

## Chapter I

### Background of the Study

#### INTRODUCTION

The 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.

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 latter.

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.

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.

Any planned effort to take up the activity of resource 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.

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.

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.

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.

### 1.1 The Economic Paradigm of Development :

The leadership of newly independent India firmly believed that it is necessary to establish a welfare state that would be committed to providing services satisfying the basic needs of its citizens such as food, clothing, and shelter.<sup>1</sup>

This model of the state was much influenced by the experiences of the socialist countries. Leadership in these countries had a strong belief in the view that history is determined by economic forces and this belief reflected in their modern internal policies also. These nations strongly favoured the control of production system and market with the belief that this is necessary, if one wants to shape history in a desirable way. It was believed that this would ensure equitable distribution of material benefits among different sections of society.<sup>2</sup>

On the other hand, the capitalist countries of Western Europe and North America were also influenced by an economic view about human well being in their own way. This was reflected in the reliance of their governments on the use of economic indices for determining their own internal policies such as Gross National Product , Per Capita Income , Economic Growth Rate etc.<sup>3</sup>

Obviously the policy - makers and development specialists in countries other than socialist and capitalist ones too were influenced by an economic view about human affairs. Nevertheless, the interest of intelligentsia in these

countries in economic theorizing was not simply born only out of intellectual influence of the countries of the North. Policy - makers in the newly independent countries of Asia and Africa strongly felt that they had to survive in the international market dominated by western countries. Thus ,they emphasized the need (i) to strengthen their own industrial infrastructure , and (ii) to equip majority of their population with skills and perspective requisite to commercialize agriculture that would ensure creation of large scale capital. In India this view was reflected in the importance given to construction of heavy industries (that formed the backbone of industrialization) consecutively in the first three Five Year <sup>4</sup> Plans.

The understanding implicit in such a view and course of action was that economic and material growth in gross quantity would percolate down to all strata of society and this would lead to elevation of conditions of living of the population in general. The improvement in living conditions in turn would enhance social and intellectual development in the population.

## **1.2 Shift from the Economic to Social Paradigm of Development**

The anticipated economic development and its consequent equitable distribution of economic benefits did not take place. This motivated policy - makers in developing countries (Including India) to search for factors, other than economic ones, that played an important role in the development of society. This urge in turn initiated the search for

social indices of change. Thus, realization of the limitations of the exclusive use of economic indices and the urge for a new perspective about development motivated effort to achieve a comprehensive view about development. It was expected that this view would integrate the economic and social indices in a common theoretical framework. The effort was characterized by (a) defining the goals of development, (b) defining social indices of change, and (c) linking the social indices with the economic indices of change.<sup>5</sup>

These efforts also highlighted certain dilemmas of development process which had to be solved to stabilize the development process.

These dilemmas are as following :-

- (i) Development vs. Non-development
- (ii) Endogenous vs. Exogenous development
- (iii) Self-reliance vs. Interdependence
- (iv) Growth vs. Distribution
- (v) Centralized planning vs. Decentralized planning
- (vi) Development vs. Environment and
- (vii) Physical investment vs. Investment in human capital.<sup>6</sup>

All the theoretical extrapolations directed towards the solving of these dilemmas led to the development of the paradigm of social development. This new paradigm about development focused on the quality of population which was indicated by the betterment of conditions related to health, nutrition, education and productivity.

According to the new paradigm these cannot be simply regarded as isolated phenomena but as different dimensions of a singular process called as the quality of population. Changes within the domain of either of the dimensions affects the processes within the other.<sup>7</sup>

### **1.3 Quality of population as the focus of development thinking**

If one tries to understand these dimensions as an integrated system, then there is a natural interdependence between any two dimensions which in turn affect the balance of the total system. Seen in an empirical perspective, definition of such a system carries with itself qualitative indicators which are justifiable only on the grounds of theoretical and policy level requirements in a specific context. These qualitative indicators may connote particular details in a specific context than the general traits common to differing context of development.

Whereas one has empirically verifiable quantitative indices which remain standardizable in varying situations. If seen in a totalistic perspective both these sets of phenomena affect each other. Thus, the attainment of the goals of development is a process of balanced and integrated realization of the qualitative as well as quantitative targets pertaining to the four major dimensions of the quality of population.<sup>8</sup>

### **1.4 The Role of Culture in Development**

If development has to be attained with respect to both

'the quality of the population and quantitative growth in the physical resources in India, one needs to take into consideration the cultural constraints set by the traditional agrarian type of social organization. This is necessitated by the conditions like (i) Majority part of Indian population lives in communities dependent on agriculture and related occupations for livelihood ; (ii) In an agrarian society the integrative organizational processes dominate role-status arrangements than the differentiating processes implicit in the division of labour; and (iii) The role-status patterns are prescriptive and particular which repeat through symbolic perceptions.

Thus, the cultural constraints influence the (i) potential of a social group for a desirable change; and (ii) the specific characterization of growth indices through symbolic and particular cultural interpretations by the beneficiaries. If these cultural constraints are to be overcome these must be conversely understood as resources that can work for the attainment of the universal goals of development. A concrete case indicating the vital role played by culture in the development activity has been discussed by George M. Foster "... the key stone of community environmental sanitation is a potable water supply. During recent years sanitary engineers in many countries have designed and built thousands of water supply systems in villages and small towns. Unfortunately , many of these projects have functioned at less than top

efficiency...These failures can be understood and some provision made to prevent them if it is recognized that the water supply system is not simply a problem in engineering design, but rather a function of the total way of life of a group ..."  
(George M. Foster; Societies and Technological Change; 1976; p.15)

Even though there has been considerable discussion among Indian intelligentsia (including Policy - makers and planners) about the need to improve the quality of population and increase the physical resources integratively, it is yet to be strongly reflected in the actual plans and programmes. This especially is to be noted in a specific perspective with regard to the dimensions of the quality of the population. Presently one finds that the largest sections of Indian Society are deprived of the benefits of the benefits of better conditions of health, nutrition, education and productivity.

This situation of deprivation is compounded by a lack of integrative planning taking into account the qualitative and quantitative aspects of development. Thus, one notices that (i) there has yet to emerge a single programme in India which simultaneously attends to all dimensions of quality of a population, (ii) in spite of investment of large scale monetary and physical resources in different sectors of economy, still substantial improvement in the quality of the population is to be witnessed; (iii) especially the maleffects of the qualitative deprivation are more pronounced in rural parts of Indian

society; and (iv) the programmes attending separately to different aspects of development are not always culturally acceptable to their beneficiaries.

