CHAPTER VIII

Overview of the Research

Chapter I Background of the study

1. This chapter points out that the economic concept of development dominated the development thinking of policy - makers and development workers in different countries for a long time. Even the policy - makers in India were under the influence of the economic thinking. Realization of the limitations of the economic thinking culminated in to emergence of the social paradigm of development. The social paradigm of development focuses on the quality of population as the major organizing principle of development planning in future. The concept of quality of population stresses on the functional interdependence of nutrition, education, health and productivity.

2. It is pointed out that the traditional conventional planning in India is sectoral in approach and overlooks the intimate relationship between the four major dimensions of the quality of population. This has resulted in the ignorance among policy - makers about the close relationship between culture of the beneficiaries of development programmes and the acceptance of the goals and contents of the later.

3. Nutrition has to be understood as a complex cultural phenomenon of management of the processes of production, distribution and consumption of food. This makes nutrition as the most crucial dimension among the four of the quality of life of a population.

4. An effort at improvement of the nutritional conditions of the population in India must begin from the village which is

socially, economically as well as environmentally capable of becoming self - sufficient with respect to food production. Indeed, this capability should be the basis of improving the quality of life of the larger Indian population.

5. Any planned effort to take up the activity of resourece mobilization for nutritional impoverishment must be preceded by an analysis of the social relationships, communication patterns and perceptions about ecosystem of the village community under consideration. Therefore, the present study focuses on (a) the interpersonal communication patterns; (b) nature of information related to nutrition; (c) the socio-cultural context of nutrition; and (d) nutritional patterns of an agrarian community.

6. The major programmes of nutritional improvement in India have been supplementary in nature. This has led to the over-dependence of people on the external agencies. This usually leads to lapse of the target population participating in a supplementary nutrition programme to its original state of nutritional impoverishment as soon as the agency withdraws from an area. The alternate arrangement of nutritional improvement must begin through a nutrition education programme which equips the members of the agrarian community with the knowledge and skills requisite to become self - sufficient with respect to production and management of food.

7. Thus, the complex nature of the problem of nutrition calls for an interdisciplinary perspective. The interdisciplinary perspective necessitates focus on certain environmental, socio - economic as well as dietary patterns in an agrarian community.

The practical utility of such an interdisciplinary perspective about nutrition would depend on the selection of a typical village that needs educational inputs for nutrition improvement.

8. The significance of the present research for the field of Social sciences lies in the fact that it has tried to (1) relate a paradigmatic issue in the form of concept of development with a practical issue in the form of a nutrition education programme; and (2) it has tried to develop a methodological tool for development planning in future.

9. Statement of the problem

It was decided by the researcher to study the exchange of nutritional information in communication networks of an agrarian village community in its socio-cultural context for developing the framework of a nutrition education programme for the village community.

10. Assumptions

(i) Health is a state of balance between various biological, social, socio-biological and physical factors which are involved in the life processes of the individual.

(ii) Health depends on a balanced external environment, a balanced internal environment of an individual and a corresponding absence of significant disease insults.

(iii) Education can modify internal interaction between mind, body and environment.

(iv) Physical and mental weakness interacts with other disadvantages to perpetuate poverty.

(v) Culture and communication are guided by rules. These rules are shared cultural contexts amounting to a cognitive

organization of social relationships.

(vi) All human acts and artifacts constitute potential symbolic or actual messages.

(vii) Functions of communication are

a) To establish linkage between individuals and between individuals and their environments

b) (i) regulation of one's behaviour by others

(ii) regulation of one's own behaviour

(iii) regulation of the behaviour of others.

11. Objectives

It is primarily an exploratory and interpretative study which aims to

(i) Identify the cultural schemata of nutrition;

(ii) Identify the range of interpersonal communication networks;

(iii) Identify the flow of nutrition related information;

(iv) Identify the referential nodes which control exchange of nutrition related information; and

(v) Analyze structurally the differential communication schemata by means of construction of graph models.

12.Scope of the study

Village Ghera Mordari was not an atypical village if considered against the observable social composition patterns and settlement patterns of the largest number of rural agrarian communities. The points of similarity were

(i) As far as composition of the population was concerned, the village showed a predominance of the peasantry.

(ii) The peasantry shared a reciprocal economic and social relationship with other caste groups within the village and in

its vicinity.

(iii) Village Ghera Mordari was strongly dependent on neighbouring villages and urban centres for satisfaction of economic and administrative as well as cultural needs.

