possible number of such connections comprising of the actual number of links in a network. The following formula was used;

$$D = \frac{'a'}{n(n-1)/2}$$

- 'a' = the actual number of links
- n = number of persons in the network
- D = density of the respondents network
- = the number of actual communication links between the members in a network excluding the respondent. Functionally expressed in percentage.

For determining the degree of relationships between the members in a network, the solid lines connecting pairs of individuals was considered and the formula used was:

$$d = \frac{\sum x Na}{N}$$

where Na = number of reciprocal relationships
 N = size of the network.
 d = the average number of reciprocal relationships members have with other members in a net work.

The value of density ranges from 0.00 to 1.00: high values indicate a greater interconnectedness among the network members.

III. METHOD OF DATA COLLECTION

Preparation and pretesting of the schedule

The schedule for the study was developed based on the objectives of the research and reviews of previous work done. The selection of relevant individual characteristics (personal, socio-economic) communication and extension orientated variables were also made which were assumed as independent variables.

The schedule had four parts:

Part I Individual characteristics of the respondents comprising of personal, socio-economic, communication and extension oriented variables which were measured with the help of various scales developed or adopted for the purpose.

Part II Information pertaining to the social network indices were recorded on a chart designed for the study.

Part III Data concerning the respondents primary source of information used and the extent of exposure.

Part IV Level of information/knowledge that the respondent has about the current development programmes.

Pretesting

The schedule was pretested with 30 randomly contacted farmers in a village other than selected one. Necessary modifications were made in the questionnaire.

Selection of Respondents

Since the whole village study was considered appropriate, a castewise list of households was compiled with the help of the village pradhan.

The village had a total household of 161 families of which 150 were interviewed. Eleven households were screened and not included because for the following reasons:

- (i) Five refused to cooperate and were not willing to be interviewed.
- (ii) Three were detected to be giving unreliable information.
- (iii) Three heads of the households were employed and lived most of the time outside the village, hence were not available for interview.

The personal interviews with the main decision maker in a household in a face to face situation was the principal method of data collection.

IV. STATISTICAL ANALYSIS

In accordance with the nature of study it was found appropriate to analyse the data employing both descriptive and relational statistical methods. The statistics is tested at probability levels of 0.05 and 0.01 on two-tailed significance test.

1. Descriptive Statistics

Percentage, mean, standard deviation, and 'Z' test.

2. Relational Statistics

- (a) Pearsons coefficient of correlation (r) was used to find out the zero-order correlation between the individual variables.
- (b) Path analysis for determining the direct or indirect effect of the independent variables on the dependent variable.
- (c) Stepwise Regression, a powerful variation of multiple regression which is a means of choosing independent variables which will provide the best prediction possible with the most relevant independent variables.

CHAPTER IV

FINDINGS AND DISCUSSION

The data collected according to the methods and procedures detailed in Chapter III were subjected to both descriptive and relational analysis to suit the objectives of the study. The results accruing from the analysis are presented and discussed under the following heads:

1. The socio-personal profile of the village respondents on the basis of:
 - a) Socio-personal variables
 - b) Communication and extension variables
 - c) Information acquisition variables

2. Existent communication network explained with the help of the 'social network' variables.
 - a) The interpersonal communication structure in terms of social network indices.
 - b) Relationship among the individual and network variables with the Level of Involvement.
 - c) Relative influence of the network and individual variables on the Level of Involvement.

3.
 - a) Relationship among the individual and network variables with Information Acquisition of the respondents.
 - b) Relative influence of the individual and network variables on the Information Acquisition in the different caste groups.

Table 1. Frequency, Percentage, Mean, Standard Deviation and Z values of Socio-personal variables of the Total, Higher, Backward and Scheduled Caste respondents.

Variable	Total Respondent (N=150)		Higher Caste (N=40)		Backward Caste (N=73)		Scheduled Caste (N=37)		Z ₁	Z ₂	Z ₃
	Freq. / %		Freq. / %		Freq. / %		Freq. / %	HC	BC	HC	BC
a) Age											
17-30 yr.	29 / 19.33		6 / 15.00	14 / 19.18	9 / 24.32						
31-44 yr.	55 / 36.66		11 / 27.00	25 / 34.25	19 / 51.35						
45-above	66 / 43.99		23 / 57.50	34 / 46.57	9 / 24.32						
Mean	43.06		45.30	44.20	37.84			0.556	2.593*	2.788*	
standard deviation	13.67		14.47	14.50	9.39			(NS)			
b) Occupation											
Govt. Service	19 / 12.66		12 / 30.00	4 / 5.43	3 / 9.11						
Agriculture	66 / 44.0		22 / 55.00	40 / 54.79	4 / 10.81						
Independent Profession	20 / 13.33		4 / 10.00	9 / 12.33	7 / 18.92						
Business	4 / 2.66			4 / 5.43							
Caste Occupation	10 / 6.66		2 / 5.00	8 / 10.96							
Labourer	31 / 20.66		3 / 10.96	3 / 10.96	23 / 62.16						
Mean	3.91		5.05	4.05	2.40			4.327**	7.621**	4.611**	
standard deviation	1.764		0.932	1.508	1.993						

1.(a) SOCIO-PERSONAL PROFILE OF THE VILLAGE RESPONDENTS

The nature of study prompted the necessity for providing some background information regarding the socio-personal characteristics of the village respondents. This would facilitate a better understanding about the nature of their social interactional patterns.

Table 1.1, reports the frequency and percentage distribution of respondents, on each of the variables in the three caste groups and as well as on the overall basis. The means, standard deviation and Z values computed to test the significant difference, if any, between the three caste groups, have also been incorporated to substantiate the findings.

The seven variables were age, occupation, land holding, family type, education, social participation and socio-economic status.

AGE: Table 1.1(a) reports the distribution of the respondents on the basis of their age. It was observed that 80 percent of the respondents were in the old and middle age group. Majority of the high and backward caste respondents (50 and 47 percent respectively) were in the age group of 45 years and above. While 51 percent of the scheduled caste respondent were in the age group of 30 to 44 years, with the remaining 49 percent being equally distributed in the young and old age categories.

The Z value was found to be significant at 0.05 level of probability in the case of the high and backward caste with that

of the scheduled caste respectively.

This implies that the scheduled caste respondents were relatively younger in age than the higher and backward caste respondents who in turn did not differ much in their age with one another.

OCCUPATION: Table 1.1(b) reports the distribution of respondents on the basis of their occupations. It indicates that farming was the main occupation for majority of the respondents followed by about 21 percent who were engaged as labourers. In general all occupational categories were found to be represented in varying numbers particularly by the backward caste respondents.

Among the higher and backward caste group about 55 percent in each were farmers. While in the scheduled caste group nearly 62 percent were labourers either manual or agricultural, 11 percent were cultivators and about 19 percent in the same group were found to be engaged in independent profession, mainly technical. There were about 30 percent amongst the high caste employed in government services.

The Z values reported in the Table indicate that there was significant difference in each of the caste groups at 0.01 level of probability.

The higher caste respondents were found to have significantly higher occupational means than that of the backward and scheduled castes, similar result was found between the backward and scheduled caste also.

Table 1.1 contd.

Variable	Total Respondent N=150	Higher Caste (N=40)	Backward Caste (N=73)	Scheduled Caste (N=37)	HC 1 BC	HC 2 SC	HC 3 SC
	Freq./ %	Freq./ %	Freq./ %	Freq./ %	Z ₁	Z ₂	Z ₃
c) Land Holding							
Landless	19/12.66	-	9/12.33	10/27.03			
Marginal	34/22.66	2/5.00	13/17.81	10/51.35			
Small (1-5 acres)	79/52.66	23/57.50	43/65.75	3/21.62			
Medium (5-10 acres)	14/9.33	11/27.5	3/4.11	-			
Large	4/2.66	4/10.00	-	-			
Mean	1.693	2.525	1.616	0.946	5.063**	3.124**	4.596**
S.D.	0.939	0.996	0.757	0.705			
d) Family Type							
Nuclear	97/64.66	19/47.50	52/71.23	26/70.27			
Joint	53/35.33	21/52.50	21/28.77	11/29.73			
Mean	1.353	1.695	1.297	1.297	2.463*	2.061*	0.103(NS)
S.D.	0.479	0.595	0.455	0.463			

Thus all the caste group differed significantly from each other in respect of their occupation.

Land Holding:

Table 1.1 (c) reports the distribution of respondents on the basis of their land holding. The data reveal that about 53 percent of the respondents were in the small farmer category owning upto 5 acres, followed by 23 percent who owned upto one acre of land and only 12 percent were landless and the same percentage was that of the medium and large farmers taken together.

About 57 and 66 percent of the higher and backward caste respondents were small farmers, while there were only 22 percent of scheduled castes in this category. Nearly 51 percent of the lower caste respondents were marginal land owners and 27 percent landless. Only 10 percent of the higher castes had over 15 acres of land.

The F values indicate that there was significant differences between the means of the 3 caste groups, at 0.01 level of probability.

The higher caste's being significantly higher than the two lower castes similarly the backward were significantly higher than the scheduled castes.

Family Type:

Table 1.1(d) reports the distribution of the respondents on the basis of their family type.

Table 1.1 Contd.

Variable	Total Respondent (N=150)	Higher Caste (N=40)	Backward Caste (N=73)	Scheduled Caste (N=37)	71 HC - BC	72 HC - SC	73 BC - SC
	Freq./ %	Freq./ %	Freq./ %	Freq./ %			
e) Education							
Illiterate	53/35.33	2/5.00	30/41.10	21/56.76			
Primary	31/20.66	14/35.00	13/17.31	4/10.31			
Middle	31/20.66	7/17.50	16/21.32	3/21.62			
H.S.& Inter.	25/16.66	11/27.50	11/15.07	3/8.10			
Graduate	10/6.66	6/15.0	3/4.11	1/2.70			
Mean	1.520	2.40	1.328	0.945	3.462**	4.328**	1.390(NS)
S.D.	1.566	1.629	1.463	1.311			
f) Social Participation							
Poor(0)	104/69.33	19/45.00	54/73.97	32/26.49			
Low(1-2)	24/16.00	9/22.50	13/17.80	2/5.40			
Medium(3-4)	3/5.33	3/7.500	4/5.48	1/2.70			
High(5-7)	14/9.33	10/25.00	2/2.74	2/5.40			
Mean	1.100	2.475	0.6712	0.450	3.316**	3.636**	0.737(NS)
S.D.	2.209	3.273	1.424	1.232			

It was found that nearly 65 percent of the respondents were having nuclear families, with over 70 percent from the backward and scheduled castes respectively. But amongst the higher caste about 53 percent were from joint families.

The Z values show that the higher caste respondents had significantly higher mean values than that of the backward and scheduled castes at 0.05 level of probability. While there was no significant difference between the two lower caste respondents.

Education:

Table 1.1(e), reports the distribution of the respondents on the basis of their level of education.

It was observed that about 41 percent of the respondents had primary to middle level of education, 35 percent were illiterate and only about 7 percent were graduates in the village.

Amongst the higher caste respondents nearly 35 percent had upto primary level of education, 23 percent were matriculate and only 15 percent graduates.

While there were about 57 percent among the scheduled and 41 percent from the backward caste who were illiterates. There were 22 percent in both these caste groups respectively who had acquired upto middle level education. Only 15 percent of the backward had completed matriculation and 3 percent in the case of the scheduled caste.

The Z values between the means of the three castes, shows that the higher castes were significantly higher than that of the backward and scheduled caste respondents respectively at 0.01 level of probability. While the two lower caste did not show any significant difference between themselves. Therefore, the higher caste respondents were significantly higher in their level of education status than that of the other two castes which did not differ amongst themselves.

Social Participation:

Table 1.1(f) reports distribution of the respondents on the basis of their social participation score.

The data shows that 69 percent of the respondents had no involvement in any of the village institutions, but there were 16 percent who had low and 9 percent having a high social participation scores.

Across the three caste groups 45 percent of the high caste respondents, 74 percent of the backwards and 96 percent of the scheduled caste were found to have no participation in the village organizations.

Among the high caste respondents it was observed that 23 percent had low and 25 percent had high social participation score.

There were about 13 percent among the backward caste respondents who had low social participation scores.

The scheduled caste had a meagre 5 percent of respondents possessing low and high social participation scores each.

The Z values show that the high caste respondents had significantly higher mean value than the other two caste groups respectively at 0.01 level of probability. While there was no significant difference between the backward and scheduled caste group in their level of social participation.

It is, therefore, obvious that the social organisation and institutions are dominated by the high caste people in the village.

Socio-economic status:

Table 1.1(g) reports the distribution of the respondents on the basis of their composite socio-economic scores.

Nearly 49 percent of the respondents were in the low socio-economic status and 25 percent of each were found to be represented in the medium and high socio-economic status.

The scheduled caste respondents were predominately in the low socio-economic with almost 89 percent followed by 53 percent of the backward caste respondents.

While in the medium and high socio-economic status 35 and 60 percent of the high caste members were found to be leading over the backward caste respondents who were about 32 and 15 percent in each of the two above mentioned socio-economic categories. There were only 8 percent amongst the

Table 1.1 Contd.

Variable	Total Respondent (N=150) Freq./ %	Higher Caste (N=40) Freq./ %	Backward Caste (N=73) Freq./ %	Scheduled Caste (N=37) Freq./ %	Z ₁ = BC HC = SC	Z ₂ = SC HC = BC	Z ₃ = SC BC = SC
<u>g) Socio-Economic Status</u>							
Low(5-20)	74/49.33	2/5.00	39/52.42	33/89.18			
Medium(21-26)	33/25.33	14/35.00	23/31.50	1/2.70			
High(27-49)	33/25.33	24/60.00	11/15.06	3/8.10			
Mean	21.146	20.150	20.75	13.27	5.982**	9.997**	5.327**
S.D.	3.930	7.631	6.516	6.233			

N.S. Non Significant

HC Higher caste

* 5% level of significance

BC Backward caste

** 1% level of significance

SC Scheduled caste

S.D. Standard Deviation

scheduled caste respondents in the high socio-economic status.

The Z values exhibit that the high caste group had significantly higher socio-economic score than the backward and scheduled caste respondents at 0.01 level of probability. Similarly the backward caste were found to be significantly higher than the scheduled caste at 0.01 level of probability. Thus each of the three caste groups differed significantly from each other in respect to their socio-economic status.

By and large the findings reveal that the high caste respondents were significantly higher than both the backward and scheduled caste respondents on six out of the seven socio-personal variables namely; socio-economic status, land holding, occupation social participation, education and family type where majority of them were from joint family background.

The backward respondents were significantly higher than the scheduled caste with respect to socio-economic, occupation land holding and relatively older in age. However, they were more or less the same with respect to family type; which was predominantly nuclear in nature, education and social participation. The scheduled caste respondents were comparatively younger in age than both the higher and backward caste respondents.

1.(b) COMMUNICATION AND EXTENSION EXPOSURE

The variables like cosmopolitaness, mass media use, extension agent contact and participation in extension activities were considered as components for determining the extent of effect that these variable had on the respondents knowledge of

Table 1.2 Frequency, Percentage, Mean Standard Deviation and the Z values of of Communication & Extension variables for the Total, Higher, Backward and Scheduled Castes respondents.

Variable	Total Respondent (N=150)		Higher Castes (N=40)		Backward Castes (N=73)		Scheduled Caste (N=37)		Z ₁		Z ₂	
	Freq./ %		Freq./ %		Freq./ %		Freq./ %		HC - BC	BC - SC	HC - SC	BC - SC
h) Cosmopolitaness												
Low(1-6)	114/76.00		25/62.50		54/73.97		35/94.59					
Medium(7-12)	32/21.33		11/27.50		19/26.03		2/5.40					
High(13-18)	4/2.66		4/10.00		-		-					
Mean	5.29		6.250		5.218		4.405		1.432(NS)	2.672*		2.370*
S.D.	3.260		4.196		3.410		1.189					
1) Mass Media Use												
Low(0-2)	53/35.33		5/12.50		32/43.84		21/56.76					
Medium(3-5)	44/29.33		6/15.00		25/34.25		13/35.13					
High(6-above)	43/28.66		29/72.50		16/21.91		3/8.11					
Mean	4.030		6.575		3.53		2.450		5.656**	7.303**		2.293*
S.D.	2.995		2.791		2.640		2.142					

the current development programmes being implemented by the Block.

Table 1.2j reports the frequency, percentage, mean, standard deviation and Z values on which the respondents of the three caste groups were differentiated. The findings of the four variables mentioned above have been reported and discussed below.

Cosmopolitaness:

Table 1.2(h) reports the distribution of the respondents on the basis of their cosmopolitaness scores.

The data reveal that nearly 76 percent of the respondents had a low level of cosmopolitaness and only 21 percent had a medium level.

The distribution of the respondents obtaining low scores in each caste category shows that the range increased from about 63 percent among the high caste to nearly 95 percent in the scheduled caste group. In the case of the medium level of cosmopolitaness, there were 28 and 26 percent from the high and backward caste respondents with a meagre 5 percent from the scheduled caste.

10 percent of the higher caste and none from the other caste were found to have a high level of cosmopolitaness.

The Z values reveal that the high and backward caste respondents had significantly higher level of cosmopolitaness

than those of the scheduled castes. Whereas the respondents of these two categories did not differ significantly between themselves in this respect.

Mass Media Use

Table 1.2(i) reports the distribution of the respondents on the basis of their use of mass media sources.

It was found that 39 percent of the respondents were low in their use of mass media sources while ^{were} there 29 and 32 percent of the respondents who were medium to high in their use of mass media sources.

The higher caste members had nearly 73 percent who were high users of mass media. While there were only 23 and 3 percent amongst the backward and scheduled caste who had high level of mass media use.

The Z values reveal that the higher caste respondents were significantly high users of mass media sources than the backward and scheduled caste respondents at 0.01 level of probability. Further the backward caste respondents were found to be significantly higher users of mass media sources than the scheduled caste respondents at 0.05 level of probability.

Extension Agent Contact:

Table 1.2(J) reports distribution of the respondents on the basis of their extension agent contact scores.

Table 1.2 Contd.

Variable	Total Respondent (N=150) Freq./ %	Higher Caste (N=40) Freq./ %	Backward Caste (N=73) Freq./ %	Scheduled Caste (N=37) Freq./ %	Z ₁ - BC HC	Z ₂ - SC HC	Z ₃ SC BC
j) Extension Agent Contact							
Poor(0)	74/49.33	14/35.00	35/47.95	25/67.57			
Low(1-2)	63/42.00	16/40.00	35/47.95	12/32.43			
Medium(3-4)	7/4.66	4/10.00	2/4.10	-			
High(5-above)	6/4.00	0/15.00	-	-			
Mean	1.00	1.95	0.935	0.405	2.731*	3.969**	3.936*
S.D.	1.442	2.202	0.928	0.643			
k) Participation in Extension Activities							
Poor(0)	111/74.00	31/77.50	47/64.33	33/39.19			
Low(1-2)	24/16.00	3/7.50	17/23.29	4/10.31			
Medium(2-3)	13/8.66	6/15.00	7/9.59	-			
High(3-above)	2/1.33	-	2/2.74	-			
Mean	0.373	0.375	0.506	0.109	0.896(NS)	2.085*	3.734**
S.D.	0.70	0.740	0.733	0.314			

N.S. Non Significant
 * 5% level of significance
 ** 1% level of significance
 S.D. Standard Deviation
 HC Higher caste
 BC Backward caste
 SC Scheduled caste

The data reveals that 49 percent of the respondents had no extension agent contact at all, while 49 percent had low extension contact, and only 4 percent of each who had medium to high level of contact.

