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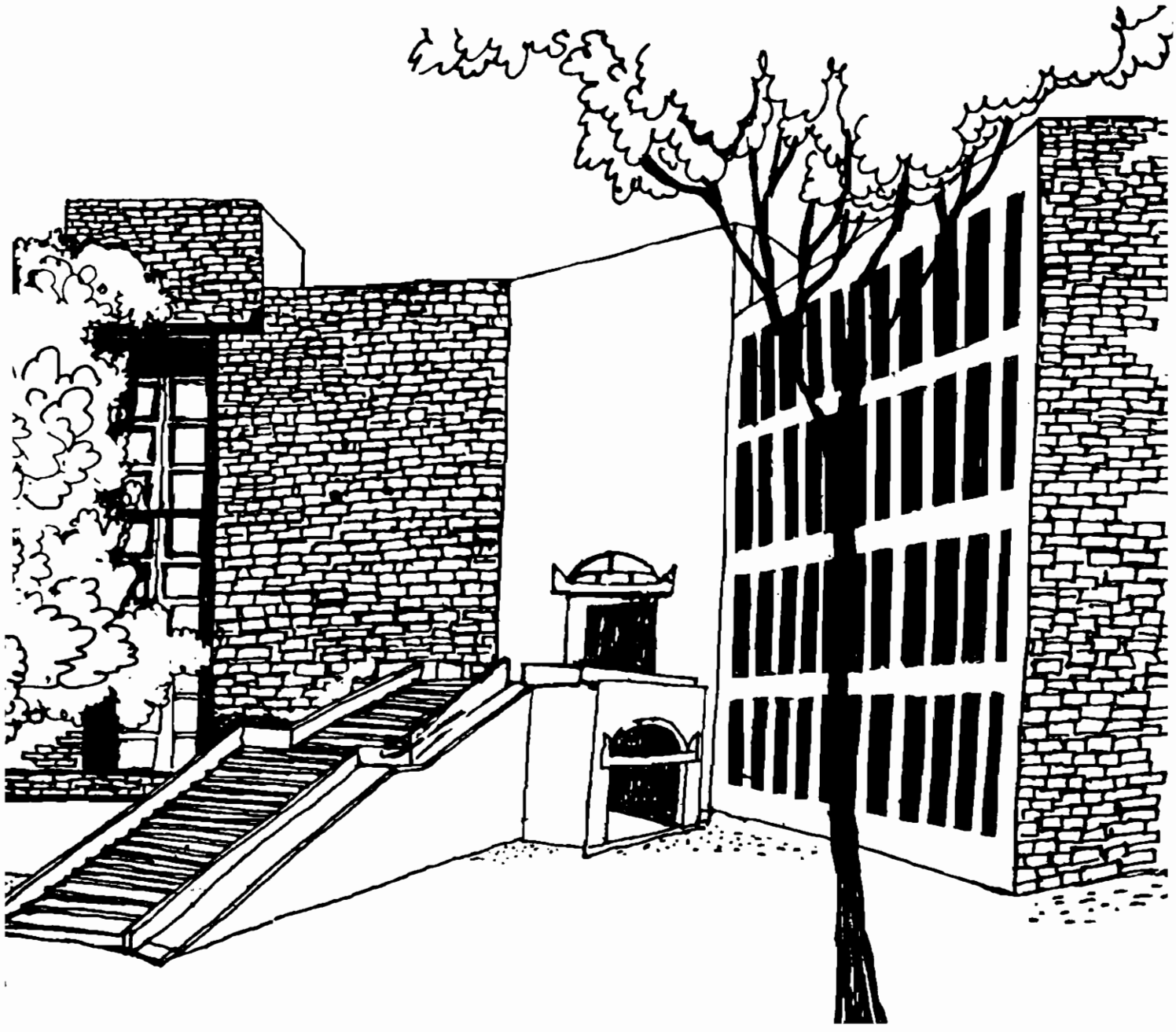

SOCIAL CHANGE

by

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Introduction

There is a dearth of significant psychological researches on social change and social development. This is evident from the fact that Rath (1972) devotes only one page to social change and development in the trend report on social psychology. Sociologists have been much more concerned with the problems of social change, although psychologists' concern has been steadily increasing, and the increase in publications by psychologists in this area is very visible.

Some scales and other instruments to measure modernisation have been developed. Only 5 such scales or instruments have been included in a recent handbook (Pareek and Rao, 1974), although the handbook reproduces 27 instruments measuring various dimensions of change, gives only technical information for 17 others, and cites 9 more instruments without technical information. The largest number of instruments are on adoption of new technology. Beriot (1973) has developed a scale to measure attitudes towards modernisation, avoiding Western subjectivism.

There have been some general discussions about social change and its various aspects. Kuppuswamy's (1972) book is an example. He has attempted to assess social changes in the country during the last quarter of a century. The first part deals with the general

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concepts and social values as the basis for social change. The second part is mainly devoted to the factors influencing social change, e.g. technological, economic and cultural factors. The last part discusses the specific areas of change. Some other books deserve mention. Moddie (1968), a technocrat, in a provocative book, argues that in India we are trying to deal with today's problem with yesterday's concepts and mental outlook. The Mandarins of India, representing the Brahmanical ethos cling to a value system that is traditional, caste dominated, hierarchical, authoritarian and village and land based. The modern industrial ethos, on the other hand, is international, scientific, rational and achievement-oriented. It does not accept a pre-determined hierarchy, but a mobile elite of intellect, skills and wealth. The attitude of material advancement in Brahmanical culture is particularly ambivalent and is reflected in current thinking of economic planning. According to Moddie, the political and administrative cultures have combined in a manner that makes hard choices impossible. Given the will and management capability, Indian can produce impressive results, but the pity is that these bright examples are all too few and isolated. According to him, modernisation and successful organisation building up should go together.

Yogendra Singh (1973) analyses the process of modernisation in India from a systematic sociological perspective. He has identified two major concepts to analyse modernisation viz., social structure and tradition. Critically reviewing the concepts of change in the cultural tradition, such as sanskritisation and westernisation and parochialisation employed by social scientists studying social changes in India, Singh suggests a paradigm with two dimensions: (1) Sources

from which social change may begin, and (2) the nature of social phenomena undergoing change viz. tradition (little or greater traditions), and social structure (macro-structure and micro-structure). Singh discusses how the tradition of Hinduism and Islam are responding to the forces of modernisation. Both the traditions in India were in the past patterned on the principles of hierarchy, holism, continuity and transcendence. Modernisation of both the Hindu and the Islamic traditions implies a psychic-normative challenge to break away from hierarchy to equality, from holism to individualism, from continuity to historicity, and from transcendence to this-worldly rationalism and secularism. Both the Islamic and Hindu traditions have undergone orthogenetic changes at many levels long before the modernising changes began mainly under the Western impact.

Rao's (1972) book offers a critical inquiry into the concepts, theories, methodology of studies on economic development and social change. The 12 papers contained in the book written during 1962-68, cover a wide range of subjects like - rural development, family organisation, caste system and social stratification, labour commitment from the standpoint of critically analysing the role of tradition and rationality in the process of social change. The major conclusions drawn are : Sarvodaya programme of rural development is more in the line of traditionality; existing rural development programmes strengthened the traditional power-structure; economic change is not sufficient to overcome barriers imposed by traditional social structure and its value system. Comparison between Protestantism and Hinduism is fallacious as the former is a religion.

In the context of the dilemma of developing societies because of the wish to adopt science and technology and also to maintain political stability and social cohesiveness, Sen (1973) examines the concepts which are most frequently used in modernisation research in the light of empirical evidence available : economic development, urbanisation, literacy, mass-media participation, political participation, achievement motivation, fatalism, empathy, cosmopoliteness and status marginality.

Factors influencing macro-level change

Social change can be studied at various levels — from macro level to micro level. Change can be studied at the levels of the total society, segment of a society, a group, a community, or an individual. Study of social change is also important from the point of view of societal sectors -- agriculture, industry, education, family planning, organisational life etc. It is difficult to isolate any of these dimensions, and yet it is necessary to discuss social change in some categories. We shall consider the various factors influencing social change under macro level (the society) and the micro level (the individual).

Several factors influencing macro social change have been studied. These have also led to various theories of social change. Although the factors are not exclusive of one another, the emphasis may differ. While an attempt has been made to identify major emphasis in the studies reviewed, several combine various factors, as will be seen.

1. Imitation of a reference group:

The simplest theory to explain social change in a traditional society is that in a society with clear stratification, persons in the lower strata imitate those in the upper strata, and this causes change in the lower strata. Srinivas has popularised this concept as Sanskratisation.