14

### **1.5 Limitations of the Sectoral Planning Approach**

These conditions have largely to do with the sectoral planning practices in India which look upon human life as a segmented entity. In such a situation, links mostly exist in an indirect manner vertically between specialized programmes at the bottom and the decision makers at the top. No horizontal links are conceived between different dimensions of the life conditions of the population. Similarly no decisive links are conceived among the beneficiaries of different development programmes at the grass root level. These factors cumulatively lead to alienation of masses from the mainstream of development processes. This situation has led to a dependence of large sections of population on the government and other centrally operating agencies to satisfy even their basic needs. This has resulted in lack of compatibility between resource inputs and outputs.

If this situation has to be remedied interlinking at two levels is necessary viz. (i) policy level link between different dimensions of quality of population on the one hand, and (ii) between quality of population and physical resources investment on the other. This would help systematically measure and correlate changes in widely separated spheres of social life. Incorporation of cultural constraints in

development planning would be another policy level relevant provision.

The last suggestion is especially feasible in case of the dimensions of the quality of population. At the practical level this remedial measure implies the participation of beneficiaries of health, nutrition, education & productivity programmes in determination of their goals, targets, implementation of such programmes and evaluation of these. This perspective has a direct bearing on the view that culture is to be understood as an integrated whole which consist of the perceptions and world view of society on one hand, and patterns of social relationships and population composition on the other. Different elements that go to make up these two halves interplay with each other directly or indirectly. At the programme level, thus, one has to put the cumulative trend of interplay between these elements against (i) social-psychological indicators of progress toward developmental goals in general; and (ii) physical and economic indicators of growth. This exercise would give one the tools to check that the specific level of development is attained by a society or not.

#### **1.6 Indicators of Development and the Quality of Population**

The last point is relevant in case of the dimensions of the quality of population. At the practical level, this remedial measure implies the participation of beneficiaries of health, nutrition, education and productivity programmes in determination of their targets, implementation of such programmes

and evaluation of these.

Thus, at the level of development programme, these four dimensions of the quality of population should be ascertainable and amenable to scientific analysis. If one accepts this perspective, then the paradigm of the quality of population should try to quantify and assess the states of interplay between the elements of both the kinds mentioned above. This activity may take place in various forms and separately for each dimension of the quality of population. Nevertheless, these four dimensions overlap with each other at a paradigmatic level. Thus, as a strategic requirement for cost-effective and comprehensive framework of operation for development programmes the importance of these four dimensions of quality of population cannot be ignored.

Participation of beneficiaries in the planning, implementation and evaluation of programmes related to the four dimensions of the quality of population is advisable given the limitations of the centralized, sectoral planning in India which has resulted in regional and socio - economic disparities with respect to attainment of development. The present centralized planning is based on a fragmented view about human life. At the practical level, this is reflected in the overdependence on target oriented, specialized programmes of development which attack the problem of low quality of population from different directions and with mutually exclusive mechanisms. This can be substantially

remedied through participation of people who have an 'integrated' and 'insiders' view about their own lives.

15

### **1.7 Culture and Development**

This formal decentralization of decision making processes with regard to the management of development programmes is necessary for evolving the contents of programmes that are compatible with the values, beliefs, attitudes and norms of action of the beneficiaries.

The idea of cultural compatibility mentioned above is to be understood 'as a process of reorientation of the cultural perceptions of the beneficiaries through the process of catharsis.' Towards the end, such a reorientation would facilitate a better use of quality of life improvement programmes by beneficiaries. Neither does this condition imply an assertion of non-scientific beliefs nor does it imply an erosion of emotive content of the quality improvement process as well as that of scientifically tenable traditional knowledge.

Therefore, it becomes a priority for a culturally compatible quality of life improvement programme to relate symbolic perceptions of its target group with the selected scientific content as well as incorporate scientifically tenable traditional knowledge into its contents.

### **1.8 Nutrition and development**

While considering the cultural perception of beneficiaries, it must be remembered that these perceptions

need to be understood in their process forms i.e. symbolic perceptions cannot be objectified and scrutinized. They keep changing continuously. As well as, these are counterparts of the social relationships of a group. The relationship between cultural perceptions and social relationships of a group show functional interdependence. In fact, cultural perceptions are the organizational processes specific to a given social group.

If one applies this perspective to the need for improving quality of population then one has to take into consideration (i) the existing role-status arrangements evolved by a social group with respect to the respective dimensions of the quality of population; (ii) the changes in the interaction patterns consequent to respective role-status arrangements; (iii) the character of the content of symbolic perceptions involved in the respective role-status arrangements; and (iv) the structural relationship between respective dimensions of the quality of population.

With respect to the last point it has to be understood that one must know which dimension among health, nutrition, education and productivity is most crucial. The crucial role of a dimension can be determined on the basis of the scope of the processes which can be considered under that dimension.

Seen in this perspective, nutrition is the most crucial dimension of the quality of population since (i) it is directly related to one of the basic needs of mankind viz.

food which is important for biological survival, (ii) relative to other dimensions change in nutritional conditions can be measured more appropriately and (iii) a deterioration in nutritional status directly affects the status of the remaining dimensions in an adverse manner.

Thus, nutrition happens to be not only a physiological process but also a cultural process of production, distribution and consumption of food. Any effort to analyze the subtleties of these processes must try to identify those features of the cultural behaviour of a social group that are directly related to the production, distribution and consumption of food.

The production component of nutrition is related with the natural environment of a social group. This relationship not only encompasses the 'environment - technology' and 'environment - economy' relationships but also the cultural perceptions of the members of the social group about the structure of environment and its productive potential.

### **1.9 Nutrition as a Complex Phenomenon of Cultural Management of Environment**

Following issues are felt to be important for the production component of nutrition viz.

- A. Stability of the mechanisms involved in the utilization patterns of physical resources;
- B. Changes in the characteristics of the environment during the production process;

C.Type and quantity of produces obtained from an environment; and

D. Perceptions of the participants in a culture about the cultural characteristics of the resources and processes involved in their use.

Moreover, the distributive and consumptive components of nutrition are related with the role-status patterns of a social group. This relationship encompasses the strategies and items for food utilization by the group viz. (i) What should be eaten ? (ii) What should be eaten by whom ? (iii) What should be eaten in how much quantity ? (iv) What should be eaten in how much quantity by whom ? and (v) What should be eaten at which timings and in how much quantity by whom ?

Thus, one can understand nutrition as a multiple level cultural management by a specific social group of its social and natural environment. This multiplexity is a reflection of the hierarchical relationship between different role - status arrangements and between different processes of food utilization.<sup>19</sup>

Indeed, the relationship between role - status arrangements and food utilisation is critical to the development status of a society because here one is discussing about the control and access of different social sections to the nutritional resources that directly affect the health, and, thus, productivity of that society.<sup>20</sup>

In addition to the above contention one should also

remember that the nutritional improvement and presence of health among individuals in a society in itself is an indicator of development in a society. The understanding implicit to such a perspective is that access to sufficient nutrition and presence of health is a prerogative of every individual.