(iv) The village was geographically isolated.

(v) The village settlement was organized into settlement clusters based on the hierarchy as follows.

FAMILY ---> CLAN ---> PHRATRY ---> CASTE

13.Advantages

(i) One could have applied the findings of the present research to other villages too because of the structural similarities. In the first part, the one could have hypothetically tested the structural values with regard to communication network in any number of other village communities.

(ii) A comprehensive application of Field-work method would enable one to take into consideration a broad range of structural factors relevant to communication

(iii) Qualitative field-work includes any source of personal familiarity with a setting or a group to be surveyed(in this case, a well defined village community). These provided a perspective and information that was relevant to the survey design.

(iv) The study was a help to develop a testable structural model of communication network.

14.Limitations

(i) Selection of the village Ghera Mordari involved a qualitative judgement by the researcher since the number of villages

satisfying the criteria of a suitable village for the study was larger.

Therefore, the village study was not a 'probability-representative' type of study because, this would have limited the scope of the generalization of the findings.

(ii) The study in its given form did not allow to test a hypothesis through control-experimentation method.

(iii) All the maximum number of interpersonal communication channels could not be identified. This limitation could have been overcome if the participant observation technique was incorporated in the field-work method based research design.

(iv) The changes in the structural processes of communication could not be identified because of the lack of the communication channels.

(v) The study did not allow to understand the functionality of the communication network in the holistic context of the village community.

15.Significance of the study

The study is significant from the interdisciplinary perspective as it drew upon the theory and methodology of a broad range of social sciences like anthropology, education, ecology and communication sciences. Thus, implementation of this project pointed towards the overlapping areas of information and valuations held by these disciplines. Therefore, on the one hand, it satisfied the tentative but persistent need of bringing together diverse social and ecological sciences for effectively dealing with specific problems of development.

On the other hand, the significance of the study is stressed in

the micro-analytical perspective. Usually, the macro-perspective studies do not take into account the localized, particularist structural features of a given social phenomenon (due to in-built theoretical constraints). This may be reflected in the disparity between the projected generalized trends by such studies and the reality. One of the reasons for this failure may be that the cumulative or structural effects of micro-processes are not accounted for. This lacuna may be filled by micro-perspective studies like this one.

As pointed out earlier in the chapter, there is a steady shift in the paradigm of development from the economic to the economic concept. This shift is particularly noticed in the perspective of the policy-makers and planners. This new emphasis necessitates consideration of diverse cultural situation and its critical importance for the effectiveness of the development programmes. There is a reversion of the plain of ambiguity (due to radical cultural diversity) and the cultural categories become crystallized into well defined social structures and the normative interrelationships between them as one narrows down the scope of the social research to relatively small populations spread over definable space.

In this perspective, the proposed study would be helpful in developing a compatible nutrition education programme as one knows about

(i) The channels of transfer and acquisition of information related to nutrition in a village community;

(ii) The relative strength of the identified channels;

(iii) The amount and type of information flow over the system of

channels; and

(iv) The rules of change in the structural values of the information flow.

This provides one with an experimental situation wherein one can precisely define the form and content of systems of messages relevant to nutrition before their introduction in the community. One also knows fairly well about the probable targets and the delay in the information flow, as well as, the Referential nodes and critical channels which potentially effect a structural change in

the messages. If adequate measures of interference to control these variables are developed, then the chances of expected performance of the nutrition education programme would improve.

Chpater II Review of the related literature

16. This chapter substantiates the proposition in the chapter I to adopt a totally new approach towards nutritional impoverishment. This substantiation has been done through the review of literature related to nutrition in a broader perspective as defined in the chapter I. The review has been organized under five major categories viz.

(1) the concept of development; (2) ideas about nutrition and development; (3) structural analysis; (4) network analysis; and (5) nutrition education.

17. These areas of discussion formed the basis of the review of literature. The major themes discussed by the authors reviewed were as follows.

(i) Concept of Development :

The material reviewed under this area falls under two categories viz. development policy and programmes; and the theoretical thinking related to the concept of development.

It is found that most of the nations across the world had a narrow perception of development i.e. economic development. Indian policy - makers were also influenced by an economic conception of development. Limitation of the economic thinking became apparent with the passage of time. Thus, a search for alternative paradigm to the one of economic development began. The new alternative paradigm was called social development.