Lynch (1969) studied Jatavas from Agra and found that Jatavas had switched from an acceptance of caste through Sanskritic behaviour to rejection of caste through political participation. One adaptive change of Jatav caste was to the shoe industry, the market system, and to government policy of 'protective discrimination.' In the adaptive mechanisms both continuities and discontinuities with past were reflected. Lynch concludes that by the use of reference group and status-role theory a structural definition of Sanskratisation can be developed. At the concrete levels Sanskratisation is defined in terms of the Jatavas' attempts to be Kshatriyas and the imitation of the Arya Samaj. At the analytical level it can be defined in terms of three generalised types of reference groups : identification, imitation, and negation. Lynch analysed actual interactions in terms of generalised types of statuses which allowed for synchronic and diachronic comparisons. Thus the structural definition of Sanskratisation is given not in terms of cultural attributes and symbols, but rather in terms of social structural positions and relations. This use of generalised frame of reference helps in using the concept of cross-cultural comparative purposes, and in side-stepping the proliferation

of analogous terms. Observability (mainly through political participation) seems to be an alternative to Sanskratisation to explain mobility. Change within the caste is seen as an adaptive response to changes in its external relations to other castes, and to changes in the institutions of the Indian social system. The concept of dichotomisation is used by Lynch with the differentia of functions and statuses out of traditional forms of social organisation with their integration into new institutions. Lynch suggests that the concept of mobility should shift from moving up to moving into statuses granting access to strategic resources.

Discussing the internal dynamics of the Indian society at the levels of little and great traditions of Hinduism and Islam in the context of varying social structural forces, Singh (1973) has proposed a hypothesis that apparently cultural movements called Sanskratisation or Islamisation reflected the latent tensions of the Indian social system caused by structural rigidity of the systems of stratification and power. With the contemporary changes, however, the structural context of these processes has changed, but the principle remains the same.

In a case study of 50 Bhangis from Jodhpur, Rajasthan, Lal (1973) studied Sanskratisation and social change among these people and found that they began to ban eating beef and dead animals to gain respect from higher castes. They sanskratised their surnames, domestic ceremonies and other cultural activities modelled after higher castes.

However, Srivastava (1973) in a study conducted in Kundanpur village of Rajasthan in 1971, found that during the last three decades or more, many changes had taken place in the social behaviour of the Raigars. They were, however, not found imitating any specific model, or the way of life of dominant castes, or those dominating monasteries and pilgrimage centres. The roots of such changes were found in the organisation of Raigar caste at the macro-level.

One factor behind the theory of Sanskratisation is the feeling of inferiority among low caste people. Freed and Freed (1972) reported in a study that villagers did not think that the low caste people were inferior to high caste people in inherent capabilities regarding intellectual and technical performance. Most villagers accepted traditional Hindu religious explanation of caste system. Women very rarely criticised the caste system.

2. Migration and Mobility:

Social change is related to, and may be caused by migration and social mobility. Deb (1976) discusses these phenomena with a backdrop of a study of villages around an industrial centre and examines the influence of industry and its occupation on the strata systems and mobility pattern in rural areas.

Sharma (1973) made a schematic representation of the tribal situations and employed some statistical concepts. He discussed regional development and the role of migrants played in imparting skills, enterprise, capital, technology etc into underdeveloped areas. The importance of building the infra-structure of communication and power networks was stressed. Further, the need of countervailing forces to

mitigate the seriousness of group inequalities between migrants and the locals was pointed out. The author underscored the necessity of the holistic perspective in planning for regional development in tribal areas.

Freed (1970) in a study of India's North West census zone for migration and modernisation found a positive correlation between migration and economic development. The possible reasons are :(1) displaced persons are mostly labour force in territory activities, (2) potential innovators led to a major increase in agricultural productivity, and (3) increase in agriculture productivity permitted increase in demands for both consumer and capital goods.

Grewal and Sohal (1971) found that the refugee farmers, on the average, adopted seven farm practices at almost double the speed than their counterparts non-refugee farmers in the Ludhiana district of Punjab. The educational level, their family members, rich previous experiences, and higher economic status contributed significantly in favour of refugee farmers in the speed of farm adoption.

Occupational mobility is an important factor in social change. Sarkar (1973) studied occupational mobility among Kumbars (porters) of Mysore city and found that several members of this community have switched on to other occupations. Instead of going for higher caste occupations they prefer to get themselves employed either in government offices or in educational institutions because these occupations give them a "higher" social status in their own community. Baranwal (1971) in a study of urbanisation and social change amongst industrial workers found that urbanward migration was greater in rural areas - distance was not a hinderance for it. Facilities of education,

medical, recreation, etc influenced to a great extent these migrations. Workers attitudes toward various institutions also changed due to urbanisation. Baranwal (1971) in a study of urbanisation and social change amongst industrial workers in Varanasi found that urbanward migration was greater from rural areas than from urban areas. Poor economic conditions of rural life pushed people to migrate to city. The fringe benefits of the city i.e. health, education, recreation, etc to a marked extent influence commitment to urban life. The longer the duration, the greater is the awareness and hence greater is the commitment to city life. Urbanisation did not result into disorganisation of the joint family, instead it has only limited its size. Social institutions and attitudes towards these also changed to a great extent.

Yogendra Singh (1972) studied 248 teachers in a university and found greater social mobility with respect to their fathers, moving from lower middle class to upper middle class.

3. Opportunities:

Some social scientists argue that economic opportunity is the main factor responsible for change or economic development, especially for the development of entrepreneurship. Papanek (1973) has been the champion of this point of view, especially in explaining the growth of entrepreneurship in Pakistan.

Saberwal (1972) discusses the conscious and unconscious efforts of three different caste groups namely - the Balmiks, the Ad Dharmis, and the Ramgarhias, of Modelpur, an industrial town in Punjab to seek upward mobility in a fast changing social system. The methods and tools used in this study included interviews with few people from each of the three caste groups, field observation, participant observation and day-to-day

full detail record. The results of the study showed that the Ramgarhias had developed very fast in achieving economic power as compared with the Balmiks and the Ad Dharmis. The author pointed out the ways in which individuals use their caste networks and new networks of occupational and political interest groups to seek betterment for themselves. One interesting question is why did the Ramgarhias alone have shown entrepreneurship and successful professional ability although there are many carpenter castes in India? The author found that technological skill, role of castelessness among Sikhs and the Punjab Land Alienation Act helped the Ramgarhias to develop into successful entrepreneurs.

The Ad Dharmi (weavers and shoe-makers) took the machine-work because with urbanisation the demand for local made shoes and cloth suffered to a great extent. Cooperative movement and labour organisation helped in upward mobility. However the work of the Balmikis (scavengers) remained naffected. That is why they made the least progress of the three groups. Low motivation, traditional occupation and social resistance also hindered their upward mobility.

4. Motivation:

The most significant question for psychologists is why people change in a particular way. Motivation has always attracted psychologists. The most relevant researches to explain social change have been done by McClelland, who propounded the theory of achievement motivation to explain economic development of various societies (McClelland, 1961). As will be discussed later, an intervention based on McClelland's theory was tried out in India, and has been extensively reported by McClelland and Winter (1969, 1971). The results showed that the aggregate effects of the

motivation l programmes included the mobilising of approximately Rs. 4 lacs on specific new capital investments and about 135 new jobs. McClelland's researches have raised controversies, and several people have expressed doubts and some have challenged his findings.

Although McClelland explained the role of achievement motivation in the development of entrepreneurs, in his recent book (1975) he has conceded that achievement motivation is not the major, and certainly not the only, motivation contributing to social change. In fact, he has suggested what he calls an 'empire building' combination of motivations. McClelland's findings show that power motivation is very important, and what McClelland calls inhibition factor is also important for the building of societies. The comparative figures he gives from 1925 and 1950 analyses for various countries, including India and China indicate that the combination of motivations for development (high power motivation, low achievement motivation, and high inhibition) was found to have increased, and is on the increase, in the case of India. McClelland's prediction, therefore, about the Indian society has been that this society would also develop an imperial attitude and behaviour (by which McClelland really means self confidence and strong self image to be able to influence world events around it). McClelland has suggested a new method of scoring both power and inhibition and has also suggested a new theory of maturation, originally developed by Stewart (a manual for scoring maturation for Indian stories has been developed by Rao,1976). Sarabhai (1976) has studied the dynamics and development of the power motivation and psychological maturity in India.

Nandy (1973) on the basis of the analysis of achievement motivation of Mahisya and upper caste entrepreneurs and nonentrepreneurs from West Bengal has questioned the role of achievement motivation in developing entreprenours. While Nandy found significant correlation (at .05 level) between profit reinvested and achievement motivation, he did not find any correlation between n Ach and three indicators of "energetic expansive business activity" viz time spent in factory, increase in work force, and helping employees to start factories. Discussing a motivational paradigm of development, Pareek (1968) suggested the role of extension motivation in social development. McClelland (1975) has cited data to show that concern for the other person and helping attitude is a necessary part of social development. McClelland puts this behaviour as a part of power motivation. Whether helping people to start new factories is a part of power motivation or it should be called extension motivation may be debated, but it certainly is not a part of achievement motivation, and, therefore, there is no surprise that Nandy (1973) found almost no correlation of achievement motivation with this indicator. Similarly, McClelland (1975) has suggested that one aspect of power motivation is an expansion of an institution. Again there is no surprise that the correlation between this indicator and achievement motivation is almost absent. McClelland (1975) has suggested that people with high achievement motivation usually are not hard workers, and, in fact, they avoid work and like to get the maximum out of minimum investment of time. According to his new findings, there should be no correlation between

the amount of time spent by a person on the actual job and his achievement motivation, and this is exactly what Nandy has found. Therefore, Nandy's findings do not seem to be in conflict with the motivational theory of social change. What may, perhaps, be needed is a more systematic and planned study to find relationship between various aspects of social change and different motivations. Pareek (1976) has suggested a scheme of motivations and dimensions for developing a new scoring system for a comparative study of motivations, and their roles in social change and occupational effectiveness. He has also suggested the indicators of various motivations, including rigour motive (what McClelland has called inhibition).