#### **1.10 Socio - Cultural Context of Nutrition in the Village Community**

In section 1.4, it was mentioned that "majority part of Indian population lives in communities dependent on agriculture and related occupations for livelihood". These communities are small sized in population, prescriptively stratified and contain cohesive groups. These groups are closely identified with the cultural definition of each respective community. Moreover, these communities show a predominance of populace engaged in agriculture. One finds the presence of occupational groups that play a supportive role in the mainly agriculture-based economy either in the geographical boundary of the same community or in its vicinity.<sup>21</sup>

This organization called as village is a common feature of South Asian countries. Distinctively Indian village community is developed into an autonomous, corporate body. This is proved by certain features of the Indian village which can be understood as the structural principles for that entity.<sup>22</sup> These features are :

i). **Codes of world view that establish continuity with the past:**

In his work the "Rubbish Theory," Michael Thompson argues<sup>23</sup> that "physical objects and ideas are socially processed things." Indeed, this applies to all times. Thus, a social group perceives its own nature and the processes within it, the objects that are related to it and their change processes and the totality of the social group and its world in interaction by the means of symbolic categories. These symbolic categories carry specific values, ideas, beliefs that go up to make the 'meaning' of respective categories.

These meanings are to be understood as in the state of continuing through all forms like values, ideas, beliefs because of the ideational content in each of the symbolic categories. However, these meanings also need a separate perceptual context which is made up of other meanings. Finally, these meanings are arranged into formal propositions that lay the principles of social organization of a group.

At the village community level this phenomenon acquires the form of 'the lineage-history'. Lineage as well as similar other forms of social organisation appear to be the thread running through all the categories of social formation viz. from family to caste in ascending order. The membership of an individual in the lineage is important for his location in these categories i.e. this implies locating him in the social hierarchy and defining his relationship with cultural things to be used.

**ii). Internal Mechanisms for cultural integration**

At the more routine levels, the village-community continuously defines and redefines itself through social norms of conduct in different situations. All members of the community generally conform to these norms. These norms are more formalized into an institutional set-up for enabling important decision - making in the community. This phenomenon may be regarded as the governmental element of the entity which is responsible for maintaining the boundary of the village. At observation level, this is reflected in the endowment of power to headmen of families and the institution of Panchayat.

**iii) Explicit networks of communication :**

The process of assimilation of personal motives and conduct into the total cultural context of the village does occur at the level of daily routine through interaction of the individual with other members of the community. A corollary of this process is 'self-definition by the community.' Through interpersonal interaction the individual acquires the symbolic elements as well as behavioral elements of the community as this helps the individual to conform to the norms of the community. At the same time, the definition of the community is reinterpreted.

At the level of daily routine, this is expressed by the personal identification by all members of the community of each other and verbal or otherwise communication between them.

### **1.11 Conceptual Dimensions of Nutrition in the Village Community**

The Indian village is a form of social organization that has the means to mobilize nutritional resources to raise its own nutritional status as well as that of the larger society; but any planned effort to take up the activity aimed at mobilizing nutritional resources of the community must be preceded by an analysis of the social relationships, communication patterns and perceptions about ecosystem of the target village community. This exercise will help to bring in a predictability in the community based nutrition improvement programme. Thus, one is required to understand (i) the interpersonal communication patterns; (ii) nature of information related to nutrition, (iii) the socio-cultural context of nutrition, and (iv) nutrition patterns of an agrarian community.

The interdependence of these aspects with respect to the need for developing a nutrition education programme is discussed below.

#### **1.11 . a . Conceptual Context of Exchange of Information**

As is known that in the course of evolution as a discipline, anthropology drew upon description of ways of living of discrete social groups and interpretation of the ideas, beliefs, values, attitudes, norms, customs, and world view that governed their ways of living. There was an implicit bias towards use of reductive concepts that would singularly try to depict the form as well as content of specific forms of behaviour of a group.

One can cite some examples like 'order' 'transformation' 'inversion' 'hierarchy' 'complex' 'whole' and a number of others. Even 'Exchange' is one of such a concept that was used in anthropological discussions for a long time. But generalizability of such terms was constrained by the context of field work based interpretation. These same terms were being used by different anthropologists to describe different situations in which they would find their defined personalized anthropological experiences grounded.<sup>24</sup>

This condition prevailed mainly because no convention developed among anthropologists to reach common understanding about the assumptions, the elements that formed these concepts and the interrelationship between these elements all of which went to produce the specific concepts.

This methodological need was satisfied by the Binary Model of Claude Le'vi - Strauss. One need not go into the details of the socio-historical context of the growth of the structuralist school of Le'vi - Strauss. One may focus on the model mentioned above.

According to him, reality can only be comprehended through synthesis. However, the conceptual synthesis is a culmination of the long drawn process of combination of binary units ; and these binary units are nothing but phonological units. These phonological units are oppositional in nature. Therefore, facts that constitute reality should be understood as signs. Then, it obviously follows that cultural

reality can only be understood in a reductive form. This means that the focus of cultural analysis should be on the definition of universals than particulars. Indeed, the so - called cultural particulars should not matter at all. Contrary to the stress on particulars, the relationship<sup>25</sup> between different units should be emphasized.

According to this perspective, the formalized relationships must be processed through 'information'. Seen in this perspective information stands as a system of perceptions, signs and symbols that implicitly exists in alternative forms. These forms are contained in the cognitive repertoire possessed by individuals by the virtue of being members of a social group.

This last statement is in fact an antecedent to the use of the term 'exchange' for the present study. It implies that the cognitive processes of individuals are concretized through their confirmation with common norms of thinking that may be relevant to more or less specific situations.

Thus, the individuals evaluate their own as well as behaviour of other members of their social group. At the concrete level this is enabled only through communication of organized contents of cognition. To avail of a broader base of analysis, one may even include physical objects in cognition which obviously do not stand significant unless and until they are posted at the end of certain cognitive intentions. The above discussion substantiates the relevance of the term "exchange of information".

### 1.11. b. Conceptual Context of 'Exchange of nutrition information

The nutritional element in the present analysis is added by the subsistence and related needs of man . To overcome this limitation , in the context of present study this element has been defined more specifically with regard to those core features of the cultural behaviour of a social group that characterize the interrelationship between subsistence patterns of the group and its ecological niche.