Focus of the paradigm of social development is on the Quality of life. A better Quality of life includes higher incomes, better education, higher standards of health and nutrition, less poverty, a clean environment, more equality of opportunity, greater individual freedom and a richer cultural life. This focus on the Quality of life as an index of development was accompanied by endeavour to evolve social indicators of development.

(ii) Ideas about nutrition and development :

Conventionally, nutrition is understood as an physiological process of consumption of food. There is little awareness about nutrition as process of production, distribution and consumption of food. Even the interest shown by Anthropologists in nutrition stemmed from the urge to give credential to this view about nutrition. Second motivational factor for involvement of Anthropologists in the area was born out of the theoretical need to understand man's functional relationship with environment.

There is a gradual change in this pattern of thinking.

Nutrition is regarded as an integrated process of production, distribution and consumption of food. There is also an awareness about the close link between nutrition and health. A step ahead in the new thread of thinking about nutrition is the assertion of the fact that there is interplay between nutrition and other social and economic dimensions of development. It is strongly proposed by a number of development thinkers and nutritionists that nutrition education programme must (a) look into the local aspects of nutrition, and (b) take into account the link between nutrition and dimensions of development. This is accompanied by the assertion that nutrition education programme must be flexible in technology and broad based in content.

Indeed, some authors have stressed two points regarding the flexibility of the nutrition education programme viz. (a) content of the programme should be suitable to the cultural perceptions of the target group : (b) members of the target group of such a programme should participate in the designing of the programme.

(iii) Structural Analysis :

The need of structural thinking in the present study is irrefutable as one is required to understand the cognitive aspects of nutrition in the light of the conceptualization as an integrated system of production, distribution and consumption of food.

Even though a number of prominent anthropologists had contributed to structuralist analysis ; still the researcher has focused on the insight provided by Claude Le'vi-Strauss as (a) he interprets human phenomena in terms of universal categories (which is prime concern of the present researcher too, though in

the limited context of nutrition) ; (b) he provides conceptual ground for the study about relationship between cultural system and ecological system. A proposition by Durkheim which is accepted in toto by Le'vi-Strauss that,'social relationships are end - products of a categorical mind,' needs to be accepted with reservation since the social relationships play an important role in shaping reality. Indeed, the social relationships are the embodiment of the dynamic exchange between the individual and culture.

This perspective has two important implications for the present research. These are (i) concept of network holds the potential to describe both systemic and process form of nutrition in a community ; (ii) it is possible to discover the structural qualities of nutritional behaviour in a community by the means of studying the nutritional networks in a community.

(iv) Network Analysis :

The concept 'network' has been widely applied in different fields. The original theoretical concept has been accepted in social sciences too. Use of the concept in social context allows to interpret the change in society and culture in contrast to the structural analysis. Nevertheless, the concept has attained a heuristic value in social research as it serves as an appropriate tool of analysis of the social relationships. This is important for the purpose of present research. General applicability of the concept has been strengthened through convergence of the structural and network analysis perspectives. Present research is expected to contribute towards this integration.

v) New ideas in nutrition education :

The dominant view about nutrition education till recent times was influenced by western perceptions. It consisted of only transferring 'relevant' information to the target group. Alternative views that have emerged as a sequel to the western idea of nutrition education have certain commonalities and differences. Some of the salient points that have a bearing on the present research are :

1) Participation of people in nutrition development programmes is necessary.

2) Malnutrition is mainly a result of lack of equity in food distribution.

3) The role of mass media in nutrition education needs to be emphasized.

4) The supplementary nutrition improvement programmes in India are handicapped by inappropriate target - setting.

5) A nutrition improvement programme can be effective if it is confined to nutrition education.

6) The agrarian community is the suitable unit for a nutrition education programme in the Indian context.

Chapter III Interdisciplinarity in the present research

18. This chapter focuses on the interdisciplinary aspects of the problem selected for present research. The major points discussed in the chapter are

i). Limitations of the disciplinary studies about nutrition.

ii). Limitations of the multidisciplinary studies about nutrition.

iii). Methodological issues involved in the present study.

iv). Need for holistic perspective about nutrition.

v). The need for combining educational and anthropological perspective to solve the present problem of nutrition education.

vi). The important cultural constructs in the present study.