Amongst the high caste respondents 35 percent had no contacts, about 49 percent had low contacts, and only 15 percent had high extension contact.

The backward caste were found to have nearly 43 percent of respondents in each of the poor and low contact category and a meagre 4 percent in the category of medium contact.

Almost 68 percent of the scheduled caste had no contact and the remaining 32 percent were found to have a low extension agent contact.

The Z values showed that the high caste members had significantly greater extension agent contact than the backward and scheduled caste respondents at 0.05 and 0.01 level of probability respectively, While the backward caste were found to have greater extension contact than the scheduled caste at 0.05 level of probability.

Participation in Extension activities:

Table 1.2 (k) reports distribution of respondents on the basis of their extent of participation in extension activities.

The data reveal that 74 percent of the total respondents had not participated in any kind of extension in the last one

year. While 16 percent were found to have low participation score and about 9 percent had medium participation scores.

There were nearly 39 percent of the scheduled, 76 percent of the high caste and 64 percent of the backward caste respondents who had not taken part in extension activities.

About 23 percent of the backward and 11 percent of the schedule caste respondents had low participation scores.

In the medium category 15 percent of the high caste and 10 percent of the backward caste respondents had participated in some of the extension activities.

The high caste respondents had significantly a higher mean score than the scheduled caste at 0.05 level of probability, while the backward caste had significantly higher participation score than the scheduled caste respondents at 0.01 levels of probability. Thus both the backward and higher caste respondents differed significantly from the scheduled caste on the basis of their level of participation in extension activities.

The above results highlight the fact that the higher caste respondents were significantly greater users of the mass media sources and had greater extension agent contact than the backward and scheduled caste respondents.

Whereas the backward caste respondents had significantly higher cosmopolitanness, mass media use, extension agent contact and participation in extension activities than compared to the scheduled caste respondents.

INFORMATION ACQUISITION

Interpersonal source of communication are the most preferred for acquiring and deliberating upon the acquired information. The three variables, proportion of network members who serve as primary source of information, the extent of exposure to these sources and the knowledge that the respondent had about the current development programmes were considered as components for this variable.

Table 1.3, reports the frequency, percentages, mean standard deviation and the Z values. Computed to test the significance of difference between the three caste groups on the above mentioned variables.

Proportion of Network members as primary sources of information

Table 1.3(L) presents the distribution of respondents in the four categories according to the proportion of primary sources of information in their personal network.

The data reported in the table reveal that 40 percent of the respondents had less than half their network members as primary sources of information, while 39 percent had more than half their network members as primary source of information. About 21 percent were found to have over seventy five percent of network members as their primary source of information.

Among the high caste respondents 50 percent of them had less than half their network members who served as the primary source of information and almost 40 percent were found to have

Table 1.3: Frequency, Percentage Distribution, Mean, Standard Deviation and Z values of Information Acquisition Related Variables for the Total, Higher, Backward and Scheduled Caste respondents.

Variable	Total Respondent (N=150) Freq./ %	Higher Caste (N=40) Freq./ %	Backward Caste (N=73) Freq./ %	Scheduled Caste (N=37) Freq./ %	Z ₁ HC - BC	Z ₂ HC - SC	Z ₃ BC - SC
1) Prop. of NWM as sources of information							
Less than 50%	61/40.66	20/50.00	26/35.62	15/40.54			
Between 50% and 75%	59/39.33	16/40.00	25/34.25	17/45.95			
Above 75%	31/20.66	4/10.00	22/30.14	5/13.51			
Mean	0.619	0.570	0.653	0.606	1.379(NS)	0.794(NS)	1.066(NS)
S.D.	0.332	0.202	0.269	0.194			
m) Extent of Exposure							
Rarely to sometimes	19/12.66	5/12.50	9/12.33	5/13.51			
Once to often in the week	69/46.00	13/45.00	34/46.57	17/45.95			
Often in the week-daily	62/41.33	17/42.50	30/41.10	15/40.54			
Mean	3.017	2.948	3.06	3.00	0.934(NS)	0.351(NS)	0.339(NS)
S.D.	0.711	0.657	0.732	0.728			

NWM - Network Members; S.D. - Standard Deviation; N.S. - Non-Significant

more than half their personal network members as source of information.

The backward caste respondents however, had equal proportion of their network members as their primary source of information in the less than half and more than half category each of which had 36 and 34 percent, and about 30 percent who had above seventy five percent of their network members who were the primary source for information.

The scheduled caste respondents however were found to have about 46 percent who had more than half the network members as their primary sources of information followed by 40 percent who had less than half the network members as their sources of information.

The F values reveal quite clearly that the three caste groups were not significantly different from each other in this respect.

Extent of Exposure:

Table 1.3(M) reports distribution of respondents across the four categories on the basis of the extent exposure they had with their primary sources of information.

The data shows that majority of the respondents had recurrent interaction opportunity with their primary source of information which ranged from 46 percent who met once to often in the week to 41 percent who interacted often in the week to daily.

Table 1.3 Contd.

Variable	Total Respondent (N=150) Freq./ %	Higher Caste (N=40) Freq./ %	Backward Caste (N=73) Freq./ %	Scheduled Caste (N=37) Freq./ %	Z ₁ = HC HC = SC	Z ₂ = HC HC = SC	Z ₃ = SC BC = SC
n) Information Acquisition Score							
Never heard	10/6.66	-	9/12.33	1/2.70			
Aware but do not know much	53/33.66	13/25.00	29/39.73	19/51.35			
Know some aspects about the programme	47/31.33	15/37.50	23/31.50	9/24.32			
Know the details of the Prog.	35/23.33	15/37.50	12/16.44	8/21.62			
Mean	3.710	3.125	2.520	2.643	3.676**	2.529*	0.726(.16)
S.D.	0.399	0.790	0.914	0.357			

N.S. Non Significant

* 5% level of significance

** 1% level of significance

S.D. Standard Deviation

HC Higher caste

BC Backward caste

SC Scheduled caste

A similar trend in the extent of exposure to their source of information was observed amongst the respondents in each of the three caste groups as the data in the Table evidently reveal.

The Z values clearly show that there was no significant difference between the means of the three caste groups.

Information Acquisition Score:

Table 1.3(n) reports distribution of respondents across the four categories based on their level of knowledge about the development programmes.

The data clearly indicate that about 30 percent of the respondents had no detailed knowledge about the I.R.D.P. programme while 31 percent had knowledge of certain aspects only. However 33 percent of the respondents were aware of the necessary details about the programme.

Nearly 51 percent of the scheduled caste and 40 percent of backward caste respondents were merely aware of the programme as 'loan scheme' and had no detailed knowledge about the programme despite the fact that some of them had been identified as beneficiaries of the IRDP programme.

There were 33 percent in the higher caste, 32 percent in the backward caste and about 24 percent in the scheduled caste who knew regarding some aspects of the programme.

In respect to possessing the detailed knowledge about the programme and its various procedures, it was found that 33 percent of the higher caste, 22 percent of the scheduled caste and about 16 percent of the backward caste respondents had the advantage over the remaining members in the village who knew little or nothing about the programme.

The Z values reveal that there was no significant difference between the backward and scheduled caste respondents.

But the high caste respondents differ significantly from the backward and scheduled caste respondents in respect to their knowledge about the I.R.I.P. programme and its procedures.

2. EXISTENT COMMUNICATION NETWORK

As far as the pattern of communication network existent in the village was concerned, the social network indices of activeness, diversity and density were used in ascertaining the distinctive features of the network in each of the major caste groups and the village in general.

The selection of these indices were made on the basis of their relative potential in contributing to the "informational strength" of a network i.e. the extent of information input that they could possibly direct into the network, rather than their role in influencing individual behaviour. The nine variables used for measuring the indices have already been described in the preceding chapter on research methodology.

Table 2.1 Frequency, Percentages, Mean Standard Deviation and Z values of the Social Network Variables of the Total, Higher, Backward and Scheduled Caste respondents

Variable	Total Respondent (N=150)		Higher Caste (N=40)		Backward Caste (N=73)		Scheduled Caste (N=37)		Z1 - BC HC		Z2 - SC BC		Z3 - SC BC	
	Freq./ %	Freq./ %	Freq./ %	Freq./ %	Freq./ %	Freq./ %	Freq./ %	Freq./ %	HC	BC	HC	SC	BC	SC
a) Network size (NWKS)														
Small (2-4)	95/63.33	16/40.00	50/68.49	29/73.38										
Medium (5-7)	46/30.66	19/47.50	19/26.03	3/21.63										
Large (8-above)	9/6.00	5/12.50	4/5.48	-										
Mean	4.10	5.25	3.77	3.39					4.207**	3.923**				0.462(NS)
S.D.	1.725	1.950	1.679	1.125										
b) Frequency of Contact (FOC)														
Daily	22/14.66	3/7.50	16/21.92	3/3.10										
Frequently	30/53.33	17/42.50	34/46.53	29/73.38										
Less Frequently	42/28.00	19/47.50	19/26.03	4/10.81										
Sometimes	6/4.00	1/2.50	4/5.49	1/2.70										
Mean	4.17	3.95	4.21	4.34					1.956*	3.036**				0.974(NS)
S.D.	0.733	0.571	0.953	0.856										

In order to highlight the network characteristic of each of the caste groups and the village as a whole, the respondents were categorized into total, high, backward and scheduled caste. The frequency and percentage distribution of the respondents alongwith the mean and standard deviation values for each of the nine network variables are reported in Table 2.1 (a-1). The F values were also computed to test the significant difference between the means of the three caste group for each of the network variables and given in the same table as well.

NETWORK SIZE:

The total number of persons who make up the respondents personal network constitutes his network size. The distribution of the respondents across the four categories based on their network size are reported in Table 2.1(a). The networks have been categorised into three groups of 'small' 'medium' and 'large' based on their range of sizes. Accordingly the 'small' group included networks made up of 2 to 4 members, the 'medium' had networks ranging from 5 to 7 members and the 'large group networks made up of eight or more members.

The data reported in the table indicates that nearly 63 percent of the respondents had 'small' networks followed by about 30 percent who had 'medium' sized networks, while only about

six percent were found to have 'large' network size.

Majority of the scheduled and backward caste were found to have 'small' personal networks, while there were only 47 percent of the high caste respondents who had 'small' networks.

But on the contrary there were more of high caste respondents who had networks which were of 'medium' size. The backward and scheduled caste having 36 and 21 percent respondents, were relatively less in this category. Again the high caste with about 12 percent respondents were found to have 'large' network size.

Therefore the high caste respondents were found to have significantly greater network size ($P < 0.01$) than those of the backward and scheduled caste respondents, who on the other hand were found to have no significant difference between the means of their network size.

FREQUENCY OF CONTACT

The frequency of interactional opportunities that an individual has with others in his personal network is a measure of the extent of accessibility and exposure that they have with one another. For the purpose of analysis the frequency of contact was categorised into four types - 'daily' 'frequently' 'less frequently' and 'sometimes'. The interaction had four levels of intensity 'once daily', 'several times a week', few times in a 'fortnight' and 'once in a while', each of which correspond to the four types of contact mentioned above.

The distribution of the respondents across the four categories based on their frequency of contact with their network members were reported in Table 2.1 (b). The results highlight that nearly 53 percent of the respondents were found to have 'frequent' contacts with their network members, while there were nearly 23 percent who had 'less frequent' and about 15 percent had 'daily' contacts with their members. The castewise distribution of respondents along the frequency of their contact make some interesting revelation. Most of the scheduled caste respondents were found to have 'frequent' contact (including daily contact), whereas only about 63 percent of the backward and 50 percent of the higher caste respondents had this level of contact. Obviously the meeting of network members varies inversely with the caste hierarchy. The mean contact score reported in the table also substantiates this finding but the Z values indicate that the higher caste respondents had significantly lower level of contact than those of the backward and scheduled caste, whereas the latter two caste groups failed to differ significantly from each other. Its quite possible that since nearly 30 percent of the high caste respondents being employed in government services were not able to find free time, as much as the others, to interact with their members. Another reason could be that some of their network members were from outside the village

LEVEL OF INVOLVEMENT:

The four types of social exchange which the village members normally engaged in their interaction with each other

were identified as social, personal, occupational and opinion. The level of involvement has been measured in terms of the overall network where the average types of social exchange is considered as the extent of involvement that respondents had with their network others. It has been grouped into 'low', 'average', 'above average' and 'high' and in each of these group the number of types of social exchange that the respondents had on an average ranged from one to four, corresponding to each group of the level of involvement respectively.

The distribution of respondents in the four categories based on their level of involvement was reported in Table 2.1(c). The data clearly shows that in general the level of involvement amongst the members in the village ranges from 44 percent in the 'above average' to 33 percent of the respondents in the 'average' category, there were only 15 percent who were found to have 'high' level of involvement.

Nearly 57 percent of the high caste respondents were found to have 'above average' level of involvement with members in their personal networks. While the backward and scheduled caste respondents with about 15 percent from each caste group, were similar in their level of involvement.

In the category of 'average' level of involvement the trend changed, where about 35 percent of respondents from each of the backward and scheduled caste groups were found to be more than the high caste respondents who had about 27 percent in this category.

Table 2.1 Contd.

Variable	Total Respondent (N=150)	Higher Caste (N=40)	Backward Caste (N=73)	Scheduled Caste (N=37)	HC - BC	HC - SC	BC - SC
	Freq./ %	Freq./ %	Freq./ %	Freq./ %	Z ₁	Z ₂	Z ₃
<u>c) Level of Involvement</u>							
One (low)	5/3.33	1/2.50	4/5.48	-			
Two (Average)	50/33.33	11/27.50	26/35.62	13/35.13			
Three (above Average)	73/48.67	23/57.50	33/45.20	17/45.95			
Four (High)	22/14.66	5/12.50	10/13.70	7/13.92			
Mean	2.75	2.30	2.67	2.34	0.906(NS)	0.234(NS)	1.106(NS)
S.D.	0.743	0.636	0.732	0.727			
<u>d) Relational Diversity</u>							
One (low)	20/13.33	2/5.00	15/20.55	3/8.10			
Two (Average)	36/57.33	26/65.00	33/52.05	22/59.46			
Three (high)	44/29.33	12/30.00	20/27.40	12/32.43			
Mean	2.17	2.27	2.07	2.24	1.65(NS)	0.233(NS)	1.373(NS)
S.D.	0.649	0.598	0.693	0.596			

S.D.- Standard deviation, N.S.-Non-significant

And though it appeared that the high caste respondents had greater level of involvement because of the advantage of their socio-economic status which comprises of both horizontal and vertical linkages, the Z values computed for the three caste groups in varying combinations showed on the contrary that there was no significant difference between them in respect to their level of involvement. Thus the respondents across the three caste groups, in general had 'above average' to 'average' level of involvement in their personal network.

NETWORK DIVERSITY

The data presented in Table 3.1 (d-7) relates to the indices of diversity in a network determined with respect to the nature of affiliational links that the respondent has with each of his network members, their occupation, education and caste status. Higher the variance more diverse the members are on that particular aspect.

RELATIONAL DIVERSITY

The distribution of respondents in the four categories on the basis of diversity in terms of the different types of relational ties namely; relation, friends, neighbours and occupational which linked them with their network members are reported in Table 3.1 (d).

The extent of diversity has been categorised into three levels; 'low' in which only one type of relational linkage common to all the members in a respondents network is included.

'Average' consists of any two types of relational link and 'High' comprises of three or all four types of relational links that the focal respondent maintains with each of the members in his personal network.

The data clearly shows that 57 percent of the respondents networks had 'average' relational diversity, followed by 29 percent respondents who had 'high' relational diversity. There were only about 13 percent respondents who were found to have a 'low' and homogenous relational diversity.

In the 'average' category; 65 percent of the high caste respondents were more than the scheduled and backward caste who had about 59 and 52 percent respondents having networks which had 'average' relational diversity.

In the 'high' diversity category the scheduled and high caste respondents were found to be more or less at par with each other followed by 27 percent respondents who had networks comprising of 'high' relational diversity. The backward caste respondents were found to have more homogenous networks in respect to the nature of relational links than that of the high and scheduled caste respondents.

The Z values revealed that there was no significant difference between the means of the three caste groups of respondents as far as their relational diversity in their networks was concerned. Indicating thereby that they had more or less similar 'average' relational diversity.

OCCUPATIONAL DIVERSITY

The distribution of respondents in the four categories based on the extent of diversity that existed with respect to the occupation status of the members in their personal network is reported in Table 2.1(e).

The diversity was computed by determining the variance, the values of which were categorized into 'low' 'medium' and 'high' according to the range of these values.

The results indicate that about 54 percent of the respondents were found to have networks which had very 'low' diversity in terms of the occupation of its members. While there were about 29 and 16 percent respondents who had networks with 'medium' and 'high' occupation diversity respectively amongst the members in their network.

The data from the table reveal that 65 percent of the high caste and nearly 50 percent of the backward caste respondents had networks with 'low' diversity in terms of the occupational status of their members. The scheduled caste had relatively fewer respondents with 'low' diversity values in their network. This implies that the high and backward caste respondents had networks comprising of members who were more or less having similar occupational status.

But, in as far as the networks having 'high' diversity were concerned, there were more of scheduled caste respondents who exhibited greater variation in the occupation status of

Table 2.1 Contd.

Variable	Total Respondent (N=150) Freq. / %	Higher Caste (N=40) Freq. / %	Backward Caste (N=73) Freq. / %	Scheduled Caste (N=37) Freq. / %	Z ₁ HC 1 BC	Z ₂ HC 2 SC	Z ₃ BC 3 SC
e) Occupational Diversity							
Low (0-2.0)	82/54.67	26/65.00	43/58.90	13/35.13			
Medium (2.01-4.0)	44/29.33	12/30.00	22/30.00	13/35.13			
High (4.01-6.0)	24/16.00	2/5.00	10/13.70	12/32.43			
Mean	1.99	1.71	1.73	2.90			
S.D.	1.589	1.316	1.482	1.81	0.057 (NS)	2.990**	3.006**
f) Educational Diversity							
Low (0.0-0.50)	39/50.33	23/57.50	43/58.75	13/48.65			
Medium (0.50-1.50)	53/35.33	17/42.50	27/36.14	14/37.84			
High (1.50-above)	8/5.33	-	3/4.11	5/13.51			
Mean	0.424	0.500	0.410	0.62	1.153 (16)	1.113 (18)	1.823 (NS)
S.D.	0.454	0.333	0.433	0.570			

their network members, than which were found in the case of backward and high caste respondents.

In case of the 'medium' category of diversity, all the three caste groups appeared to be almost at par with each other.

Hence there was significant difference ($p < 0.01$) between the scheduled caste groups and that of the other two caste groups, between whom there was no significant difference in respect to the occupational diversity among their network members.

A review of the occupational distribution of the members in the personal networks of the scheduled caste respondents revealed that occupations like government service, farming, independent profession and manual labourers in varying combinations existed. The primary reason for this heterogeneity in occupational background of the members is the economic necessity which links them to other caste members who have relatively higher socio-economic and occupation status. Moreover since majority of the lower caste are landless they try to engage in nonfarm employment opportunities and those which draws them away from their prescribed caste occupation.

EDUCATIONAL DIVERSITY:

The distribution of the respondents across the four categories based on the extent of educational diversity amongst their network members is reported in Table 2.1 (f).

The diversity was computed by means of the variance values of which were categorised into 'low', 'medium' and 'high' according to their range.

The data reveal that nearly 50 percent of the respondents network exhibited 'low' educational diversity among the members while there were 35 percent respondents who had networks with 'medium' diversity and a meagre five percent of respondents had 'high' educational diversity amongst their network members.

