#### ALTERNATE PATHS - MODALITIES OF DEVELOPMENT

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### Dynamic Nature of Social Science

Social Science is essentially dynamic in its nature because it is concerned with practical reality and problem solving. Weber has categorically stated, "Definitions in the sphere of the social science are entirely tied up with the shift in practical problems construction" a critique of concept take quise of Even when social science (Methodology of Social Sciences). construction appears to be abstract and more of a general the historical specificity under which such generalisation developed is not always fully expanded. Therefore, one tends mistake such formulation for a generalised truth. As a matter of fact, generalities in social sciences have to be interpreted in different or differing comparative social framework and is why one has to resort to a typology construction. addition, there is always the problem of space and time which also indicated in terms of synchronic and diachronic analysis. It is a common sense that even in a village which looks otherwise homogeneous where there are different social spaces which more often than not reflected in the special pattern of living at least in a caste society, this point need not be elaborated further. Even if what is fashionably now mentioned or stressed as "reflective sociology" was always present. This can be guessed from the works of the founding fathers. Thus Marks take into his wide compass the evaluation of capitalism and all that it signified. According to Marks Capitalism marked important brake from feudalism and he felt very rightly that there was no question of going back to feudalism once there has been the rise and development of capitalism. On the other hand,

the decay and decline of capitalism would result in socialism of kind or another. Durkheim also wanted to come to grips with stupendous problem created by industrialism, urban society, the and the resulting sense of helplessness by the individual. propounded the loss of social integration or solidarity and set himself the task of analysing different types of solidarities viz. Mechanical solidarity, Organic solidarity etc. The problem faced by Durkheim has been recurring in later works like Erich Fromm who have been concerned with the future of individuals mental health and freedom. Weber was equally well concerned with the emergence of different types of authority namely traditional, legal, rational and charismatic or rather the transition from one type to another. On the basis of kind of authority system prevailing in society at a point of time. Weber would that society has been less developed, characterised developed and so on. Apart from such formulations there is a very sustained interest in the manner in which a society type can handle the emergening problems. That is why Weber maintains that in a complex society whether capitalist or socialist bureaucratic organisation will be necessary. The rising scale of complexity parting company with traditional modes of different situations and problems. It is quite significant Karl Marks also appreciated the component of rationality efficiency in capitalist society. It becomes all the more important for us to realise this aspect when dealing with the changing situation in India and particularly when change itself becomes an ideology and as such constitutes a very important parameter of social reality, social philosophy therefore social theory.

## Ideology and Political Economy

Apart from the fact that theory in social science is concerned with both comprehending various problems and the matter in which

they are addressed and attempts are made to solve them, social science, though not content of ideological explicitly clear, can not be ignored. Whether or not one a social scientist is imbued with some ideological predilections or other. What one perceives as a kind of linear progression from type or another and the conscious or otherwise advocacy such progression in a given direction can be said to be a function of ideology. It may appear strange but a votary of human freedom and liberty like Marks had to emphasize the importance and necessity and importance of centralism for installing socialist values. Reaction to the excesses of over centralisation been uncommon in social science literature. there is a growing concern for the loss of man as a free those who praise for the american way of life opportunity, which provides for individual prosperity and growth, are very much concerned about the emergence of mass society the resulting lonely crowd. In fact an individual is lost in a crowd particularly because of over conformity, even though wanting to do otherwise. A great deal of the inducting of radical elements in sociology particularly after 1960 testimony to this reality of alienation of man and the increasing necessity to reinstate mans freedom and dignity. Moreover, ideological pre-suppositions also enquire an emphasis political economy of a given social system. That comprehending any social science theoretical formulation one to be aware of such complexities and be continuously sensitive the working of a) ideology and b) political economy to implications for various types of social relations - more often than not of an asymmetrical nature. Such asymmetry is to be seen in respect of power relations. This is what brings us to our next problem.

# Received Wisdom & Replacement Elites

In the case of India after attaining its political independence there was naturally a tendency to search for the solutions of its multiflex problems in the form of a neatly package set of theory. As one can imagine such a search was made with reference to the developed west and the Soviet Union. The later held particular attraction in view of the successes of its 5 year plans development and also from a humanitarian (?) point of view freeing people from the clutches of exploitation. At time, there was a fascination for liberal state with economy, science technology, rationality, individual liberty etc. It is indeed well known as to how the Americans made a bee-line to fill the vacuum by suggesting a modalities development and the required training of personnel in extension work, community development programmes and so on. The capital India and even remote corners of India were filled with such experts (?) and consultants who were approached or even otherwise made themselves available to provide a readymade Naturally the elites who had replaced the British rulers were the first to be conscious of the need for such consultancy expertise No wonder if these replacement elites became the most important link between the various programmes undertaken for "development" and the people. One can easily imagine a degree of impatience on the part of replacement elites to rush for such solutions, rather uncritically. The various formulations provided particularly by the west look very attractive on the face of Later on, it was felt that various types of formulations were really couched under this overall concept of development. addition there was the problem of replacement elite being to deliver the goods by successfully implementing the package so provided. The vary structure of bureaucracy and its culture The political elite certainly stood in its way. struggled hard all their lives to attain political independence were also not conversant with the new vocabulary, leave aside enquiring into its ideological content.

## Modernisation Growth Development

Discussion of modernasation was very fashionable in the sixties and there was hardly any aspect of Indian reality which was not examined from this point of view. Yet modernisation posed a very vital requirement of modernisation of economy and therefore such modernization would not apply to the different corners of India where the basis of economy was very very traditional. requisite of modernisation solutions were provided in respect significant modification or even discarding of patterns of social relations such as joint family. Even a moments reflection would be adequate to convince us that the common would not be prepared to part from his joint family, which the only bastion of support for him. In its train secularism, universalism were emphasized, which again were subject to a different interpretation in the context of Indian social The concept of modernisation was linked up with economic There was considerable debate on stages of economic growth and in what stage Indian society found itself - obviously at concept of development which subsumed both stage. The loaded concept growth was thus a modernisation and In order to develop it was necessary both to Unidirectional. manage things and men. While management of things may be feasible it would be extremely difficult to think of managing men - human relations, human associations and interactions, which has a tradition.

# Management - Domination

The Management aspect of development meant manipulation and control which naturally gave rise to domination. Right from

intellectual - theoretical formulation to ideological assumptions and management of resources both material and human were implied in this scheme of things. This is further complicated by the fact of international stratification where-by the world is divided between the first world, second world, third world and so on. There is almost a fatality in such arrangement, which would be very difficult to overcome.

## Development and Nation

is a growing fashion to condemn a nation's concern development because it is emphasized that it is the world order which is often compared with the liberalisation of economy, new vista which do not accept geographical opening of political boundaries. Quite in keeping with what was any social science formulation worth the name, itself to a specific problem faced by that society. Society is not an amorphous entity but is linked up with quality economy and culture. That is why concern for development particularly shaping the design for development has to be nation specific. One can go further and say that even nation a macro reality and one cannot avoid taking care of multifarious micro realities of which the macro reality is made. Therefore castigate a nations concern for development as "Developmentalism" is erroneous and an historical.

# Pre Independence concerns and efforts for development

Concern for development is to be located in the pre -independence period in the leaders' concern and the efforts they made as well as the dreams they had dreamt of to create a new society which would be economically prosperous, politically sovereign and socially progressive. Efforts were made to incorporate the common man in promoting developmental activity of various types, which

in the myriad voluntary associations reflected are organisations. In fact the British Rulers became quite suspicious of the progress of such associations and organisations. from the political, economic to the cultural. One can easily understand that the benefits of such activities were because of political interference by the British Rulers, severe restraints on economic activity and lack of various facilities ignorance, superstition, development such as internal divisions along caste, religion, region etc. Such division meant society. On the other hand the of Fragmentation "monpolisation" of developmental activity by the elite gave different social movements challenging the bonafide of the leadership, which naturally came in handy for the British Rulers. Some of the fissures in Indian society particularly the woeful plight of the peasants in India has to be attributed squarely to the rapacious revenue policy of the British rulers Nowrojee, R.C. Dutt, J.V. Joshi etc.) One could say that almost the eve of independence spurt was given to development planning, which is famously known as Bombay plan and People's plan. Both Jawaharlal Nehru and Subhashchandra Bose were of the importance of National planning for development.

## Independence and after

Developmental planning gathered momentum after independence. setting of the planning commission and the various areas topics it sought to cover were indeed very comprehensive. economic plans included development of industries establishment, various scientific agricultural, laboratories, atomic research, space research, development of media for conveying uptodate and useful information and knowledge to the people for improving agricultural practices storing Similarly credit facilities were so on. methods and available to the tenants for making agricultural activity,

economically viable and profitable. Efforts were made to spread health care education and communication facilities in the distant parts of the country also. Democratic institutions were set up to ensure representation of the people, their participation in decision making and governance so as to make them both responsive and responsible.