Achievement motivation increases competition. Sinha (1968) found achievement motivation to be functional as long as the resources were unlimited; but when the resources were limited, achievement motivation did not help, and cooperative motive became more functional. Pareek (1976), based on findings from experiments in cooperative and competitive behaviour, has suggested that achievement motivation is not necessarily correlated with competitive behaviour, and Sinha equated achievement motivation with competition.

Sinha and Chaubey (1972) in a study of achievement motivation and economic development found that age alone did not seem to have strong effect on the n Ach. Compared to the Ss of undeveloped villages, the Ss of the developed villages were found to have significantly high n Ach score. The study demonstrated validity of the assumption that sustained rate of economic development is accompanied by high achievement

Singh and Singh (1971) in a study of motivation components of agricultural and business entrepreneurs found that progressive, successful group of agricultural entrepreneurs showed high n Ach scores and low anxiety and high risk taking behaviour as compared to traditional successful group. Against this business entrepreneurs recorded high n Ach as compared to agricultural entrepreneurs.

5. Entrepreneurship:

One of the areas attracting a great deal of attention of social scientists is entrepreneurship. Usually entrepreneurship is studied in terms of starting new business enterprise or small industry activity. However, entrepreneurship need not be confined to business and industry. It could relate to other vocations also like agriculture, medicine, law, etc. One of the most significant collection of papers on entrepreneurship is in the book edited by Singer (1973). Singer in the introduction critically reviews Waber's theory of 'Protestant ethic' and its relevance to the understanding of entrepreneurial process in India.

Papers by Fox (1973) and Minos (1973) deal with Hindu Banias in a small north Indian town and Muslim small traders in a small town in Madras respectively. Both authors found the small traders acting rationally. In both cases they were not interested in expansion of their activities, but the investigators found the decisions rational. Owens (1973) studied Mahisyas as "peasant entrepreneurs" near Calcutta, and attributes their success to their relatively low status (their willingness to work with their own hands in the machine shops, and to keep their standards of living down), and community solidarity which provided necessary support from their relatives and caste members in various ways. Contrasted with this in Barnett's (1973) report about a cultivating caste (KVs) around

Madras city who did not use the opportunity and preferred to sell their lands in order to cope up with their expenditure rather than start business or industry. Their adaptive strategy of "withdrawal" is explained in terms of their dominant caste position (and therefore unwillingness to work with hands and get lowered in the eyes of others). Two factors in the success of entrepreneurial activity, therefore, appear to be : delinking oneself from traditional symbols of status based on not working with hands (work values) and community support for entrepreneurship efforts.

The paper by Leslie (1973) and the comment on the paper by Galanter published in Singer's book (1973) presents an interesting picture of modernisation of occupation. It was found that while indigenous medical profession did not get modernised, legal profession modernised fast. The authors have found several explanations like 'symbolic traditionalisation' for this phenomenon. However, it appears that a vocation with which the majority of people in the country (which means rural areas) are concerned (like agriculture and medicine) will take a long time in modernising, since the common man in the village will continue to use the traditional form both because of his being comfortable with the system with which he is familiar, and because of the system being much less expensive. While, on the other hand, a vocation which is primarily practised in towns, and with which the common man is not so much concerned (like law or scientific research), will get modernised fast. One factor, which has emerged in this discussion is worth consideration. Contrasting two institutes, one in Bombay and other in Calcutta, the authors propose cosmopoliteness as one factor in favour of modernisation and effectiveness of an institution, contrasted with parochialism which comes in the way of a modernisation of a scientific

research institute.

In a study of socio-psychological factors influencing the starting of a small industrial unit, Christopher (1970) took 72 entrepreneurs from Hyderabad and Secunderabad and found that economic gain, own ambition, social prestige and social responsibility were the main reasons for starting of small industrial units. High demand for the products, experience in the line, friends and family are perceived as encouraging and capital shortage, governmental red-tape were discouraging factors. In the adoption processes, most of the respondents passed through the stages of awareness, evaluation and adoption.

6. Education:

Education has been suggested as one of the main factors in producing and promoting social change. Education has both components, a general awareness through formal education, and training in special skills, like technical education.

Kumar (1975) has proposed a model with five components viz., education attainment, communication exposure, urban exposure, innovative behaviour and individual modernity. The five components show direct or indirect relationship between education, innovative behaviour and modernity. The samples were collected from eight villages in India and fourteen in Costa Rica. The model was not fully supported by data from Costa Rica and India. More specifically, the data did not indicate the mediating role of (a) communication exposure in India and (b) innovative behaviour in Costa Rica. The effects of education upon individual modernity are found to be both direct and indirect. Education directly generates modernity orientations by teaching new knowledge and skills and by providing the child a formal social setting, which contrasts

sharply with the family. Education indirectly provides individual modernity by imparting those skills and attitudes which further exposes an individual to the modernising influences of mass media, urban exposure, change agent contact and employment in formal organisation. The finding that individual modernity does not contribute to the innovative behaviour is quite interesting It shows that the innovative behaviour is primarily not a function of the values and psychological orientations associated with the modern man.

Atmaram (1971) has emphasised the use of scientific knowledge and skill to bring about economic and social changes in India. The actual problems before us are - poverty and population. One eliminated without eliminating the other, Bhatnagar (1970) analysed societal changes with relation to changes in the political, economic and educational sectors in India and Japan. Both the types of education and timing of educational expansion were crucial in the effects upon the ecoromic and political system in both the countries. In Japan, a tightly organised power structure used in education as a resource for development of a disciplined and unified labour force. In India, a more diffused and externally constrained power structure was not in a position to utilise education at an early stage to accelerate economic development. India now confronts problems of under utilisation of educated personnel, while Japan reaps both the rewards and the conflicts of affluent industrialisation.

Naik (1969) in a comparative study of 15 villages from the two major Bhil districts in M.P., viz. Dhar and Jhabua found that participation of Bhil children in the educational institution was not very encouraging. He points out the ineffectiveness of the educational schemes, as far as the Bhils are concerned. The main reason for the resistance of the tribal people

to sending t' eir children to school was that the children were an economic asset to the tribal families. Education of the leader was found to be an important factor in the process of social change. When a leader of a village was educated he became a potent factor in favour of spreading education and social change. Srivastava (1971) found that education helped to a great extent in modernisation of two tribes of Chotanagpur. Educated tribesmen were more mobile spatially, occupationally and socially than the uneducated. Education also helped them to take part in public issues and express their views freely.

Education has been found to be an important factor in changing the traditional values. In a study of untouchables (N=150) from Varanasi and nearby villages, Toha and Srivastava (1971) found that the impact of education on the value orientation of the untouchables was not significant. Their traditional social structure and life values were found to be impeding their progress to modernisation.

Muanakatwe (1970) analysed adult education as a dynamic factor in promoting all forms of development. Adult education has a direct bearing on development and political change in the sense that it helps citizens to acquire more knowledge and new skills. Ahluwalia (1973) has discussed the role of teacher education in modernisation of India. Teacher education and educators have to play an important role in acclerating the process of modernisation, by strengthening the programmes of teacher education.

Education indirectly contributes to social change by developing students with new values. Meyer (1972), analysing the role of students in bringing about social change, observed that the main concern of students for

transformation of societies diverted against 'technocracy'. Widespread affluence, educational exploration, communication resolution are noted as the sources of students. However, Prasad and Devi (1970) in a study of social change and educated women in India on a sample of 100 unmarried women students from Andhra University found that by and large education as one of the change-inducing force has little impact as yet on the outlook, attitudes and values of young women in regard to the specified issue of mate selection and the institution of marriage is a hard spot in the culture of the modern India.

Communication is a special form of education. The use of mass media is increasing in the country. The use of SITE (Satellite Instructional Televisia Experiment) is a very interesting experiment in social change. The experiment (Yash Pal, 1976) is still in progress with an underpinning by a large scale research. We may shortly get some interesting data from the experiment. The dynamics of communication and influence have been discussed by Faroqi in this volume in a separate chapter. Only a few studies of the role of communication in social change are reviewed here. An excellent review of the role of communication in the adoption of new technology has been done by Y.P. Singh (1970 Roy et al (1969) have reported a comparative study between two different cultures, of the way in which different means of communication could bring about better knowledge and adoption of desirable innovations in rural areas. In Costa Rica, the impact of the treatments was very modest. In terms of relative effect, radio forums proved to be more effective than the reading treatment. In India, the changes brought about by the radio forums and literacy reading treatment were not only statistically significant, but also more predominant

than the results shown in Costa Rica. In Costa Rica, forum participants showed greater changes in knowledge, evaluation and adoption of innovations than non-participants. In India, however, a reverse trend was observed. Non-participants often showed greater changes than forum-participants.