This perspective about nutrition has been a legacy from cultural ecological thinking in anthropology. Even though within the disciplinary fold of anthropology the structural thinking and cultural ecological thinking form two distinct trends, they have been brought together here to bear upon the concrete problem of self management of nutritional resources by a community.

Thus, the full term "exchange of nutritional information" stands for the continuous evaluation of one's own cognitive system and those of others with regard to nutrition. This allows one to understand the nutritional behaviour in a group as a communicative process. This communicative process entails the flow of information through the complex and compound system of social organization and ecological niche' of a social group; in contrast to the traditional approach towards nutrition ; thus, this allows one to understand nutrition as a techno-cultural management

of the environment .The most important advantage of this approach is that various empirically verifiable parameters are definable in an intricate manner-encompassing cultural and environmental peculiarities.

26

#### **1.11. c . Conceptual Context of 'Interpersonal Communication Network'**

Once the cognitive base of the process of exchange of nutritional information is clarified, the relevance of the term "interpersonal communication networks"also becomes understandable. Human beings as individuals always share their nutritional needs with the group of which they are members and use a common repertoire of evaluative norms to assess their group's nutritional behaviour. These norms are situation specific and these situations, for the purpose of present study, are defined in a cultural ecological perspective. Therefore, here one is mainly concerned with the identification of specific concrete situations in which individuals in the community have common experiences related to nutrition. In fact, these recurrent situations are channels of exchange between individuals. And if one further relates the function of these channels with the nutritional requirements of the community then these channels must be expected to achieve optimum nutrition for the individual and through the totality of the channels of individuals in the social group an optimization of nutrition for the group.

#### **1.11. d . Conceptual Context of 'Socio - cultural Context'**

'Socio-cultural context' of the community covers those discrete features of the behaviour of the community that have direct bearing upon the nutritional patterns in the community. In this case, the identity of the village as a 'part culture' and 'part community' is highlighted. In simple terms, the village under study is not considered in isolation from the larger social polity of which it forms an integral part. Thus, the community is appraised if not evaluated with respect to certain socio-cultural traits that are commonly ascribed to all social entities called as 'village' in present politico-legal system in India. The nature of these traits have direct consequences for subsistence behaviour of the group and as a phenomenon this must reflect in the exchange of nutritional information in the interpersonal communication networks.

#### **1.12 Limitations of the Traditional Approach towards Nutrition**

If one scrutinizes the approach of policy - makers till date about solving the nutritional impoverishment problem in India, one sees a lack of insight about this complex nature of nutritional process.<sup>27</sup>

Hitherto, all nutrition improvement programmes are essentially supplementary in character where government sponsored agencies or others provide food to the target group. The supply agencies as well as the source of food are both located outside the control of the target group in this kind of arrangement.

This kind of arrangement has almost created a 'parasite

- host' type of relationship between the target group and the supply agencies. The target groups, most of the times which comprise of sections of the village community, neither feel the need to improve the nutritional potential of their environment nor to adopt self-sufficient and need based strategies of food distribution and consumption. Usually, it is observed that after the withdrawal of such supplementary programmes the target group relapses into nutritional impoverishment.

The problem of nutritional impoverishment in India is two sided. The first side is related to the general problem of maintaining quality of the population which mutually affects labour input; and consequentially economic growth of that society. It suffices to mention here that generally, the agrarian communities predominate numerically as well as structurally the Indian socio-political scenario. If these communities have to be garnered in with priority for any general nutrition improvement programme then one must take into consideration the general patterns of nutritional behaviour of the agrarian community in India. On the other hand, need for nutrition education of an agrarian community exists implicitly too as the targeted community requires to be educated to understand and rationally plan the relationship between its own nutritional perceptions and its ecological niche'.

### **1.13 Need for Interdisciplinary Perspective about Nutrition**

It is, thus, but natural to analyze the quality of the

nutritional perceptions by the group and if these perceptions are scientifically untenable these have to be substituted by newer scientific themes of nutritional optimization. Thus at the disciplinary level, education reflects on the potential content of the nutrition improvement programme by the community for itself. This has implicitly broadened the very definition of education to go beyond pedagogy. One basically wants to shape incidental learning of the members of the village through education.

In brief, for the present study one brings in anthropology to analyze the cultural processes underlying nutrition and simultaneously brings in education to define the learning situations and the general content and guidelines about nutrition to be transferred to the community.

29

#### **1.14 Framework of a Nutrition Education Programme**

This change cannot occur overnight and involves the process of learning and internalization of the new content by target groups. When this learning and use acquire the systematic form of acquisition of content through instruction and content specification there is a likelihood of emergence of a nutrition education programme. Such a nutrition education programme will essentially aim at self-dependence of the village community with respect to its environmental conditions and perceptions of the community members about food distribution and consumption.

Thus, the content of such a nutrition education programme

will consist of information about :

- (i) Geography of the village
- (ii) Climatic conditions of the village
- (iii) Biotic components within the geographical boundaries of the village
- (iv) Landholding patterns
- (v) Land use patterns
- (vi) Seasonal produces from land cultivation
- (vii) Dietary needs of different sections of the community
- (viii) Dietary items and sources available to the community.

All of these dimensions are interrelated with each other in a complex manner that none of these can be regarded exclusively related to production, distribution or consumption. Indeed, each one of them is directly or indirectly related with each of the three components of nutrition. In fact, any attempt toward this kind of classification will lead to a preconceived reduction of cultural data which is always enormous and multidimensional.

The specification of information of such a programme can be done with respect to the interpersonal communication networks within the community since the concept of network allows one to understand the transformation of symbolic categories in to information flow. As the last point suggests, the change in the strength of the flow in network points towards 1) strength of the interrelationship between members of the community in the specific nutritional context; and 2) the effectiveness of information input in terms of structural properties of

relationships.

While adopting such a position toward information users' behaviour, one is trying to reconcile the traditional Role Network and Field Network perspectives in social research. While the role network perspective focuses on the individual as a unit of analysis the field network perspective focuses on a group of individuals as the unit of analysis.

Incorporation of the 'network' concept in the framing of the present study allows one to deeply probe the processes and states of interaction between the individual and his social environment. Here in the present study the social environments crystallized as the behaviour of the village community with regard to the use of nutritional information. Thus, depending on the structure of communication in the community, the content and form of a nutrition education programme can be anticipated to a large extent.

#### **1.15 Selection of the Village for Study**

It was helpful to undertake such a study in village Ghera Mor dari of Haveli Tehsil in Pune district which was a typical village in Western Ghat ranges of Maharashtra if considered against the observable social composition patterns and settlement patterns of any rural agrarian village community in that area. The typical features of the social composition and the settlement patterns that were considered in the present study were as given below :-

A. Numerically , predominant Maratha caste was an agricultural caste.

B. Intricate exchange system of goods and services between different caste groups. It was called as 'Balute Paddhat' by the locals.