## Involving Common Man

main problem of how to involve the common man stared the planners and leaders in their face. While it was regarded essential to involve common man in every kind of developmental activity, both due to the tradition of apathy and indifference of also the nature or rather scale activity, such participation became extremely difficult. On the whole citizens participation in development has been of a small order while : on other hand the various plans had definite targets which a gigantic administrative set up was devised to cover smallest village and the capital of the country. discuss the peculiar characteristics of this administrative setup its limitation when we dwell on the role of bureaucracy development.

## Legislation

In order to restrict various kinds of exploitating relationship in respect of land industry, family, marriage and so on, various legislative measures were introduced to do away with such exploitation. Of course there was legislation in favour of promoting certain developmental activities e.g. the construction of dams for irrigation, setting up of steel mills, etc. heavy industries directly affected (positively) income generation. There were certain radical types of legislation such as the removal of untouchability prohibition of dowry, child labour

etc., Of course it is a matter of common knowledge that these radical types of legislation have not been implemented adequately in practice. Yet the legal stand by is there for anyone to make use of it.

### Critic of Development

On various fronts - economic, political, social the developmental activities undertaken have not been able to satisfy various groups of people, particularly those who did not have the wherewithal of infrastructure or benefit from such activity. Apart from a radical critic which questions the very legitimacy State, there has been a thinking (positive constructive) of providing alternate modality of development. Thus the science movement and cultural religious movement are a case in point. One can however discern a common feature in these alternatives suggested such as social. moral commitment. harnessing of men of knowledge for effective development. One of most crucial features of such movements has been delegitimizing of all kinds of arbitrary distinction and sources of power.

## Rethinking Development

Naturally the forging has given rise to a host of questions such as why development and for whom? It would be to usefult to dwell to certain extent on rethinking on development, because such rethinking has frontally exposed the basic component of vested interest on the part of the first world in their enunciation of theory of development. It would be more correct to say that the Political Economy of development has to be properly understood and appreciated in order to evolve in a proper, suitable and useful theory of development which would be advantageous to the people of third world in particular.

Basically it should be stated that this raises the problem of theory building in social sciences, because the various theories pertaining to social sciences were evolved and developed in west and were passed on to the third world almost as an article faith, apart from their unshakable, rational foundation. However, even in the west there is dawning an acceptance of fact that theories (economics) developed in the west are specific to industrially developed economics and not really applicable economies and societies which do not qualify on this count. whole exercise of providing, not to say imposing a general theory of development has been fought with difficulties. There has been insistance on prescribing authoritative knowledge developed countries. Obviously this smacks of techno-political well as economic authoritarianism, which has to be understood and successfully countered. Social science theory if for deferring general cannot account pertains to be is fact such endeavour and insistence situations. In theoretically and substantially unsound. The temptation sciences in respect of presenting a general imitate natural theory has to be avoided. As mentioned earlier, there has to shif from technocratic insistence to going back to philosophy. The entire theory of development as developed in the west is patternalistic. On the other hand, development is after change and as such there is activity in process reflexive thinking. The problem does not rest here because interventist mode of development and its impact society concerned and also on theory. Development theory been akin to management theory and as such is closer to policy to a proper academic, intellectul sciences rather than The centralist assumption of development discipline. where the State plays an important role in promoting monopoly, public enterprises and socialistic economic capitalism or planning, there is no denying that the monopoly of the state runs counter to any promise of freedom, liberty and particularly freedom from being manipulated. The technocratic aspect development is not confined only to economy but also which again vitiates human condition. A (development) and approach in addition to an obssession with general theory as propounded in the west, certainly has questioned. One can think of the dichotomy between certainty caution - both in theory (methodology) and action comes to ones mind. One can not but think of sociology of knowledge and pritical demands which shape such formulations. Any formulation on a deeper scrunity is based on the demands of the situation and the need for Ideology Construction to both in theoritical methodological terms it is necessary to observed that specificity encourages, open mind and dista, encouraging a multipilicity strategies of making sense of the social world and naturally evolve machanism for meeting the diferent needs. What is glibly a labelled as theory construction tents to be production of ideologies, construction criticism and comparative ranking ideological schemes from within instead of a rising from without has been dubb as Nationalist Developmentalism has properly appreciated from this stand point. As English, "Ones bitten twice shy" applies to the suspecision about trans national theorising and prescriptions. Particularly internation parlance it is fashionable to talk of transfer of resources from the first world to the third world, is neither feasible not desirable because it would not only dampen and initiative but perpetuate a relationship of local tallent This proposition can be extended, subordination. extend, even within the nation. Intervention has its own of the most important consequence is rendering technical knowledge and aid on a permanent basis of disabled and incompitent. Apart from the technical aspects of the advantages flowing from development the moral diamention development has to be stressed because development development of human beings which further means altering of the

set of relationships based on gender, caste language, region, power and any kind of stratification. fandamental aims of development to the most delegimitize any kind of arbitrary power. It is extremely important that there should be a decline in triune confidence claims to knowledge, technical expertise and ethical surety. Then alone the theory of development and even more so the praticise of development can be meaningful to the common man. In this case the state in both monopoly capitalism and socialism as development equally unhealthy. is to count What situation will precisely depend upon the particular possibilities of that situation, thus linking the present to future it would be infact necessary to introduce the remain tradition particularly in the Indian context, which as shaped the present. A clever and discreet utilization of mechanisms for ensuring development must not be neglected. can be neglected at ones own peril. it technocratic knowledge in any case is not substitute for There has to be thus a harnessing of knowledge social good rather than for ascertaining ones authority enjoying the fruits thereof. In this context the problem of legitimacy and authority of knowledge needs to be question from time to time, lest it runs amuck. Receive knowledge can be more questionable, because it is torn out of context. This to rejection of paternalism technicalism and over generalisation of development theory. A multiplicity of interest has to be taken account. In reality there is a dialectical relationship the "expert" the "leader" and the "Common man". That in our formulation of different paths of development one as to be conscious of these special features and antecedents of development theory, as it emanated in the best and got imposed on the third world. Perhaps it would be more fruitful to say such theory held tremendous fascination for thinks in the world, which is reflected in the undue emphasis on planners

planning as well as the involvement of social scientist in formulation of such plans and to provide legitimacy to such exercise. Authoritative knowledge has to be thus question.

#### INDIAN SITUATION

Volumes have been written about poverty and various kinds of deprivation affecting large section of people. However what generally emphasized is the meagre income which people have, they cannot even make two ends meet. Ιt has also been stressed that quite a few have no source of income. customary for the main member to support his family and for want income this responsibility can not be discharged. Even affluent countries if for any reason the earnings of the member were to be affected adversely, the family suffers particularly the education of children, health, food intake etc. casualties. With the low GNP in are the first India easily imagine what the scourge of poverty must be. Therefore, one of the most important indicators of development is generation, which should be adequate for the whole family. Even if standard of living is fairly low, what is needed is assured monthly income which will be affected by vagaries of nature or caprice of employers and so on. Income assures some status to the which is also transferred to his family Therefore, guarantee of income is the first prerequisite development. The problem does not stop there because earning income should be through objective sources, rather than depending on anybody's subjective charity. It is a common place that there are thousands and millions of workers in India who are contract labours and as such there is no security of income. on the other hand organised labour enjoys not only guarantee of secure income but also various other privileges and right. It estimated that not more than 15% belong to this privileged category. Income assures status and self respect. It also affords

a degree of confidence and make people to participate in different activities. Freedom from exploitation can not be had without earning income.

Freedom from exploitation is not however so easy, because of traditional social structure and patterning of the system authority. In spite of legislation even now it is found that quite a few persons live under bondage. There are atleast 4 to 5 States in India which are notorious for continuing the system of in one form or another even after 50 years of independence. Personalised service place one at the mercy of the and as such service is much more amenable to More often than not people who are exploitation. exploited are not even aware of such exploitation. As a matter of fact is something very normal and routine. That regarded as why development must incorporate inflex of new ideas ideologies and values which would at least awaken the exploited to the fact of exploitation. Indian cinema as depicted various types of exploitations and particularly that based on sex. Thus a landlord or the Zamindar has almost an unlimited right over the wife of or a landless worker. Such exploitation is not confined to rural areas but even in cities particularly joints for entertainment such one does come across exploitation. Even in administrative offices exploitation of this type is not entirely absent. Child labour is another instance exploitation and without ensuring a proper quantum of income it would be extremely difficult to do away with child labour.

As Oscar Lewis observes the poor have no agenda, in sense they can not decide anything for themselves others takes them and as such the freedom guarantee by decision for constitution means nothing. There is also the right to know which has been guarantied by the constitution and as such everyone to atleast a minimum level have access of education.