The F values show that there was no significant difference between any of the three caste group of respondents in respect to their educational diversity amongst network members. Such an outcome is obvious since the level of formal education of the members in the village on the whole was low.

CASTE DIVERSITY

The distribution of respondents in the four categories based on the diversity or caste composition of the members in their network and the extent to which it varied from that of the focal respondents caste group, is reported in Table 3.1(g).

Accordingly the measure of caste diversity has been categorised into three groups, 'no diversity' implies that the respondent and the members in his personal network belong to the same caste. The 'medium' category includes a member(s) of another caste other than that of the respondent. Whereas the 'high' category includes members who belong to the two other caste groups than that of the respondent.

Table 2.1 Contd.

Variable	Total Respondent (N=150) Freq./ %	Higher Caste (N=40) Freq./ %	Backward Caste (N=73) Freq./ %	Scheduled Caste (N=37) Freq./ %	71 - HC - BC	72 - HC - SC	73 - BC - SC
g) Caste Diversity							
No Diversity	65/43.33	14/35.00	41/56.16	10/27.03			
Medium (Single Caste)	64/42.67	13/45.00	27/36.99	19/51.35			
High (more than one)	21/14.00	3/23.00	5/6.35	3/31.62			
Mean	0.706	0.35	0.506	0.946	2.496**	0.584(NS)	3.201**
S.D.	0.70	0.735	0.626	0.705			
h) Density							
Low (less than 50%)	27/18.00	3/20.00	15/20.55	4/10.81			
Medium (50%-75%)	43/28.67	15/37.50	13/14.66	15/40.54			
High (75%-100%)	75/50.00	17/42.50	40/54.79	13/43.65			
Mean	0.75	0.70	0.76	0.77	1.196(NS)	1.716(NS)	3.133(NS)
S.D.	0.232	0.219	0.247	0.215			

The data in the table shows that almost an equal representation of nearly 43 percent respondents were found in each of the categories of 'no diversity' and 'medium' while about 14 percent of the respondents had networks with 'high' caste diversity amongst their members.

The results reveal that majority of the backward caste group with nearly 56 percent of respondents had networks which were homogenous in terms of the caste status amongst the members. Thirty five percent of the high caste and about 27 percent of the scheduled caste respondents also had networks comprising of members of their own caste. Thus there was no diversity in terms of the caste status between the respondents and their network members.

But in the category of 'medium' diversity, there were more of scheduled and high caste respondents than that of the backward caste who had nearly 37 percent respondents having networks which comprised of persons of other caste than that of the respondents. Similarly in the 'high' diversity category the scheduled and high caste respondents were found to have nearly 20 percent of equal representation while the backward caste groups had far less respondents with networks having high variations in the caste status of their members.

The Z values clearly indicate that the scheduled and high caste respondents had significantly greater mean difference ($p < 0.01$) than that of the backward caste respondents. However the two former caste groups did not have any significant

difference in respect to the caste diversity of the members in their networks. Hence it implies that the backward caste persons tend to be more homogenous as far as their caste status is concerned. On the other hand the scheduled and higher caste persons generally have a more heterophilous network consisting of members of other castes apart from that of their own caste.

The reason for such network characteristic features is probably because of the economic factors for which the lower caste members have to depend on the high caste, while the reciprocal dependence of the high caste on the lower caste for services relating to manual and agricultural labour.

DENSITY OF NETWORK

The distribution of the respondents in the four categories based on the density of their personal network is reported in Table 2.1(h). Density is a measure of the extent to which the network members are interconnected through communication links with each other. The values of density so computed were categorized into three groups, the 'low' density comprised of networks which had less than fifty percent of its members who were linked to each other. Similarly the 'medium' and 'high' density group comprised of networks which had between 50 to 75 percent of member's linked and the other which had above 75 percent members interconnected to each other respectively.

Fifty percent of the respondents according to the data in the table were found to have networks with 'high' density

among its members; followed by 37 percent who had 'medium' density and only about 13 percent respondents had 'low' density networks.

Considering the distribution according to the caste groups, it was found that, more of the backward and scheduled caste group respondents had networks with 'high' density among their members followed by about 42 percent of high caste respondents who also had very 'dense' networks.

Whereas in the category of 'medium' density in the networks, the scheduled and high caste had more or less similar representation of about 40 and 37 percent respondents respectively. The backward caste respondents were relatively less with almost 24 percent of them having 'medium' density of networks.

There is apparently no significant difference between the three caste groups of respondents with respect to their network density. This implies that in general, the members in the personal networks of the three caste groups are highly interconnected in terms of communication linkage with one another. The plausible reason for such an outcome is that majority of the network members belonged to the same or neighbouring village, hence there was greater interactional opportunities between the members.

DEGREE OF RELATIONSHIP

The distribution of the respondents across the four categories based on the degree of relationship that exists

Table 3.1 Contd.

Variable	Total Respondent (N=150) Freq./ %	Higher Caste (N=40) Freq./ %	Backward Caste (N=73) Freq./ %	Scheduled Caste (N=37) Freq./ %	Z ₁ - HC - BC	Z ₂ - HC - SC	Z ₃ - BC - SC
1) <u>Degree</u>							
Low (upto 2.0)	59/59.33	13/32.50	54/73.97	22/59.46			
Medium (2.01-4.0)	58/38.67	25/62.50	19/26.03	14/37.84			
High (4.01-6.0)	3/2.00	2/5.00	-	1/2.70			
Mean	2.18	2.75	1.87	2.179	4.515**	2.553*	1.344(NS)
S.D.	0.954	1.033	0.780	0.957			

N.S. Non Significant HC Higher caste
 * 5% level of significance BC Backward caste
 ** 1% level of significance SC Scheduled caste
 S.D. Standard Deviation

between the network members on an average with each other is reported in Table 2.1 (1). Degree of relationship is the measure of the mean number of reciprocal interrelationships that each network member had with the other members in the network.

The computed values of this variable were categorised into three groups, 'low' 'medium' and 'high'. The first of these implies that lesser number of relationships exists, with a mean of two per person. While in the 'medium' an average relationship of two to four per member was considered and in the 'high' group the mean relationship ranging from four to six per member was included.

The data from the table reveal that nearly 59 percent of the total respondents had networks with 'low' degree of relationships amongst the members. There were about 33 percent respondents with networks which had 'medium' degree of relationships between their network members.

Majority of the backward caste respondents were found to have networks which had 'low' degree of relationship between its members, followed by nearly 59 percent of scheduled caste respondents who had such network features. The high caste respondents were found to be the least in this category with only about 32 percent being represented.

But the order was however reversed in the 'medium' category where nearly 62 percent of high caste respondents had networks comprising of members having a mean of two to four interrelationships with other network members. Next in order

were the scheduled caste respondents with nearly 37 percent being represented in this category. The backward caste group were relatively low with about 26 percent respondents who were found to have networks with 'medium' degree of relationship amongst its members.

The F values clearly show that the high caste respondents had significantly greater mean differences than that of the scheduled caste group ($p < 0.05$) and backward caste respondents ($p < 0.01$) respectively. Whereas there was no significant difference between the two lower caste group of respondents in respect to their degree of relationship amongst their network members.

This brings out the fact that the members in the networks of high caste respondents maintained relatively greater degree of interrelationship amongst themselves than those of the scheduled and backward caste respondents who evidently exhibited lesser degree of interrelationship amongst their network members probably because of smaller network size.

3. LEVEL OF INVOLVEMENT

In order to find out the relationship between the network and individual variables with the level of involvement a zero order correlation was computed. The data were analysed in two separate sets across the four categories into which the respondents have been grouped. The sets comprise of the following:

- a) the eight network variables exclusively
 b) the fourteen individual variables and the results of each are presented Table 3.1(a) and 3.1(b) respectively.

Network Indices with the level of involvement

The correlation coefficients of the eight network variables with the level of involvement for the four categories of respondents are reported in Table 3.1 (a). As evident from the data reported in the table six social network variables were found to be significantly correlated with the level of involvement.

Table: 3.1(a). Zero order correlation coefficients of Network variables with the level of Involvement of the Total, Higher, Backward and Scheduled caste respondents

S.N.	Network Variables	Total (n=150)	Higher (n=40)	Backward (n=73)	Scheduled (n=37)
1.	Network size	0.4384**	0.3833*	0.5643**	0.5893**
2.	Frequency of contact	-0.1667*	0.0668(n.s.)	-0.2962*	-0.0085(n.s.)
3.	Relational Diversity	0.2965**	0.0748(n.s.)	0.4001**	0.2215(n.s.)
4.	Occupational Diversity	0.0734(n.s.)	0.3237*	-0.1114(n.s.)	0.1715(n.s.)
5.	Educational Diversity	0.1533(n.s.)	0.1053(n.s.)	0.2414*	0.0175(n.s.)
6.	Caste Diversity	0.4334**	0.3451*	0.5439**	0.2534(n.s.)
7.	Density	-0.3159**	-0.1328(n.s.)	-0.5106**	-0.0219(n.s.)
8.	Degree	0.5004**	0.3674*	0.5830**	0.6020**

* Significant at 5% level of probability
 ** Significant at 1% level of probability
 n.s. Not significant.

Of these, degree of relationship, network size, caste and relational diversity had a positive association at 0.01 level of probability whereas density and frequency of contact had a negative association at 0.01 and 0.05 level of probability respectively. Occupation and educational diversity showed no significant relationship with the dependent variable in the case of total respondents.

In the high caste category, four network variables; namely network size, degree, caste and occupation diversity were found to have positive and significant correlation with the level of involvement at 0.05 level of probability.

Similarly in the backward caste category, seven variables were found to have significant correlation with the level of involvement. These were degree, network size, caste and relational diversity which had positive association at 0.01 level of probability while density and frequency of contact had negative association at 0.01 and 0.05 level of probability. Occupational diversity did not show any significant association with the level of involvement amongst the backward caste respondents.

For the scheduled caste category, only degree and network size were found to have a positive and significant correlation with the dependent variable at 0.01 level of probability. While the other six variables did not have any significant association with the level of involvement.

The results therefore highlight that across the four categories of respondents, three network variables consistently

featured in their association with the level of involvement. These variables were degree, network size and caste diversity. The tentative assumption which can be drawn is that degree of relationship between individuals in a network, is an essential factor which determines the various types of social exchange that individuals may possibly engage with each other. While a larger network of individuals would subsequently enhance the possibilities of more social relationships being formed among the members.

Further if the increase in network size is effected by caste diversity it directly influences the relational diversity, type of social exchange and inevitably the informational strength of the network because of heterogeneity with respect to certain social characteristics amongst the members.

In case of the higher caste respondents, correlation between the caste diversity and occupational diversity ($r=0.4834$; $p < 0.01$) signify the interdependence that exists between the higher and scheduled caste members for services rendered in agricultural and labour related activities. In normal circumstances a higher caste person will not have a lower caste in his personal network hence the association between these two groups is probably owing to economic dependence and rarely because of personal relationship. Perhaps that is why in the scheduled caste group the caste and relational diversity did not feature significantly. The possible reason being that for

Personal matters the scheduled caste had to depend on their own caste for support. Moreover, there exists a strong association between the network size and degree ($r=0.6747$ $p < 0.01$) in the case of scheduled caste respondents, thus it is the degree of relationship ^{amongst} members in the network of this caste group that determines to a great extent the type and nature of interaction and subsequently the level of involvement.

3(b) Individual variables with the level of involvement

Table 3.1(b) reports the findings of the correlation of individual variables with the level of involvement.

Table 3.1(b). Zero order correlation coefficient of the selected individual variables with level of involvement of the total, higher, backward and scheduled caste respondents

Variables	Total (n=150)	Higher (n=40)	Backward (n=73)	Scheduled (n=37)
Age	-0.2078*	0.0036 (n.s.)	-0.7361*	-0.4318**
Landholding	0.0761 (n.s.)	0.0454 (n.s.)	-0.028 (n.s.)	0.4702**
Family type	0.0456 (n.s.)	-0.3543*	0.2687*	-0.0178 (n.s.)
Cosmopolitaness	0.2245**	0.1515 (n.s.)	0.3993**	0.0133 (n.s.)
Participation in Extension	0.0539 (n.s.)	-0.0504	0.0942 (n.s.)	0.3214*
Proportion of Network member as source of information	-0.2944**	-0.1731 (n.s.)	-0.2832*	-0.4239**
Extent of exposure	-0.2698**	0.1422 (n.s.)	-0.3925**	-0.3766*

* Significant at 5% level of probability
 ** Significant at 1% level of probability
 n.s. Non Significant

It was found that only four out of the fourteen individual variables were associated significantly with level of involvement.

Cosmopolitaness was found to have a positive correlation at 0.01 level of probability. While age, proportion of network members as source of information, and the extent of exposure had a negative correlation at 0.05 and 0.01 level of probability. The remaining ten variables related to socio-personal, extension communication and information acquisition were not found to be significantly correlated with level of involvement.

Family type was the only variable for the high caste respondents which was found to be significantly but negatively associated with the level of involvement at 0.05 level of probability.

Amongst the backward caste respondents, five variables were found to have significant correlation with the dependent variable. Of these family type and cosmopolitaness had positive association at 0.05 and 0.01 level of significance.

Whereas age, proportion of information sources and the extent of exposure was found to be negatively associated in a significant manner at 0.05 and 0.01 level of probability respectively.

In the case of the scheduled caste respondents, five variables were found to be significantly correlated. Age, proportion of information sources and extent of exposure had negative association at 0.1 and 0.05 level of probability respectively,

while landholding and participation in extension activities showed positive association at 0.01 and 0.05 level of probability.

A general observation across the four categories of the respondents showed that there are certain variables which have a decisive role on the level of involvement of the respondents in the different caste groups. Age and proportion of information sources exhibit a significant influence in three groups, with the exception of the high caste. The family type contributed in the case of high and backward caste group. Land holding was found to have a distinct role only in case of the scheduled caste category. Therefore, these variables were found to have sufficient relevance to the objective under study.

Although individually, both age and proportion of information sources were found to have a negative but significant correlation with the level of involvement in the case of the total, backward and scheduled caste respondents yet between the two variables a significant and positive association was found to exist; (Total, $r=0.2439^{**}$ higher $r=0.270^{**}$ backward $r=0.2614^*$ and scheduled $r=0.2037$ (n.s.), therefore it is evident that younger age and fewer number of primary sources of information in a social network enhances the possibility of greater level of involvement of provides more scope for individuals to engage in different types of social exchange with one another. It also increase the chance for more information acquisition. On the contrary, older age and greater dependence on individuals within ones personal network for information tends to limit the different types of social exchange with others in their social setting.

Considering the effect of family type on the level of involvement in the case of higher and backward caste it could be possible to explain the role of joint and nuclear family structure on the level of involvement. Since 52 percent of the higher caste respondents were from joint families, it was possible for them to discuss and settle personal matters amongst themselves. However, as they were numerically more members in a joint family there would be relatively more information input through different members than compared to a nuclear family. Therefore, there is every possibility that joint family structures do limit the level of involvement, while on the contrary nuclear family structures do not lay any structures on the level of involvement as observed by its positive and significant association in the case of backward caste respondents, who were about 71 percent having a nuclear family background.

Landholding was found to express a high and positive association with the level of involvement in the case of scheduled caste respondents. But within this community only 22 percent could be categorised as small farmers who owned land between one to five acres. However, it was observed that landholding had a significant correlation with occupation ($r=0.474$ $p < 0.01$) and socio-economic status ($r=0.335$ $p < 0.05$) while both of these were highly intercorrelated ($r=0.747$). But paradoxically neither of the two latter mentioned variables had any association with the level of involvement individually.

Hence land ownership particularly in the case of scheduled caste members appears to enhance the status quo of the

individual providing opportunities for wider level of involvement which may extend to other caste groups as well rather than being limited to just their own community. Moreover, it is the economic variables like occupation, landholding etc. which contributes directly in raising the economic status of the otherwise socially disadvantaged members in the rural society.

4. Relative Influence of Individual and Network Variables on the Level of Involvement

The orientation of the social network was used to ascertain the nature of communication network that existed among the members of a village. And therefore in order to find out the extent of influence the network and individual variables had on the level of involvement, a path analysis was computed with the level of involvement as dependent variable and the network and individual variables as independent.

The analysis was conducted for the four categories of the respondents separately; total respondents, high, backward and scheduled caste groups respectively. The findings across the four categories was presented in two sets i.e.

- A. Selected network variables exclusively.
- B. Selected network and individual variables together with the level of involvement as the dependent variable.

Network Correlates of the level of involvement for the total respondents

The correlation and path coefficients of the six significant network variables for the total respondents with their level of involvement is reported in Table 4 A(i)

Table 4 A(i): Path coefficients of the network correlates of the total respondents Level of Involvement

Variables	Corr. Coeff	Direct Effect	Total Indirect Effect	Substantial Effects	Indirect Effects	
x ₁₄ Network size(NWKS)	0.4394**	-0.1083	0.5967	0.3511 (x ₂₂)	0.1655 (x ₂₁)	0.0669 (x ₂₀)
x ₁₅ Frequency of contact (FOC)	-0.1667*	-0.0310	-0.1357	-0.0885 (x ₂₁)	-0.0455 (x ₂₂)	
x ₁₇ Relational Diversity (Rel D)	0.2965**	0.0204	0.2761	0.1733 (x ₂₂)	0.0745 (x ₂₁)	0.0596 (x ₂₀)
x ₂₀ Caste Div. (Caste D)	0.4234**	0.1535	0.2699	0.1699 (x ₂₂)	0.1351 (x ₂₁)	-0.0472 (x ₁₄)
x ₂₁ Density (Den)	-0.3159**	-0.3104	-0.0055	-0.0668 (x ₂₀)	0.0577 (x ₁₄)	
x ₂₂ Degree (Deg)	0.5004**	0.5238	-0.0234	-0.0726 (x ₁₄)	0.0498 (x ₂₀)	

* Significant at 5%

** Significant at 1%

The data shows that degree of relationship had the largest direct effect (0.5238), followed by density of network(-0.3104) which expressed substantial negative effect directly on the level of involvement. Since the magnitude of the direct values of degree and density are equal to their correlational values, both

the variables are instrumental in contributing their influence on the level of involvement of the members in a social network.

The implication of the above results can be interpreted as greater the degree of relationship that exists among the members in a network with others more will be the opportunity for different types of social exchanges in which they could engage with each other. On the contrary, higher density amongst the members i.e. more the communication links there is between members greater will be the tendency to limit their social interaction preferably to their network links than with others outside the network. This subsequently limits the different types of social exchange that the members in a network would engage themselves with others outside their network, hence higher density has a negative influence on the level of involvement on the whole. The remaining four variables network size, relational and caste diversity and frequency of contact, registered larger total indirect effects on the level of involvement respectively.

Network Size: Though network size was found to have a positive and significant association ($r=0.4334$ $p < 0.01$) with the level of involvement, it had a negligible negative direct effect (-0.1033) on the dependent variable. But the total indirect effect which was the largest (0.5967), was seen to be contributed substantially by the indirect influence of the degree of relationship (0.3511) and density (0.1655) which were found to channel their positive effect through network size on the level of involvement. A similar trend was seen in the case of relational diversity which had a very meagre direct effect (0.0004) and

degree of relationship was found to channel its substantial and significant influence (0.1733) through relational diversity on the level of involvement.

The above results imply that in personal networks with few members, there is limited scope for variety of social exchange among the members in the network and hence it expressed a negative influence on the level of involvement. Further, in small networks with low relational diversity this particular diversity index does not exhibit any significant influence on the level of involvement. However in the case of both the variables under consideration, the degree of relationship emerges as the key variable which asserts its influence on the level of involvement more than that of network size and relational diversity.