C. Convergence between the cultural and geographical boundary of the village i.e. the symbolic definition of the identity of the settlement under study and the other two settlements of the village were dependent on the geographical limits of the valley known as Mordari (meaning the Valley of Peacocks).

As well as, focus on that village is directed by the researcher's rapport with the community which had been established in the course of the latter's frequent and consistent visits to the community as part of his research related to development communication.

The typicality of the village was proved by (i) its confirmation to the general pattern of inhabitation of the area delimited as "Village" by more than one endogamous group; (ii) preponderance of the agriculturalist caste in the village; and (iii) its own genealogical history which rendered it a "part community-part society " character.

The later part of the rationale for present study relates to a previous study undertaken by the present researcher on behalf of the Indian Institute of Education, Pune. This study focused on (1) the graded potential of the environmental subsystem of Ghera Mordari to provide sufficient nutritional

input to its native population, and

(2) the socio-economic and demographic composition of the native population that would determine its nutritional requirements and ability to procure nutritional resources from market.

This study required the researcher to establish an informal and intense contact with selected key-informants in the village. It also further required him to interact with all the households in the village as he had to collect detailed data about their socio-economic and demographic characteristics.

This situation allowed the researcher to deeply probe the inner cultural mechanisms of the community which apparently no other community could allow in a short period of time.

#### **1.16 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.

#### **1.17 Assumptions**

This study had the following assumptions :-

(1) Health is a state of balance between various biological, social, socio-biological and physical factors which are involved

in the life processes of an individual.

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

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

(4) Physical and mental weakness interact with other disadvantages to perpetuate poverty.

(5) Culture and communication are guided by rules. These rules are shared patterns of expectation within shared cultural contexts amounting to a cognitive organization of social relationships.

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

(7) Functions of communication are :

(a) To establish linkage between individuals and between individuals and their environment.

(b) i) Regulation of one's behaviour by others.

    ii) Regulation of one's own behaviour

    iii) Regulation of the behaviour of others.

### **1.18 Objectives :**

It is primarily an exploratory and interpretative study which aims to :

(1) Identify the cultural schemata of nutrition.

- (2) Identify the range of interpersonal networks.
- (3) Identify the flow of nutrition related information.
- (4) Identify the referential nodes which control the exchange of nutrition related information.
- (5) Analyze structurally the differential communication schemata by means of construction of graph models.

### **1.19 Significance of the study**

In the present study, the researcher has tried to relate a methodological issue with a paradigmatic issue. Of course, both the issues elaborated in the thesis have a long tradition of extrapolation by researchers and policy - makers. These issues are viz. reduction of data for model-building and definition of social development. However, the distinctiveness of the present study lies in the fact, that very few researchers hitherto have tried to bring a methodological issue together with a paradigmatic issue in a common framework.

It is expected that this study will strengthen a rather weak tradition i.e. applied research in the field of social sciences. Such a kind of exercise will not only be useful to policy - makers but also to those interested in the problem of a 'grand' social theory . If the findings of this study conform to any of the planned programmes in future, it will prove the predictable applicability of certain techniques of analysis of socio-cultural data on one hand and on the other hand it will provide certain reliable techniques in

the hands of policy-makers that will help to develop cost-effective programmes of social change. Therefore, it would not be out of place to expect that in the future such kind of intense integrative researches are taken up.

Nevertheless, present study will not try to give full proof final answers to long drawn questions in the field of social research and development planning. Instead, it will bring back into focus these questions. Indeed, the researcher claims that the study will raise more questions than answers. This is to be realised against the fact that the study is neither providing a hypothesis nor giving any experimentally proved model about any social phenomena. Rather, the study will stick to the interpretative tradition and merely try to decipher some structural pattern of some behavioral sphere of a society (i.e. nutrition).

One might take an overview of the questions that will be addressed to in this study. Keeping in with this pattern of discourse adopted in the thesis, one will begin with the paradigmatic issue of social development and shift to the methodological issue of data reduction for model-building.

#### **1.19. a . Research Needs related to Social Development**

##### **Paradigm**

Last few decades have witnessed attempts by social scientists to define a universal concept of social development. Even though certain achievements have been made towards this like the specifications of requirements that need to be

fulfilled to reach a satisfactory quality of life of population, still the task of deciding the indices that can be universally used to define the exact state of social development is yet to be completed. This raises specific questions about the notion of social development. These are

- i). What constitutes development ?
- ii). Are there certain ends to development ?
- iii). Is the term 'social' inclusive of 'culture' ?
- iv). Are socio - cultural phenomena reducible to allow planning ?

Before one goes into the subtleties of these questions, it will be helpful to list down certain skeptical questions about the problem of reduction of data for model building too. These questions are :

- a. Are there any general characteristics of socio - cultural data ?
- b. Are there any criteria to select the unit of social investigation ?
- c. What type of parameters can be used to define the Cultural Ecology of Nutrition ?
- d. How to integrate three theoretical perspectives in anthropology viz. Structuralism; Cultural Ecology and Social Network Analysis ?
- e. What modifications are required in the graph techniques of Network Analysis in order to deal with a wide range of data ?
- f. In what way mathematical mode of analysis will be useful

to deal with socio-cultural phenomena ?

These questions point toward possible directions of research in applied perspective. These will be discussed elaborately in sequence as following.

0. What constitutes development ?

The concept of development has been elaborately discussed by academicians belonging to different disciplines. Nevertheless, the reflection of the theoretical interests and subject-matter of respective disciplines is visible in majority of these discussions. Thus, a universally acceptable concept of development remains a dream.

The first issue to be solved while evolving a universally acceptable concept of development is to distinguish between development as a socio-historical model and development as a heuristic model for social planning. There is a need for defining the common acceptable goals; framework of action and indices of evaluation of social change as an integral part of a universal model of development.

This problem is in fact intertwined with the problem of model-building in social sciences. Human societies show extreme range of varieties of cultural natural environment. Thus one observes that every human society has evolved its own particular way of life. If all these socio-cultural variations are to be brought within a common framework of action, then in the first place there should be an effort to develop common analytical methods for all societies.

The second issue is integrating humanistic values in the rational analytical approach of development. This will require a comparative study of world-view of different human societies in order to select the common values in them. A narrow definition of the scope of human values like this will enable determination of humanistic values. Nevertheless, a mere identification of humanistic values will not be sufficient for emergence of a universal concept of development. There will be an essential need for assertion of political will on part of all human societies to accept these humanistic values as common goals of social change.

i). Are there certain ends to development ?