Without education it would be impossible for anyone to know what happening around him, leave aside having any control over access to minimum knowledge can emancipate one from getting the clutches of unscrupulous people such as the landlords employers moneylenders etc. Moreover education must acquaint with the constrains of the system from which is suffering so that try to fight against such constraints. to information is also an extremely important indicator of development, because for want of information many an but certain legal Not only that enactments provisions made put one in a difficult situation to It is proverbially said that ignorance of law excuse. Thus adequate communication in language and terminology easily understood by the people which can be is Withholding of information has certainly played havoc people. Therefore education and information should be had as matter of right, without which the process of development has meaning. It is only through education that one can become of one's cultural heritage and its importance. belonging and also the corresponding responsibility arising of ones understanding of a group and tradition would enable proper integration of people groups and society. In this context, it is necessary to refer to the people from bordering areas have not yet been brought into the national fold for various reasons.

Facilities for health are also an important ingreading of development because without such facilities, human beings are impaired in every possible way. It is not only that one's capacity to earn is impared but ones capacity to need a normal life is also affected. Therefore control of various decises and the provision of various preventive facilities becomes extremely significant the emphasis of the qurative aspect of health and neglect of the preventive aspect has cost very dearly to the

nation and ofcourse to the people concerned. In a proper sense of the term, education must necessarily include lessons about the importance of health and also provide the knowhow of acquiying such knowledge and implement it into practice so as to ensure a minimum standard of health. this naturally introduces important element of safe water supply, which has not so far been acomplished. Undue exercision by women folk in fatching water from quite a distance as not only affect the health of the but also her participation in various income earning activity. Supply of medicines, however elementary they may be is also very crutial. Health facilities required a properly trained personnel emphasis should be placed on the and greater personnel. Whatever the legal requirement about medical graduates spending time in rural health service, it is quite obvious at for to come this requirement is not going to be effective. education and health practices further ensures saving of lost mandays and than health increase in productivity.

Creating a new man and society has to be the ultimate development and as such this is an active process rather than a finish products. Of course the interests of a nations state be guarded by development of economy so as to attend prosperity. Otherwise the national economy will be vulnerable. Therefore dvelopment of industry an agriculture acquires significance. All same the ill effects of industrialization have also to be avoided and that is why it is necessary to take industry to village rather takeing a villager to industry in a town and city. Generation of income by promoting industry and agriculture also means paying head to the market. It has been know that for want of market facility particularly the products of agriculture suffered tremendous loses. Production consumption distribution required degree and exchange has to be done with the efficiency, not to say honesty. In order to augment economic process introduction of science and technology becomes very important. However science and technology has to be user friendly and specific to the demands of a given situation. Therefore it is necessary to impart a minimum degree of and technology education to everyone. This would production of suitable information and knowledge so as to the loops and corners of India. Therefore developmental activity must necessarily the attention to this aspect. While the State may not be in a position to undertake such activity, various valuntary groups can deliver the groups only such knowledge would facilitate control over situation of the part common man. Otherwise the object depends on even a small technician from outside renders a person staying in rural miserable helpless. It is not enough to install machinery, pumps, in villages but it is even more important to trained the required man power from the villages which can keep such machinery in good that the productive activity is not inpaired. indeed a well known fact as to how various a radio and television sets or even water pumps lie unused from want of repairs even univesities computers are not fully use for want of repaire. This an administrative change which is alive to would mean problem and also which is easily accessable to common man. brings in another important requirement of development namely administring authority which is expected be access to the required infra of provide structure responsible to This would necessarily mean orienting the facilities. set up to this new task, which means sustain administrative friendly intraction with the clients i.e. the common man. Several studies of development administration have pointed out the this respect so that the administrative machinery is not accessable and therefore useful to the common man.

Development for whom is a very important question because if all the consequents of the country are not taken into an account, it would give rise to a lop sided development. Several studies have brought out this point. Obviously the tribles who are spread far flung areas and particularly inner hilly recesses have to enjoy the fruits of development and so have the villagers to do even in urban areas uneven development which is ghettos signifies a inadequate slumbs and and development. Such development can be a hot bed of criminal activities, a phenomenon form which various deviant, cities have been afflicted. As mentioned in the brief statement on development theory the emphasis on aggregates has resulted neglect of many people and groups who could not be reach. Planning for development from above is prime cause of this type of phenomenon. A various promises made about development and failure of the state to fulfilled such promises as dissatisfaction and even turmoil and disturbance and urban. It is ofcourse the duty of various political parties pressure groups and voluntary bodies to point efficiencies in development and in order to make the concious of their rights. Ideological basis of such communication is very important and as a matter of fact development would mean various ideologies and groups in the main stream.

how to bring Naturally the question rises has to in the desire direction and who is going to development important problem about the agency and raises the structuration. Secondly what is the contect of development criteria of majoring development is very vital already mentioned. Reliance on aggregates can be very misleading. is true that infrastructure of development and shoull be provided by the state private enterprize and public enterprise. The method of providing development has tremendous significance for a success or otherwise. On the other launching developmental activity the involvement of people and atleast their feedback has to be paid efficient attention. would mean a modification in the existing planning process. There are many activities of development which cannt be adequately handled by these three agencies where there is considerable scope for the activity of various voluntary groups. One of the activity the induction of science and technology however science and technology is a double aged weapen and one of the vital development theory is to ask ourselves the questions science and technolgy are to be a weapen or an instrument. would depend on resolving this dinema satisfactorily, of course favour of the later alternative. Utilization of technology must be imbued with social purpose distribute the benefits of science and technology to Even more so introduction of science and technology would further required putting science and technology in a social context. science has been properly regarded as a social institution and as such amenable to the scrunity by common man. Facilitating communication about science and technology to people is a major step in this process. As they say taking science and technology out of laboratory to the door step of the people necessary if science and technology have to contribute development. This means a new kind of ability on the voluntary groups and individual who want to take science and technology to the common man such as communication more importantly the doing away of the east while scientist and the common man. This is traditinal role of the expert has to be questioned. Science technology has to tested in the field in terms of its beneficial results such as increase in production, saving of the produce by controlling bacteria, storing of product efficient distribution of product and so on. This would mean convey new information knowledge to the people so that they can enjoy the much needed The traditional awe of the expert self confidence. resulting inferiority complex and sub ordination has avoided. Ideological conviction on the part of trained scientists and technologists makes matters easy for undertaking

activity. That is where one has to think of a personnel, a paid group, a salaried group which performs his duty in this respect developmental task as a matter of routine rather than that of conviction. Apart from the inputs of science and technology one could think of inputs of cultural, values and revitalising some useful cultural pattern and values so as to ensure the economic development, moral development and also political development without flaunting progressive - radical ideology one can appeal to the best in ones traditions and ways of doing things so as to benefit the entire collectivity and not a given individual or a group in fact it would be an essay in social solidarity cutting across all types of cleavages raised on cast and class.

## Agency and structuration

iternal problem of individual vs. society or individual society or otherwise manifest itself in various rays time Thus this discussion about agency again. reintroduces the problem of proper relationship individual and society and how it can lead to a better order. regards the development administration we have of agency (external) making decisions and imposing a programme activity on the people. Under such condition there is a tendency to received such programms passively and not activity which would of involvement and the subsequent of harted relectant participation, affecting the results. The plan and the programme of activity if it is a micro plan or activity tends ignor, if not disrespect, micro specificity would result in the damping of peoples enthusism and cooperation for whom such Lack involvement programms have been planned. of and participation would spoiled the activities beyound repaire. The purpose of development is to incorporate new actors and groups. can be done only by encouragement and This appropriate motivation. The feeling of being at the receiving end has to be

away with. Creation of new actors and groups inculcating confidence and skills in them. This cannot be done the machinery to do so is bereaucratic and impersonal. Moreover the rules and regulations of a bereaucratic structure would also stand in the way of effectively reaching the people or rather the people having access to such machinery. situation the consumers of bereaucratic service have either in deciding the developmental activity or ensuring everyone can benefit from it equally. The power structure as particularly in villages is well known to queer the pitch and thus stand in the way of the benefits reaching the people for whom they are really intended. On the other hand ideologically committed group of educated trained scientists technologists social scientists also too make it a point to up developmental activities and programmes which are relavent to the and communicate them effectively to involved properly. the people at large being served which such facility would naturally have a sense of participation and can contribute to creating new social mechanisms. In a way this would mean voluntary structuration rather than compulsory structration Utilization of strainth underline external agency. the traditional cultural and traditional would also mean making people involved and feel that the activities is their own. undertaking activities which are needed by the people themselves making inputs of modern science and technology as help provide the financial resources from within the community, confidence of the community will be enhance. such economic activities introduction of work such as in agricultural fishery orchards etc. The collective society gets reinforced and therefore one could even speak of the rise of a new community and society. Here also distance between the man of knowledge and expert and the common man is reduced so as to be almost non existing and therefore traditional stratification is more or less dum away with. Weber's

insistance on rejuvenating cultural values comes to ones mind. Therefore to discuss various mechanisms for providing and encouraging developmental activity reference is made to three different types as indicative above. This is not to suggest these mobalities are entirely mutually exclusive but they represents different types of thinking and functioning. Going back to agency and structuration the activist role of agency in encouraging people to involve or rather alter the structures or the agency itself being required to continue the existing structure for whatever reasons is a very important distinction one has to keep in mind, particularly when agency is expected to encourage the process of struction whereby existing social economic the political and ideological arrangements have to be changed.