Caste Diversity: The caste diversity was found to be significantly associated ($r=0.4334$ $p < 0.01$) and as well as it had an appreciable direct effect (0.1535) on the level of involvement. But its total indirect effect (0.2699) ^{was} relatively greater than the direct effect and the data revealed that the degree of relationship yielded a significant influence (0.1699), followed by density (0.1351) both of which were channelled through caste diversity on the level of involvement.

Hence the implication of the above results is that the degree of relationship and the density among the members in a network are important factors in determining the level of involvement when there exists a variance in the caste status between the members.

Network correlates of the level of involvement for high caste respondents

The correlation and path coefficients of the four significant network variables network size, degree, caste and occupation diversity of the high caste respondents with the level of involvement is reported in Table 4 A(2).

Table 4 A(2): Path coefficients of the network correlates of the Higher caste respondents Level of involvement

Variables	Corr. Coeff.	Direct Effect	Total Indirect Effect	Substantial Effect through	Indirect Effect through
x ₁₄ Network size(NWKS)	0.3333*	0.0799	0.3044	0.1759 (x ₂₀)	0.0458 (x ₁₈)
x ₁₈ Occupational Diversity (Occ D)	0.3237*	0.1614	0.1613	0.0952 (x ₂₀)	0.0434 (x ₂₂)
x ₂₀ Caste Div.	0.3451*	0.2134	0.1327	0.0723 (x ₁₈)	0.0304 (x ₁₄)
x ₂₂ Degree	0.3674*	0.2645	0.1029	0.0524 (x ₁₄)	0.0264 (x ₁₈)

* Significant at 5%

** Significant at 1%

The data reveal that degree of relationship asserted the largest direct effect (0.2645) on the level of involvement followed by caste diversity (0.2134). This implies that both these variables have an important role in determining the level of involvement in which the high caste respondents engage with other caste members in the village.

Network size was found to have the largest total indirect effect (0.3044) on the level of involvement but had a very negligible direct effect (0.0787). However it is apparent from the table that degree of relationship had an appreciable magnitude of its influence (0.1758) channelled indirectly through network size which contributed to its significant association with the level of involvement. To a certain extent the caste diversity, also indirectly channels its influence (0.0820) through network size. This clearly implies that the degree of relationship which the high caste respondents had with members of other caste status was primarily out of a socio-economic necessity and it accordingly determined the level of involvement.

This fact is further evident when the occupational diversity is considered it was found to have a positive association ($r=0.3227$ $p < 0.05$), with the level of involvement. The data reveal a very interesting outcome where the direct effect of the occupational diversity (0.1614), is equal to its total indirect effect (0.1613). The indirect influence of caste diversity (0.0953) was found to be channelled through occupational diversity on the level of involvement. Hence it indicates, that the interactional link between the high caste respondents and that of other caste members is mostly attributed to the occupational involvement; such as manual and agriculture labour, for which the former have to depend on the backward or scheduled caste members in the village.

Therefore in the case of high caste respondents the degree of relationship with members of other caste status was important in determining the level of involvement.

Network correlates of the level of involvement of the Backward Caste respondents.

The correlation and path coefficients of the six significant network variables; degree of relationship, density of network, network size, caste and relational diversity and frequency of contact for the backward caste respondents on their level of involvement is presented in Table 4 A(3).

Table 4A(3): Path coefficients of the network correlates of the Backward Caste respondents Level of involvement.

Variable	Corr. Coeff.	Direct Effect	Total Indirect Effect	Substantial Effect through	Indirect Effect through	
X ₁₄ Network size(NWKS)	0.5643**	0.0165	0.5478	0.2473 (x ₂₂)	0.3005 (x ₂₂)	0.0772 (x ₂₀)
X ₁₅ Frequency of contact (FOC)	-0.2962*	-0.1373	-0.1584	-0.0919 (x ₂₂)	-0.0493 (x ₂₁)	
X ₁₇ Relational Div.(ReID)	0.4001**	0.0190	0.3811	0.1976 (x ₂₂)	0.1835 (x ₂₁)	0.0706 (x ₂₀)
X ₂₀ Caste Div. (Caste D)	0.5429**	0.1641	0.3738	0.1731 (x ₂₂)	0.1721 (x ₂₁)	
X ₂₁ Density (Den)	-0.5106**	-0.3155	-0.1951	-0.0995 (x ₂₀)	-0.066 (x ₂₂)	
X ₂₂ Degree (Deg)	0.5330**	0.4197	0.1633	0.0696 (x ₂₀)	0.050 (x ₂₁)	

* Significant at 5%
 ** Significant at 1%

As in the case of the total respondents the data for the backward caste respondents also revealed that degree of relationship had the largest direct effect(0.4197), followed by density

(-0.3155); on the level of involvement.

Since nearly 60 percent respondents belonging to this caste status had small personal networks the degree of relationship amongst their members was a crucial factor which influenced the level of involvement. While greater interactional link amongst the members tends to limit their level of involvement with others and hence for this reason, density was found to express a significant negative association ($r=0.5106$, $p < 0.01$) with the dependent variable. Network size was found to have the largest total indirect effect (0.5478) compared with that of the other variable such as relational and caste diversity. As is evident from the table the individual direct effects of the network size (0.0165) and relational diversity (0.0190) is very meagre and hence these variables do not have any substantial role to play in the level of involvement. Instead in the case of both these variables, the indirect influence of degree of relationship to a large extent and followed by density of network which also channelled its indirect effect through network size and relational diversity have been instrumental in contributing towards their positive correlation with the level of involvement.

In the case of caste diversity it was found that it had an appreciable direct effect (0.1641) on the level of involvement, but yet its total indirect effect was far more substantial and significant (0.3788) owing to the indirect influence of degree (0.1781) and density (0.1721) which contributed to a large extent by directing their effect indirectly through caste diversity on the level of involvement.

Hence the degree of relationship and the extent of interactional link or density are the primary factors which determine the level of involvement with members of other caste background.

Therefore for the backward caste the degree of relationship and density of network are the important factors which determine the level of involvement particularly when they have relatively smaller network size and greater interactional link between the members.

Network correlates of the level of involvement for Scheduled Caste

In the case of scheduled caste respondents the degree of relationship and network size were the only two network variables which were found to be significantly associated ($p < 0.01$) with the level of involvement. The correlation and path coefficients of these variables are reported in Table 4 A(1)

Table 4 A(1): Path Coefficients of Network Correlates of the Scheduled Caste Respondents level of involvement

Variable	Corr. Coeff.	Direct Effect	Total Indirect Effect
Degree (x_{22})	0.6020**	0.3751	0.2263
Network size (x_{14})	0.5392**	0.3361	0.2531

** Significant at 1%

The data clearly indicates that both the degree of relationship (0.3751) and network size (0.3361) had significantly large direct effects on the level of involvement. But since there were

only two variables found to play such a decisive role on the level of involvement, it would be appropriate to review the intercorrelation matrix for supplementary information about the other variables which have not been found to express a significant association with the dependent variable.

Caste diversity was found to have a positive correlation with the network size ($r=0.4473$, $p < 0.01$), relational diversity ($r=0.3674$) and degree ($r=0.2917$) both of which were significant at $p < 0.05$. Similarly density was also found to have a positive and significant relationship ($r=0.4552$, $p < 0.01$) with degree. A careful look at these correlational evidence seems to indicate that though individually caste diversity and density were not statistically associated with the level of involvement, they however do have a significant correlation with the degree and network size, the key factors in the case of scheduled caste respondents, that asserted their influence on the dependent variable. This fact is more distinctly highlighted when all the network variables were subjected to a multiple regression analysis. Collectively the eight variables accounted for 49% of variance on the level of involvement, ($R^2=0.4906$, $F=3.371$, $p < 0.01$) with degree being the only significant variable ($p < 0.05$). Considering only the significant correlates; namely degree and network size, the two were responsible for 43% of the variance ($R^2=0.4240$; $F=12.51$ $p < 0.01$) with only degree found to be significant ($p < 0.05$). However when degree and density were considered together they accounted for 47% of the variance ($R^2=0.4729$; $F=15.25$ $p < 0.01$) and both were found to be significant. Thus the results clearly

Table 4 A(5): Stepwise regression of network variables of the scheduled caste respondents on their level of involvement.

Step entered	Variable F to enter	Significance	Std. Error of Est.	Adjusted R ²	R ²	Multiple R	Change in R ²
1.	Degree (x ₂₂)	19.89	0.0008	0.5387	0.3624	0.6020	0.3624
2.	Network size (x ₁₄)	3.63	0.0651	0.5673	0.3901	0.6511	0.0616
1.	Degree (x ₂₂)	19.89	0.0008	0.5387	0.3624	0.6020	0.3624
2.	Density (x ₂₁)	7.129	0.0115	0.5431	0.4419	0.6377	0.1105

The variables selected in the stepwise regression and their contribution tested by their F values

Step	Source of variation	df	Sum of squares	Mean square	F
1.	x ₂₂	1	6.3960	6.3960	19.396**
2.	x ₂₂ +x ₁₄	2	3.0668	4.033	12.512**
	Residual	34	10.960	0.322	
1.	x ₂₂	1	6.3960	6.3960	19.396**
2.	x ₂₂ +x ₂₁	2	8.993	4.499	15.254**
	Residual	34	10.028	0.2950	

Regression coefficient of selected variables; figures in parentheses denotes Standard error.

$$1. Y = 1.29 + 0.2173x_{14} + 0.318x_{22}$$

(0.1140) (0.1405)

$$2. Y = 2.38 - 1.2623x_{21} + 0.6546x_{22}$$

(0.4728) (0.1186)

* Significant at 5%
** Significant at 1%

imply that degree and density have a far more greater influence on the level of involvement of scheduled caste members with their network others.

Hence the degree of relationship between the members of other caste status and the scheduled caste individuals does have a decisive role in determining the type of social exchange that they usually engage in amongst themselves. Particularly when there exists a high density of interactional links between such members in a network. This however is a reflection of the qualitative nature of the relational ties that the scheduled caste individuals maintain with their own caste members and those with that of other caste.

A second set of multivariate path analysis was carried out by taking together the significantly correlated individual and network variables as independent and the level of involvement as the dependent variable. This was done to ascertain the extent of influence that these variables had on the level of involvement of members in the network.

Correlates of the level of involvement of the total respondents

The correlation and path coefficients of the ten variables, which were found to be significantly associated with the level of involvement are reported in Table 4 B(1).

The results reveal that degree of relationship had the largest direct effect (0.5239) on the level of involvement. Density (-0.3963) and age (-0.1501) were the other two variables, which

expressed substantial but negative direct effects on the dependent variable.

On further observation of the data it was found that network size, proportion of information sources, relational and caste diversity, cosmopolitanness, extent of exposure and frequency of contact exerted relatively large total indirect effects on the level of involvement than their individual direct effects. And with the exception of caste diversity and proportion of information source, the rest of the above mentioned variables had very negligible direct effect on the dependent variable. It was found that the influence of the degree of relationship was indirectly channelled through each of these variables, on the level of involvement. This implies that the degree of relationship amongst the members was the key factor which influenced the level of involvement more than the individual variables.

AGE: The age of respondents was found to have a substantial negative direct effect (-0.1501) and a significant negative association ($r = -0.2078$ $p < 0.01$) with the level of involvement. Hence the inference drawn from the result is that younger respondents had more opportunity to engage in different types of social exchanges with others than compared to older members. This was possibly due to the fact reason that younger respondents had diverse interest and greater physical mobility while the older members on the contrary had limited social exchange confined mainly to their network members.

Table 4 B(1): Path coefficients of the correlates of the total respondents Level of Involvement

Variables	Corr. coeff.	Direct Effect	Total Indirect	Substantial indirect effect through	
Age (x_1)	-0.2078**	-0.1501	-0.0577	-0.0946 (x_{22})	
Cosmopolite (x_2)	0.2345**	-0.0426	0.2671	0.1463 (x_{22})	0.0928 (x_{21})
				0.0426 (x_{20})	
Prop. of Inf. Sources (x_{12})	-0.2944**	0.1012	-0.3956	-0.2592 (x_{22})	-0.099 (x_{21})
				-0.0529 (x_{20})	
Extent of Exposure (x_{13})	-0.2698**	-0.0911	-0.1387	-0.1191 (x_{21})	-0.0632 (x_{22})
				-0.0409 (x_{20})	
Network size (x_{14})	0.4334**	-0.0735	0.5619	0.3545 (x_{22})	0.1530 (x_{21})
				0.0741 (x_{20})	
Freq. of Contact (x_{15})	-0.1667*	-0.0246	-0.1421	-0.0945 (x_{21})	-0.0460 (x_{22})
Relational Diversity (x_{17})	0.2965**	0.0029	0.2936	0.1300 (x_{22})	0.0711 (x_{21})
				0.0561 (x_{20})	
Caste Div. (x_{20})	0.4234**	0.1701	0.3533	0.1716 (x_{22})	0.1290 (x_{21})
Density (x_{21})	-0.3159**	-0.2963	-0.0196	-0.0740 (x_{20})	
Degree (x_{22})	0.5004**	0.5289	-0.0285	0.0552 (x_{20})	
				-0.0496 (x_{13})	

* Significant at 5% ** Significant at 1%

Caste Diversity: Despite the fact that nearly 47 percent of the respondents had medium diversity, the variable was found to channel substantial direct effect (0.1701) on the level of involvement. But its total indirect effect was found to be greater (0.2533), with the influence of degree of relationship (0.1716) being indirectly channelled through caste diversity contributing to its significant association ($r=0.4234$, $p < 0.01$) with the level of involvement. This clearly indicates that when there is caste diversity among the members in a respondents network, degree of relationship amongst them contributes to an appreciable extent in influencing the level of involvement.

Network size: Almost 63 percent of the respondents were found to have small personal networks consisting of two to four members. Therefore network size by itself could not have any appreciable influence on the level of involvement.

This is evident from the result given in the table which shows that network size had a negligible negative influence (-0.0735) while it had a substantial total indirect effect (0.5619). The positive indirect influence of degree of relationship (0.3545) and density (0.1530) were found to offset the individual negative effect of network size to exhibit a strong association ($r=0.4334$, $p < 0.01$) with the level of involvement.

A similar out come was found in the case of cosmopolitaness which also had a negative and negligible direct effect (-0.0426), but was offset by the positive influence of degree of relationship which played a major role in channelling its indirect influence

(0.1463) contributing to the positive association of cosmopolitanness ($r=0.5245$, $p < 0.01$) with the level of involvement.

Proportion of network members as information sources:

This variable was found to have only a marginal and positive direct effect (0.1012) on the level of involvement while its total indirect effect was substantial and negative in nature (-0.3956). It is evident from the data reported in the table that the negative influence of degree of relationship (-0.2592) to a large extent is instrumental in offsetting the positive effect of the variable under study resulting in its negative correlation with the level of involvement.

A review of Tables 1.3 and 2.1 discussed earlier in this chapter provides reasonable explanation for such an outcome. Since nearly 59 percent of the total respondents had primary sources of information ranging from fifty to over seventyfive percent of their personal network members and with the same proportion of respondents exhibiting low degree of relationship amongst their members, it is obvious that this variable will not be able to have a significant role in the level of involvement. A majority of such sources being from the same village not much of difference exists among the village members in general and hence they hardly serve the purpose of providing information, thus reducing their role to a lower level.

To substantiate the above results the set of ten significant variables were subjected to a multiple and stepwise regression

Table 4 B(2): Stepwise regression of the correlates of Total Respondents on their level of involvement

Step	Variable entered/enter	F to enter	Significance	Std. Error of Est.	Adjusted R ²	R ²	Multiple R	Change in R ²
1.	Degree (x ₂₂)	49.39	0.0000	0.6459		0.2504	0.5004	0.2504
2.	Density (x ₂₁)	25.47	0.0000	0.5983	0.3524	0.3611	0.6009	0.1107
3.	Caste Diversity (x ₂₀)	4.28	0.0437	0.5918	0.3666	0.3793	0.6159	0.0182
4.	Age (x ₁)	3.62	0.0539	0.5865	0.3777	0.3945	0.6281	0.0152
5.	Prop. of Inform. Source (x ₁₂)	2.30	0.1309	0.5839	0.3833	0.4040	0.6356	0.0088
6.	Ext. Exp. (x ₁₃)	1.42	0.2349	0.5830	0.3851	0.4099	0.6402	0.0059

The variables selected in the regression analysis and their contributions tested by their F values.

Step	Source of variation	df.	Sum of Sq.	Mean Sq.	F
1.	x ₂₂	1	20.626	20.626	49.439**
2.	x ₂₂ +x ₂₁	2	29.746	14.873	41.544**
3.	x ₂₂ +x ₂₁ +x ₂₀	3	31.845	10.415	39.741**
4.	x ₂₂ +x ₂₁ +x ₂₀ +x ₁	4	32.492	8.123	23.613**
5.	x ₂₂ +x ₂₁ +x ₂₀ +x ₁ +x ₁₂	5	33.879	6.655	19.522**
6.	x ₂₂ +x ₂₁ +x ₂₀ +x ₁ +x ₁₂ +x ₃	6	33.762	5.627	16.55**
	Residual	143	48.610	0.3399	

Regression coefficient of selected variables, figures in parentheses denotes standard Error

$$Y = 2.80 + 0.0030(x_1) + 0.365(x_{12}) + 0.0389(x_{13}) + 0.1823(x_{20}) + 0.8043(x_{21}) + 0.3101(x_{22})$$

(0.0036) (0.2597) (0.0745) (0.0820) (0.2649) (0.0630)

* Significant at 5%; ** Significant at 1%.

analysis. The results of the analysis validate the path analysis by exhibiting that the ten variables accounted for about 41 percent of the variance ($R^2=0.4131$, $F=9.735$, 10, 139; $p < 0.001$) and that degree of relationship, density, caste diversity and age were the only four variables found to be significant ($p < 0.05$) accounting for 30 percent of variation ($R^2=0.3045$, $F=23.613$; 4, 143; $p < 0.001$) on the level of involvement.

Therefore it can be generalized that younger age and caste diversity amongst the members in a network do provide greater scope for various types of social exchange but more important is the degree of inter relationship that members share with each other which determines the type of social exchange between them. Whereas higher density amongst the members in a network tends to limit their interactional exchange within themselves and since there is more homogeneity in such situation particularly with small network the level of involvement is reduced.

Correlates of the level of involvement of High Caste respondents

The data related to correlation and path coefficients of the five variables which were found to be significantly correlated with the level of involvement of the high caste have been reported in Table 4 B(3).

It is evident from the table that family type registered the largest but negative direct effect (-0.2969) on the level of involvement, followed by degree of relationship(0.3759) and caste diversity (0.1910). On the contrary the network size was found to have the largest total indirect effect (0.3343) followed by

occupational diversity (0.1754) which was only marginally more than its direct effect (0.1473).