This question is obviously inseparable from the earlier question. However, the focus of this question rests on the methodological aspect than the philosophical aspect of development. When one mentions ends of development process, it particularly refers to the discrete observable results of a planned social change. Even if one succeeds in defining universal goals of development along with a common frame of action; still it remains to be seen whether there are common general effects of planned social change. Further, one has to see that these effects are acceptable to all.

ii). Is the term 'social' inclusive of 'culture' ?

Both the terms have been most often used in human affairs. Even social scientists have yet to reach any common definition of either of the terms. This issue might be

addressed in an altogether different perspective. To avoid the inherent bias in linguistic usages which goes with these terms, one may search for mathematical definitions of these terms which allows simplicity in model building about complex phenomena. This will enable one to see the logical relationship between the two conceptual constructs viz.

'society' and 'culture'.

iv) Are socio-cultural phenomena reducible to allow planning ?

Natural sciences are able to provide predictable models mainly because of the reducible nature of their data. To be more precise, the subject matter of natural sciences can be viewed to be made up of units that are organized into a hierarchy. Thus, the properties of the units and the interactions between these can be discovered with the help of mathematical techniques. Against this, the subject - matter of social science i.e. socio-cultural phenomena is characterized by continuity. This continuity in socio- cultural phenomena does not permit the established logico- analytical methods (including alternatives) to identify the permanent, structural units of analysis. One may rather approach the problem from an altogether different perspective. This consists of developing methods that can precisely account for continuity in the socio-cultural phenomena. Therefore, one may take up more intense research related to Content Analysis, Network Analysis and Catastrophe Theory. As one knows, the field of Content Analysis focuses on the breaking down of linguistic process;

Network Analysis focuses on the prediction of interactions in quasi-groups and social groups; and Catastrophe Theory focuses on predictable modelling of cyclical socio - cultural phenomena. The scope of human behaviour covered by these three fields is very vast so as to allow contribution to the task of a Grand social theory.

Apparently, all these questions are independent and may follow an integrative, multiple phase approach to answer these questions. In the end one may hope for the emergence of a scientific paradigm of social development.

The second set of questions raised above, if answered properly will provide breakthroughs in the emergence of the paradigm of social development. At the same time, this will provide insight to the efforts to improve certain techniques of model building in social sciences. One may deal with the scope of research related to each of the questions in sequence.

#### **1.19. b . Research Questions related to Reduction of Data**

Q. Are there any general characteristics of socio-cultural data ?

The focus of the study is development of certain conceptual constructs based on cultural categories held by members of a particular social group. These cultural categories will not be accepted by the researcher in their projected form by the respondents. Rather, he will try to identify observable characteristics of these categories that are not within the

of the participants in the culture of the community.

The question raised here cannot be answered at the ground level of discrete data because of the continuity in the behaviour of the participants. The data must be reduced in the first place to certain pattern of thought and action. Any attempt to discover general characteristics of socio - cultural data must be based on these patterns.

With respect to the last prerequisite what research needs to be taken up further based on the present research study ? Primarily, patterns of exchange of nutritional information is the focal theme of this study. So following questions with respect to the generalizability of characteristics need to be probed further:

Th. 10235

- a) Is nutritional information characterized in the same manner by other social groups ?
- b) What would be the characteristics of the class of social groups in order to test the applicability of findings of this study ?
- c) Would it be found that the same patterns of interpersonal communication exist in similar communities that are environmentally impoverished but with surplus production?

Answer to these questions would widen the scope of generalizability of the analytical techniques used here with respect to the diversity that characterizes agrarian communities in India.

- ii). Are there any criteria to select the units of social investigation ?

Present study has tried to incorporate two units with distinct characteristics in the single frame of reference viz. the 'community' and the 'individual'. Functional link between these two units is established through the concept of communication network. However, the researcher has not tried to study how the nutritional behaviour of these two units is integratively controlled by the communication network ? This will be possible in case of modelling of the amount and nature of the flow in the interpersonal networks. In this respect it will be necessary to document relevant incidents. Once such incidents are documented the logical problem of classification of the incidents will have to be solved. This kind of classification will permit measurement of the amount and nature of the incidental flow of nutritional information. Thus, briefly one can say that in future it will be helpful to define the criteria for selection of communication linkages and incidents that affect the function of these linkages.

ii). What type of parameters can be used to define the cultural ecology of nutrition ?

In the present study, the culture and ecology of an agrarian community is proposed as a composite system of information. However, one is trying to see the causal relationship between two distinct kinds of information viz. quantifiable system of the ecology and qualitative system of the culture. Thus, one is dealing with a crucial question of interrelating quantitative and qualitative factors. If viewed separately, information of each

ecosystem has its own patterns of behaviour and this is true for all such systems. However, the question, 'what are the predictable patterns of multifarious interaction between these two systems remains. Here, indeed, one is talking about the modelling of the threshold phenomena between these two systems.

;) How to integrate three theoretical perspectives in anthropology viz. Structuralism; Cultural Ecology and Social Network Analysis ?

Structural anthropology focuses on the structure of cognitive systems ; while Cultural Ecology focuses on the cultural organization of traits related to subsistence ; and social network analysis focuses on the interaction patterns ensuring group cohesiveness. These perspectives have stood separately in the anthropological tradition. Nevertheless, in present research, attempt is made to incorporate the methodology of these three perspectives by focusing upon :

- a) Interpersonal communication networks ;
- b) Reduction of ethnographic data in order to characterize networks; and
- c) Defining the complexity of network interactions on the basis of ecological conditions that directly affect the nutritional patterns of the community.

On the basis of these conditions, if one can develop a predictable model of a composite 'Information Transfer-Ecological System' that will set new experimental tradition in the field of convergence of cultural and ecological sciences.

v). In what way mathematical modelling will be useful for modelling of socio - cultural phenomena ?

In the present research, one has identified a conspicuously well defined micro - level entity for analysis. Even though the researcher has restricted to relate the ecosystem -specific behavioural data with certain ecological data; yet as mentioned earlier there will be a number of gaps in the data as the ecological data is limited in scope and sometimes based on personal impressions in the present study.

These gaps can be filled up with the help of mathematical techniques that allow to model cultural choices in integration with alternative ecological strategies in future.

**Summary :**

Chapter I has dealt with the following points :-

1. Leadership of the newly independent India firmly believed in the economic concept of development. This was a view commonly held by leadership in many other newly independent countries of Asia and Africa. Two major factors responsible for the spread of economic concept of development in the newly independent countries were

A) Influence of western thinking on the intelligentsia in these countries; and

B) Economic conditions characterized by competition with the western economic powers.