#### BUREAUCRACY

Administrative mechanisms have been started by the Govt. of India since independence to not only ensure economic development even more so to transform society. The various criteria or bases stratification old and new have been regarded as promoting injustice. That is why the purpose of economic development has been fondly hoped to be in favour of creating a just society by transferring resources from one group to another and also by generating income, which has not really succeeded to the expected degree. Development signifies change in the desired and desirable direction. It is from this point of view that observation, "Definition in the sphere of the social sciences are almost entirely toed up with the shift in practical problems and take the guise of a critique of concept construction." (Methodology of Social Sciences). Even then Weber has provided a three fold Typology of authority and the resulting society design - traditional authority, legal rational authority and Charismatic authority. Discussion of bureaucracy is obviously a part and partial of legal rational authority. Even at that time weber felt or was rather convinced that any society which would like to industrialise itself must have complex organisation and therefore even if there were to be a socialist society it would need bureaucracy for discharging its duties with a degree of efficiency and certainty which brings from proper qualification training and involvement in the sense of performing the task alocated as a full time activity.

- 1) Bureaucrats are personally free and subject to authority only with respect to their impersonal offical obligation.
- The office is filled by a free contractual relationship. Thus, in principal, there is a free selection.
- 3) They are remunerated by fixed salaries in money, for the most part with a right to pensions.
- 4) Each office must hold possibilities of a career and so on.

It was but natural that weber could not have foreseen the possibility of political and administrative authority being combined into one, as happened later on in the case of Russia.

Quiet in keeping with what weber has observed scholars of social sciences who came later on were concerned with different practical problems and as such found it necessary to criticize and modify webers formulations about bureaucracy. Weber tended to regard buraeucracy as more or less omniscience and omnipotent. could easily develop or deteriorate authoritarianism, which is an anathema to democracy. bureaucratic action may be reduced to ritualism, doing things for owns sake and not because it meant anything significant. Historically beauracracy was burden with maintenance of Law and Order and therefore regarded as averse to change. In addition the social background of bureaucrats would also make them resistant to change. Impersonality emphasized by Weber may also result vesting an officer from bureaucracy, however low in the system of hierarchy, arrogate to himself undue power as a representative of Instead of being a servent of the people he would tend to behave as a master of the people. In theoretical methodological terms there has been a revival of the primary a matter of fact the clients whom a bureaucrat are very keen to establish primary group supposed to serve with the bureaucrat and therefore do not like impersonality requirement of bureaucracy and a bureaucrat in perticular. Under conditions where mass contact is required tried relationship between programme personnel and the people assumes an extra ordinary significance. Therefore according the programme envisaged, there will have to be a modification the personnel. This is something which can never be furnished but it is a matter of reorientation any text book, The control of bureaucracy and bureaucrat by opinion for example media as well as various political and volentary organizations and movements is something which is not particularly accepted by the officials. When bureaucrats are required to self change, they are burdened with factors such (rational, scientific and intelluctual material. ideological so that the existing patterns of social relationship are transformed. This is certainly a very tall task, for which a bureaucrat may not be equiped either in terms of personality or training and orientation. This makes necessary to distinguish between bureaucracy and the secretariate level, where he is called upon to deal with files and not persons another situation where he is directly confronted with particularly from the lower sections. A distinction people, between the structural and the made to be characteristic of bureaucracy. Similarly culture of bureaucracy is also very significant if the culture of bureaucracy make them prone to the public and sensitive to their needs and aspiration. Such a bureaucrat would help in the process of structure which is both desirable and desired by the common people. In fact such a role in respect of struction is to be located more in voluntary agencies rather than in a bureaucratic setup. The image of a bureaucrat is also important both for him and for the people and even more so for the success of the programme or activity interested to the bureaucrat in question.

#### Technology and Bureaucracy

Jems Burnham and several others have propounded the thesis that bureaucracy will be increasingly manned (women) by technocrats and that there would be a rule of the experts because such a rule will be efficient people will not have much to complain about Even then the domination of the elite is legitimated by efficiency and as such the elite domination is inevitable. The technocratic model of bureaucracy puts a premium on privileges arising out of socio-economic background, which the Soviet Union wanted to do away with though without much success.

### Russian Model of Bureaucracy

Due to the top most priority even to industrial and technological development, efforts were made to ensure efficient functioning of bureaucracy by not only emphasising technical excellence but also through the central value system namely the socialist ideology. On the other hand a combination of technical expertise with political power, which was a kind of a prize afforded for ones political (ideological) convictions, there came to be a compounding of double power - technical or technocratic and political. There was hardly any distinction made between policies and administration of bureaucracy was used in Russia, foster

development and change. This was made possible by special emphasis on elementary and higher education, so that a band of technicians and scientists could be trained to serve the expanding industry. However, the interference of political leadership affected the working of bureaucracy in times to come.

## Democracy and Bureaucratic Model

While it may be expedient to merge politics and administration and have bureaucracy merge its identity with the political machine, it may not be so possible or even desirable democratic set up. In a democratic set up, governance is supposed to be by the people, of the people and for the people, and as a matter of fact one has to add that governance has to be done with people. It would not be desirable, therefore, to have a technocratic rule in a democracy, particularly when modernisation social change are the desired goals. Democratic process requires that people are involved in the new changes in all walks of life and as such apart from the fact that the bureaucrats have to supply the relevant services and facilitate the production of goods and commodities, they also have to educate the people with view to change their erstwhile mental attitudes. absolutely necessary that in a democracy, a bureaucrat will have to play a role over and above that of a mere technocrat. because of this that the formalistic model of bureaucracy would of much avail and informal groupings will reckoned with by bureaucrats in their day-to-day working with the Bureaucracy in a democratic framework will have sensitive to peoples' aspirations and criticisms develop a two-way process of communication with built-in feedback There should be mechanism. a continuous dialogue bureaucracy and its clients and it means that rules and regulations will also have to have a certain measure of flexibility. The bureaucratic model under these conditions will

be much more open and cannot enjoy the insulation. This will necessitate different personality types as well as the requisite culture which will facilitate effective performance on the part of the bureaucrats so as to meet the new demands of their role. Amiability to change the elasticity would thus characterise the bureaucratic model in a democracy. Y.B. Damle - on Framework for the study of Bureaucracy bb. 9-30 in <u>Public Services and Social Responsibility</u> Edited by S.C. Dube - Indian Institute of Advanced Study - Vikas Publishers House New Delhi, 1979.

We have already presented a critique of Weber's theory and similar stand-point is adopted by Michel Crozier in his study on "Bureaucratic Phenomenon" (Tavistock Publications, London, EC 4, Crozier while calling it a functional study, examine the bureaucratic phenomenon within the context of human activities. In doing so, he emphasizes the importance of theory of organisations as well as that of cultural systems, of which, bureaucracy functions. Scientific definition of a phenomenon constitutes theory. Initially, the bureaucracy was mainly a concept used in political Sciences so as imply the realm of law and order, while Max Weber emphasized bureaucratisation as rationalisation of collective activities. The study of bureaucracy in action in various situations provides arbitrary understanding rather than Weber's emphasis on construction of ideal types which makes the study unrealistic. Crozier is very conscious of the fact that" all theory ofcourse, originates in a partial and insufficient contact with reality" 5). That is why he attaches importance to the study of Bureaucracy in the context of a general theory of organisations and general theory of cultural systems. Theory of organisation is based on the assumptions of rationality, certainty and control, whereas human beings do not like to be treated as means and is why certain problems arise. As a matter of fact, bureaucratic routine, existence and delays are in clear response