19. There are peculiar limitations to the unidisciplinary research about nutrition improvement. These are :

i). Medical sciences exclusively identified the physiological and related biological aspects of nutrition improvement.

ii). Psychological sciences isolated only the cognitive effects of nutrition improvement.

iii). Anthropology and related social sciences focused on the broad cultural aspects in an exclusively particularistic context instead of dealing with the general patterns related to the process.

iv). The theoretical limitations of Sociology to deal effectively with the nutrition problem was rooted in its general insistence on isolating structural elements of any socio-cultural phenomenon.

20. The multidisciplinary research is constrained to provide enduring solutions to the problem of nutritional impoverishment due to following limitations :

i). This kind of approach does not allow to develop any generalizable models.

ii). The broad conception of the problem has limited the search for basic social, cultural units of analysis.

21. The overview described above shows that there are certain methodological issues involved in finding a permanent solution to the problem of nutritional improvement.These are

(i) What are the limitations of the problem ?

(ii) What assumptions need to be adopted in order to define the problem ?

(iii) If the concepts and the techniques of the unidisciplinary and multidisciplinary approaches are not adequate to explain the problem effectively, what kind of new concepts and techniques are to be developed ?

With respect to the first question, it is to be noted that the problem of nutrition impoverishment can be tackled effectively only in a holistic perspective. Effective realization of the holistic perspective depends upon certain assumptions about nutrition. However, these assumptions must lead to the emergence of theoretical constructs that conform to the norms of disciplinary knowledge. This is made possible in the present study as following points show.

22. The present study basically deals with an educational problem because one is interested in bringing about a desired change in the behaviour of a community through an instructional programme based on the study. A specification of the content of the instructional (i.e educational) programme should be followed by an arrangement of the programme in a manner compatible with the perceptions of the learners.

Educational science has depended on survey techniques and control - experimental techniques to satisfy this kind of requirement. Nevertheless, utility of these types of techniques was proved more appropriate in formal schooling situations. When one is dealing with a large, open complex cultural system interacting with the larger environmental system then these

techniques are not sufficient. Therefore, one has to search for a discipline that deals with the cultural and ecological aspects in an integrated manner. One can consider Anthropology to serve this purpose. In the present context of the study, Environmental Anthropology provides one with following important conceptual constructs that will allow a precision in the arrangement of a nutrition education programme viz. (a) exchange of information, (b) interpersonal communication network, (c) agrarian village, and (d) cultural ecology of nutrition.

Conversion of these conceptual constructs into interdisciplinary form is as follows :

i). Information becomes a system of ideas related to nutrition.

ii). Exchange of information is a process of learning by members of the community.

iii). Institutionalization of exchange of information is an instructional activity that can be transformed into a formal delivery system.

iv). Interpersonal communication linkages are treated as the structural elements of a delivery system.

v). Interpersonal communication networks are specific context in which members of the community participate through learning.

vi). Each of the members in the network is ordered in the role of learner as well as instructor.

vii). The agrarian community is a group of learners.

viii). The cultural ecological context become the learning situations for the members of the community.

ix). The cultural ecological context with their specific

behavioural content define the learning needs.

x). If the agrarian community has optimized its nutritional resources through its ecosystem, then the focus of an education programme would shift to environmental education, purchasing and foraging.

Chapter IV Methodology

23. The chapter discusses the methodology of the study in details. The first section in the chapter begins with the discussion about the interdisciplinary context of the study. Particularly the convergence of education and anthropology at the methodological level is emphasized. This is followed by discussion about the sampling criteria employed by the researcher to select the village for the study. It is highlighted that the selection was a lengthy process consisting of three steps of which each step consisted of selection of less and less number of villages for further probing with the exclusive aim of selection of a community that was impoverished with respect to nutrition yet had the potential for development of nutritional resources.

24. The second section of the chapter discusses the framework of the tools. It stresses on the importance of the field-work method in the light of the interdisciplinary nature of the present study. It discusses in detail the procedures followed for selec- tion of the respondents and the designing of the tools of data collection. In the course of this discussion, three types of investigations used in the present research are described viz. (1) Ethnographic investigation; (2) Socio-economic survey; and (3) Exploration of the interdisciplinary communication networks.

25. The third section of the chapter is about the procedure of data analysis. Three types of data are described in this part viz.

(1) Ethnographic data; (2) Survey data; and (3) Network data. This is followed by a brief description of the techniques used for analysis of the data.

26. Selection of the village

Following criteria were used for selecting the village :

1) The sampled population must have receptivity towards the presence of the researcher and the probing about the social interactions.

2) The community should be subject to geographical definition.