Singh and Sahay (1972) report the results of a research study on the communication behaviour of farmers and its impact on the economic and social aspects of their life. The general conclusion of the study is that adoption of innovation is a function of effectiveness of communication. It was also postulated that adoption of technologies of economic nature, besides improving their economic conditions, effects a parallel change in the socio-cultural aspect of their life. The results were found to lend the support to the proposition that economic aspects of village life cannot be detached from the broader social aspects, and agricultural improvement is inextricably linked up with a whole set of social problems.

Mishra (1972) in a study of 401 male and female slum dwellers in Delhi found that mass-media exposure was a relatively stronger predictor of modernisation. Mishra viewed modernisation as a multi-dimensional phenomenon-which he indexed mainly as empathic ability, political participation and freedom from family dependence.

Swaminathan (1973) discussed the role of cinema in bringing about social change in India. However, the author found that cinema themes are often fanciful, unrealistic, version of love-marriage hypothetical stories, punctuated by frequent changes of dress, song, dance, etc.

The psychological aspect of the generation gap seems to be equivalent to communication gap, and this implied an inability or unwilli gness

to communicate effectively with other groups. Anandalakshmy (1972) observed that ideological conflict between generations would be maximal in those sector of the population which are subject to largest change in life style or environment. There is an authority crisis and familial, religious, social and political institutions are rapidly losing their capacity to command the easy compliance of youth. The younger generation does not differ sufficiently from the previous one to initiate any radical change. Young women of the middle class are the least likely to make a revolution.

Education can also be considered as a specific area of change. Change in education is usually very slow. In recent years psychologists have paid attention to the process of change in education. Griffin and Pareek (1970) have discussed in details the process of planned change in education, including cultural connotations of change, motivation for change, dynamics of the change process, leadership and support for change, and the role of the change agent. They collected a large number of critical incidents, and have used theseincidents to deduce (and illustrate) various generalisations for planning change in education. Pattnayak (1975) considers innovations in education system and change in the pattern of education to be essential factors to bring about social change in India. He has raised some fundamental issues, has analysed the causes of chaos and confusion, and has examined the relevance of courses of study with regard to the emergent social realities in the country. Varghese (1971) in a study of costs and returns on investment in education (1950-61) found that the returns in general were lower than returns to physical capital, thus suggesting over investment in human as opposed to nonhuman capital in India. Indian economy also showed so called negative residual growth during this period.

Bhagia (1973) in a study of perception of characteristics of innovations as related to their diffusion in school of Gujarat took 1715 heads of the schools from 170 schools and found that 11 characteristics, as perceived by the principals of schools, are found positively and significantly related with the diffusion of innovations. In general, for an innovation to be adopted and get diffused, it must appear to the heads of schools to have their intrinsic characteristics namely communicability, complexity, divisibility, efficiency and structuralisation, academic effectiveness, prestige and relative advantage and the situational characterisitics namely facilitation, meaningfulness and practicability. More the diffusion of these characteristics, the greater is the likelihood of its adoption and the extent of diffusion. Bhogle (1973) in a study of professional attitudes of teachers and their acceptance of innovations took 30 headmasters and 320 teachers and found that teaching attitude and adoption of innovation are highly correlated in the case of headmasters. As for teachers, there was a low but positive correlation between acceptance of an innovation and attitude towards teaching profession.

An excellent survey by Buch (1974) cites several doctoral and other studies in the adoption of educational innovations.

One main problem is the development of self-renewing systems in education, so that education can cope with, and influence, the changing forces in the society. Pareek and Rao (1975) present a systemic view of innovation and have suggested an institution-building framework for educational planning, emphasising self-renewing organisations in which the individual attains genuine autonomy, and mechanisms are built into the system in order to continuously respond to the new demands of the society,

and actively influence the process of change within the system and outside it. Institution-building framework has separately been outlined by Pareek (1976c), requiring some shifts in values. Pareek (1976a) has also outlined shifts in values from elitism to whole society emphasis, from parallelism to linkage formation, and from GNP growth to distributive justice as the main framework for the management model of the future. Seven different dimensions of management have been suggested, and eight different processes for the two models of education (elitist and whole society education) have been proposed.

Yogendra Singh (1972) has studied the concept of modernity amongst teachers of a university, and their aspirations and commitment. Commitment and modernisation were found to be higher for science teachers than for teachers of humanities and social sciences, but the reverse held for aspirations. Based on the analysis of correlations between aspiration, commitment, and authoritarianism, Singh has suggested four role types: pure traditional, traditional-transitional, modern-transitional, and pure modern.

7. Technological development:

Social change is certainly related to technological development; in fact, technological development is an indicator of change. However, technological change may be studied as a factor helping in social development. Technological development can be considered in various sectors of the economy. Industry and agriculture are the two main sectors which the use of new technology may be considered. According to Datta (1971) it is necessary to consider the growth of technology as well as institution in order to understand economic development. Broadly economic development depends on the rate of absorption of new methods of production. Calkins (1970)

studied technology, innovation and economic development in India and found that both technical potential and economic motivation seriously constrained the adaptation of technology in the Indian industrial environment. While there is a need for research toward the adaptation of improved technology, such research should, however, take into account the stage of development of the institutional capacity for carrying out research.

A large number of researches have been done in agricultural technology. Since the major parts of India are rural, and the majority time in villages, the agricultural technology has a very important role in social change. Singh (1971) presents a dynamic microeconomic model of the agricultural sector which incorporates several details of strategies of agricultural development and attempts to build a development planning and research tool for sectoral analysis to bridge the gap between policy makers and theoretical economists.

Agricultural development has been reported to result in social change. Mann (1971) analysed social change among Gambit in Panchal village Surat (Gujarat) and found that ways of life have changed among these people. Traditional oriented outlook of Gambits is in the process of change. High agricultural production, literacy, and new innovations have affected tribal life. They have good understanding of the alien ways of life. Social change is systematic and has come in methodic way. Shand (1972) in his book analyses policy of developing agriculture mainly with government help and observes that most of the countries (including India) faced with the problems of modernisation of traditional agriculture. Cooperativeness and collectivisation are neglected. India's performance under Five Year plan has belied the notion that no growth in agricultural productivity has occurred. From 1965 onwards

India relied on advanced technology, but there still remains undoubted scope for getting more from old varieties.

The general strategy of agricultural development through the use of advanced technology like improved seeds, more irrigation, use of pesticides, and new harvesting technology (popularly known as the Green Revolution) has aroused controversy amongst social scientists in their assessment of such a strategy on social change. While the strategy has certainly resulted in higher production on large farms, by and large, it has been found, by itself, to result in adverse social impact. Sharma (1972) in a study of agricultural modernisation found that adoption was not up to the expected level because of the objective factors influencing the ecology of cultivation and the subjective conditions and values and attitudes of the cultivators. Inspite of increased farm production, landless workers' positid went down (SES) and caste solidarity developed in upper and depressed castes Green Revolution has been reported to have produced social tensions in Indian villages. In a study Chopra (1971) found that in Haryana and Punjab the Green Revolution has led to greater inequity in the rural areas between the owners of irrigated and unirrigated lands; between owners of big and small land holdings; and between rural agricultural classes and rural non-agricultural classes. The modern technology can be useful only if the land is re-distributed, new ceiling on land is fixed and the surplus land is redistributed among the landless and the poor peasants. The emphasis has to be on the landless and the poor peasants, and the resources have to be differed for their benefit.

Sachchidanand's (1972) book primarily deals with the adoption

process of the various agricultural innovations introduced through the package programme but also discusses some of the socio-psychological implications of agricultural development. Some of the findings regarding the adoption process revealed that the higher caste people with more education, higher SES and large holdings adopted the maximum improved practices. The medium size family showed the largest adoption. There was a significant relationship between optimism, planning and credit orientation, achievement motivation and adoption of agriculture innovation. Lack of awareness, lack of irrigation facilities, disinterest and high cost of the practices and implements had prevented people from adopting new seeds and fertilisers. Friends, relations, neighbours, and caste leaders are still the main channels of communication for the introduction of innovation. The VLW continues to be a key figure in extension programme. Agricultural development and resultant prosperity has not made much difference in the matter of observance of caste sanctions in social intercourse is found to be lesser degree, caste continues as an important governing principle of social behaviour. That progressive outlook will emerge out of economic development has not been borne out by the results of this study.