dehumanised goals and aims of scientific organisation. In order to understand "Pathology of organisation", cultural becomes an indispensable tool which terms the delimitation of the global theory and its application in different cultural context." Specifics of Micro Reality must be taken account of. from this point of view, the study of bureaucratic is not only the means of social control used within different cultural systems to arrive at ends but structural and structured inconsistency, not sav contradictions inherent in the implementation of the programmes any formal organisation. This is so because it difficult to modify values, much less the basic personality. is only through action that is by acting through institutions and by modifying these institutions themselves that a society can transform itself. Thus, structuration assumes importance. Sociology of organisation and sociology of cultural systems thus equally necessary to a general theory of action the bureaucratic phenomenon makes contribution to While using both. (P.8)the functionalist method, Crozier does not accept the functionalist philosophy tries to emphasize the problem of change, although the kind change which he has in mind whether of a linear type or of mutational type is not very clear. Even them, Crozier points out that employees in an organisation are not necessarily interested in the purposes and functioning of their organisation and they feel completely neglected. Crozier is not even very optimistic about the purpose and functioning of Trade Union Organisation far as actually reality goes. Crozier regards power as central problem of the theory of organisation and also points out that the early realistic theory of organisation continued ignore the problem of power, because it believed 'that had to shift from the government of men to the administration of Power to the Doers performers authority things'. (P. 146) overcomes power is a subtle which has to be encouraged rather

than the naked use of power. He further mentions that by ignoring subordinates' claims to freedom, they immediately create them fear of being manipulated' (P. 150). The presence of certainly dysfunction to any rational organisation. cut hierarchy cannot help people get rid of their fear being manipulated. Hierarchy itself is a kind of rationalisation or which may be questioned from time to time! Even in the case of organisation, which is monopolistic, and as such, relatively stronger position to define the rules of behaviour narrow terms. Ofcourse. it must be conceded monopolistic situation is an example of an unduly equilibrium. On the other hand, undue faith in the superiority of the bureaucratic rationality can have threatening implications in domain of human values. Michel Crozier rightly emphasized that bureaucratic organisation is destructive of democratic 176). This is not to suggest values (P. that human relations approach will be wholely a substitute to rationalist approach, particularly as far as the technical efficiency and the attendant hierarchy is concerned. Even then, all bureaucrats tend to reduce the tensions that are due to the differences of values groups and also due to the problems of communication. Values sentiments make it difficult for a bureaucratic model to function automatically. a modern adaptive society, In a bureaucratic system also has to change to become efficient and effective. large, power to innovate becomes a preserve occupying superior positions in the bureaucratic hierarchy. Their capacity to innovate further necessitates acquiescence by the petty officials and also the submissiveness the employees and the officials. In reality, 'power finally, is so exceptional that discretion, it must removed from face to face relationships and surrounded by an aura of awe and submissiveness. We now confront the new images of bureaucrat, the self-satisfied glorious innovator, the submissive assistance and the ritualist sub-altern. This set of roles

corresponds to regular hierarchical arrangement within a very and powerful agency.' (p.202). Crozier further observes that whenever change and power are present, we find more involvement and deeper feeling. We cannot help that this also is a kind of an ideal type, because it postulates role set between conformists and innovators. On the other hand, co-operation means participation in decision making, and if for any reason such participation is denied, asymmetrical but stable relationship implied in a role set may not be forthcoming. It is further well-known that rules protect people who submit People find conformity or acquisence useful or rewarding! Achievement of flexibility would diminish the lure for rules stability inherent in bureaucratic system. Likewise, orientation would also threaten any ascriptive basis of consciously or otherwise implied in a system of bureaucratic hierarchy. There can be no escape from the fact that bureaucratic world is an arbitrary world and as such exposes itself to threats from the surrounding culture, questioning its arbitrariness.

Any bureaucratic structure contains elitism, because power decision making is vested in bureaucracy. In a certain sense, in the ascriptive basis, elitism cannot be wished inspite of open competition and recruitment, echelons of bureaucracy tend to derive benefits from ascriptive There is an obvious relationship between Position status. Moreover, such links get further strengthened because Power! bureaucracy with institutional of patterns education. It is not necessary to labour the point that acquiring in certain institutions of higher learning lend a tremendous prestige and leeway to its recipients and as such are placed high above the rest of the strata in any system of bureaucratic hierarchy. It is indeed a common place of sociology education that the system of education reflects the leverage mobility and at the same time is also the main force of

perpetuating it. Thus, the educational background for bureaucrats acquires great significance in respect of their status, privilege or its absence. Normally it is expected that which is institutionalised, would do away with movement, hierarchical system. However, working of labour movement would disabuse one's mind in the sense that it is the leaders of labour movement who matter and not the rank and file. Crozier's observation is very trenchant: "Thus, finally, the movement itself can be viewed as a reflection of our French model (studies by OOmmen Alexander were bear this out) authoritarian in its radical beliefs, weak and bureaucratic in and absolute day-to-day routine operations, avoiding face isolated from other social relationships, groups, not cohesive itself, more ready for negative expressions of for constructive, co-operative leadership, preferring finally to submit to impersonal rules and to appeal to authority than to flight and to compromise in its own right. the other hand, it should also be taken into account that it is a reinforcing force for the French bureaucratic model. powerful radicalism, because of the its Because uncontrollable explosion which it maintains, it is very difficult for the employers and for the state to relinquish their tight and inefficient patterns of social control -- without which they have some ground to fear, chaos would develop." (p.251). 'Thus the sub-system reflects a generalised of fear administrative overlapping which is a characteristic paralysing feature French administration -- and on the other hand by calling for overall supra-organisational centralisation'. (p. 253) One cannot think of the parallel example of Indian bureaucracy. Eventually, this results in the lack of communication between the various strata in bureaucracy and imposes remoteness from the field of decision making. Right in duty of making decisions to promote new policies that is to permit adjustment to change is delegated to deliberative bodies and political figures

the bureaucratic elite. The culture of dissertion, isolation and exercise of authority cannot but be reflected both in a bureaucratic system and a political system where utmost is accorded to the leaders of opinion and Speaking of the dominance of the bourgeois class in the political and the overall French social system, Crozier observes "the combination of strong administrative system with unstable policy making system ensured, in the smoothest possible way, introduction of the exact amount of change that we endangering the bourgeois equilibrium. Even period, however, it had three far-reaching draw-backs : (1)allows citizens to participate only in a very remote and indirect way; (2) it deliberately excluded whole groups from any actual possibility of participation; and (3)it considerably the rhythm of economic and social change. (p. further points out that it is only the myth of revolution which holds labour class together and ensures their participation though ofcourse temporarily. Ofcourse, the French colonial system e.g. the way it worked in Canada, is characterised by passion for rationality -- the desire to achieve order, and harmony, which is the hallmark of bureaucratic (p.265) and yet, as everyone knows that the bureaucratic centralisation was not really effective. This was so because the systematic imcompatibility between feudal structure and new rationalistic structure imposed by the French rulers. Compare India Feudal position requires either subservient Bureaucracy indifferent Bureaucracy or a combination of both! It be useful here to mention Mecaulay's theory of filteration enunciated in the Indian context. Further, as very observed by Crozier, 'the assimilation goals denied the existence autonomous personality to the native population. provided a good rationale for direct administrative methods for refusing face to face relationship outside the teaching situation. But, in doing so, the coloising society was imposing a fraudulent world and a fraudulent language -- of which it was also itself a prisoner -- of the natives. It was not amenable to discussion and, therefore, to change. (p.268) The colonial system administration provided an impetus to the native Bourgeois going in for innovation in the field of commerce and industry by lending to it the legitimacy provided by nationalist This is how one can account (India compare) in the industry and commerce field amongst the innovation which became a bulwark of nationalist colonies, of independence, there is no denying Ofcourse, after attainment the fact that the local bourgeois class tend to lose their credibility. Then again, bureaucratic administration is always confronted with the problem of change. However, revolutionary utterances tend to have only a symbolic value and they suffer a constant erosion. The Rhetoric has to be remembered. Bureaucracy further reflects the will to order and equalise because of pressure. Similarly, intellectual creditability egalitarian amongst bureaucrats is also responsible for the maintenance of hierarchy within the system e.g. the old Indian Civil Servants in India. Ofcourse, intellectuals can create courses and it may not change any modes and philosophy of bureaucratic organisation by the dependence of the individual insistence on Revolutionary pressure of individuals and also to some extent the example of foreign countries emphasizes the disfunctional aspects of bureaucracy. At the same time, this same disfunction ensures the performance of model of change and adjustment giving the individuals the protection they change and thus require. (p.292) Because it would be wrong to imaging any society being permanently bound by the existence of cultural pattern. constantly through the different organisational learns experiences to which its members resort to reach its general ends and their own particular ones. (p. 292) The process of adjustment between the business leaders and higher civil servants would reduce the process of change. Therefore the problem of collusion or corruption has to be understood & dealt with.