3) The community should be composed of definable social units.

4) The community should be culturally definable.

5) Population size should allow each member of the community to identify any other member of it.

6) Community should possess identifiable nutritional resources.

7) Community should have explicit communication linkages with collectives outside its own boundary.

8) Community should have a large impoverished land with potential to meet the nutritional needs of the community.

27.Framework of Tools

The strategy adopted was one of using different techniques in Field work Method for data collection.

A. Participatory Interviewing for Ethnographic Exploration

Focus of informant-interviews of a limited number of community members was :

1) Definitions of the community by the members themselves.

2) Social composition and broader schemes of social classification.

3) Extension of networks of external institutions in the community.

4) Interrelationship between social composition and settlement pattern.

5) Communication infrastructure for contact with outside.

6) Land use patterns.

7) Nutritional sources.

8) Seasonal occupation patterns.

B. Socio - economic and Demographic Survey

A structured interview Schedule was used for eliciting data about certain socio - economic, and demographic variables for all the families in the village. These variables were

1) Residential identification

2) Period of residence in the village

3) Personal identification of family members

4) Family size

5) Age - sex distribution

6) Marital composition

7) Occupational distribution

8) Educational achievement

9) Literacy skills

10) Caste composition

11) Degree of kinship

12) Land ownership pattern

13) Domestication pattern of animals

14) Media exposure

C. Exploration of the Interpersonal Communication Networks

Based on the data collected in the earlier phases, informant-interview schedules were prepared. These schedules intended to

a) identify information specific to cultural ecological contexts;

b) identify interpersonal communication linkages of the respondent through which information is obtained and transferred.

Nine cultural ecological context were defined for framing of informant - interview schedules. These schedules were administered to fifteen randomly selected family heads. These cultural ecological context were -

i) Information about soil typology

ii) Information about cumulative effect of soil type and temperature on crop pattern

iii) Information about relationship between precipitation and crop pattern.

iv) Information about channels of rainwater and land management

v) Information about temperature and crop pattern

vi) Information about food sources

vii) Exchange of agricultural technology through labour mobilization

viii) Information about use of community land and

ix) Daily exchange of prepared food.

28. Data Analysis

The study focused on three types of data :

A) Ethnographic Data B) Survey Data C) Network Data.

A. The ethnographic investigation in present study tried to define the cultural identity of the village Ghera Mordari.

Certain cultural traits of the village were elaborately studied with the help of certain guided questions.

B. The major aim of collecting data through survey was to understand the broad features of the village population. These socio - economic, demographic features were probed for relationship with the nutritional information exchange behaviour of members of the community. Thus, the survey was supposed to play two roles viz. comparison between family units in the village, and interpretation of ethnographic observations about the village.

C. The network data was collected in order to study the information optimization behaviour of the agrarian community. It mainly consists of individuals considered as communication nodes, interactions between individuals considered as linkages ; and aspects of interactions between individuals considered as strength of linkages.

The juxtaposed interpersonal communication network was subjected to two types of graphical interpretations viz.

a) **Social Network** : The basic idea of a social network is that an individual's behaviour may be affected by the ways in which he is directly connected with other individuals and the ways in which they in turn are connected with each other. In the present study, the analysis was applied to measure the Reachability between 15 individuals with primary linkages, and 26 individuals with secondary linkages.

b) Capacitated Network : In it the membership of an individual in network is determined through determination of the Minimum Cut-set. In this analysis, values of the linkages (arcs)

represent the amount of flow over a system of channels. Each arc of the network N represents a channel that can carry a flow from its first point Fx to its second point Sx. In the present study, the analysis was used to identify the Stable Sources ; Stable Linkages and Mobilization Groups.

Data Interpretation

29. Background :

This was an interpretative study.The major characteristics of such a study were :

i). It adopted a holistic approach toward its subject- matter.

ii). It related together a broad range of data in a functional manner depending upon the definition of the problem.

iii). It exposed the emic-etic patterns of behaviour of people under study (i.e. the people under study).

iv). It constructed general patterns of behaviour that were applicable only with respect to the subject under study.

As discussed elaborately in the earlier chapters,the major concern of this study was developing a nutrition education programme for Ghera Mordari. The applicability of such a programme depended upon the definition of nutritional needs by the community itself and capability of it to mobilize its own nutritional resources on its own. In other words, 1) the content of a nutrition education programme would have been specific to the cultural needs of the village ; 2) Organization of this programme would have been specific with respect to the structure of the interpersonal communication network of the village.