Frankel (1971) was the first social scientist to raise doubts about the success story of India's Green Revolution in 1969-70. She pointed out that : (i) what was true of high yielding varieties of dwarf wheats did not seem to be equally true of other new seeds including paddy and millets; (ii) the ability of a farmer to strike it rich with miracle seeds of one kind or another was definitely dependent upon the size of his holding. And,

a great majority of people in India being small farmers cannot afford to provide for the whole package of inputs - seeds, fertilisers, water, pesticides, tractors - without assistance from the United State or moneylender. Consequently, the rich farmers get richer and the poor farmers did not improve properly. She predicted that with the polarisation of classes, agrarian unrest was bound to increase and various political parties were sure to exploit it.

Saini (1976), analysing the farm incomes, has reported that new agriculture being capital-intensive, would have an unavoidable by-product viz growing inequalities in household incomes. The analysis shows a growing gap between incomes. Saini pleads for a new taxation policy in the light of this finding.

Feder (1976) has pointed out the international aspects of the Green Revolution. He quotes McNamara who admitted that "the data suggest that the decade of rapid growth has been accompanied by greater maldistribution of income in many developing countries and that the problem is most severe in the countryside." In order to deal with this problem McNamara has come up with a new scheme, which Feder believes cannot solve the problem because World Bank has not proposed a rapid promotion of broad agrarian reforms. Feder in no uncertain terms states the need for basic structural changes to bring out social change, and the distribution of benefits of agricultural development amongst the large masses:" As almost everyone knows the quickest and the most direct way to help the rural poor is to do away with the blatant inequalities in the distribution of land, by exproportiating without compensation the entire landed oligarchy practically at one stroke, turn over

the land to the peasants under an entirely new and more just land tenure system and thereby prepare the way for rapid increase in output, productivity and income, and undertake all the steps necessary (e.g. the nationalisation of the marketing system) so that the benefits accruing to the peasants will not be whittled away by the enemies of the reform and of the peasants."

8. Social structure:

This brings us to the role of structural changes in promoting and accelerating social change. Oommen (1971) analysed agrarian tension in a Kerala district and concluded that this cannot be understood independently of the socio-political forces that operate in the area. Hanchett (1970) in a study of changing economical, social and ritual relationships in a modern South Indian village found that social, economic and ritual relationship as well as all aspects of village life are constantly changing in response to change effected at higher political level. Chakravarthy (1970) in a study of the changing pattern of power and authority in village community of Rajasthan found that abolition of Jagirs and introduction of panchayats provided a base for political change in village community. But a real change in the power could be brought about by informal leaders who actively undermined the influence of the traditional elements. Sahani (1971) identified some sociological barriers in rural change such as casteism, caste system, caste communalism, apathy towards change agents, opposition to agricultural reforms and factorial rivalries in the acceptance or rejection of community development programme.

In a book edited by Lehmann (1974) a number of social scientists

seek to bring a new element of 'hardheadedness' into the study of agrarian reforms or land reforms. Although they share a traditional concern for the misery and exploitation which afflict the rural people of Asia and Latin America, and a conviction that injustice is inherent in the social structure of the countries they have studied, they also share in varying degrees a scepiticism about land reform as the single and definite way of liberating the peasantary from this fate. Nor are the interest of industry and urban workers to be ignored. The authors take the view that reform is not an utopia and that it must be understood as the product of a constellation of political and social forces, rather than as a policy which any government should be persuaded to undertake.

If change is caste-oriented, it may be expected that upper castes have devised appropriate personal strategies and styles of life most commensurat with modernisation process. In order to explore this possibility, Trivedi (1973 in a study of 608 house heads from two community devebpment blocks in Lucknow, found that upper castes had access to new and technically more accurate sources of information. Because of their better understanding and appreciation of forces of change, they are able to occupy a strategic location in the network of social relations, and to control and regulate the flow of ideas. They have been consolidating their position and eminence and influence. But it is more secular in character and more in tune with the process of modernisation. Anant (1972) in a survey of rural and urban population in three regions of India noticed changes in social stratification as a result of changes in the caste system and abolition of untouchability. Inter-caste attitudes and behaviour also showed changes.

Jos. I (1973) studied power structure and social change in Nadiad (Gujarat) and found that elites constituting the power structure came from the urban upper class, with English education. They showed tendency being generalist in their involvement. The political power rests into the hands of Paditars, who are economically very sound and take interest in various activities. It is because of them certain voluntary organisations have emerged. The nature of community determined power-structure in Nadiad. Because of affluent agrarian conditions radical land reforms are considered a threat and a challenge. There is, in fact, a politics of voluntary organisations. They give directions to social change in Nadiad. Singh and Shankaraiah (1973) in a study of socio-economic status and its influence on communication in a progressive (N=120) and a traditional (N=107) village found that in both the villages upward vertical communication preferences were prevalent. Most of those who preferred downward communication were from the upper class in the progressive villages whereas in the traditional only one respondent was from upper class. In case of traditional village, upper class farmers showed preference to those farmers who belonged to their own class for seeking information. Bhattacharjee (1970) on the basis of a study of socio-political parameters of economic planning has suggested that planners should widen their horizons, without bringing the institutional and structural changes in the society, it is difficult to expect any economic change on the basis of changes in purely technological and economic variables.

Yogendra Singh (1973) has analysed the changing nature of the political, industrial and urban structures. The role of organisation of

the bureaucratic, industrial, political and intellectual elite have been studied in relation to the modernisation processes. He found that the cultural homogeneity of the elite groups which existed during the British days or during the first decade of the free India, has since been increasingly rendered hetrogeneous. Thus, significant differences can be found in the sub-cultures, socialisation patterns and the world views of the industrial, military, the bureaucratic and intellectual elite in comparison with the political elite. This reflected a degree of structural discontinuity in the social system resulting from the unbalanced growth of the processes of modernisation. The analysis revealed that micro-structures have responded with great adaptive capacity to the demands of modernisation. Caste has today become a major structural network of modernisation in the Indian social systems. It has permeated some of the major structural forms, such as the local political bodies voting behaviour and power structure at the village, district and to some extent also the State levels. Singh found that a unique feature of modernisation in India is that it is being mainly carried forward through adaptive changes in the traditional structures rather than structural dissociation or breakdown. A form of neo-traditionalism thus proceeds alongwith modernisation. The ramifications of this process have been analysed in the concluding chapter.

Sachchidananda (1972) in a study of social dimensions of agricultural development found that development cannot be self-generated with its own momentum unless the community and the social structure in which people are socialised, alerted and adjusted to be in harmony with socio-economic objectives of planning. The importance of the social factors in the economic development needs to be recognised in a better way than hitherto. Doshi (1975) studied

social structures and cultural change in a Bhil village of Rajasthan in the light of their values, customs, social structure, kind of life they lead, their religion and witchcraft, political organisation and changes occuring are also discussed.

A bulk of studies have been conducted after the introduction of community development programme in India. The community development programme proved to be a failure in many places. Verma (1970)studied 12 community development blocks in Gorakhpur and found that it could not arouse mass enthusiasm and secure participation and cooperation of the people in rural areas. Panchayati Raj has resulted in power conflict between various tiers of it. A great need for extension education was felt to bring about a change in villagers' attitude and outlook. Block staff was found to be lacking social service attitude and sense of responsibility. Dishonesty, lack of trained personnel with rural background and lack of cooperation were found to be responsible for hindering development. Muthayya (1971) studied 101 farmers from Rajendranagar Block of Hyderabad and found that high level of aspiration had a favourable personnel, social and economic attributes compared with the other groups. A high positive relationship was found between SES and aspiration level. The rating of the present were very much low.

Several aspects of the community structure have been studied in the process of change. Family has been a subject of great interest to sociologists. Ramanujam (1972) after reviewing the existing literature has concluded that structurally some changes are taking place but attitudinal changes are difficult to occur. Even if structurally the joint family breaks into nuclear units, functionally all members of the family maintain "jointness" in terms of

family loyalty indicating thereby strong emotional involvement with the family of origin even after separation. Roots of guilt feelings, bitterness, and unwilling help to the family of origin are analysed along with various psychological implications involving role performance in hierarchical set up in the joint family.

9. Bureaucracy

Bureaucracy could both promote social change as well as retard it. Any way, it is an important factor in social change and modernisation. Bureaucracy helps in modernising (and at some stage becomes a force impeding further modernisation) of the decision making process. Desai (1971) has suggested a two-fold strategy for accelerating technical change. Management of research and development must be overhauled. Decision-making should be decentralised and placed in the hands of scientists. Secondly, the import of technology should be made quite free, only subject to a tax on royalties. The acceleration of industrial growth requires action in the following fields - agricultural inputs, trade policy, management, and technology.

Hunter (1970) has analysed the pattern of agricultural administration and its implications in India, and has discussed the aspects of coordination of administrative action, the changing pattern of relationship between the government, private and cooperative services to the farmers, and relationship to officials. An urgent need of combination between bureaucratic machinery and peoples' contribution is advocated.