## Conceptual and Normative

It could be argued as to what is the relevance of conceptual normative discussion at this point, but I think that relation of different concepts and particularly the gap between these concepts and also the normative expectation made of bureaucracy provide an excellent pointer to the inadequacy shortcomings of bureaucracy in India particularly when it is used transformation and development. What is presented field of discussed here is based entirely on several studies bureaucracy or development administration, which is content and papers (research) Ι monographs books several instead of giving the dull figures here it would be more useful to resort to conceptual analysis and also the normative one. the first place it has been found that bureaucracy prevents structuration (voluntary) because bureaucracy itself is a victim structure which its own structure or rather the bureaucracy with all its routines rules regulations presidents and what not. More often than not the response of bureaucracy initially negative because a bureaucrat is generally confronted with a new situation, problem and the case which he does not know handle since there is no president. Naturally such dampens development process by throwing response or attitude on peoples initiative. It is a very common trait cold water to look for generalised uniform patterns backing in bureaucracy and reflexivity and ofcourse the capacity flexbility transform. This is reflected in the very process of the various policies and programmes which are The technocratic planning ensures domination technocratic. the people by manipulating things as well as people. That is why undue emphasis on rationality as the most important ingredient planning is inversely related to commitment. Commitment to a cause propels a person to search for new solutions where as going the rule of thumb in this case rationality would not provide leeway for the bureaucrat. The technocratic model

planning, which emphasises quantities and target reaching need much space for feedback from the people about aspirations in formulating programmes and policies. condition where the success of a programme and policy depends on peoples involvement and cooperation. There is a slender chance of success. It is customary to refer to peoples participation in a democracy it is peoples representative and leaders always act as a go between the people and the bureaucrats. So far so good, but a various studies have brought out the fact of intervention, not to say interference by the leaders in respect of the implementation of various programmes and policies by bureaucrat. As such there ensues manipulation of resources human and material in favour of leaders, certain sections of resulting in the denied of such resources populations, very people or whom they were intended as an example the cases of special types of low interest loans weaker section, which do not reach them for the reason mentioned above. Similarly health services and education also is usurped by the high and mighty. What gets emphasise or over emphasise increasing the size of the cake and there is a tendency to neglect distribution. It is but natural that in order to reach the targets there is a temptation to pump in resources into already prosperous sections of society so that they could furnish evidence of profitable activity. On the other hand bureaucracy is characterised as slow moving - sluggish and insensitive to rulers (lower strata) demands the Hiatus between administrators and people is a common observation.

Development should encompass natural environment social relation education, production, consumption, distribution and well being of every one. There is a sage observation that "limits of mankind are not primarily physically but social and political". Therefore actor, model (activist or activisor) model of development and consequently that of recruitment of bureaucratic personnel who can fill the bill is required a bureaucrat is expected to be a

catalytic agent. Naturally the Top-Down concept and design of bureaucracy will be detrimental to development. This would required breaking of wall of impersonality.

While power is a central variable in human society possession of power should be made to depend on appropriate performance and achievements on the other hand when leaders rulers want maintained power by popularity - managing media press through the and not Power becomes a naked power answerable to the public. This defeats the very purpose of development. The philosophy of economic planning is to create a new social order where everyone will enjoy freedom and liberty based on access to minimum facility which would emancipate person from anyones manipulation. It is with reference to that distribution of facility like setting up of heavy industries fertilisers petroleum gas electricity irrigation etc., where brought under the purview of the state so that everybody could have access to the product. However the factual experience shows that this access was not forthcoming.

On the one hand it is well known that the bureaucracy has confronted with performing task of a rather unfamiliar nature. the structural setting also put hurdles Further performance of such task, by inhibiting any kind of initiative innovation which is in the bureaucratic language is branded as transgression of rules and regulations. Similarly distincting by the officials from the common people is also responsible for making the bureaucracy in sensitive. It is not phenomenon to observed the ascriptive basis of authority, guided by stratification. It is true that development administration - bureaucracy is expected to play the role of Benevolent interventionist, of which we find the absence. All this conceptual and normative presentation give rise to certain results which are quiet obvious.

# These results could be summed up as follows :

- The culture of bureaucracy and the personality types of bureaucracy as well as its structure is not conducive to transformed resources to the weaker and poorer sections.
- There is a lace of innovative spirit by and large status and authority are linked up with ones capacity and desire to innovate thus educated higher class and urban based bureaucrats tends to run the risk of innovation by departing from the existing rules. It is a common sense of sociology that those placed in higher authority no fully well as to how the rules and regulations need to be and can be bended in practice, because they are convinced that it is the spirit of the law rather than the later of the law which is important. While undertaking any developmental activity this has to be borne in mind.
- 3) There has been found relative absence of delegation of authority, which leads to inefficient organisation and lack of discharged of the responsibility.
- 4) Several suggestion have been made about recruitment of bureaucracy its structure culture behavior etc., emphasizing that bureaucracy should be responsive elastic and must ensure feed back from the common people. While transfer of resources in a regulated and peaceful way is expected the functioning of certain political elements (Gundas) would not allow this to happen.
- 5) The performance of pureaucracy is not always evaluated or if it is evaluated there are many arbitrary elements which creep into such evaluation, with the result that bureaucracy get demoralized and less secure and confident. The problem

does not stop at that but even affex citizen participation in development.

- 6) While hierarchy is suppose to be functional in so far as it is based on efficiency and appropriate orientation, any absence of these two would result in a chaos both in the minds of bureaucrats and that of the public.
- However the various fields studies I pointed out that 7) is a way out of this impassed. Thus in states and districts were the tradition of voluntary activity and more leadership of people is concerned, selfless influence is exerted on the bureaucracy. Alert public make bureaucracy more responsible, responsive to the peoples demands. What is required is healthy interaction collusion) between bureaucracy leaders and people. Therefore there is an increasing necessity of reaching the lowest powerless strata. While some officials want to do for of support from the system (bureaucratic) they prevented from doing so. It is not entirely uncommon to come across instances of a bureaucrat (even a highly placed to get penalised for his active and conscientious insistence on distributing resources in favour of weaker section and by implementing the existing peace of legislation. That is why certain experiments of development undertaken by voluntary groups - elites, scientists, technologists to sensitize the common man to his right and also by spreading the much needed information and knowledge so that the common would acquire control over his situation becomes important for us to look into. Several examples were to the effect that under such dispensation inaccessibility of bureaucrats whittles down this can happen only by creating confidence amongst the common man. traditional fear an apprehension about Govt. officers has to and can be done away with. Such confidence has

naturally matched by generation of sources of income particularly amongst the poor so that they could stand up to anyone. Without in any way resorting to redistribution of income in a women's society putting income in the pocket of the people who were more or less totally devoid of any income would amount to raising their level of self confidence and self respect. In sections to come I will be discussing such experiment however I must conclude this section by observing that bureaucracy can not be solely depended upon to contribute to development.

#### SCIENCE MOVEMENT FOR SOCIAL ACTION

#### INTRODUCTION

Even before discussion what is meant by Science in this context a about movement would be in order. As is well every movement has to have ideology : idealism, organization for absolutely necessary institutionalisation which are Of course every movement must sustaining movement. any implemented. body of programmes necessarily have a to be Moreover, programmes need to be revised in order to keep pace the changing environment : demands of the people and infrastructure of resources which would be available resources are not only material but essentially human. It is certainly well known that however laudable the programmes may be much depends on implements them and how. There has to be flexibility of programmes and even the personnel put in charge of carrying out such programmes should have a flexible approach in the sense that be very sensitive to the recepient's perception they must experience as well as demand which must be taken into account. Other wise such programmes will tend to run in a purely bureaucratic style, defeating the very purpose. It is also said that the programmes should be geared to social transformation and social change. However, social change and transformation present very tall order. Generally social change is defined as change in the core social institution and even more so their inter-However, what is expected in the context relatedness. really this kind of transformation or change but simply a process programme of enabling the poorer sections of our population participate in various activities, particularly to generating activities. So many times the concept of development is rather un-critically employed. However, development will meaning whatsoever if a large section of our people are left out not only of the process of development but even more so deprived of the fruits of development. In short, what is meant is facilitation of income generation for every one, no matter whichever class, caste or local he belongs to. Without earning any income it is obvious that any kind of consumption would impossible. So many times one hears about the lack of purchasing power in the hands of poor people, so that even if food and other necessities are available in the market they are not in a position to avail of those. The same could be said clothing and shelter. Of course, in modern society where earning capacity depends on the education and training he has received, all those who are deprived of requisite education or in a way debarred from access to the necessities and comfort not a way debarred from access to the necessities, comfort not luxuries of life. It is a patent fact in India that there labour market, as a result of which majority of the people are kept away from jobs which are prestigious status giving and high income yielding. Leave aside the black market to which majority of the people do not have any access even necessities of the life including education. There is dual economy in operation. Therefore, the most important aim or goal social transformation and any movement aimed at attaining will have to make sure that every one gets at least amount of income which will allow him not only to feed himself and discharge his family responsibilities but also to lead human Instances are galore about sub human existence of existence. people to which they are pushed by dual market and of course by system and practice of bondage.