30. Types of Data

As described in the chapter of Methodology, this part was expected to deal with three types of data pertaining to the two points mentioned above:

(A) ethnographic data, (B) survey data (C) network related data.

The data and related interpretations under each of these categories are organized in three chapters for convenience of presentation.

Ethnography of the village and its neighbouring areas

The ethnographic investigation in present study tried to define the cultural identity of village Ghera-Mordari. Certain cultural traits were assumed to be important from the perspective of cultural ecology of nutrition. These cultural traits were as following.

a) Definition of the geographical boundaries of the village.

b) Convergence of the geographical boundaries of the village with other settlements.

c) History of the settlement.

d) Criteria for the membership of the community.

e) Social composition of the village.

f) Occupational patterns :-

(i) Occupational patterns and associations within the village.

(ii) Seasonality of the occupational patterns.

g) Patterns of discrimination in the village.

h) Social/political/administrative agencies extending in the village.

i) Channels for inflow of nutritional information.

j) Connection between social relationships and land use

patterns.

k) Similarity of the village with other villages with respect to the connection between social relationships and land use patterns.

l) Conditions of transport and other channels of communication.

m) Land use patterns and changes within the same.

n) Land ownership patterns and changes within the same.

o) Sources of food and amount of food available to the villagers.

Survey data

The major aim of collecting survey data was to understand the socio - economic and demographic features of the village. These features could have been possibly related with the nutritional behaviour of the community. To be more specific, the researcher wanted to check the possibility of the information either being 'shared' or 'hoarded' by the virtue of one's membership in a particular social or economic category. This presumption connoted that the researcher wanted to check the relationship between the socio-economic, demographic characteristics and the nutritional information exchange behaviour. The survey data was supposed to contribute to the comparison between the persons in communication and between their families on the basis of certain characteristics like common neighbourhood; lineage affiliation; relationship between the family heads; family size; age difference; sex difference; marital status; occupational status; educational status; level of literacy; caste difference; ownership of land ; ownership of domestic animal; exposure to media. This comparison was to be

carried out on the basis of the assumption that 'persons with the same characteristics tend to communicate more frequently with each other than with those who possess different characteristics.

Another purpose that the survey data was expected to serve was projection of a comprehensive socio - economic, and demographic profile of the village.This was particularly important with respect to the problem of characterization of the community as one afflicted by the syndrome of ' culture of poverty'.It would be a major contribution of the present study to the efforts of nutritional improvement if it was capable of telling something decisively about the relationship between the cultural and socio - economic characteristics of the village and the qualities of the exchange of nutritional information in the village.

Network Data

Fifteen individuals were probed about their interactions with other members of the community. Their regular interactions were treated as Linkages carrying a flow of information. Strength of this information flow was determined on the basis of the value of the flow in each linkage. This value of the flow in each linkage was determined on the basis of the number of contexts in which the persons identified as communicators interacted with the other person. The individuals identified as communicators were called as Reference Nodes. Finally, the set of Reference Nodes and the Linkages together were called as a

Network. The final network consisting of the 15 respondents and the communication partners of each of them together were subjected to two types of analyses viz. (i) Social Network Analysis, (ii) Capacitated Network Analysis. The results of the two types of analyses are presented in this chapter. The results are interpreted with respect to certain structural properties of the communication network of the group studied, viz. Reachability; Information mobilization capacity through reticula; Maximum flow capacity of different channels in the network; Reference Nodes maintaining minimum constant information flow; and Chance of emergence of Simple Cut-sets and Minimum Cut - sets in the network.

31. Definition of Ghera Mordari as a Community

From a nutrition education perspective, following cultural traits of the village were important.

i). Nature of economic activities.

ii). Access to development resources.

iii). Development of nutritional resources within the village.

iv). Sufficiency of nutritional resources.

The problem of defining Ghera Mordari as an integrative unit was basic to all analysis under all the points mentioned above. Thus, different dimensions of the cultural identity of the village were considered viz. geographical definition of the settlement, historical distinctiveness of the settlement, distinct social composition of the village, distinguishing characteristics of the relationship of the village with other social entities. Thus, an elaborate ethnography of the village needed to be explored in the first place.