Bopegamage (1971) has discussed the role of military as a modernising agent in India. Contribution of the army to roadways, electrification, water supply, sanitation, irrigation and dairy farming is cited as an index of

army as an agent of modernisation. Indian army also contributed to social mobility in India. In one study Verma (1970) made a critical review of peoples' participation, cooperation, initiative and contribution to community development and assessed its impact on the rural society. He found that CD projects in the Gorakhpur division were far from satisfactory in fact, they were a failure--- without taking ecological and local problems into consideration. It has also failed to arouse mass enthusiasm and secure participation and cooperation of people in rural areas. Even the Panchayati Raj system had not much differences to the set up. As the rural people are illiterate, there is a great need for extension education to bring about a change in their outlook.

Saksena (1972) analysed various trends of modernisation and development in India. The success of community development programme depends essentially on the intensity of the solidarity, that is to be found or can be built up in the community. In the acceptance or rejection of a particular innovation several social, cultural, geographical and historical factors govern the process of acceptance. Lacuna in proper training of the personnel in administration has also been found.

10. Urbanisation

Urbanisation is both a cause and a part of social change process. Some studies have been reported on urbanisation, and modernisation. Mehta's review of political processes in this volume are also relevant in this connection. Urbanisation in modern life being an outstanding and inescapable factor, the problems emerging from non-agricultural activities leading to urbanisation needs to be tackled to make urban areas more liveable from environmental standards (Swamy, 1972). Rao (1970) studying

Yadavpur, a multi-caste village with Ahirs as the dominant caste and at the top of economic hierarchy, found that changes come to their village primarily as a result of the growth of Delhi as the capital of India. There was a great increase in the percentage of individuals engaged in trade and commerce, and official jobs. The kinship obligations have been limited to a limited range of relatives than in the past. Consumption patterns have changed due to the changes in traditional status system. Election at the Panchayat level are dominated by factions. These factions serve the purpose of softening the vigour of dominant caste rule in the village community.

Subhashchandra (1970) in a study of (Kanpur) urban social participation found that pattern of urban social participation was vastly different from the one prevalent in highly industrialised society. SES and stay in city were found to have significant relationship with social participation. Non-participants were rural migrants of lower SES. In a generalised psychological framework of 'stimulus-response' Samajee (1971) tried to analyse political change - a gradual but definite transformation in the political relationship between various social groups - in Bariapur situated nearly six miles away in South-West of Baroda. The major impact of democracy was that it gave political significance to various jatis to win the election of Sarpanch. The younger generation seemed to be replacing the old leadership and few jatis were also trying to get into the game. Democracy had helped in this direction. However, there were no effective channels of communication between the villagers and their elected leaders. Decentralisation in decision-making process at the jatis and village level, was one of the major impacts of democracy.

The role of women in social change deserves special study. McClelland (1961) has argued for more assertive role of women for increasing n Ach in a society. Kapur (1973) has discussed the role of women in a developing society like India in influencing changes in various parts oflife. According to him, for full development of our human resources, the improvement of homes and moulding the character of children during the most impressionable years of infancy, the education of women is even greater important than of men. Other areas like population, health, education and socio-economic problems can also be solved with the help of women. Dhillon (1970) attempted to explore the relation between the changing status of the women and success of family planning programme in India. With the urbanisation, education, mobility to non-traditional occupations, the women tend to favour small family size, late marriage, use of contraceptive more often. In comparison to men, women are less exposed to mass media. Sex of workers is found to affect their professional performance, and not the success of family planning. The hypothesis of falling female work participation rate with economic development, is not corraborated by the State level data. This has been shown by Nath (1970). The agriculture as well as non-agricultural work, the non-participation of female will lead to lower production, in enterprise (family) can not afford to have paid workers. Falling female work participation rate will accelerate the rise in dependency ratio. This will have slowed down the process of social change and modernisation because women have a key role in these programmes.

Factors Influencing Micro-Level Change

Psychologists are more concerned with micro-level (individual) change as a unit of social change. Change in an individual (in terms of adoption of a change) may be influenced by a variety of (and a combination of some and several) factors. The individual's personality and expectancy, the nature of the change, change agent and his behaviour, organisational structure of the groups to which the individual belongs, and the support system which help in stabilising change are some variables important in the process of individual change. These are discussed below.

1. Expectancy

Expectancy has been proposed as a significant variable in the paradigms of motivation of behaviour. While this variable deserves enough research, almost no work has been done in recent years. Only one study is available on this topic. Chaubey and Sinha (1974) in a study of 154 rural farmers analysed expectancy of success and rural development. Stronger expectancies of success in the undeveloped groups as compared to developed groups indicated that development had taken place in their villages without arousing expectancies in the mind of masses and even did not take into account their (of masses) existing expectancies. The findings that under-developed groups had higher expectancies of success may be interpreted as demonstrating that expectancy may or may not influence the process of development and development in turn may or may not alter social ecology so as to arouse the desires among masses to improve or to develop.

2. Individual variables

The number of researches in adoption of innovations mainly in

the field of agriculture has been increasing over the past few years. Most of these investigations have studied individual background variables, the age, education, socioeconomic status, group membership, size of farm, etc.

Moulik (1975) has reported that for adoption of innovations (innovation was measured in terms of overall participation in agricultural development programmes and actual adoption of recommended farm practices) caste was not a significant factor. Adoption of innovation was highly correlated with the social status factors. For adoption of soil stiring plough, Prasad and Sinha (1971) found that size of farm had no significant association with the use of different categories of information sources. The age and education had significant effect at the final decision. Social participation was also associated with the use of various categories of information sources at all stages of adoption. Although both economic and attitudinal factors were found important by Prasad and Yousuf (1973), the economic factors were more influencial than attitudinal factors in innovation acceptance. While land-holdings and modernity were significantly correlated, religiosity was independent of innovation acceptance and economic resourcefulness.

Supe and Kolte (1971) in a study of 236 farmers from 4 villages - two each progressive and non-progressive analysed values and adoption of farm innovations. The adoption behaviour was significantly correlated with economic motivation, scientific orientation, mental activity and risk preference. It did not show significant relationship with independence. Rajguru and Satapathy (1973) studied 100 farmers for the role of incentives in adoption behaviour and found that family size, aspiration for childrens' education and advising ability

of the farmers were significant stimulants for adoption attitudes of response. Other social variables like caste, type of family, membership of an organisation and newspaper reading habit were not having significant effect on adoption behaviour. Further number of earning members, field workers in the family, annual farm income, extent of dependency on land, land ownership, irrigation facilities and economic status were found to be significantly related to adoption behaviour. Jaiswal, Singh and Singh (1971) studied 100 farmers for identifying factors associated with innovativeness in farming and found that all the six independent variables - education, farm size, contact with extension agency, cosmopoliteness, risk taking willingness and attitude toward change had significant and positive correlation with innovative behaviour.

Dubey (1970) in a study of 600 villages from Jabalpur Block studied factors influencing adoption, non-adoption and reservation from improved farm practices and found that farmers faced difficulties in the movement from one stage to another because of extra finance care and technical knowhow. Older age, higher education, large size of family, better financial position and large size holdings were found to be related for adoption of four selected improved practives. Adoptors were satisfied with the new innovations while non-adoptors were not fully convinced.

Kline (1974) studied factors influencing supernatural beliefs among Indian university students and found that most important factor found to have effect on supernatural beliefs was the intensity of religious belief. Sex and education also showed significant relation to supernatural belief.

3. Personal ity

Several personality variables have been found to be significantly related with adoption of change. Rao, Singh andPal (1971) in a study of motivational patterns of farmers towards the adoption of high yielding varieties of wheat taking 200 farmers found that a clearerunderstanding of the motives of farmers in the adoption of innovations was essential.

Moulik (1975) found significant positive correlation between adoption of farm innovations and personality variables like attitude towards innovations, self-rating on innovation-proness and closeness with extension agents. The five personality variables explained 81% variance in the adoption of nitrogenous fertilisers.

Sinha and Mehta (1971)found n Ach and changeproneness as significantly correlated with adoption of agricultural innovation. Kolte (1973) in a study of 50 mechanised farm-holders analysed socio-psychological correlates, and found that conservatism and farm mechanisation were found to be negatively related. Fatalism also showed negative relationship to farm-mechanisation. A positive relationship was found between farm-mechanisation and variables like education, farm-size and socio-economic status. Ganguli. (1970) in a study of Jhumia resettlement and social change in Tripura found that with the introduction of sedentary cultivation various social changes of far reaching consequences occured. The holistic identification was replaced by individualistic identification a tendency to think in terms of boundary and area of one's homestead and farm.

Among the non-economic variables of social change the one most frequently mentioned is conducive value. In a study Sinha et al (1970) used

educational organisation as a value object and students as the value agents. Two samples, one from Ohio State University (N=82) and another from Ranchi University (N=86) were drawn to explore their value patterns. Value scale (VS) and Biographic Inventory (BI) were administered. The results supported several previous viewpoints. For example, Parsons' (1951) concept of diffuseness of organisational functions in an under-developed economy has been supported. The Weberian contention about the crucial role religion plays in affecting economy through values is also supported. Religious activities are associated with liberalism, progress and service orientation in the American but with conservatism and backwardness in the Indian culture. The differential effects of religion reflect upon the nature and demands of the two religions: Christianity an Hinduism. The study is of particular interest indicating that values are much more highly related to social, economic and political variables in India than in the United States.