Table 4 B(3): Path coefficients of the significant correlates of High Caste respondents Level of Involvement

Variable	Corr. coeff.	Direct Effect	Total Indirect	Substantial Indirect Effect
Family Type (x_5)	-0.3543*	-0.2969	-0.0573	-0.0243 (x_{20})
Network size (x_{14})	0.3334*	0.0490	0.3343	0.1334 (x_{22}) 0.0733 (x_{20}) 0.0424 (x_{18})
Occup. Diversity (x_{18})	0.3223*	0.1473	0.1754	0.0356 (x_{20}) 0.0452 (x_{22}) 0.0303 (x_5)
Caste Div. (x_{20})	0.3451*	0.1910	0.1540	0.0660 (x_{18})
Degree (x_{22})	0.3675*	0.2759	0.0915	0.0326 (x_{14})

Family type: The significant influence of the family type on the level of involvement amongst the high caste respondents highlights a characteristic feature of their social and personal network. The data clearly iniers that joint family background has a negative influence on the level of involvement. And since nearly 50 percent of the respondents of the high caste were from joint families it restricted their type of social exchange, particularly those pertaining to personal and advisory being confined to relatives and family members. It was mostly for the social

and occupational matters which constituted a major part of their social exchange content, that they depended on friends and other types of relational ties. Hence it can be concluded that joint family background amongst the high caste members restricts their level of involvement in terms of interactional content of their social exchange relationships in general.

The network indices of caste and occupational diversity also exhibited a specific feature of this communities communication network. A positive and significant intercorrelation between the two variables ($r=0.4432$ $p < 0.01$) was found to exist. It appears that because of diversified occupations members of the community have a greater network size.

Despite the fact that the high caste respondents had relatively more members in their networks than those of the other two caste groups and it was found to have a significant association ($r=0.3334$, $p < 0.05$) with the level of involvement. Yet it had a very meagre direct effect on the dependent variable (0.0490). The data from the above table clearly indicates that degree of relationship was the main factor which channelled its indirect influence (0.1334), followed by caste diversity (0.0733) through the network size on the level of involvement.

A stepwise regression was computed with the same set of five variables and the results showed that family type had a negative influence and degree of relationship were the only variables found to be significant ($p < 0.05$). Together they accounted for nearly 33 percent of the variable on the level of involvement ($R^2 = 0.3378$; $F = 4.464$, 4, 34; $p < 0.05$).

Table 4 B(4): Stepwise regression of the significant correlates of high caste respondents on their level of involvement

Step	Variable Entd/Remd	F to Entd/Remd	Signif- iance	Std. Error of Est.	Adjusted \bar{R}^2	R^2	Multiple R	Change in R^2
1.	Network size(x_{14})	6.547	0.0146	0.642		0.1470	0.3334	0.1470
2.	Family Type(x_5)	4.758	0.2105	0.6131	0.2033	0.2442	0.4041	0.0972
3.	Occup. Div.(x_{18})	2.006	0.1652	0.6049	0.2244	0.2341	0.5330	0.0399
4.	Degree(x_{22})	1.508	0.2276	0.6007	0.2352	0.3136	0.5600	0.0295
5.	/Network size(x_{14})	0.464	0.5003	0.5962	0.2466	0.3045	0.5510	0.0091
6.	Caste Div.(x_{20})	1.759	0.1932	0.5900	0.2622	0.3373	0.5812	0.0333

The variables selected in the stepwise regression and their contribution tested by their F values

Step	Source of Variation	df	Sum of Sq.	Mean Sq.	F
1.	x_{14}	1	2.7041	2.7041	6.547**
2.	$x_{14}+x_5$	2	4.4927	2.2464	5.976**
3.	$x_{14}+x_5+x_{18}$	3	5.2263	1.742	4.761**
4.	$x_{14}+x_5+x_{18}+x_{22}$	4	5.7709	1.442	3.998**
5.	$x_5+x_{18}+x_{22}$	3	5.6035	1.8678	5.225**
6.	$x_5+x_{18}+x_{22}+x_{20}$	4	6.2160	1.5540	4.464**
	Residual	35	12.1840	0.3481	

Regression coefficient of selected variables figures in parentheses denotes standard error.

$$Y = 2.539 - 0.4064(x_5) + 0.078(x_{18}) + 0.1918(x_{20}) + 0.1944(x_{22})$$

(0.1886) (0.0311) (0.1444) (0.0886)

* Significant at 5%
** Significant at 1%

Therefore on the basis of the results of the two set of statistical analysis it can be concluded that in the case of high caste members the joint family background has a significant influence on determining the type of social exchange to a great extent. Further the variance in terms of caste and occupational status between the members in their network is primarily because of interdependence between the two strata of village society for services and economic needs. And especially when the members are from different caste status the degree of relationship is more important than the network size, as a network index for deciding the level of involvement.

Correlates of the level of involvement of Backward Caste respondents

The correlation and path coefficient data of the twelve variables found to be significant with the level of involvement of the backward caste respondents are reported in Table 4 B(5).

The data revealed that degree of relationship was found to have the largest direct effect (0.6223) on the level of involvement, followed by density (-0.3333) and age (-0.1409) which expressed a negative direct effect on the dependent variable.

The proportion of information sources was seen to have the largest total indirect effect (-0.5449), followed by mass media use, network size caste diversity; family type cosmopolitaness; relational diversity, extent of exposure and frequency of contact. Excepting for extent of exposure, it was seen that the degree of relationship to a large extent and density indirectly channelled

their influence through each of these eight variables, on the level of involvement. This clearly reveals the importance of degree of relationship between the members in a network which determines the type of social exchange they generally engage themselves in.

Proportion of network members as primary sources of information

About 36 percent of the backward caste respondents were found to have less than fifty percent of their network members as their primary source of information. But the data in the above table showed that despite the variable's significant direct effect (0.2627) on the level of involvement it was found to have a significant negative association ($r = -0.3822$ $p < 0.05$) with the dependent variable. Hence the strong negative influence of the degree (-0.3135) and density (-0.1317) which were found to be indirectly channelled through proportion of information on the level of involvement have been responsible for offsetting the positive influence of the variable. The probable reason for such an outcome may be the degree of interrelationship among the respondents personal network was quite low, nearly 74 percent. On the other hand there was a high density of about 54 percent among their network members. It is quite possible that most of the members in the network did not have adequate interactional link with the respondents primary source of information nor did they maintain an appreciable degree of relationship. Thus it reflected a low level of involvement amongst them and the sources which is indicated by the negative association.

Table 4 B(5): Path coefficients of the correlates of level of Involvement for the Backward Caste respondents

Variables	Corr. Coeff	Direct Effect	Total Indirect	Substantial Indirect effect
X ₁ Age	-0.236*	-0.1409	-0.0952	-0.1693 (x ₂₂) 0.1327 (x ₁₁) 0.0636 (x ₁₂) -0.0630 (x ₂₁)
X ₅ Family type	0.2637*	-0.1510	0.4197	0.2921 (x ₂₂) 0.0935 (x ₂₁) -0.0891 (x ₁₂) 0.0517 (x ₁₄)
X ₃ Cosmopolite-ness	0.3993**	0.1794	0.2199	0.2353 (x ₂₂) 0.1397 (x ₂₁) -0.1275 (x ₁₁) -0.1240 (x ₁₂)
X ₁₁ Mass Media Use	0.1936*	-0.3053	0.4999	0.2343 (x ₂₂) -0.1072 (x ₁₂) 0.1025 (x ₂₁) 0.0749 (x ₃) 0.0640 (x ₁)
Prop. of Inf. sources(x ₁₂)	-0.2922*	0.2697	-0.5449	0.3135 (x ₂₂) -0.1917 (x ₂₁) 0.1246 (x ₁₁) -0.0947 (x ₃) 0.0512 (x ₅)
Extent of Exp. source(x ₁₃)	-0.3935**	-0.0345	-0.3079	-0.1964 (x ₂₁) -0.0919 (x ₂₂) 0.0606 (x ₁₁)

Contd.

Table 4 B(5) Contd.

Variables	Corr. Coeff.	Direct Effect	Total Indirect	Substantial Indirect effect
Network size(x ₁₄)	0.5643**	0.1060	0.4533	0.3667 (x ₂₂) 0.244 (x ₂₁) -0.1469 (x ₁₂) -0.0937 (x ₁₁) -0.0737 (x ₅)
Freq. of contact(x ₁₅)	-0.2962*	-0.1344	-0.1013	-0.1363 (x ₂₂) 0.0691 (x ₁₁) -0.0599 (x ₂₁)
Relational Diversity(x ₁₇)	0.4001**	0.0064	0.3937	0.2792 (x ₂₂) 0.1353 (x ₂₁) -0.0311 (x ₁₂) -0.0563 (x ₅)
Gate Diversity(x ₂₀)	0.5429**	0.0350	0.4570	0.2641 (x ₂₂) 0.2091 (x ₂₁) -0.0953 (x ₁₂) 0.0734 (x ₂)
Intensity(x ₂₁)	-0.5106**	-0.3333	-0.1273	0.1245 (x ₁₂) -0.0937 (x ₂₂) 0.0917 (x ₁₁) -0.0676 (x ₁₄) -0.0654 (x ₂)
Degree(x ₂₃)	0.5390**	0.6223	-0.0343	-0.1395 (x ₁₁) -0.1323 (x ₁₂) -0.0711 (x ₅) 0.0653 (x ₂) 0.0625 (x ₁₄) 0.0603 (x ₂₁)

* Significant at 5%; ** Significant at 1%

Mass Media Use: Majority of the backward caste respondents were found to be low (43 percent) to medium (34 percent) users of mass media sources. The data reveal that the variable had a substantial negative direct effect (-0.3053) on the level of involvement but its total indirect effect was still greater and positive effect (0.4989), which offset the significant negative influence, largely owing to the indirect influence of degree (0.2343) which were directed through the mass media use on the level of involvement and eventually contributed to their positive association ($r=0.1936$, $p < 0.05$) with each other. This clearly implies that degree of relationship amongst the members in a network is an important factor which determines the level of involvement.

Cosmopolitaness: It was found to exert an appreciable direct effect (0.1794) on the level of involvement, but it still had a larger total indirect effect (0.2199) contributed mainly by the influence of degree (0.2283) and density to a certain extent (0.1397). Although, nearly 73 percent of the backward caste respondents had low cosmopolite score, it had a strong association with level of involvement. Yet the dominant influence of the degree of relationship indirectly was more important than just cosmopolitaness itself.

Family Type: There were nearly 70 percent of the backward caste respondents who were from nuclear families and though family type was found to have a significant positive ($r=0.2637$ $p < 0.05$) association with the level of involvement, it channelled a negative direct effect (-0.1510) on the dependent variable. But

The indirect influence of the degree of relationship(0.2931) which contributed largely to the substantial total indirect effect(0.4197) offset the negative effect of family type and established its dominance over the independent variable under study.

A similar pattern of influence is seen in the case of network size, relational and caste diversity, where degree of relationship channelled to a large extent its influence indirectly through these networks variables on the level of involvement. Hence the above results clearly indicate the importance of degree and density which together complement the role in determining the type of social exchange far more effectively than the above selected network indices and individual variables, particularly when the persons have small networks which do not have much variance in terms of relational ties, occupational and caste status. In general, the backward jati groups were more homogenous as far as their social status is concerned, limiting their personal networks to relatives and friends. This invariably contributed to high density amongst their members owing to which they restricted themselves in their level of involvement and for this reason density exhibited a negative influence on it.

On subjecting the same set of twelve variables to a multiple and stepwise regression analyses the results showed that together these variables accounted for nearly 67 percent of the variance on the level of involvement ($R^2 = 0.6749$, $F=10.331$; df 12, 60, $p < 0.001$) and four variables; degree, density, mass media use and proportion of information sources were found to be significant ($p < 0.01$). But the stepwise regression analysis presented in Table 4 B (6) revealed that only

Table 4 B(6): Stepwise regression of the correlates of backward caste respondents on their level of involvement

Step	Variable to enter	F to enter	Significance	Std. Error of Est.	Adjusted R ²	R ²	Multiple R	Change in R ²
1.	Degree(x ₂₂)	37.520	0.000	0.6375		0.3457	0.5880	0.3457
2.	Density(x ₂₁)	26.295	0.000	0.5474	0.5109	0.5244	0.7242	0.1787
3.	Prop. of Inf. sources(x ₁₂)	9.371	0.0031	0.5174	0.5631	0.5313	0.7624	0.0569
4.	Mass Media Use(x ₁₁)	3.800	0.0553	0.5072	0.5301	0.6034	0.7768	0.0221
5.	Cosmopolite (x ₈)	4.511	0.0373	0.4946	0.6007	0.6284	0.7927	0.0250
6.	Age(x ₁)	2.009	0.1611	0.4909	0.6066	0.6394	0.7996	0.0110
7.	Family Type(x ₅)	2.070	0.1550	0.4807	0.6129	0.6505	0.8066	0.0111
8.	Freq. of contact(x ₁₅)	2.447	0.1227	0.4816	0.6213	0.6634	0.81450	0.0129

The variables selected in stepwise regression their contribution tested by their F values.

Step	Source of variation	df	Sum of Sq.	Mean Sq.	F
1.	x ₂₂	1	15.250	15.250	37.520**
2.	x ₂₂ +x ₂₁	2	23.131	11.565	33.59**
3.	x ₂₂ +x ₂₁ +x ₁₂	3	25.639	8.546	31.927**
4.	x ₂₂ +x ₂₁ +x ₁₂ +x ₁₁	4	26.616	6.654	25.867**
5.	x ₂₂ +x ₂₁ +x ₁₂ +x ₁₁ +x ₈	5	27.720	5.544	22.66**
6.	x ₂₂ +x ₂₁ +x ₁₂ +x ₁₁ +x ₈ +x ₁	6	28.204	4.700	19.50**
7.	x ₂₂ +x ₂₁ +x ₁₂ +x ₁₁ +x ₈ +x ₁ +x ₅	7	28.695	4.099	17.28**
8.	x ₂₂ +x ₂₁ +x ₁₂ +x ₁₁ +x ₈ +x ₁ +x ₅ +x ₁₅	8	29.262	3.657	15.763**
	Residual	64	14.346	0.2230	

Regression coefficient of selected variables, figures in parentheses denotes standard error

$$Y = 3.11 - 0.006(x_1) - 0.242(x_8) + 0.359(x_5) - 0.0515(x_{11}) + 0.367(x_{12}) - 0.1103(x_{15}) - 1.710(x_{21}) + 0.730(x_{22})$$

(0.0044)(0.1481)(0.0284)(0.028) (0.3030)(0.070) (0.276)(0.1008)

* Significant at 5%

** Significant at 1%

eight variables; degree, density, proportion of information sources, mass media use (all significant at $p < 0.01$), cosmopolite ($p < 0.05$) and age, frequency of contact and family type were the best predictors of the level of involvement in the case of backward caste respondents. These eight variables accounted for about 65 percent of the variance on the dependant variable, ($R^2=0.6605$; $F=15.768$ df 8.65, $p < 0.001$). However of these, density, mass media use, age and family type exhibited a negative influence on the level of involvement.

Hence it is explicitly clear from the results of the two set of analysis discussed above that the decisive role of degree of relationship and density of network are the main determinants of the nature of social exchange which the members in the networks of backward caste respondents engage with each other.

Correlates of the level of involvement of scheduled caste respondents

The correlation and path coefficients of the six variables with the level of involvement of the scheduled caste respondents are presented in Table 4 B(7).

Data reported in the table reveal that landholding was found to have the largest and significant direct effect (0.2957) on the level of involvement. This clearly implies that ownership of land by individuals of this community enhances their economic status and provides greater scope for involvement with other in general.

Table 4 B(7): Path coefficients of the correlates of Scheduled Caste respondents Level of Involvement

Variable	Corr. coeff.	Direct Effect	Total Indirect	Substantial indirect effect through		
Age(x_1)	-0.4318**	-0.1730	-0.2588	-0.0971 (x_{22})	-0.0563 (x_{14})	-0.0613 (x_3)
Landholding (x_3)	0.4702**	0.2957	0.1745	0.0635 (x_{22})		
Proportion of Inf. Sources(x_{12})	-0.4233**	-0.046	-0.3769	-0.1535 (x_{14})	-0.1215 (x_{22})	
Extent of Exposure(x_{13})	-0.3766**	-0.1302	-0.2464	-0.1202 (x_{14})	-0.0559 (x_3)	
Network size(x_{14})	0.5892**	0.2630	0.3262	0.1460 (x_{22})	0.0596 (x_{13})	0.0495 (x_3)
Degree of Relationship(x_{22})	0.6020**	0.2164	0.3956	0.1774 (x_{14})	0.0368 (x_3)	0.0777 (x_1)

* Significant at 5%

** Significant at 1%

Network size and degree of relationship

It was found that network size had an appreciable direct effect (0.2630) on level of involvement but the sum of its indirect effects was relatively large (0.3262) owing to the moderate influence which the degree of relationship (0.1460) channelled indirectly through network size on the dependent variable. Hence it can be inferred that when the personal networks comprise of more number of individuals there is a likelihood for greater degree of relationship to exist amongst the members which would inevitably lead to greater involvement.

A similar outcome was observed in the case of degree of relationship which had a moderate direct effect (0.2164) but it also had a relatively large indirect effect (0.3856) through network size (0.1774) on the level of involvement. This clearly implies that degree of relationship among members in a large network provides greater opportunity for involvement of varying kind amongst the members. The positive and significant association between network size and degree of relationship ($r=0.6743$, $p < 0.01$) amply validates the inference.

Age: The direct effect of age was found to be moderate and negative (-0.1730) on the level of involvement. But it had a relatively larger indirect effect (-0.2533) which was owing to the cumulative negative influence of degree of relationship (-0.0071) network size (-0.0663) and land holding (-0.0613). Therefore the compounded negative influence of all these variables were instrumental for bringing about a significant negative association between a respondents age and his level of involvement. The results clearly imply that older respondents had relatively lower level of involvements. This could possibly be due to the low degree of relationship because of small personal networks which the older respondents had and consequently limited their level of involvement.

Proportion of information sources:

The sum of the indirect effects of proportion of information sources was found to be substantial and negative (-0.3769) on the level of involvement largely owing to the negative influence

Table 4 B(3): Stepwise regression of the correlates of scheduled caste respondents on their level of involvement

Steps	Variable Entd/ Remd.	F to enter or Remove	Signifi- cance	Std Error of Est.	Adjusted R ²	Multiple R	R ² Change	Overall 'F'	Signifi- cance
1.	Degree(x ₂₂)	19.896	0.00008	0.5337	0.3624			19.896	0.00008
2.	Land Holding(x ₃)	5.896	0.0206	0.5514	0.4247	0.6758	0.0943	14.388	0.00003
3.	Network size(x ₁₄)	4.756	0.0364	0.5233	0.4819	0.7346	0.0624	12.162	0.00001
4.	Age(x ₁)	2.137	0.1535	0.5145	0.4992	0.7449	0.0297	9.970	0.00002
5.	Degree (x ₂₂)	0.936	0.3406	0.5140	0.5001	0.7361	-0.0130	13.007	0.000009

The Variables selected in the stepwise regression and their contribution tested by their F values.

Step	Source of variation	degrees of freedom	Sum of Squares	Mean Square	'F'
1.	x ₂₂	1	6.8960	6.8960	19.896 **
2.	x ₂₂ *x ₃	2	8.6888	4.3444	14.238 **
3.	x ₂₂ *x ₃ *x ₁₄	3	9.9910	3.3303	12.162 **
4.	x ₂₂ *x ₃ *x ₁₄ *x ₁	4	10.5566	2.6391	9.970 **
5.	x ₃ *x ₁₄ *x ₁	3	10.3089	3.4363	13.007 **
	Residual	33	8.7181	0.2642	

Regression coefficient of selected variables, figures in parentheses denotes standard error

$$Y = 2.034 x_1 + 0.0183 x_3 + 0.3516 x_{14} + 0.3043 x_{22} \quad (0.0097) \quad (0.1252) \quad (0.0793)$$

* Significant at 5% level; ** Significant at 1% level;

of network size (-0.1535) and degree of relationship (-0.1215) both of which were found to indirectly channel their influence on the dependent variable. However the variable under study did not have any influence as was evident from its meagre direct effect (-0.046). Thus from the results it is evident that proportion of information sources in the case of scheduled caste respondents, did not have role on their level of involvement with others.