32. Findings of the investigation :

CHAPTER V : ETHNOGRAPHY OF THE VILLAGE GHERA MORDARI

1. The village Ghera Mordari was located in a geographically distinctive area.

2. The environmental system in which the village was located was impoverished with respect to nutritional resources.

3. There were no institutionalized occupational associations within the village.

4. The community was divided in to settlements, castes, lineages and peer groups. This affected the exchange of information indirectly.

5. The village topography indicated the village area as a less resourceful area.

6. The villagers were dependent on the scanty resources available for the modern kind of agriculture which is typical of the marginally living agricultural groups.

7. The village showed a high proportion of land to population which indicated the potential of further development of nutritional resources in the village.

8. The village was homogenous economically.

9. The villagers indicated foraging behaviour which is not so common about the agricultural groups.

10. The food produced locally was not sufficient for the nutrition of the community.

11. The village did not have access to the resources of development which were commonly present in the neighbouring villages.

12 Agriculture as a model of employment could not compete with the urban mode of life which was evident in the migration of a large number of individuals to the urban areas.

13. Irrespective of the compact settlement pattern, the villagers were not treating their cultural experiences as 'information'.

Socioeconomic and demographic survey of village Ghera Mordari

1.Communication between members of the village was strongly influenced by one's peer group.

2. Peer groups in the village were formed on the basis of age, sex and commonness of domestic responsibilities.

3. Largest part of the population was in the socially approved reproductive age range. This implied that the village was exposed to the risk of high rate of population growth.

4. There was a high proportion of dependent, young population in the village. Families belonging to Ramoshi caste were contributing to this section of the population through a high rate of production as compared to the population of Maratha caste in the village. This was evident from the fact that majority of the population was in the age group of 15 to 35 years. However, the gross increase in the dependent population was due to the large proportion of Marathas in the population.

5. There was a slight inverse proportion of males to females in the population. This resulted due to the marriage of majority girls in the age group of 16 to 21 years outside the village. This process was complemented by the one related to the marriage of males from the village in an age range more than that of females.

6. The low spread of education in the village had restricted the scope of employment opportunities of the villagers.

7. There was an implicit discrimination against females with respect to availability of educational opportunities.

8. Employment opportunities were extremely limited for the villagers. Majority section of the population was engaged in agriculture and related activities for earning livelihood.

9. All the families were living in utter economic poverty.This added to the slowing of socio-cultural progress of the village.

Interpersonal Communication Network in village Ghera Moradari

I. Information specification by the respondents :

1. They were not able to describe their own cultivational land and that of others in terms of standard system of soil classification.

2. They were able to specify :

a. Periods of extreme temperature variations

b. All the cultivators in the neighbourhood

c. Variation in the crop patterns according to the changing precipitation patterns

d. Effects of soil erosion

e. Local food and food obtained from external sources

f. Range of food cultivated in different seasons in the village

g. Traditional and 'new' food items cultivated in different seasons

h. Soil type specific crop patterns

i. Exchange of agricultural produces and implements

j. Families with whom labour was being exchanged

k. Families with whom food is exchanged.

II. Interpersonal communication network :

1. Individuals with reticula made up of direct linkages predominantly would acquire nutritional information faster than individuals with reticula made up of indirect linkages predominantly.

2. One could observe a difference in the potential of individuals in the network to transfer information. When the various individuals in the network were labelled as Sources and their potential to transfer were compared with each other, Individual no. 14 could be considered as the major "information transfer node" in the network.

3. A strategy of information transfer could be devised wherein the individual no. 14 passed on more information to individual nos. 2 and 12 or passed on differential information to those.

4. A strategy of information transfer could be devised wherein individual nos. 14 and 2 and 12 would support each other.

With respect to individual nos. 9 and 19, three alternative information transfer strategies could be used viz.

1. These could be treated as diffusion nodes.

These could be treated as major information transfer nodes; and

These playing supportive role to individual no.14, 2 and 12.

Individuals with reticula made up of direct linkages predominantly could be treated as receivers.

The network remained a diffused structure at the 1-step distance. Nevertheless, it held potential for information dissemination widely because of presence of bridges.

3. At the 2-step distance, even individual no.15 could be

treated as " major information transfer node".

9. A Mobilization group of individual nos. 11, 12, 13, 14, 15, and 16 emerged at 2-step distance. These individuals shared information among themselves more favourably than others in the network.

10. Proximity in the reachability range of individuals at 2-step distance implied wider dissemination of information.

11. Individuals with uniplex linkages at 3-step distance

a. Would not participate in group based activities.

b. Would not transfer multiplex information obtained from external sources to others in the network.

c. Could be exposed to single component nutrition education packages.