Nath (1971) studied 300 PG students for personality correlates of attitudes towards social change and found that radicalism was positively related to 14 of the 17 chosen factors. Negative relationship was found between radicalism and neuroticism, introversion and sociability. The personality traits were better predictors of attitudes. Similarly, Promila(1971) in a study of personality correlates of attitudes towards social change found that radicalism was positively correlated with fourteen of the seventeen chosen traits, i.e. intelligence, capacity of status, tolerance, responsibility, flexibility, achievement via conformance, achievement via independence, social presence, self acceptance, self-sufficiency, dominance, good-impression, psychological mindedness and confidence. Radicalism showed negative association with neuroticism, introversion, and sociability. Results showed that personality

traits are better predictors of attitudes than vice-versa. In a study of 112 Patna University students Sinha and Yusuf (1972) administered Behaviour Prediction scale and Choice Dilemma Questionnaire. On the basis of their scores high and low risk taking groups were formed. Results indicated that Indian groups shifted toward more risky positions. Competence facilitated the shift on both scales. Whereas trust was found significant only for unethical risky shift.

Vajpayi (1971) found positive relationship between empathy and the other variables of modernisation such as political participation, higher education, mass media exposure, and achievement motivation, but cosmopoliteness was not highly correlated with empathy. Similarly, the political participation was highly correlated with innovativeness, achievement motive, political knowledge and occupational and educational aspiration for children. Message carried by mass media was found to be related with citizen's information level.

4. Nature of Change

The characteristics of the change programme (or innovation) have important implications for adoption of change. Rural sociologists have identified several significant characteristics influencing adoption of a practice. Minz (1971) has presented a functional approach to innovation in community development. The basic assumption was that functional innovations were generally accepted. Acceptance or rejection of an innovation depends on the decision making by the recipients who evaluate the innovations before taking decision. The evaluation is mainly in terms of behaviour of change agents, and in terms of their own level of articulation. Some issues have direct bearing on accepting or rejecting an innovation are : availability of

the resources, existing cultural pattern and effectiveness of communication.

4. Change Agentry

The change agent plays an important role in the adoption of new programmes of change. Rogers et. al. (1970) in a cross-cultural generalisation about the diffusion of innovations research in Brazil, Nigeria and India studied 10,000 peasants and found that change agent contact was important in introducing innovation as compared with such alternative channels as the mass media. The relatively greater impact of radio forums were found as compared with other communication media. Jaiswal, Singh and Singh (1971) found highly significant correlation between innovative behaviour and contact with extension agency.

Prasad, Shukla and Sohal (1970) studied factors affecting the non-adoption of artificial insemination in animals by the farmers of Ludhiana and found that factors like 'practice against nature' and 'low extension contacts' scored more than one and ranked first and second most important factors for non-adoption. Commonly assumed factors "farmers are conservative in nature" was ranked 12th, the least important factor. Year of awareness, educational level and number of milch cattle with the farmers also affected significantly the ranking of various factors for non-adoption.

Good impact of the Institutional Farmers' Training Programme was observed on adoption of improved practices by trained farmers in a study by Patel and Pandya (1972). Large number of trained farmers had adopted high yielding varieties. Khan and Tripathy (1972) examined the socio-economic organisational factors which lead to reluctance of many farmers to make use of the improved methods of agriculture despite the institutional support for the supply of inputs, credit and technical guidance. The main reasons for non-adoption reported are lack of information from Extension Agency, high cost of intensive

agriculture and high risk associated with it. The authors also emphasised to carry the laboratory results to farm. In a study of peckage programme works on jute growers and their reactions to different approved practices of jute cultivation, Pathak and Dargan (1971) in a sample of 100 respondents found that adoption of improved practices was associated with the intensity of the programme works. Farm size and adoption behaviour showed significant relationship.

National demonstration in the villages has been found to achieve partial success in a study by Singh and Singh (1972). Demonstration officers failed to use it as an educational tool for motivating the farmers to go in for the adoption of high yielding varieties. Pal (1970) in a study of farmers' training and education programme in relation to the changes in their behavioural components took 80 farmers (40 experimental and 40 control) in experimental training and education programme. For second part of the study a total number of 120 farmers were selected for ex-post-facto design. The farmers who participated in the treatment group in the farmers training programme had gained more knowledge, attitude and adoption behaviour than the farmers who participated in the control group of training. The institutional training and education programme was found better as compared to non-institutional training. Sinha (1971) in a study of attitudes of change agents in agricultural development in Punjab found that the three change agents viz., Block Development Officers, Agricultural Extension Officers and Village Level Workers, significantly differ in their attitudes toward IADP. The AEOs did not have favourable attitudes towards administration, planning, involvement of rural institutions, execution and development of local leadership. The VLWs, on the other hand, possessed

unfavourable attitudes towards administration, planning, involvement of rural institutions while the BDOs showed unfavourable attitudes towards coordination, training, and timely supply of service, etc. However, they did not show difference in CD approach.

6. Support Systems

One of the most neglected variables in the study of social research is that of support system network. Planned change cannot be sustained without the proper functioning of the support systems which have to create necessary climate for the acceptance and internalisation of change. Researches both in sociology and psychology have been confined to the study of change agentry network. Almost no research has been done on the organisational effectiveness of such network. Singh, Rao and Sahay (1970) have a whole section devoted to the review of researches in agricultural administration in relation to the new strategy of agricultural production. These discuss details about agricultural administration, but no research in this long list has been done on the organisational dynamics of the support systems. Psychologists are best suited to work on motivational patterns required for effective support systems, and on how support system behaviour can reinforce the desired social change. Pareek (1975) in a short note has proposed a few dimensions and has suggested the need for developing intervention modules to develop effective support systems for entrepreneurial growth.

Psychological Interventions

Increasingly social scientists are getting interested in designing and testing interventions to bring about social change. A healthy trend is reflected in the growing concern for doing something about social change

amongst young r social scientists. Such interventions may range from an activist role by a social scientist in the social change process to designing and testing various kinds of interventions in order to make them available for use by concerned people in the society. The interventions may relate to the structure, change agentry system, or directly with individuals in the society. Psychological interventions deal primarily with individuals, as well as small and large groups in the society.

Psychologists have contributed to the designing and use of interventions in organisational change. These interventions, which are popularly known as process interventions (one example of such an intervention is what has become popular now, OD, or Organisation Development). These interventions have been referred to and discussed by Sinha in this volume (Sinha, 1976). Only the interventions of psychological nature will be discussed here.

Based on McClelland's theory of entrepreneurship (1961), an intervention was designed and tried out for the first time in India (McClelland and Winter, 1969, 1971). This intervention has become very well known. Two towns of about 1 lack population each were selected from Andhra Pradesh and Tamil Nadu, with two comparable towns in the two States as control towns. In the town of Andhra Pradesh (Kakinada), the experiment was completed, while in Tamil Nadu the experiment was only done half way and had to be abandoned. The results as reported by McClelland and Winter (1969, 1971) indicate clearly the effectiveness of the intervention. The intervention consisted of a specially designed programme to increase achievement motivation. While the intervention showed that the effect on individuals in increasing their achievement motivation, and thereby increasing their entrepreneurial behaviour, was effective (the results being significant statistically), the effect of such an intervention on the

development of entrepreneurship in the total community of about 1 lack population could not be studied and established. The second edition of the book, published in 1971, gives at the end some details about the follow up of the experiment. The experiment clearly indicates the effectiveness of such an intervention. Since then, the intervention has been used in several parts of the country. A recent study of the evaluation of the intervention used in Gujarat State again showed the effectiveness in influencing entrepreneurial behaviour (Shah, Gaikwad, Rao and Pareek, 1975). This evaluation study is significant also from the point of view of methodology of measuring effectiveness of interventions.

Christopher and Jaiswal (1972) have described in details the programme used for development of entrepreneurial motivation. The programme is more or less the same as described by McClelland and Winter (1969, 1971).

Extending the intervention of increasing motivation to increase entrepreneurship, Mehta designed an intervention and used it on a large number of students and teachers to increase motivation in education (Mehta, 1976). Programmes for increasing teachers' motivation and students motivation were designed and were used in primary and secondary schools. The details of the design of these interventions, along with various instruments used, are described by Mehta (1976). There was significant increase (at .002 level) in the level of achievement motivation of teachers. After 18 months of the intervention, children in experimental groups were found to be more motivated, more responsible, more hard-working and more cooperative than children in non-experimental groups. It was found that the combined treatment of classroom motivation, curriculum, classroom testing, and goal setting programme was more effective in accelerating the secondary school pupils' scholastic

achievement. Mehta's experiment, thus, showed the effectiveness of psychological interventions based on development of motivation.