Generally, people tend to equate revolution with movement. Of course, removal of poverty and the helping of marginalized group: landless labourers, women, scheduled caste, scheduled tribes and other deprived and dis-advantage section of population are lifted up so that they get over the stigma of being marginalized. Yet, marginalization is much more comprehensive and insidious because it reduces such sections to a sub-survient existence. And

perhaps that is why it is fondly felt that a revolution would once for all put an end to the misery of such people, even more so to make sure that the society would be misery-free. Those with inclination and conviction tend to look upon Science providing a panacea for all the ills of the society. Science naturally equated with rationality and it is felt by adopting a rational approach all the problems of the people and society can be resolved satisfactorily. Of course, there still science for remains the question of who is going to utilise resolving the problem? Further still what is the concept science? It is going to be a privilege and monopoly of a minority of the people? If not, how can it be made available to every in what form and shape? This and of course introduces a pedagogical problem. The usual concept of be considerably broadened so as to make science user friendly. By and large there exists a certain degree about science and even more so about the scientists. Both science and scientist have so far stayed away from the common quite contrary to the very aim of science, it is mystified, inaccessible and fear instilling. Therefore, the very first any science movement would be to demystify science by making available to all and sundry by making use of the available resources. Otherwise, if one were to make a fetish very sophisticated instrument and the use of a language not easily comprehensible to common man, people would shy away from the value of science must be Not only that but demonstrated in its utilization for solving day to day problems. For example, fixing a water pump, providing safe water supply, repairing any kind of equipment : in short to acquire a minimum degree of control over one's situation.

## THE ROLE OF VOLUNTARY AGENCY - THE NON GOVERNMENTAL ORGANISATION

Pandit Jawaharlal Nehru, India's first Prime Minister, put much stress on science and as such created a network of science

laboratories in order to conduct advanced scientific research to keep pace with advanced nations. Nehru also talked of a scientific culture and nature although how to create it particularly make it available to those outside the main education remained problematique. This is precisely "science" had to be redefined, revised and made available to In short, there was an urgent need for developing every one. parallel science. One is reminded of dual labour market, now dual science. All the same this kind economy and science" is very necessary for the common man and that this task can only be undertaken by voluntary groups. science has to be redefined and extended, it would require acumen and energies of such scientist who would both have capacity to do so, energy and time to spare and of sacrifice their career "as prestigious scientists" who would flock the corridors of power. In short a special scientist is required. Science movement as it has been developed India is essentially both conceived, developed and manned by such scientist. In the 1930's there was considerable debate about the nature, role and responsibility of science and scientist. J.D. Bernal and several others distinguished scientists applied their mind to this problem and asserted forcefully that there can be no science without society and therefore, science must essentially used for society. This means a change in the very "traditional science" which was of dominating rather than serving people. Even as of now, hierarchy tends to be observed amongst natural science - mathematics and physics occupying pride of place, relegating disciplines like botany to lower order. Obviously natural science tended to lord over social sciences and humanities. On the other hand one to accept the broader concept of science which put it centrally in society and for society, such arbitrary notion science has to be discharged. In fact, it has been properly realized now that science has to be understood in the light of economical, cultural, .social reality - various social,

political arrangement and therefore, cooperation between natural sciences and social sciences is a must. This can be effected only by forging organic linkage between the two. All this can be attempted only by voluntary groups and individuals constituting such groups. During the last 35 years or even more, different scientists have chosen to join or rather constitute such groups, with, the avowed purpose of redefining and utilising science for furthering the cause of the common man and this particular phenomenon labeled as science movement for social action. Various doubts have been expressed about the viability and efficacy of such groups - non-governmental organizations but we will not enter into that discussion right now.

Science movement as it has developed in India ranges from a revolutionary fervor to down right practical use of science and technologies for changing the lot of the people and also to educating people, in this new science so that it becomes a part and parcel of day to day experience. In this context should be made of imparting science to health education children in school so that they would convey that message to their elders. Likewise science and technology is used from storing water and making it available for every one so as to earn living, by imparting skills for the improvement of economic resources and thereby to create confidence as to how to handle the stranger - urban people, government functionaries, in charge of banks, trade and commerce etc. Therefore, the concept of science has been extended and is all There is hardly any doubt that this is an ad-mixture (organic) of the material and the moral. Rationality and ensuing control situation is to be shared with everyone rather monopolising it for one's own selfish gains is the philosophy. No wonder that science and science movement particular is designed for transformation. One might question as to what is the nature of transformation? radical and revolutionary? Does it aim at changing the very structure of social relations? or does it enable the disadvantage groups to not only earn their living but also lead a life of self respect and dignity? In a way as stated earlier, right from nothing short of a revolutionary upsurge to modification of reality so as to make it palatable and even profitable for everyone are the stated objectives of science movement.

### RAISON DUETRE OF SCIENCE MOVEMENT

The various 5 years plans as floated and implemented by the Govt. India and the various steps taken were expected to promote development so as to at least meet the basic minimum need of common man such as drinking water, health facilities, employment, etc. However, in reality with every plan completed newer and newer problems have come up, particularly that of and non-availability of minimum resources needed employment keeping body and soul together. This is reflected both employment figure which are mounting and also in the incapacity the people to satisfy the basic minimum needs. Neither growth of food supply nor the pace of industrialisation has adequate either to provide sufficient employment and even more so to create purchasing power. The bigger projects like construction of dams and heavy industry either in the public sector or private sector have not been enough to provide employment and purchasing power. In short, the trickle down theory has not only not out, but the Govt. is not even sufficiently aware of the tragic reality which is some times covered by pseudo development. very nature of development has been imbalanced which is reflected in the regional and sub-regional imbalances. While as a nation, we always refer to the North South differences and discrepancies own country there are several such differences, in discrepancies which have not been properly attended affairs is generally ascribed to faulty planning and state even more so the tardy and reluctant implementation of various programmes of development undertaken by the State. Moreover,

hardly 20% of the schemes reach the people for whom they intended. And that is why there is persistence of poverty and deprivation. the other hand the increasing On pressure of globalization would render majority of the people into unskilled Of course, even among some regions as well regions this spectrum is already looming large. For Marathwada is a backward sub-region of the advanced Maharashtra, particularly Western Maharashtra. It is also complained people do not participate in the various development programmes sponsored by the Govt. Several studies point a finger direction. As far as the urban sector is concerned, quite a feel that there is nothing for them to participate in because the programmes are decided in an ex-party fashion and even more implemented in a very perfunctory fashion. As regards the rural sector the less said the better and therefore, supreme need voluntary organizations. That is why various movements and experiments listed above have to play a significant role in at least alleviating the sufferings of the people. It fashionable to raise several questions about the advisability of such experiments. It is generally felt that problem of poverty can be solved only by working with the However, there are forty percent people staying and quite a few of the urban population are poor and various kinds of programmes for their uplift. Lack of employment requisite scheme for satisfying ever increasing means new strategy because the new kind of assignments turn many into unskilled and even unemployment. Late Shantanurao Kirloskar used to say that the product of many engineering colleges are not only un-employed but also un-employable (for want of requisite training and skills). There is also a tendency to belittle programmes and experiments and it is also argued that programmes would not make any dent on the existing problems. Therefore, the usual dilemma between the micro and macro approach However, what is micro and macro can also advanced. matter of proportions. Moreover there is a tendency to underplay technical approach which again is erroneous. Both technical human approach are necessary at the same time. It is important to establish linkages with like minded organizations and activities country and even may be outside the country. know-how from whichever source one may get it as a must. emphasis is placed on designing programme in terms of the 'feltof the people. However, as in economics, supply creates demand. If new programmes are made available to the people, they see the profitability of such programmes, they take to avidly. Initiative and innovativeness is extremely important initiating and developing newer and newer programmes by which people can learn and profit. While it is very important to and equip the insider to take up and implement the programmes which were originally introduced by the outsiders, there doubt that certain kinds of technical and professional expertise may rest with the so called 'outsider'. It is here that a local and outside division of labour is needed. entire development theory points out there is no such a thing a proven model of development that can hold good for different environment and circumstances. Then again there is kinds of criticism that the various action groups provide only note to the entire task of development. In addition initiating and implementing programmes of development needy and neglected sections of population, are developed which are reflected in the such programmes. The basic concern for creating purchasing power through which many other schemes of development and place is certainly well known. Even while programmes for creating self employment there is no doubt technical expertise and to certain extent leadership is provided the agency which initiates such programmes. It is generally argued that any programme in order to take roots and be effective people's programmes. However, what is not generally realised is the inability of the common man even to conceive of a programme which requires a) identification of resources

material and human b) getting access to such resources and c) have the expertise to transform these resources in units which would provide self employment d) to derive skill for marketing of the products produced. This is exactly why help from external agency is very much required, at least initially, if not, more or less permanently. Of course, this involves the usual problem donor and donee relationship which can be easily tackled people in such agency in charge of the programmes are by idealism and are prepared to offer their services to people in the shape of the programme. Even though it looks as the agency offers the services, without involving the local people such services would mean nothing. It is a truism whatever is offered free is not valued and therefore, people have made to pay for such services rendered. relationship becomes mutual and the usual syndrome of dependency can be avoided. Even while technical advice comes from outside it has to be internalised by the local people for whom it is meant so that for running a programme they do not have to depend on the external agency. This necessarily means training of the people on jobs not once for all but from time to time. Training is again based on the philosophy of relationship of equality between trainer and the trainee, which has to be established. Therefore, the usual top down relationship There can be no denying that the work of agencies meant to be a substitute for the inputs to be made by the All the same such work creates a new perspective and model for at least communication and dissemination, if not, emulation. The spread effect of such models as they get developed in course certainly well known and in many cases it transcends and state boundaries. Therefore, the initiator of programme have to be continuously prepared to interact with all others who display such interest. In fact, they have to play the role of trainers. In a way offering services and training are two sides of the same medal. Sometimes, people feel that training and giving services are two distinct kinds of work, which is not SO.