2. Implementation of development programmes based on economic concept of development brought certain dilemmas to fore in India. These dilemmas highlighted the limitations of the economic thinking. This encouraged a discussion about comprehensive social development among the policy - makers.

'Quality of population' was the focus of the social concept of development.

3. Quality of population is seen as an integrated phenomenon characterized by nutrition, education, health and productivity. The attainment of the goals of development is a process of balanced and integrated realization of the qualitative and quantitative targets pertaining to the four major dimensions of the quality of population.

4. If development has to be attained with respect to both the

quality of the population and quantitative growth in the physical resources in India, one needs to take into consideration the cultural constraints set by the traditional agrarian type of social organization. If these cultural constraints are to be overcome, they must be conversely understood as resources that can work for the attainment of the universal goals of development.

5. The need to improve the quality of population and increase the physical resources integratively is yet to be strongly reflected in the actual plans and programmes. Presently, one finds that the largest section of Indian society of the benefits of health, nutrition, education and productivity. This situation of deprivation is compounded by lack of integrative planning taking into account the qualitative and quantitative aspects of development.

6. These conditions have largely to do with the sectoral planning practices in India which look upon human life as a segmented entity. This situation has led to dependence of large sections of population on the government and other centrally operating agencies to satisfy even their basic needs. If this situation has to be changed for the better, then (a) integration at the level of quality of life and at the level of resource planning ; and (b) participation of beneficiaries of health, nutrition, education and productivity programmes in determination of their goals, targets, implementation and evaluation is required.

7. Decentralization of decision - making process with regard to management of the development programmes is necessary for evolving contents of programmes that are compatible with the values, beliefs, attitudes and norms of action of the beneficiaries.

8. Nutrition is the most critical dimension of quality of population. It is not only a physiological process, but also a cultural process of production, distribution and consumption of food. The productive component of nutrition, as understood in the present study, is related to the cultural perceptions of a social group which are about the characteristics of the nutritional resources and processes involved in their use.

Distributive and consumptive components of nutrition are related to the role - status patterns of a social group. This relationship encompasses the strategies and items for food utilization by the group.

9. Village is a common feature of South Asian countries.

Distinctively, Indian village community has developed into an autonomous, corporate body. This is proved by certain structural principles that characterize this entity viz.

- (a) Codes of world-view that establish continuity with the past;
- (b) Internal mechanisms for cultural integration; and
- (c) Explicit networks of communication.

10. The Indian village is a form of social organization which has the means to mobilize nutritional resources to raise its own nutritional status as well as that of the larger society. However, any planned effort to take up the activity must

be preceded by the analysis of the social relationships, communication patterns and perceptions about ecosystem of the target village community. This exercise would help to bring in a predictability in the community based nutrition improvement programme. Thus, one is required to understand

- (a) The interpersonal communication patterns ;
- (b) Nature of information ;
- (c) Socio - cultural context ; and
- (d) Nutrition patterns of an agrarian community.

11. Hitherto, all nutrition improvement programmes were essentially supplementary in character where government sponsored or other agencies provided food to the target group. The supply agencies as well as the source of food both used to be located outside the control of the target group in this kind of arrangement.

12. Thus, it is but natural to analyze the nature of the nutritional perceptions of the group and if these perceptions are scientifically untenable, these have to be substituted newer scientific themes of nutrition optimization.

13. Therefore, in the present study one brings in Anthropology to analyze the cultural processes underlying nutrition and simultaneously brings in education to define the learning situations and the general content and guidelines about nutrition to be transferred to the community.

14. A nutrition education programme for the community will essentially aim at self - dependence of the village community

with respect to its environmental conditions and perceptions of the community members about food distribution and consumption.

15. It was helpful to undertake such a study in village Ghera Moradari of Haveli Tehsil in Pune district (Maharashtra state) which is a typical village in Western Ghat ranges if compared with the observable social composition and settlement patterns of a rural agrarian community in that area.

16. The study is likely to encourage discussion about the

(a) The nature of the process of development; and

(b) Certain methodological issues related to reduction of socio-cultural data.

#### **Operational Definitions :**

**Agrarian society :** A social system wherein majority of the population depends on agriculture and related occupations for livelihood. In the context of such a society, indicators of economic development are basically related to agricultural production.

**Beneficiary :** Individual who obtains direct or indirect benefit from a development activity. He might be a selected or unintended target of the activity.

**Catharsis :** The process of purification or purging of emotions through the effect of art. The term has been extended here to mean self-criticism by people with respect to their culture. The self-criticism is followed by change in their cultural perceptions towards more conducive state for attainment of

development goals.

**Community** : A group of people living in the same geographical area and sharing common cultural features is called a community. In the present study, the term is being used with specific reference to the 'village community' which is a rural community having a distinct governmental element in addition to the above two features.

**Communication** : It is the state of interaction between any two or more systems and it includes five fundamental factors : an initiator , a recipient , a mode or vehicle , a message and an effect.

**Communication channel** : The route along which a message is transmitted from one node to another node and along which feedback may be obtained.

A node is a communication centre which receives, stores and transmits messages. In the context of present study , a single individual who participates in the study community directly is considered as a node( direct participation means interaction with any biotic or abiotic components of the community). The persistent interpersonal interaction between any two nodes in an institutional context amounts to the route of communication.

**Culture** : The total body of material artifacts(tools, weapons, houses, places of work, worship, government, recreation, work of art, etc.) of collective mental and spiritual means (systems of symbols, ideas, beliefs, aesthetic perceptions, values, etc.) and of distinctive forms of behaviour (institutions, groupings, rituals, modes of organization, etc.)

created by a people in their ongoing activities within their particular life conditions and transmitted from generation to generation.

**Cultural constraints :** Application of a generalized model of behavioural change is limited by the particular ideas, beliefs, faith, values, attitudes and norms of a people belonging to a culture. A specific condition defining this limit is called as cultural constraint.

**Cultural schemata of nutrition :** These include patterns of landholding ; patterns of land utilization ; crop patterns ; patterns of use of flora and fauna ; patterns of cultivational yield ; range of dietary items and practices related to their intake ; sources of food ; scheme of classification of food.

**Decentralization :** Decision - making is distributed among wider sections of society; and participation of the local people in planning and implementation of development programmes is emphasized.

**Development :** The planned social change towards specific goals, viz. Rationality ; Planning ; Increased production and efficient production processes ; Improved standard of living ; Socio - economic equality ; Institutional changes ; political democracy ; Democracy at the grassroots ; Democratic planning etc.

**Education :** The process of transfer and acquisition of new knowledge, skills and attitudes.

**Exchange :** The process of transfer of goods, ideas, emotions from one point to another through a channel. In the cultural

context it transforms into the process of communication.