Intervention using feedback to the teachers based on Flander's technique (1970) is described by Pareek and Rao (1971). The detailed theoretical rationale of the intervention, and its implications for change in the teacher education is discussed by them in an unpublished monograph (Pareek and Rao, unpublished). The intervention consisted of a 10-day programme to help teachers understand the theory of classroom interaction, and the influence of direct and indirect influence patterns on pupils' behaviour. They also learned the technique of coding classroom interactional behaviour. The teachers gave feddback to each other on their interaction behaviour, comperison between experimental and control groups showed after the intervention there was increase in teachers' use of categories 2,3 and 4 (praising, encouraging, and accepting ideas and questions) and decrease in categories 5,6 and 7 (lecturing, directing, critising). There was also significant increase in I/D and i/d ratios.

Sinha (1971) in a study with 76 students found limited evidence to suggest that Ss' behaviours can be modified to some extent by just comparing with their scores on a personality test. A high dependence prone person usually requires more time and information in making risky decisions and needs more frequently task relevant information and feedback. He also gets anxious in risky decision making situations.

Theory and Methodology

Although sociologists have suggested some conceptual models for understanding social change, very few psychological or comprehensive models have been proposed. There is a need of what Gaikwad (1974) calls "middle

range theories." Pareek (1968) proposed a paradigm in which psychological factors like motivation and values are treated as dependent variables (results) of societal systems, but which assume active role in due course of time and, therefore, require equal attention for planning and accelerating change. According to this model, social change is caused by changes in values in individual members of the society, and these values are sustained by the relevant motivational patterns. Social change can be accelerated by both bringing about structural changes in the societal system (without which no basic change can take place) and by working on and modifying the motivational patterns so that patterns which are supportive of values of modernisation and future forms of society get reinforced. This paradigm is given in Figure 1.

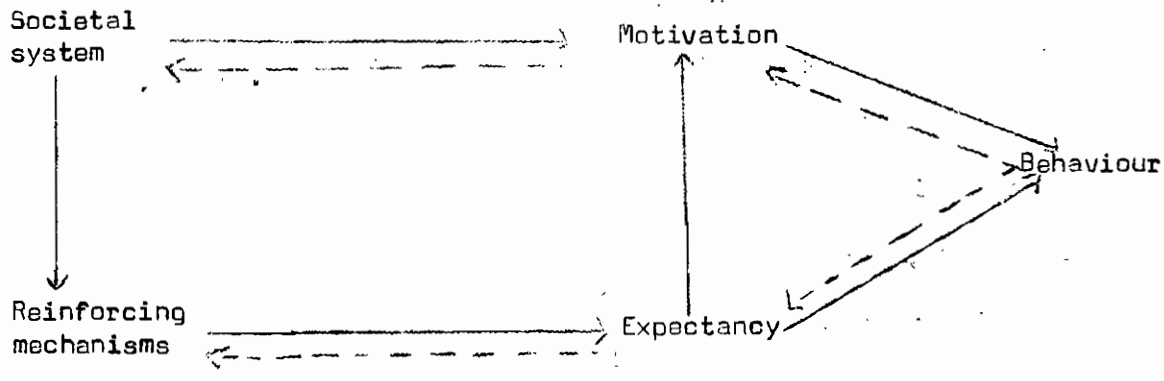


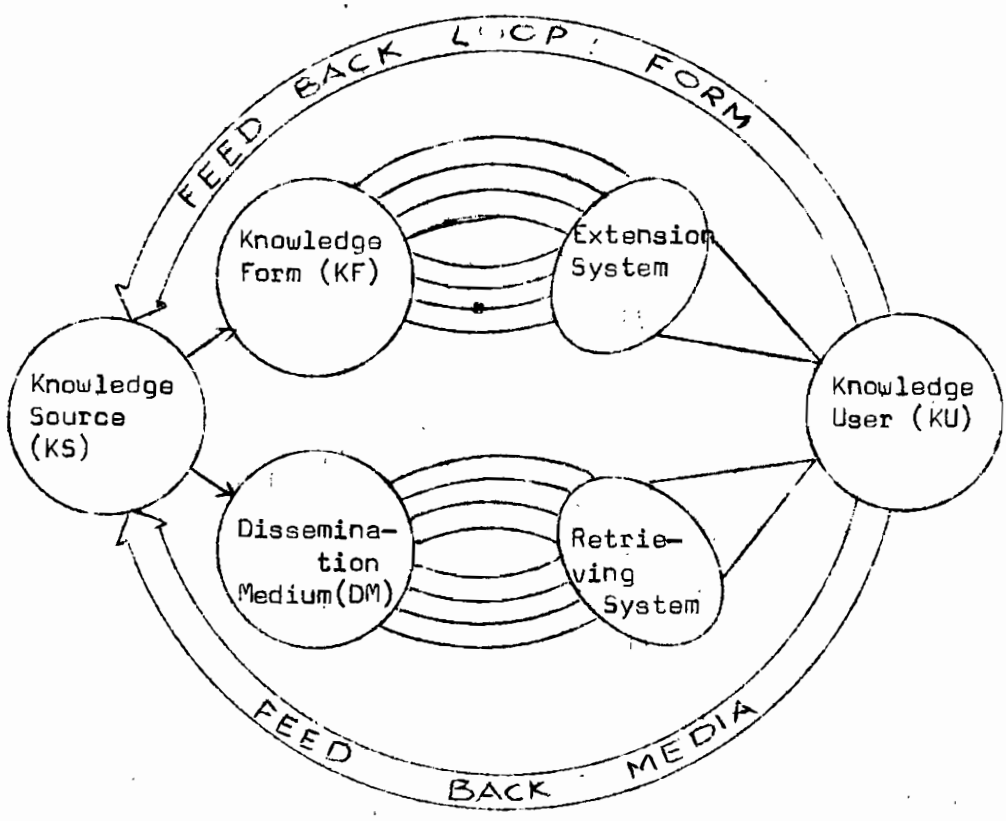
Figure 1 : General Paradigm of Social Behaviour

Some conceptual models have been proposed for specific social changes like adoption of new practices. Two aspects of adoption behaviour require attention by psychologists. One is the measurement of adoption and the other is the sequential process of adoption. The concept and methodology of multi-practice adoption behaviour proposed by Pareek and

Chattopadhyaya (1966) continued to be used by several investigators during the last five years. Singh and Pareek (1968) proposed a paradigm of sequential adoption in which several stages of the adoption process were proposed with relevant psychological processes operating at these stages. The model was validated with the study of adoption behaviour of farmers. Sinha and Mehta (1971) presented a model for adoption of agricultural innovation. The adoption process starts after the information is fed and final adoption of the innovation will take place if the client has a high need to achieve and change. Awareness is not a stage in the process of adoption. Adoption starts only after awareness. The first distinct stage after adoption starts is the acquisition of information about the innovation. n Ach coupled with change-proneness is not a stage in the process of adoption, but a pre-requisite for the process to start.

Several studies have been reported on diffusion of change. The book by Singh, Rao and Sahay (1970) reviews several researches on diffusion of adoption of agricultural innovations. The basic dimension of diffusion is transfer of knowledge from one source to the other, and its use. This has come to be known as "knowledge utilisation." Reviewing various researches done in India, Pareek (1974) has proposed a conceptual model of knowledge utilisation in social sciences. This model emphasises the role of innovative agency where knowledge is generated, the receiving agency and the way in which knowledge is both transmitted, and the results and problems are fedback to the innovative agency. The model is given in Figure 2.

Figure 2 : A Circular Model of Knowledge Utilisation



Singh, Pareek and Arora (1974) have proposed a macro level model of the development of a new applied field in higher education. It is a circular model indicating the phases through which an applied social science discipline develops. Another conceptual framework of the entry of social science in higher agricultural education has been suggested, based on the study of several agricultural universities in which social sciences have been accepted.

Singh and Singh (1971) have proposed a rationality index of farmers' decision making. Yogindera Singh (1972) on the basis of factor analysis for modernisation scale, suggested two main factors in modernisation : affective-neutrality and universalism. Data were collected from teachers of a University.

Rath (1972) in the first survey of social psychology, complained that no Indian writing was available on interview techniques,although it is a most widely used technique in social psychology. Pareek and Rao (1977), in a chapter for a handbook of cross-cultural psychology, have discussed in details, with examples from Indian experiences, the various dimensions of sampling and interviewing in cross-cultural research, specially, researhces in the field of social change.

Yadav (1971) has presented a thorough study of Indian fictions from the social change point. The author concluded that the writers are dispassionate honest and they have not involved in their ethical judgements and sentiments in their works and accepted the challenge of time.

Conclusion

The review of researches in the field of social change in the last few years has indicated growing interest of psychologists in this important area. Researches both on the traditional aspects of social change, as well as on more dynamic aspects, including interventions for accelerating social change have been steadily increasing. However, there is need for more rigour in research so that the understanding of the dynamics of social change can be advanced through the development of new theories and concertual models. Involvement of younger psychologists and their actual interest in this important

field gives hope for new strides in researches in the near future. The responsibility of psychologists studying social change does not end with investigations in change, but their involvement in both accelerating and causing change is also important. Hopefully, psychologists will not shirk this responsibility and will contribute both to the study of change and its effective management in our society.

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