In order to identify the predictors which would best explain the variables that influenced the level of involvement for scheduled caste respondents, a stepwise regression was computed with the six variables. The results obtained showed that together these variables accounted for nearly 56 percent of variance in the level of involvement, ($R^2=0.5673$; $F=6.569$ df 6,30 $p < 0.001$) with only landholding found to be significant ($p < 0.05$). But on the basis of the standard error of estimate and the critical value of F for entry or removal of a variable being set at 1.0, three variables; landholding, network size and age accounted for nearly 54 percent of the variation in the level of involvement, ($R^2=0.5413$; $F=13.00$ df 3,33; $p < 0.001$) with landholding and networksize found to be significant ($p < 0.001$).

Therefore the two set of statistical analysis indicate that ownership of land by scheduled caste serves as an important determinant in their level of involvement with others. For as much as it enhances their economic status it also widens their domain of social interaction in the village. This would invariably lead to larger network size and probably greater degree of relationship, eventually resulting in high level of involvement.

5. Information Acquisition of Development Programmes

In spite of the fact that the Integrated Rural Development Programme (I.R.D.P.) had already been under operation for the past six years and there were some beneficiaries of the programme too, majority of the people did not have proper and adequate knowledge about the programmes. One of the purposes of the study was to ascertain the extent to which the existent communication network of the people was effective in the spread of information relating to the major poverty alleviation programmes being implemented by the block including the I.R.D.P.

In order to identify some of the individual and network variables which were useful in acquisition of development related information a zero order correlation was computed between the variables considered in the study and the information acquisition score for the four categories of respondents to determine the nature of their association. Thereafter the significantly associated variables of the four categories of respondents were selected and subjected to a multivariate path analysis. The selected variables served as independent variables and the information acquisition score as the dependent variable. This was done to find out the extent of influence the selected individual and network variables had on the information acquisition score. A stepwise regression analysis was carried out with the same set of variables from each category of respondents to identify the best predictor variables. This was done on the basis of the standard error of estimate.

Relational Analysis

The individual and network variables which were found to be significantly associated ($p < 0.05$ and 0.01) with the information acquisition score for each of the four categories of respondents are presented in Table 5.

In case of total respondents the fourteen variables found to be significantly associated ($p < 0.01$) with the information acquisition, were mass media use, education, socio-economic status social participation, landholding cosmopolite, extension agent contact, degree of relationship, network size and occupation, whereas proportion of information sources, density of network, caste diversity and age were significant at 0.05 level of probability.

The eight variables that showed association with the information acquisition for the high caste respondents were extension agent contact, socio-economic status, cosmopolitaness, mass media use, social participation, education, network size and degree of relationship all of which were significant at 0.01 level of probability.

The seven variables found to be associated with the dependent variable in the case of backward caste respondents were mass media use, education, cosmopolite, and socio-economic status all being significant ($p < 0.01$). Whereas land holding, proportion of information sources and participation in extension activities were significant at 0.05 level of probability.

Table 5: Zero order correlation coefficient of the significant individual variables with the information acquisition of the Total, Higher, Backward and Scheduled caste respondents.

S.N.	Independent variables	Total Respondents (N=150)	Higher Caste (N=40)	Backward Caste (N=73)	Scheduled Caste (N=37)
1.	Age(x ₁)	-0.1660*	-0.1881(n.s)	-0.1997	-0.2452(n.s.)
2.	Occupation(x ₂)	0.2470**	0.0956(n.s)	0.0898(n.s)	0.4339**
3.	Landholding(x ₃)	0.31513**	0.3081	0.2934*	0.0696(n.s)
4.	Education(x ₄)	0.5302**	0.4775**	0.4516**	0.5254**
5.	Social participation (x ₆)	0.3698**	0.5312**	0.0479(n.s)	0.5302**
6.	Socio Economic status(x ₇)	0.4976**	0.6003**	0.3970**	0.6269**
7.	Cosmopolite(x ₈)	0.4370**	0.5431**	0.4136**	0.3344*
8.	Extension Agent contact(x ₉)	0.3826**	0.6591**	0.0959(n.s)	0.3157
9.	Participation Extension activities(x ₁₀)	-0.1165(n.s)	0.1369(n.s)	-0.2375*	-0.0612(n.s)

Contd.

Table 5: Contd.

S.N.	Independent variables	Total Respondents (N=150)	Higher Caste (N=40)	Backward Caste (N=73)	Scheduled Caste (N=37)
10.	Mass Media Use (x_{11})	0.6010**	0.5378**	0.5675**	0.6654**
11.	Proportion of Information sources (x_{12})	-0.1925*	-0.1500(n.s)	-0.2435*	0.0635(n.s)
12.	Network size (x_{14})	0.2934**	0.4163**	0.0709(n.s)	0.3053(n.s)
13.	Caste Diversity (x_{19})	0.1351*	0.0771(n.s)	0.1301(n.s)	0.2435(n.s)
14.	Density (x_{21})	-0.1913*	-0.1770(n.s)	-0.0905(n.s)	-0.3447*
15.	Degree (x_{22})	0.2899**	0.3951*	0.2219(n.s)	-0.0436(n.s)

* Significant at 5% level

** Significant at 1% level

Of the seven variables in the case of scheduled caste respondents, mass media use, socio-economic status, education, social participation and occupation were found to be significant at 0.01 level of probability. Whereas density and cosmopolitaness were significantly associated at 0.05 level of probability with the information acquisition score.

A review of the data across the four categories of respondents in the table given above, clearly shows that mass media use, socio-economic status, education, cosmopolitaness and social participation emerged as the five key variables which were found to yield highly significant ($p < 0.01$) correlation coefficient with information acquisition in each of the four groups of respondents. While network size, and degree of relationship figured strongly in the case of total and high caste respondents; whereas land holding and proportion of information sources featured in the total and backward caste groups. Occupation and density were the two variables found to be associated with the information acquisition in the case of total and scheduled caste respondents only. Hence from the above results, it is evident that the individual variables have an important role in the acquisition of information.

Individual and Network Correlates of Information Acquisition of the total Respondents

The correlation and path coefficients of the fifteen individual and network variables of the total respondents, selected on the basis of their significant association with the information acquisition score are reported in Table 6(a).

Table 6 (a): Path coefficient of selected individual and network correlates on Information Acquisition of the Total Respondents

Variable	Corr. Coeff.	Direct Effect	Total Indirect effect	Substantial Indirect Effect through
X ₁ Age	-0.1660*	0.0030	-0.169	-0.1160 (x ₁₁)
X ₂ Occupation	0.2420**	-0.0118	0.2538	0.1677 (x ₁₁) 0.0994 (x ₇) -0.0507 (x ₃)
X ₃ Landholding	0.3151**	-0.0386	0.4037	0.2008 (x ₁₁) 0.1193 (x ₇)
X ₄ Education	0.5302**	0.0968	0.4334	0.3130 (x ₁₁) 0.1120 (x ₇) 0.0663 (x ₈) -0.0520 (x ₁₄)
X ₆ Social participation	0.3688**	-0.0804	0.4492	0.2288 (x ₁₁) 0.1063 (x ₇) 0.0737 (x ₈) -0.0497 (x ₁₄)
X ₇ Socio. Econ. status	0.4976**	0.1595	0.3381	0.3073 (x ₁₁) 0.0630 (x ₄) -0.0663 (x ₃) -0.0536 (x ₆) 0.0654 (x ₈) -0.0533 (x ₁₄)
X ₈ Cosmopolitaness	0.4370**	0.1378	0.2992	0.1890 (x ₁₁) 0.0756 (x ₇) -0.0523 (x ₁₄)
X ₉ Extension Agent contact	0.3826**	0.0504	0.3322	0.1918 (x ₁₁) 0.0915 (x ₈) 0.0386 (x ₇) -0.0557 (x ₁₄)
X ₁₁ Mass Media Use	0.6010**	0.4038	0.1972	0.1213 (x ₇) 0.0750 (x ₄) 0.0645 (x ₈) 0.0526 (x ₂₂) -0.0510 (x ₁₄)

Contd.

Table 6 (a) Contd.

Variable	Corr. Coeff.	Direct Effect	Total Indirect Effect	Substantial Indirect Effect through
X ₁₂ Proportion of Inf. Source	-0.1925*	0.0441	-0.1494	-0.1033 (X ₁₁) -0.0809 (X ₂₂) 0.0761 (X ₁₄)
X ₁₃ Extent of Exposure	-0.1386*	0.0029	-0.1357	-0.0795 (X ₁₁) 0.0426 (X ₁₄)
X ₁₄ Network size	0.2866**	-0.1396	0.4262	0.1477 (X ₁₁) 0.1107 (X ₂₂) 0.0609 (I ₇) 0.0547 (X ₂₀) 0.0516 (X ₃)
X ₂₀ Cast Div.	0.1351*	0.1255	0.0596	-0.0609 (X ₁₄) 0.0536 (X ₂₂)
X ₂₁ Density	-0.1913	-0.0563	-0.1350	-0.0943 (X ₁₁) 0.0744 (X ₁₄) -0.0546 (X ₂₀)
X ₂₂ Degree	0.2399**	0.1652	0.1247	0.1236 (X ₁₁) -0.0936 (X ₁₄)

* Significant at 5% level

** Significant at 1% level

The data revealed that mass media use which had the strongest association ($r=0.6010$, $p < 0.01$) was also seen to assert the largest direct effect (0.4033) on the information acquisition score. And further it was found to be responsible for indirectly channelling substantial amounts of its influence on the dependent variable through as many as twelve of the selected independent variables. This clearly indicates that use of mass media source was the key variable in the acquisition of information about development programmes by the respondents. Whereas from amongst the network indices; caste diversity (0.1255) and to some extent degree of relationship (0.1652) were found to have an appreciable direct effect on the information acquisition score of the respondents.

Age: The direct effect of age on the information acquisition score was very meagre (0.0030), whereas the sum of its indirect effects was found to be substantial and negative (-0.169). The significant and negative indirect effect of age was found to be channelled by mass media use (-0.1160). Thus direct effect of age did not have any reckonable influence on information acquisition probably because majority of the respondents who were old might not be regular users of various mass media sources, hence the lack of it caused the negative indirect influence to be directed through age.

Occupation, Landholding and Social Participation

The direct effects of the three variables social participation (-0.0804), landholding (-0.0936) and occupation (-0.0113) were found to be negligible and negative on the information

acquisition score. But the significant total indirect effects of each of these three variables were channelled largely through mass media use and to some extent the socio-economic status were substantial and positive. Thus the influence of these two variables offset the negative effects of the three above mentioned variables. It is therefore clear that regular use of mass media sources and adequate socio-economic status are more important factors which favour the acquisition of information than social participation landholding and occupation. This may be owing to the fact that since the village institutions hardly functioned regularly and failed to be an effective forum for the members of the village in any kind of development activity it resulted in the poor social participation of a majority (69 percent) of respondents. Likewise most of them who had farming as their occupation possessed small holdings and this is the probable reason that occupation and land holding failed to yield any appreciable direct effect on the information acquisition score.

Education: The direct effect of education (0.0963) was negligible while its total effect was substantial (0.4334) which was found to be contributed largely by mass media use (0.3130) and socio-economic status (0.1120). This clearly indicates that high level of formal education is advantageous for those respondents who used more of mass media sources for acquiring information. They were also found to come from high socio-economic status.

Socio-economic status: The direct effects of socio-economic status (0.1595) on information acquisition was found to be positive but it also contributed to the dependent variable more substantially through mass media use (0.3073) which channelled its influence indirectly. Therefore a high socio-economic status is an essential prerequisite which provides the favourable condition for individuals motivating them to explore the possibilities of benefitting from acquiring such information in some way or the other.

Cosmopolitaness: The respondents in general had low cosmopolitaness yet it was found to express a strong association with the information acquisition score ($r=0.4370$, $p < 0.01$). It also yielded a moderate direct effect (0.1378), but cosmopolitaness was seen to contribute indirectly through mass media use (0.1890). This clearly indicates that cosmopolitaness consisting mainly of visits to the Block Office and other development associated institutions like Banks' etc. does help indirectly in acquisition of information.

Extension Agent contact: The extension agent contact was very poor with the people in the village, its direct effect on the information acquisition score; though positive was negligible (0.0504), but its indirect effect was substantial (0.3323) mainly through mass media use (0.1919), cosmopolitaness (0.0915), socio-economic status (0.0336) and less substantially owing to social participation (0.0509). This clearly indicates that the extension agent contact contributed indirectly to the information acquisition score of only those respondents who were found to be socially influential, using more of mass media sources, had high socio-economic status, and

cosmopolitaness and were elected members of the village panchayat and cooperative society. This fact conforms to the findings of several of the earlier studies which highlight this change agent preferential contact with only the influential few in the village.

Mass media use: Despite the significant direct effect of mass media use on the information acquisition score (0.4033) it was also indirectly contributing through socio-economic status (0.1213) and education (0.0750). This clearly brings to light the fact that the individuals in the village who have higher socio-economic status, formal education and cosmopolitaness and generally considered as the 'elite' had the advantage of using more mass media sources and acquired more information about the development programmes and thus monopolised on the information so gained.

Proportion of information source and extent of exposure to such sources:

Both these variables were found to have very negligible direct effects on the acquisition of information (0.0441 and 0.0029), whereas they ^{had} relatively large negative indirect effects contributed mainly by mass media use (-0.1033, and -0.0735) which channelled its negative influence through the two variables under study on the information acquisition score. This clearly indicates that in personal networks comprising of fewer members who hardly use mass media sources for acquisition of information tend to depend more on their primary sources of information within their networks. Hence the lesser use of mass media sources by the members in a network is consequently responsible for its indirect negative influence on

the information acquisition score.

Network size: The direct effect of network size on the information acquisition score was negative (-0.1396). However its total indirect effect (0.4262) was positive and substantial which was owing mainly to the positive indirect influence of mass media use (0.1477) and degree of relationship (0.1107) channelled through network size on the information score which offset the negative influence of the variable. It can therefore be concluded that number of members in a network is not so important, instead the regular use of mass media sources, degree of relationship and to some extent the caste diversity among the network members (0.0547) contribute more in the acquisition of information.

Density of network: It was found to have a negative and small (-0.0563) direct effect on the information acquisition score, but the sum of its total indirect effects was also negative and relatively larger (-0.1350) than its direct effects. Mass media use (-0.0848) and caste diversity (-0.0546) were found to be responsible for contributing their negative influence indirectly through network size on the information acquisition score. This means that in small networks where members have more interactional linkage amongst themselves but do not use much of mass media sources and lack caste diversity between themselves, they tend to have less knowledge about the development programmes.

Caste Diversity: It was found to have a direct effect (0.1285) on the information acquisition score, therefore if a personal network had relatively more members comprising of other caste and as well as

had greater degree of interrelationship between themselves it would probably be advantageous in acquiring more information.

Degree of relationship: The degree of relationship had a direct effect (0.1652) on the information acquisition score but it also had an appreciable total indirect effect (0.1247) which was found to be contributed indirectly by mass media use (0.1296). Therefore together both the direct and indirect effects of degree of relationship were responsible for its significant association. ($r=0.3899$, $p < 0.01$) with the information acquisition score. This implies that just as much as degree of relationship between members in a network is important in acquisition of information a relatively regular use of mass media source by each of them is also an advantage for acquiring proper information and together these factors provide an opportunity for discussing and clarifying information about matters of common interest.

In order to understand the overall outcome of the above analysis more explicitly, a multiple regression was computed with the same set of selected variables, and the result showed that the fifteen variables taken together accounted for nearly 42 percent of the variation ($R^2=0.4253$, $F=6.611$ df 15, 134, $p < 0.01$) and only mass media use was found to be significant ($t=3.096$, $p < 0.001$). But to find out the best predictors stepwise regression was computed, setting the critical value of F as 1.00 for entry and removal of variables at each step in the regression analysis. The result as reported in Table 6 (b) showed that only four variables mass media use, cosmopolitanness, caste diversity and education, selected on the basis of the standard error of estimate, accounted for merely

Table 6(b): Stepwise regression of the correlates of total respondents on their information acquisition

Step	Variable	F to enter	Signifi- cance	Std.error of estimate	Adjusted R ²	R ²	Multiple R	Change in R ²
1.	Mass Media use(x ₁₁)	88.719	0.0000	0.7216	0.3613	0.6010	0.6010	0.3613
2.	Cosmopolite(x ₈)	7.510	0.0069	0.7063	0.3941	0.3923	0.6264	0.0310
3.	Caste Diversity(x ₂₀)	3.184	0.0764	0.7011	0.3931	0.4053	0.6366	0.0130
4.	Education(x ₄)	1.001	0.3133	0.7011	0.3931	0.4094	0.6398	0.0041

Contribution of selected variables tested by their F values

Step	Source of variation	Degree of freedom	Sum of Squares	Mean Square	F
1.	x ₁₁	1	43.593	43.593	88.719** (1143)
2.	x ₁₁ +x ₈	2	47.3449	23.672	47.456** (2147)
3.	x ₁₁ +x ₈ +x ₂₀	3	48.909	16.303	33.68** (3146)
4.	x ₁₁ +x ₈ +x ₂₀ +x ₄	4	49.4017	12.350	26.127** (4145)
	Residual	145	71.271	0.4915	

$$Y = 1.72 + 0.0584x_4 + 0.0471x_8 + 0.1337x_{11} + 0.1499x_{20} + 0.0309x_{20} \quad (0.0309) \quad (0.0350)$$

40 percent of variance on the information acquisition score, ($R^2=0.4053$, $F=25.137$ df 4,145, $p < 0.0001$) and again only mass media use was found to be highly significant ($p < 0.0001$).

Thus with both the path and regression analysis yielding similar outcomes it can be concluded that use of mass media sources such as the local newspaper, radio and television to some extent can be made a more effective channel for disseminating information uniformly amongst the rural population in general rather than depending upon interpersonal localities sources. This would particularly reduce the scope for information being monopolized by the influential persons in the village. While in terms of network indices, caste diversity amongst the members and greater degree of relationship between them might provide a better chance for information of specific nature to be acquired more easily and effectively.

Path correlates of information acquisition of the High Caste respondents

In the case of high caste respondents the correlation and path coefficients of eight individual and network variables selected on the basis of their significant association with the information acquisition score is reported in Table 7(a).

The data from the above table revealed that extension agent contact registered the largest significant direct effect(0.4427) on the information acquisition score. Whereas its total indirect effect (0.3164), contributed mainly by the indirect influence of socio-economic status (0.2150) was instrumental for bringing about

Table 7(a): Path coefficients of selected individual and network correlates on the Information Acquisition of the Higher Caste Respondents

Variables	Corr. coeff.	Direct Effect	Total Indirect effect	Substantial Indirect Effect through
Education(x ₄)	0.4775**	-0.0892	0.5667	0.2367 (x ₇) 0.1662 (x ₁₁) -0.094 (x ₆)
Social participation(x ₅)	0.5312**	-0.1464	0.6776	0.2942 (x ₉) 0.2671 (x ₇) 0.1493 (x ₁₁) 0.0526 (x ₂₂)
Socio. Econ. status(x ₇)	0.6003**	0.3285	0.2713	0.2997 (x ₉) 0.1689 (x ₁₁) -0.1190 (x ₆) -0.0643 (x ₄)
Cosmopolite(x ₈)	0.5481**	-0.0377	0.5953	0.3700 (x ₉) 0.1965 (x ₇) 0.1173 (x ₁₁) -0.0932 (x ₆)
Extn. Agent contact(x ₉)	0.6591**	0.4427	0.2164	0.2180 (x ₇) 0.1307 (x ₁₁) -0.0973 (x ₆) 0.065 (x ₂₂) -0.0580 (x ₄)
Mass M. Use(x ₁₁)	0.5378**	0.2356	0.3022	0.2355 (x ₇) 0.2369 (x ₉) -0.0923 (x ₆) -0.0630 (x ₄)
Network size(x ₁₄)	0.4163**	-0.0377	0.444	0.2075 (x ₉) 0.2013 (x ₂₂) 0.0868 (x ₇) -0.0540 (x ₆)
Degree(x ₂₂)	0.3951**	0.3023	0.9923	0.1079 (x ₉)

* Significant at 5% level; ** Significant at 1% level

a strong association between extension agent contact and the information acquisition score. ($r=0.6591$, $p < 0.01$). The results clearly imply that those high caste respondents who had high socio-economic status and regularly used mass media sources, were found to have the advantage of greater extension agent contact which enabled them to acquire information about the development programmes more easily, similar findings have been reported in several of the earlier studies as well.