**Field Network** : A network limited within a social field and containing more than one type of role.

**Graph** : It is a structure consisting of points joined by lines. For the purpose of present study, points in the graph represent individuals and lines represent linkages between a given set of individuals and the graph represents a set of interrelated points.

**Health** : It is a state of a balanced external environment , a balanced internal environment of an individual and a corresponding absence of significant dietary or disease insults.

**Information** : Knowledge of particular facts or circumstances gained or given through communication. However , human communication is basically social in character. Therefore , while considering 'the information in social networks' one has to notice that in human interactions the information is associated with attitudes , needs , desires , moods , feelings , intentions , perceptions , thoughts , etc. of other people and of ourselves.

**Interpersonal Communication Network** : The system of interconnected channels of all members of the community is called so. It consists of linked dyads in which the Receiver in one dyad is the Source in the next.

**Intelligentsia** : The word originally means ' intellectual or educated people collectively, especially those with a broad and informed point of view (Funk and Wagnalls Standard Desk

Dictionary , 1977). The term is more specifically used in the present study. Here , it refers to the collectivity of policy - makers who devise development policies and programmes in the government ; and thinkers influencing the thoughts and actions of these policy - makers.

**Network** : Any system can be defined as a network. It consists of points representing elements in the system and lines representing the linkages interconnecting the points.

**Nutrition** : Conventionally nutrition is defined as a biological process by which micro - organisms , plants and animals absorb and utilize food substances. However , present study adopts a more broader cultural ecological approach towards it. Nutrition is understood as consisting of the culturally defined patterns of production, distribution, and consumption of food that are developed by a community in order to optimize the dietary resources in its ecology. In other words , nutrition is conceptualized as an adaptive cultural strategy. If there is a loss adaptive value of nutritional strategies of the community it may lead to a state of lack of health.

**Optimization** : It is the process by which maximum output is obtained through minimum expenditure of energy. In this context it is used to denote the state of maximization of nutritional resources by the community through expenditure of minimum inputs in the form of labour , money etc. Prescriptive and

**particularist role - status patterns** : The term refers to the patterns of roles and statuses in a traditional society. In a

traditional society, the individual has to learn the directions (guided by customs and rules) related to a social role defined by the community and larger society. He does not have much scope to go beyond the specifications attached with his prescribed role. As well as he can not attain social mobility through learning of new roles. Mostly, these roles are particular to a group (a community or a society) ; and these are not repeated in other groups. The traditional society is stratified in an intricate hierarchy. Different roles are attached immutable social status at specific levels within the hierarchy.

**Productivity** : It is the state of efficient production processes characterized by growth in physical resources and attainment of high quality of human skills.

**Quality of population** : It is a cumulative result of the satisfaction of basic human needs like food and sufficient nutrition ; presence of health ; education for all ; and increased productivity in the sense that the technical and managerial skills (related to production of essentials) of the population are improved leading to growth in production.

**Role Network** : A network which is centred around the Ego ( the individual ) with respect to a specific role. Major function of this type of network is to satisfy certain cultural needs pertaining to that role.

**Structure** : It is a system of relations in which the interdependence of parts is characterized by their relation to the Whole.

**Village** : A group of social associations with common political and cultural functions and integrated institutional structure. It is a historically organized political and cultural unit equipped with mechanisms for self - definition as a political cultural community. Herbert Spencer (Principles of Sociology , vol. I ) observes " ... the village communities have a local self - government . The village life of these small communities comprises an agricultural and a governmental element...

## References

1. S.C. Dube. Modernization and Development - The Search for Alternative Paradigm. 1988. Vistaar Publications, New Delhi.pp.1-40.
2. Gunnar Myrdal. Asian Drama Vol. I, 1966.Allen Lane The Penguin Press, London.
3. S.C. Dube. Development Perspectives for the 1980s. 1983.Abhinav Publications, New Delhi.pp.30-45.
4. Ed. V. Iswarmurti. Agriculture and Industrial Survey. 1990 - 91.Published by Vadamalai Media (P) Ltd., Bangalore. pp. 1-10.
5. Dube. op.cit. 1988. Vistaar Publications, New Delhi. Chapter I.
6. Dube. op.cit. 1988. Vistaar Publications, New Delhi. pp.44-67.
7. Myrdal.op.cit. 1966.
8. Myrdal. Asian Drama Vol.II.1966.
9. Dube. op.cit. 1988. Vistaar Publications, New Delhi.
10. Table 28 in Health and Nutrition. World Development Report, 1990. World Bank.
11. ibid.
12. Table 1 in Basic Indicators. World Development Report, 1993. World Bank.
13. Table 2 in Growth of Production. World development Report. 1990.
14. S.N. Deshmukh. Process Analysis of Resource Mobilization

- in Rural Communities. 1991. Unpublished report for the Indian Institute of education, Pune.
15. Investing in Health. World Development Report. 1993. published for The World Bank by the Oxford University Press, Oxford.
  16. J. Dwyer. National Conference on Nutrition Education : Directions for the 80s. Journal of Nutrition Education, vol.12 , no.2 . 1980. Supplement 1.
  17. T. Drummond. Rethinking Nutrition Education. 1977.
  18. Ed. A. N. Rao. Food, Agriculture and Education.1987. Pergamon Press.
  19. Drummond. op.cit.1977.
  20. World Development Report, 1993. World Bank. PP.75-82.
  21. Ed. M. N. Srinivas, S. Sheshaiah and V. S. Parthasarthy. Dimensions of Social Change in India. 1977. Allied Publishers Ltd., Bombay. PP.1-25.
  22. Herbert Spencer. The Principles of Sociology, Vol. I quoted in Western Sociologists on Indian Society : Mary Spencer, Weber, Durkheim, Pareto by G. R. Madan. 1979. PP.327.
  23. Michael Thompson. Rubbish Theory. The Creation and Destruction of Value. 1979. Oxford University Press, Oxford. p.7. PP.228.
  24. Per Hage and Frank Harary. Structural Models in Anthropology. 1983. Cambridge University Press, Cambridge. PP.1-10.

25. Claude Le'vi - Strauss. Structural Analysis in Linguistics and in Anthropology in Structural Anthropology. 1945. Basic Books, New York. PP.31-54.
26. Marvin Harris. The Rate of Anthropological Theory. 1968. Crowell, New York. PP.1-70.
27. Ed. P. V. Sukhatme. op.cit. 1982.
28. T. Gopaldas. Supplementary Feeding Programme. Food and Nutrition, Vol. 4, No.1/2. 1978. PP.15-19.
29. T. Drummond. op.cit. 1975.