12. Individual no. 1 and 2 could have been treated as "major information transfer nodes" in the network; and this role of theirs could have been strengthened through constructing a multiplex linkage between these two.

III. The nutrition education programme would focus on

a. Soil classification system

b. Cultivation of traditional nutritious varieties.

c. Introduction of new nutritious food varieties .

d. Soil and water conservation through appropriate technology.

e. Alternative crop patterns.

f. Multiple cropping systems.

g. Crisis management in crop cultivation.

h. Recultivation of the ecological system.

i. Devising purchasing strategies that were economic and allow benefit to the largest section of the community.

j. Understanding the importance of specific food types for health and disease control.

k. Food storage techniques.

33. Implications of the research :

1. The research have highlighted the need of relating the paradigm of Social Development to immediate developmental concerns in the context of the Indian society. Thus, in future many research studies related to various practical issues related to the quality of life of population can be taken up which will be similar in approach to the present study.

2. The study has explored the relationship between certain theoretical and methodological aspects of development. This will lead to a growing awareness among the development planners and the scientists and technologists belonging to various disciplines about the link between theoretical issues related to paradigm of Social Development and the methodological problems involved in the actualization of the concept of Social Development.

3. The study has demonstrated the use of model building as an effective tool of development planning.

4. The study has reiterated the importance of testing of theoretical models for development planning.

5. The study has implied the convergence of the Structuralist and the Network approaches in future.

6. It will be possible to build more cost-effective 'nutrition improvement through education' type of programmes in future in which there will be a functional and unbreakable link between nutrition improvement and nutrition education. Present study might provide a basis for research in this direction.

7. The Study has hinted at the possibility of developing Community based nutrition education policy as an alternative to the conventional Supplementary nutrition policy.

34. Suggestions for further research :

A. An action-research programme based on the present study can be implemented in the study village to test the propositions in the nutrition education programme formed in the study.

B. A number of studies related to application of the same techniques used in the present study can be taken up. This effort can be based on the need to improve the specific aspects of the paradigm of development.

C. A set of procedures specifying the reduction of data through use of Graph techniques should be defined.

D. Procedures to integrate cultural data with ecological data should be taken up.

E. An algorithm dealing with the Multiple-source and Multiple-receiver condition can be developed.

35. Suggestions for application of the research :

A. Strategies for the social marketing of nutrition related items can be developed.

B. Strategies for the commercial marketing of nutrition related items can be taken up.

C. The techniques used in the present research can be employed for development of education programmes focusing on the discrete aspects of the quality of life including nutrition.

D. The approach can be adopted for the studies specialized in organizational behaviour analysis and development too.

E. The techniques used in the present research would prove

effective tools of monitoring and evaluation of development and commercial projects.

F. Integrated information-ecology model can be built for use in as effective tools of management of development projects.

G. The techniques employed in the study can be used in the sphere of Population and Biological sciences too.

References

1.Dube, S.C.; Development Perspectives for the 1980s; 1983;

References

1.Dube, S.C.; Development Perspectives for the 1980s; 1983; pp. 1-40

2.Chakravarty, S.; Development Planning : The Indian Experience; 1987; Chapter I.

3. Pizano, J. Mejia de; The educational Approach within Columbia's Nutrition Plan (PAN); International Review of Education;; vol.26,No.1; 1980; pp.17-29.

4. Church, M. and J. Doughty; Value of Traditional Food Practices in Nutrition Education; Journal of Human Nutrition, vol.30;1976.

5. Drummond, T.; Using the Methods of Paulo Freire in Nutrition Education : An Experimental Plan for Community Action in Northeast Brazil; 1975; Cornell University.

6. Streeten, Paul P.; Basic Needs : The Lessons; 1986; in The Design of the Alternative Development Strategies; Ed. Irma Adelman and J. Edward Taylor; p. 27

7. Food and Agricultural organization of the United Nations; Report of the Conference on Agrarian Reform and Rural Development : The Impact of Development ; 1987; p. 42, p. 45.

8. Le'vi - strauss, Claude; French Sociology in Twentieth Century Sociology; ed. Gurvitch and W.E. Moore; 1946; Philosophical Library; New York

9. Hage, Per and Frank Harary; Structural Models in Anthropology; 1983; Cambridge University Press; Cambridge; Chapter I.