Socio-economic status: The direct effect of socio-economic status (0.3235) was both positive and significant ($p < 0.05$). However its total indirect effect (0.2718) was also found to be large owing to the indirect effects of extension agent contact (0.2997) and mass media use (0.1639) which were channelled through socio-economic status on the information acquisition score. Thus the results indicate that socio-economic status of the respondent is both necessary and advantageous in acquiring information because by virtue of their higher status they have a convenient access to the block and other development agency personnels and are also preferred by extension agents. Moreover regular use of mass media sources, also keeps them better informed and aware of various aspects that is covered by the local newspaper or radio through its regional programmes.

Cosmopolitaness, Social Participation and Education:

The data in the above table shows that though cosmopolite, social participation and education were found to be positively associated with the information acquisition score, each of them

had a negative and negligible direct effects (-0.377, -0.1464 and -0.0992) on it. But however each of them were found to have positive and substantial total indirect effects 0.5353 0.6776 and 0.5667 contributed mainly by extension agent contact, socio-economic status and mass media use which indirectly channelled their positive influence through cosmopolitaness, social participation and education. In the process the negative effects of the latter mentioned variables were offset. Therefore extension agent contact, socio-economic status and regular use of mass media sources were more important factors in acquiring information, than the three variables under study which instead contributed indirectly and had^a supplementary role

Mass media use: The direct effect of mass media use (0.2356) was positive but marginally less than its total indirect effect (0.3022). Socio-economic status (0.2355) and extension agent contact (0.2269) were found to complement the effect of the mass media use in the acquisition of information by contributing their influence indirectly in almost equal magnitude. This reaffirms that those respondents who had high socio-economic status, had higher extension agent contact and were found to use more mass media sources which probably helped them to know more about the programmes.

Network size: The total indirect effect of network size on the information acquisition score, was found to be positive and substantial (0.4440) with extension agent contact (0.2075) and degree of relationship (0.2013) being the major contributing factors seen to direct their effects through network size and in the process offset its negative and relatively meagre direct effect (+0.0277) on the information acquisition score. This meant

that extension agent contact and greater degree of relationship between the members were indirectly more important in acquiring the information from one another in a network than that of its size. The above outcome finds further validation when degree of relationship was found to have substantial direct effect(0.3028) which was far more large than its total indirect effect (0.0323). Therefore in terms of the network features and the extent of their role in acquiring more information the degree of inter-relationship is a very important interpersonal factor that helps in the transmission of information amongst the members in a network.

The above results clearly show that high caste respondents had greater extension agent contact which helped them to have first hand knowledge and details about the development programme. And by virtue of their high socio-economic status and use of more mass media sources they were aware of the development programme more than that of the other caste groups. While amongst their network others, the degree of relationship was the sole factor which was instrumental in the dissemination of information.

The stepwise regression analysis with the same set of variables, presented in Table 7(b) showed that the four variables, extension agent contact, degree of relationship, mass media use and socio-economic status were the best predictors accounting for about 57 percent of the variance on information score, ($R^2=0.5714$, $F=11.663$, $df 4,35$, $p < 0.001$) with extension agent contact, and degree of relationship being significant ($p < 0.05$). Whereas together the eight variables explained 58 percent ($R^2=0.5827$, $F=5.411$, $df 3,31$ $p < 0.001$) with none of the variables found to

Table 7(b): Stepwise regression of the correlates of High Caste respondents on their information acquisition

Step	Variable	F to enter	Signifi- cance	Std.error of estimate	Adjusted R ²	R ²	R	Multiple Change in R ²
1.	Extension Agent contact(x ₉)	29.19	0.0000	0.6033	0.4345	0.6591	0.4345	0.4345
2.	Degree(x ₂₂)	4.261	0.0460	0.5790	0.4654	0.7020	0.7020	0.0594
3.	Mass Media use(x ₁₁)	5.091	0.0302	0.5495	0.5197	0.7454	0.7454	0.0628
4.	Socio Eco.status(x ₇)	1.296	0.2644	0.5463	0.6225	0.7559	0.7559	0.0157
5.	Soc.participation(x ₆)	0.435	0.4010	0.5504	0.6153	0.7599	0.7599	0.0061

Contribution of selected variables tested by their F test values

Step	Source of variation	Degrees of freedom	Sum of Squares	Mean Square	F
1.	x ₉	1	10.590	10.590	39.192**
2.	x ₉ +x ₂₂	2	12.013	6.006	17.979**
3.	x ₉ +x ₂₂ +x ₁₁	3	13.545	4.515	15.009**
4.	x ₉ +x ₂₂ +x ₁₁ +x ₇	4	13.929	3.482	11.663**
	Residual	35	10.446	0.2985	
5.	x ₉ +x ₂₂ +x ₁₁ +x ₇ +x ₆	5	14.075	2.815	9.294**
	Residual	34	10.299	0.3029	

$$Y = 1.35 + 0.013x_7 + 0.1297x_9 + 0.0531x_{11} + 0.2021x_{22} + 0.0453x_6 + 0.0937x_7$$

be significant ($p < 0.05$).

Hence it can be concluded on the basis of the results from the two set of analysis, that because of their higher socio-economic status the high caste respondents had the advantage of more extension agent contact which helped them directly in acquiring detailed information about development programmes. This however was further complemented by their regular use of mass media sources, such as local newspaper and regional radio programmes in general. And apart from this the relatively greater degree of relationship amongst the members in the personal network of high caste respondents facilitated the diffusion of information to others most of whom comprised of relatives and friends of their own caste.

Path Coefficients of Information Acquisition of the Backward Respondents

The correlation and path coefficients of the eight variables with information acquisition score of backward caste respondents are reported in Table 3(a).

The data reported in the above table show that use of mass media sources had the largest direct effect (0.3451) on acquisition of information. It was also found to have an appreciable indirect influence (0.2224). Thus it is clear that regular use of mass media sources helps in the acquisition of information about development activities. This was particularly advantageous in the case of those backward caste respondents who had greater cosmopolitanism and higher level of education, since these two attributes were found to complement the benefit of using mass media

Table 8(a): Path coefficients of the correlates of Backward Caste respondents information acquisition

Variable	Corr. coeff.	Direct Effect	Total Indirect Effect	Substantial Indirect Effect
Age (x_1)	-0.1997*	0.0146	-0.1351	-0.1568 (x_{11}) 0.0590 (x_{10}) -0.0536 (x_8)
Landholding (x_3)	0.2924*	0.1826	0.1098	0.1341 (x_{11}) -0.0659 (x_{10})
Education (x_4)	0.4516**	0.1463	0.3053	0.2553 (x_{11}) 0.0839 (x_8)
Socio-Eco. status (x_7)	0.3970**	-0.0631	0.4601	0.2224 (x_{11}) 0.1290 (x_8) 0.1008 (x_8) 0.0394 (x_4)
Cosmopolite (x_8)	0.4136**	0.2641	0.1495	0.1441 (x_{11}) -0.0527 (x_{10}) 0.0465 (x_4)
Participation in Extn. activities (x_{10})	-0.2375*	-0.3438	0.1063	0.0405 (x_3)
Mass Media use (x_{11})	0.5675**	0.3451	0.2224	0.1103 (x_8) 0.1024 (x_4) 0.0709 (x_8)
Proportion of Inf. sources (x_{12})	-0.2435*	-0.0144	-0.2291	-0.1409 (x_{11}) -0.1247 (x_8) 0.0335 (x_{10}) -0.0402 (x_4)

* Significant at 5% level;

** Significant at 1% level

sources more effectively.

Cosmopolite: It was found that cosmopolitaness had a significant direct effect (0.2641) on acquisition of information, although there was a moderate indirect influence of the variable (0.1495) through mass media use (0.1941). Hence it is evident that greater cosmopolitaness when complemented by regular use of mass media sources is helpful in acquisition of information.

Landholding: The total land owned by a respondent was found to have a direct effect (0.1326) on acquisition of information. It is evident therefore that those backward caste respondents who had larger landholdings may have had the resources such as transitors, had higher level of education which helped them to acquire more information.

Education: The level of formal education had a moderate direct effect (0.1463) on acquisition of information but its indirect effect was substantial (0.3053), largely through use of mass media sources (0.2553).

The inference drawn from the results is that use of mass media sources for acquiring information was probably done by those who had higher level of education.

Socio-economic status:

Despite the fact that socio-economic status had a significant association ($p < 0.01$) with the information acquisition score, it had a negligible and negative direct effect (-0.0631). But

it was found to have a substantial and positive indirect effect (0.4601) on acquisition of information largely contributed by mass media sources (0.2234) landholding (0.1290) and cosmopolitaness (0.1008), thereby offsetting the negative effect of socio-economic status. It therefore implies that attributes such as, regular use of mass media sources, larger landholding greater cosmopolitaness (which few of the backward caste respondents possessed) were more important in acquisition of information than the socio-economic status per se.

Age: It was found that age had a very negligible direct influence on acquisition of information (0.0146) however its indirect effect was substantial and negative (-0.1851). This was mainly owing to the negative influence of mass media use (-0.1563) and cosmopolitaness (-0.0536) which were channelled indirectly through age on acquisition of information. The results imply that other variables remaining constant, age did not have any effect on acquisition of information in the case of backward caste respondents. This may probably be due to the fact that majority of the backward caste respondents happen to be in the middle to old age, it is quite possible that they had relatively low mass media use and cosmopolitaness which limited their access to information.

Proportion of information sources:

The proportion of information sources from amongst the network members of backward caste respondents was found to have a meagre and negative direct effect on acquisition of information (-0.0144). But it had a substantial and negative indirect

effect (-0.2291) primarily yielded by mass media use (-0.1409) and cosmopolitanness (-0.1247). The negative influence of each of these variables when compounded, indirectly contributed to the negative association between the variable under study and the information acquisition score, ($r = -0.2435$, $p < 0.05$). This clearly implies that proportion of information sources did not have a reckonable direct effect on acquisition of information. The lesser use of mass media sources and the lack of cosmopolitanness and formal education among the backward caste respondents is understood to serve as factors that limit acquisition of information about development programmes in particular.

Participation in Extension Activities

Data concerning the participation in extension activities from the above table show that the variable had a substantial negative direct effect (-0.3433) on acquisition of information presents a rather unusual result. This therefore, necessitates a clarification which would explain such an anomaly on basis of the factual information about the existent situation which were as follows:

- i) participation in extension activities for which the respondents were measured against were primarily conducted by the institutional agency other than the Block.
- ii) the major emphasis of the extension activities were related to the adoption of improved agricultural and animal husbandry practices by small and marginal farmers rather than the I.R.D.P. components which were mainly directed to industrial and small business enterprises.

111) In the area of study the backward caste respondents were numerically more (35 percent) than the respondents of the other two caste groups individually, that had participated in various extension activities. Apart from this most of them had farming as their main occupation hence found the agricultural related programme more beneficial than that of the I.R.D.P. for which they expressed reservation because of the procedural delays and unnecessary harassment by officials.

Thus from the above stated facts it is evident why the participation in extension activities exhibited a significant negative influence with respect to acquisition of knowledge about the ongoing development programmes. Hence the overall result is suggestive of the fact that in order to make any kind of development activity acceptable by the majority of the clientele it must be backed by a well planned package of extension activities, such that these are directed towards enabling the beneficiary to understand and simplify every aspect of the programme, this would probably ensure greater participation.

In order to identify the best predictors from amongst the set of eight variables a stepwise regression was computed. The results as reported in Table 3(b) show that together the eight variables accounted for nearly 48 percent of the variation in the information acquisition score ($R^2=0.4862, F=6.518, df 3,64; p < 0.001$). But on the basis of the standard error of estimate only four variables, mass media use, participation in extension activities, cosmopolite

Table 3 (b): Stepwise regression of selected individual variables of the Backward Caste Respondent and their information acquisition

Step	Variable	F to enter or cance	Signifi-	STD error Adjusted	Multiple Changes			Overall	Significance	
Enter Remd	Remd	estimate	R ²	R ²	R	R ²	F			
1.	Mass media use (x ₁₁)	33.741	0.0000	0.7532	0.3221		33.741	1.639 E-07		
2.	Participa-tion in Extension Activity (x ₁₀)	9.235	0.0033	0.7123	0.3340	0.4011	0.6324	0.0780	23.445	1.503 E-03
3.	Cosmopolite (x ₃)	6.971	0.0102	0.6920	0.4324	0.4561	0.6753	0.0550	19.237	3.453 E-08
4.	Landholding (x ₂)	2.230	0.1400	0.6320	0.4424	0.4734	0.6380	0.0173	15.280	5.811 E-09

Contribution of selected variables tested by their 'F' values

Step	Source of variation	Degree of freedom	Sum of Squares	Mean Square	F
1.	x ₁₁	1	19.393	19.393	33.741**
2.	x ₁₁ +x ₁₀	2	24.1563	12.073	23.445**
3.	x ₁₁ +x ₁₀ +x ₃	3	27.465	9.155	19.237**
4.	x ₁₁ +x ₁₀ +x ₃ +x ₂	4	28.505	7.126	15.280**
	Residual	63	31.713	0.4664	

Regression coefficients of the selected variables, figures in parentheses are the Standard Error

$$Y = 1.39 + \overset{x_3}{0.1761} + \overset{x_8^{**}}{0.0992} - \overset{x_{10}^{**}}{0.3939} + \overset{x_{11}^{**}}{0.1480}$$

$$(0.1172) (0.0371) (0.1056) (0.0359)$$

and landholding which however was negligible had collectively accounted for about 47 percent of the variance in the dependent variable, ($R^2=0.4734$, $F=15.230$, $df 4,63$, $p < 0.001$).

Hence the results of the two set of statistical analysis validates the fact that regular use of mass media sources and cosmopolitaness were helpful in acquiring information about development programmes, especially in the case of those backward caste respondents who also were found to possess adequate land which apparently enhanced their socio-economic status in general.

Path coefficients of information acquisition of the scheduled caste respondents.

The correlation and path coefficients of the seven significant variables with information acquisition score of scheduled caste respondents are reported in Table 9(a).

Table 9 (a): Path Coefficients of the correlates of Scheduled Caste respondents information acquisition

Variable	Corr. coeff. with Inf. Acquisition	Direct Effect	Total Indirect Effect	Substantial Indirect Effect through variable
Occupation(x ₂)	0.4929**	-0.0683	0.5012	0.2398 (x ₇) 0.1397 (x ₁₁)
Education(x ₄)	0.6254**	0.0074	0.6180	0.2964 (x ₁₁) 0.2369 (x ₇) 0.0547 (x ₆)
Social Partiel- pation(x ₆)	0.5302**	0.1038	0.4264	0.1944 (x ₇) 0.1617 (x ₁₁)
Socio-Eco. status(x ₇)	0.6269**	0.3074	0.3195	0.2449 (x ₁₁)
Cosmopolite- ness(x ₈)	0.3944**	0.1369	0.1975	0.1135 (x ₁₁)
Mass M.Use(x ₁₁)	0.6654**	0.3704	0.2950	0.2033 (x ₇)
Density	-0.3447**	-0.1295	-0.2152	-0.0793 (x ₇) -0.0641 (x ₁₁) -0.0547 (x ₆)

* Significant at 5% level
** Significant at 1% level

Data reported in the table show that use of mass media sources had the largest direct effect (0.3704) on information acquisition scores, it was further found that socio-economic status channelled substantial indirect effect (0.2950) through mass media use. This indicates that high socio-economic status promotes greater use of different mass media sources resulting in greater acquisition of information.

Socio-economic status: The socio-economic status was found to have equal magnitude of direct (0.3074) as well as indirect effect (0.3195) on acquisition of information through mass media use (0.2449). This validates the earlier finding that respondents who had higher socio-economic status have greater access to mass media sources for acquiring information which contributed to their knowledge about development programme.

Social participation: The direct effect of social participation was found to be of relatively lower magnitude (0.1033), but indirect effect channelled through it is quite substantial (0.4264). Socio-economic status (0.1944) and mass media use (0.1617) made major contribution to this indirect effect. This reiterates the fact that higher socio-economic status and regular use of mass media sources were far more useful in acquiring information by few of the scheduled caste respondents. Nevertheless by virtue of their membership in the village panchayat and cooperative society it did enable them to have greater access to information about development programmes.

Education and occupation: The data reveal that education (0.0074) and occupational status (-0.0633) of the scheduled caste respondents, had very negligible direct effects on acquisition of information. But on the contrary they were found to have substantial indirect effects (0.6180 and 0.5012) which was largely contributed by mass media use (0.3964) and socio-economic status (0.2798). Both these variables were together responsible for directing large amount of their positive influence which consequently resulted in their contributing to the significant association ($p < 0.01$) between education and occupation with the information acquisition score. Hence the foregone results clearly imply that regular use of mass media sources and socio-economic status were the key factors which helped in acquisition of information rather than the level of education and occupation status. Such an outcome is evident since majority of the respondents of this community were illiterate and engaged as manual labourers, thus the two variables under study would obviously not exhibit any appreciable influence on the dependent variable.

Cosmopolite: The direct effect of cosmopolitaness on acquisition of information was moderate (0.1369), whereas it was found to have relatively larger indirect effect (0.1975) contributed by mass media exposure (0.1135) on the information acquisition score. This implies that regular use of mass media source together ^{with} cosmopolite-ness does help significantly in acquiring information relating to development programmes.

Density: Greater interactional linkage between the members in a network was found to have a negative direct effect (-0.1295) on

acquisition of information. Its indirect effect which was more than the direct effect was also of a negative nature (-0.2152). This was mainly owing to the compounded negative influence of socio-economic status (-0.0792), mass media use (-0.0641) and social participation (-0.0547) which was indirectly channelled through density and together were instrumental in affecting a significant negative association between the two variables under study.

Therefore the inference that can be drawn from the results discussed above, is that networks which comprise of members who are low in their socio-economic status and social participation, and hardly use any mass media sources is largely responsible in limiting their access to information. And more so when a network comprising of such members has greater density it would invariably make it difficult for them to acquire adequate information.

In order to identify the best possible predictors for acquiring information in the case of scheduled caste respondents, multiple regression with the seven variables was computed and it was found that together the set of variables accounted for nearly 54 percent variance, ($R^2 = 0.5499$, $F=5.061$, $df 7,29$, $p < 0.001$) with none of the variables being significant. But on the basis of the standard error of estimate in stepwise regression, as presented in Table 9(b) the four variables, mass media use, socio-economic status, social participation and cosmopolitaness, were found to be the best possible predictors in acquisition of information. Together these variables accounted for almost the same magnitude of

Table 9(b): Stepwise regression of the correlates of scheduled caste respondents on their information acquisition

Step	Variable	F to enter	Signifl- cance	Std. error of estimate	Adjusted R ²	R	Multiple Change in R ²
1.	Mass media use(x ₁₁)	27.819	.00001	0.6497	0.4428		0.4428
2.	Social participation(x ₆)	4.960	0.032	0.6148	0.4882	0.7168	0.071
3.	Soc.Eco.status(x ₇)	1.325	0.276	0.6123	0.4886	0.7253	0.0174
4.	Cosmopolitaness(x ₈)	1.314	0.278	0.6108	0.4918	0.7405	0.017

Var. not included: Edu., Occup, Density

Variables selected in the stepwise regression and their contribution tested by their 'F' values

Step	Source of variation	degrees of freedom	sum of squares	Mean square	'F'
1.	x ₁₁	1	11.705	11.705	27.819**
2.	x ₁₁ *x ₆	2	13.530	6.790	17.963**
3.	x ₁₁ *x ₆ *x ₇	3	14.040	4.680	12.463**
4.	x ₁₁ *x ₆ *x ₇ *x ₈	4	14.493	3.623	9.711**
	Residual	32	11.934	0.373	

$$Y = 1.34 + 0.155 + 0.0318 + 0.1216 + 0.1006 + 0.066(x_6) + 0.0254(x_7) + 0.1039(x_8) + 0.0913(x_8)$$

variance, ($R^2=0.5493$, $F=9.711$ df 4,32, $p < 0.001$) with mass media use being the sole variable which was found to be significant ($p < 0.05$).

Since the results of the two sets of statistical analysis more or less concurs with each other it can be concluded that regular use of mass media sources particularly by those scheduled caste respondents who had such personal attributes as high socio-economic status, greater social participation in village institutions and were more cosmopolite, had the advantage of greater access to information about development programmes.

An overall appraisal of the results show that use of mass media sources, cosmopolitaness and higher socio-economic status emerged as the key factors which helped in acquiring information about development programmes in general. And apart from them, there were certain other variables that were found to be complementary in the process of information acquisition. Caste diversity amongst the members in an individuals personal network was beneficial in the case of total respondents. Whereas extension agent contact and degree of relationship was evident among the high caste responden. And participation in village institutions on the part of some of the scheduled caste respondents was advantageous to some extent in acquiring the necessary information about the various aspects relating to development programmes.

Chapter V

Summary and Conclusion

Information is one of the key resources in rural development, as almost every activity crucial to it, is either information related or dependent in some way. Development related information often becomes proprietary and is usually prevented from diffusing easily because of the economic value associated with it for the benefit of the target group of beneficiaries. As the village information environment does not have any channel functioning to bring development information to the rural people. This generally results in an inherent lack of sufficient information and knowledge concerning the various development programmes and its aspects, on the part of most persons in the village.

It is therefore necessary to understand the village communication pattern and identify the interpersonal factors which would be instrumental in determining the flow of development related information amongst the people and reduce the disparities in the level of information amongst the different segments of the village population. For this purpose the social network analysis has been chosen to study the existent pattern of interpersonal communication in a village based on social relationship linkage amongst the persons and the nature of their interaction. For interactional content differs according to the relational bond the persons have with others in their social settings. Communication therefore constitutes the major substance of the relationship between the members in a network. And as social relationships channel the process of communication, therefore interrelationships amongst the members in a social network is synonymous to the communication

network which ultimately governs the flow of information of common interest between them and others in their social setting.

Therefore the notion of social network conceptualised for the study is founded on the tenants of the social exchange theory, where the concept of reciprocity is the core of the theory that relates between material flow and social relations. Hence the underlying postulation of the study is that, 'the network of social relationships between the members in a village, constitutes the communication environment, where information on diverse subjects and interests forms the basis for interaction. And the nature of social exchange ^{or} interaction among the members determines the composition and form of interpersonal relationship in the network, the characteristics of which are measured by selected network indices'. As these indices are assumed to assess the potential that the relational features have for information input through varying levels of involvement. It also helps to ascertain the extent and type of information to which the members have an access from such relational ties. Providing a better perspective for examining the rational for the social exchange and the rules and structural factors which regulate the participants and the content of information in the communication process in a stratified social system, such as that which exists in the villages of India.

Considering therefore the importance of information in development, the present study entitled, "Pattern of Rural Communication- A Social Network Analysis", was planned with the broad objective of exploring the existent pattern of communication in a village.

The specific objectives of the study are:

1. To find out the socio-personal profile of the villagers on the basis of selected variables.
2. To describe and compare the interpersonal communication structure according to the network indices of Activity, Diversity and Density.
3. To ascertain the relationship of the individual and network variables with the Level of Involvement in each of the three caste category of respondents.
4. To determine the relative influence of the network and individual variables on information acquisition across the three caste group of respondents.

Methodology:

A whole village approach was adopted for investigation keeping in view the nature and objective of the study. Palpur Khas, a multicasite village in Chakka Block of Allahabad district in Uttar Pradesh was the locale for the purpose. Orientation of the social network is, used synonymously with 'interpersonal network, comprising of those persons with whom the respondent maintains a personal and regular communication links. Personal interview of the main decision maker in a household with the help of a structured interview schedule was the principal method of data collection. Data were analysed by using suitable statistical techniques. A summary of the results obtained is presented in this chapter.

Major Findings

Social Profile of the village and its members

1. Majority of the people in the village were engaged in farming followed by labourers in both the non farm and agricultural category.
2. The land ownership pattern comprised of mainly small and marginal holdings.
3. In general, the members in the village had low level of education, social participation and socio-economic status.
4. The upper caste respondents were significantly higher than^{that} of the other caste respondents in terms of their socio-economic status, land holding, occupation, social participation, level of education and family type where most of them were found to be from joint family background.
5. Similarly the backward caste respondents were relatively better of than the scheduled caste with respect to their socio-economic status, occupation and size of holdings.

Communication and Extension

6. In general the people had low extension agent contact and cosmopolitaness and were found to have poor participation in extension activities. However they were average in their use of mass media sources.
7. Invariably the high caste members used mass media sources more regularly and had greater extension agent contact.
8. Backward caste respondents had more participation in extension activities than compared to the other caste groups. And when compared to the scheduled caste respondents:

they had the significant advantage of having greater extension agent contact, were more cosmopolite and regular in their use of mass media sources, particularly the radio.

Information Acquisition:

9. The backward caste respondents had relatively more of their network members as their primary source of information than compared to the higher and scheduled caste respondents.
10. The high caste respondents were found to have significantly more awareness and knowledge about the development programmes than rest of the members in the other two caste groups.

Existent Pattern of Communication:

The pattern of communication existent in the village had the following characteristics,

11. In general, the individuals had small personal networks comprising of few members with whom they had more frequent interactions and average level of involvement. Diversity amongst the network members was found to range between average to low in terms of relational ties, caste occupation and educational status. And although there was a high density of communication links between the network members, the degree of relationship amongst them was low.
12. The distinguishing features of the high caste respondents was that their personal networks were of medium size, they had less frequent contacts and there was significantly greater degree of relationship amongst their network members.

13. Whereas the scheduled caste respondents personal networks though smaller in size, had a significant caste and occupational diversity between their network members as compared to the other caste group respondents.

Level of Involvement

Network variables

14. Degree of relationship and network size, in general were found to have a positive and significant association ($p < 0.01$) with the level of involvement on the basis of their zero-order correlation. Caste diversity was also found to express a similar relationship with the exception of only the scheduled caste group respondents.
15. Greater density of communication links amongst the members in a network and more frequent contacts with them was observed to have a significant but negative correlation with the level of involvement in the case of total and backward respondents. Whereas the relational diversity in both these groups expressed a significant association ($p < 0.01$).

Individual variables:

16. Age, proportion of network members as primary source of information and the extent of exposure, in the case of total backward and scheduled caste group of respondents, were found to have a significant negative relationship with the level of involvement.
17. Family type in the case of higher and backward caste group of respondents was found to express a significant association with the Level of Involvement ($p < 0.05$).

Relative influence of individual and network variables on the level of involvement

18. In general it was observed that when there is caste diversity among the members of an individual's personal network, the degree of relationship and density were found to play an influential role in determining the type of social exchange that the members engaged in, between themselves.
19. The influence of degree of relationship in determining the level of involvement which they have with members of other caste group, is distinctly evident in the case of high caste respondents.
20. However in the case of backward and scheduled caste respondents' personal networks, it was the degree of relationship and density of network which influenced the level of involvement they engaged in with their network members.
21. Besides the influence of degree of relationship between the members in a network younger age and caste diversity in general provides a greater scope for level of involvement. Whereas higher density amongst the members in a network tends to limit their level of involvement. This is more evident in the case of small personal networks. Together these four variables accounted for about 39 percent of variation on the level of involvement.
22. In the case of higher caste respondents, the joint family background had an appreciable negative influence on their level of involvement. Apart from this the degree of relationship, occupational and caste diversity also influenced their level of involvement.

23. Ownership of land more than degree of relationship was instrumental in determining the level of involvement of the scheduled caste respondents with the members of other caste groups in their network. This invariably contributed to the increase in size of their personal networks of particularly the younger aged respondents of this group.

Information Acquisition

24. More than the network variables, the individual parameters particularly the regular use of mass media sources, socio-economic status, level of formal education, greater cosmopolitanism and social participation were found to be useful in acquiring information about development programmes, since these variables were very significantly associated ($p < 0.01$) with the information score of the respondents in general.
25. In the case of higher caste respondents the other variables, which displayed a significant relationship with the acquisition of information, were extension agent contact, network size and degree of relationship between the network members.
26. Size of holding and occupation in the case of backward and scheduled caste respondents respectively were found to be helpful in acquiring information about development programmes. Whereas greater proportion of network members as primary sources of information and density in the case of backward and scheduled caste respondents respectively were seen to have a negative correlation with their information acquisition.

Relative influence of individual and network variables on the Information Acquisition

27. In general the influence of the regular use of mass media sources, higher socio-economic status and cosmopolitaness emerged as the primary factors which helped in acquiring information about the development programmes.
28. By virtue of their higher socio-economic status the upper caste respondents had the advantage of greater extension agent contact enabling them to acquire more information about the development programmes than the other caste group respondents. The relatively greater degree of relationship amongst the members in their network was also instrumental in acquiring information.
29. However in the case of the backward caste respondents their individual characteristics of regular use of mass media source and greater cosmopolitaness were more beneficial in acquiring information than any of their network variables.
30. Apart from the use of mass media sources, the participation in village institutions by few of the scheduled caste respondents was to some extent found useful in acquiring information of development programmes in more details.

Conclusion:

An overall appraisal of the results strongly validates the proposition that the type of social exchange or interaction in a social relationship between persons is primarily governed by the intensity of their association with one another is amply substantiated in the analysis of the relational features which links

individuals in a social network. Further greater homogeneity amongst the members or density in a network limits the input of information since it restricts the type of social exchanges particularly in small personal networks. Consequently the non network variables played a more important role in acquisition of information about matters which were external to the social settings of the village people than compared to the network indices in general.

Therefore from the point of view of extension, it clearly indicates that both the exogenous and endogenous factors combine together in influencing the pattern of communication amongst the people in a village. And since the degree of relationship in a dyadic communication is crucial in determining or governing the type of informational content, an appropriate combination of mass media sources and extension methods ^{should} form the basic information support for development related activities. In order to make the development programmes more acceptable and effective in achieving their objectives of poverty alleviation it is essential that the extension system should constantly monitor and actively supervise, particularly the rural poor in establishing a workable alternative for improving their economic and social condition.

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APPENDIX-IScoring Key For Instruments UsedA. SOCIO-ECONOMIC STATUS(RURAL) Trivedi & Pareek (1963)1. Caste:

Higher caste -	3
Backward caste -	2
Scheduled caste -	1

2. Occupation:

Government service	5
Farming	5
Independent Profession	4
Business	3
Caste Occupation	2
Labourer	1

3. Education:

Graduate	5
Intermediate	4
High School	3
Middle	2
Primary	1
Illiterate	0

4.	<u>Social Participation:</u>	
a)	Member of one organization	1
	Member in more than one organization	2
	Office holder	3
	Public servant/Leader	4
b)	Never attend the meeting	0
	Occasionally attend	1
	Regularly attend	2
	The formal institutions/ Organizations which were considered;	
	Village Panchayat, Village Cooperative Society and the Bhajan/ Kirtan Mandali	
5.	<u>Land holding:</u>	
	Landless	0
	Less than one acre	1
	One to Five acres	2
	Five to Ten acres	3
	Ten acres and above	4
6.	<u>Type of House:</u>	
	Hut	1
	Katcha	2
	Mixed	3
	Pucca	4
6.	<u>Family type:</u>	
	Nuclear	1
	Joint	2

7. Farm Power:

Bullock (Pair)	2
Crossbred Cow	2
Buffalo	2

8. Material Possession:

Cart	1
Cycle	1
Radio	1
Watch	1
Improved Farm Implements	2

Total Socio-economic status score = Type Score X Number.

B.(1) EXTENSION AGENT CONTACT

One point for each contact of the respondent with each category of development personnel in the last six months.

1. V.E.W.
2. A.D.O.
3. B.D.O.
4. Panchayat Secretary

(2) PARTICIPATION IN EXTENSION ACTIVITIES

Participation in each of the activities by the respondents in the last one year, a score of one was awarded into the number of times the event activity was attended.

- a) Demonstration
- b) Kisan Goshti
- c) Farmers Village or Institutional Training
- d) Kisan Mela
- e) Educational Tours.

C. MASS MEDIA USE

<u>Source:</u>	Daily (3)	Sometimes (2)	Rarely (1)
1. Listen to Village Prog			
2. Read Local Newspaper			
3. View Television(Krishi Darshan)			
4. Seen Development related films/video			
5. Read Extension Literature			

D. GOSMOPOLITENESS:

	Very often	Quite often	Seldom	Never
1. Neighbouring Village	3	2	1	0
2. Nearest Town	4	3	2	0
3. Block Office	5	4	3	0
4. Dist. Headquarters	6	5	4	0
5. Other towns in the State	7	6	5	0
6. Places outside the state	8	7	6	0

Appendix-II

Interview - Schedule

1. Name of Respondent:
2. Caste:
3. Age
4. Educational status
- 5.(a) Main Occupation
- (b) Secondary Occupation
6. Family Type (1) Nuclear (2) Joint
7. Family's Educational and Employment status
 - (i)
 - (ii)
 - (iii)
8. Material Possession
 - (a) Type of House: Hut/Kutchra/Mixed/Pucca
 - (b) Land Holding: (i) Total Land owned ----
 - (ii) Total cultivated area --
 - (iii) Total irrigated area --
 - (c) Household goods: Watch/Cycle/Radio
 - (d) Improved farm implements:
 - (i) mouldboard plough
 - (ii) chaff cutter
 - (iii) cultivator
 - (iv) seed drill
 - (v) pump set
 - (e) Farm Power: Bullocks/Crossbred cow/Buffaloes

8. Social Participation: Are you associated with any of the following formal groups in your village? Yes/No

If Yes, please indicate in which of these are you actively involved.

	<u>Member</u>	<u>Hold a post</u>	<u>Participate in activities</u>		
			<u>Regula- rly</u>	<u>Some- time</u>	<u>Rarely</u>
i) Village Panchayat					
ii) Cooperative Society					
iii) Bhajan Mandali					

9.(a) Extension Agent contact: How many times in the last six months have you contacted or been visited by any of the following extension personnels?

<u>Personnel</u>	<u>Number of contacts</u>
i) V.E.W.	
ii) A.D.O.	
iii) Health Asst.	
iv) Panchayat Sec.	
v) B.D.O.	

(b) Participation in Extension Activities: In the last one year, how many times have you participated in the following extension activities.

<u>Extension Activities</u>	<u>Number of times</u>
i) Demonstration	
ii) Kisan Goshti	
iii) Farmers Training	
iv) Farmer's fair	
v) Tours	

10. Mass Media Use: From which of the following mass media sources do you generally come to know about various aspects of your interest.

<u>Source</u>	<u>Daily</u>	<u>Sometimes</u>	<u>Rarely</u>
i) Radio			
ii) Local Newspaper			
iii) Television			
iv) Seen development related film/ video	(3 or more)	(1 to 2)	(None)
v) Read Extension Literature			

11. Cosmopolitaness: How often do you visit the following places?

	<u>Very often</u>	<u>Often</u>	<u>Seldom</u>	<u>Never</u>
i) Neighbouring Village				
ii) Nearest town				
iii) Block office				
iv) Tehsil office				
v) Bank				
vi) Other towns/cities in your state				

SOCIAL NETWORK

Who are the persons with whom you regularly interact and those whom you consider trust worthy. (The names of individuals is entered in the chart).

The following information about each of the persons is obtained by asking a set of questions.

- i) Where does he live?
- ii) How often do you normally meet the person?
- iii) What nature of information or discussion do you generally engage with this person?
- iv) What is the relationship of this person to you?
- v) What is his occupation?
- vi) What is the education status of the person?
- vii) To which caste does the person belong to?
- viii) Do you maintain a consistent interactional contact with each other? Yes/No

Network Density and Degree of Relationship?

The names of each member of the respondents network is entered in a circle individually. Then for each name ask the respondent if the person noted in the circle.

- i) Is a friend of each of the other. (Draw a solid line between the 2 names)
- ii) Is just a casual acquaintance of each of the other. (Draw a dotted line between the names).
- iii) Does not know the others. (Do not connect by any line between the names).

The total number of solid lines represent ^{the} average degree of relationships between the members in the network. While the solid and the dotted lines together indicate the density of the communication links in a network.

SOCIAL NETWORK

Chart used for recording details about the network other members
in a respondents personal network

S.No.	Name	Place of residence	Frequency of contact	Nature of social exchange	<u>NETWORK DIVERSITY</u> Relational Occupation Caste tion
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INFORMATION ACQUISITION

1. When you want to know about something whom do you often contact?
 - (a) in your village:
 - (b) outside your village:
2. What or who are the other sources known to provide the information you usually need?
- 3.(a) What is the extent of exposure you have with the persons indicated in Q.1.

<u>Name</u>	<u>Frequency of exposure</u>
-------------	------------------------------

- | | |
|---------------------------------------|--|
| (1) | |
| (ii) | |
| (b) Do you seek these person(s) named | |
| (i) Regularly | |
| (ii) Selectively | |
| (iii) Rarely | |

Orientation about the various development programmes:

1. What are the different rural development agencies do you know of that are functioning in your area?
 - (i)
 - (ii)
 - (iii)

2. Have you heard about any of the following poverty alleviation programmes launched by the Government?

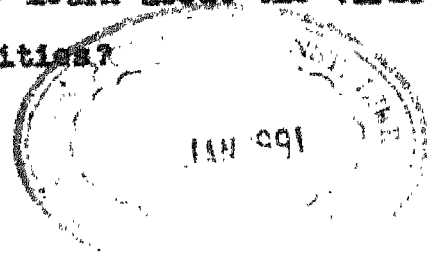
Name of Programme	Extent of Awareness			
	Never heard of	Aware but don't know much	Aware and know a little	Aware and know in detail
(i) N.R.E.P.				
(ii) R.L.E.G.P.				
(iii) TRYSEM				

3. To what extent do you know about the programme indicated above?

- i) Main objectives.
- ii) potential beneficiaries
- iii) amount of financial assistance that can be availed
- iv) agencies associated with the programme and the services offered.

4. From which source do you usually learn about the various development programmes and activities?

- i) interpersonal sources
- ii) mass media sources



T-5182