It is some time complained that social action groups tend to stem the tide of the revolution. Even a cursory understanding of would enables us to appreciate the importance of the of institutionalization, which necessarily reduces the revolutionary fervor and programmes. Inevitably there develops a certain amount of routinization. Moreover, a purely revolutionary may not or would not have any concrete material services to offer to the people. Particularly when the attempt is serve the marginalise and poorer sections, one cannot philosophy alone: Some material input has to be necessarily provided. Social action groups play a positive role in India of which science movement is a very eminent example. By its emphasis on rationality and the capacity to manipulate the situation so as to be helpful to the common man or even to the poorer science movement, certainly plays a catalytic role. While inputs provided may look only material such inputs set in motion trends of social change which would affect the existing pattern of relationship. e.g. the landlord and the tenant, rich and the poor, the status of women, children and of not only identifies but accepts new actors and leaders. shall see later, even women who were widows or deserted play important role, which becomes acceptable in a traditional which in itself is an important measure of change. There can be no doubt that action groups and particularly movements play a significant role of providing enlightenment to the people, not only by sticking to the cannon rationality, but thereby opening the gates of social change. One of the major indicators of social change is the new capacity of the common man to fight against inequality and injustice. In a way therefore, if people start questioning the traditional pattern of authority and power this would really spell social structural change. This can be achieved a) and b) even more importantly by providing the wherewhithal resources so as to make the people independent. As a matter the traditional dependency pattern is full of domination whether it be landlord tenant relationship, employer employee relationship, father son relationship, husband wife relationship and of course money lender borrower relationship. If people become economically independent and can find their way to augment their income by devising various methods of production and even more so develop sufficient mastery over post production processes such as marketing, then the traditional structure would certainly get a jolt. This is precisely what a science movement is about. And it is in this sense that science movement is looked upon as an important agent of change, even though it may be confined to smaller units.

## Typology of science movement studied here

The Kerala Shastra Sahitya Parishad has been engaged for the last 35 years and more in evolving and spreading a science movement which is fired by Revolutionary Ideology. In fact, it is openly stated that their purpose is to encourage activism which would squarely challenge the existing social, cultural, economical and political arrangements. And that is why this experiment mainly concerns itself with the training, education of workers (in the movement) and conscientisation. With this end in view various programmes and activities are undertaken, which will be described later. This particular experiment deals with urgent and important issues as they arise from time to time, for example, the silent valley project, environmental pollution and so on.

Homi Bhabha Science Education centre, Bombay has been mainly concerned with science education for students coming from disprivileged groups. In order to impart science education to such children, a municipal high school at Tardeo, Bombay was adopted by this group of scientists hailing from Tata Institute of Fundamental Research so as to make science text books readily understandable to the students by re-writing them and also to create interest in scientific experiment by throwing open

physics, chemistry, biology laboratories to these students all the 24 hours of the day. Since all these students came from disadvantaged families - slums where the parents were not educated and as such were not in a position to offer any guidance to their wards, it was felt that by resorting to this course of activities proper and healthy interest in science would be created in the minds of the students so as to rule out fear and suspicions of science. As a matter of fact, after a few years of the conduct of this experiment, the performance of students was evaluated specially for science subject and it was found that the outcome was very re-assuring not only in subjects pertaining to science but also in respect of acquiring some proficiency in English language and of course, a measure of self confidence in conducting themselves in the class or even outside.

### Maharashtra Association for Cultivation of Science, Pune

A group of scientists decided to adopt a few villagers about Pune so as to concentrate on health education, changing sanitary and environmental conditions of the people and also to offer some technical help in changing the living conditions, particularly by making safe water supply available. With this end in view, health workers were posted in these villages so as monitor this programme and to study its impact. This was done primarily through school children who were trained to observe the norms of hygiene, sanitation and health not only in schools but also in their homes as well as educating their parents. Basically is a programme of health, education and nutrition. Various students working for their M.Phil or Ph.D. degree in the field of nutrition, biometry, molecular biology etc. were given research projects to work in these villages. Co-operation of also enlisted who would go from one village to doctors was another once a week so as to offer proper advice and suggestion regarding health and illness.

#### PANI PANCHAYAT

engineer who was considerably concerned about persistent An drought conditions in Purandar and Saswad Talukas of Pune struck brilliant and novel idea of encouraging, enabling people small farmers or for that matter even landless particularly labourers to organise themselves in a group so as to ensure storage of water 2) distribution of water in terms everyone so that everyone could earn a living. equity to engineer concerned Mr. Vilas Salunke after a careful rainfall and any other sources of water came to topography, conclusion that every drop of water should be and can be stored as to be utilized by the people of the villages. In addition his engineering skills, he displayed exemplary skill to persuading and organising people of these villages to form groups so that water will be stored and distributed equitably. In to bring this project to fruition Mr. Salunke left unturned so as to persuade and convince governmental bureaucracy and banks to provide necessary credit facilities. Of course, exhorted villagers to provide 20% of capital needed construction mostly, in cash or failing which in kind. Thus experiment is not only a scientific and technological one but experiment, which is both innovative socio-political and challenging.

# Bharatiya Agro Industrial Foundation

Being a discipline of Mahatma Gandhi, Shri Manibhai Desai thought it fit to concentrate his attention and energy to improve the lot of rural people. With a view to do this, he posted himself in Urulikanchan. He was convinced that unless a source of ready income was generated people could not either listen to any moral or spiritual advice and therefore, he concentrated on providing people with an assured sources of income by improving the

condition of cattle which they possessed. Cattle programme by using latest knowledge and equipment both from India and from abroad provided a starting point of his However, the gamut of activities undertaken ranges from cattle breeding to seri-culture. Of course, several programmes undertaken such as water shed management, development of nursery, social forestry, poultry and so on, so as to put money pockets of the people. While the starting point is essentially economic the main purpose underlying this activity was to train people to become self sufficient, self respecting and dignified. These various activities were spread from usual villages interior tribal belts. While doing so, latest scientific technological devices were availed of and of course developed locally people themselves could see the efficacy of such devices. In addition management technique was employed so as take care of the economic viability and profitability of every activity. This is a wide ranging programme, providing people with source of income and at the same time injecting social change through Balwadi teachers, and field and extension workers. Clever use has been made of children also to convey and convenience messages to their parents and community. Technological economical development as well as educational and training have been very intelligently utilized for effecting change in these villages. Of course, no attempt is made to challenge the existing order but every attempt is made to prevail upon the existing resources, wherever they may be, to help the villagers to improve their conditions.

This typology represents a progression from abstract to concrete, philosophical to material. While the K.S.S.P. emphasizes promotion of science education and extending the vista of science so as to encompass social arrangements and also relationship of man with nature, it was not content with doing so but wanted to utilise science for social action - revolution. It is in the

fitness of things that the K.S.S.P. identifies science which only the maximum content of rationality but also has become password of modern society or a society which the to modernise Ofcourse, as we shall see later on itself. the very concept of modernization in its western garb and antecedence has been squarely rejected, and very rightly so, by the K.S.S.P. The can be properly regarded as not only a path finder but a friend philosopher and guide which has influenced the thinking and action of various educated young men and women in India, apart from the scientists themselves. This typology is in a way an Ideal Type Construction.

## Kerala Shastra Sahitya Parishad (K.S.S.P.)

Its work is definitive in nature, and naturally so because took upon itself the task of initiating a new idea altogether Indian context by trying to eliminate in the the arbitrary distinction between natural science social science humanities. The K.S.S.P. hit the name. Quite in keeping with this basic conviction, both intellectual and moral it wanted into a people's science movement for rectifying develop various kinds of existing ills which stemmed from the socioeconomic cultural and political arrangements. Almost time the political economy of science was first identifying but efforts were made to attack it. Apart spread of information and knowledge about natural science social science and nature various social issues were also taken up such futility of the existing educational system, womens degradation of several human groups as various types of exploitation and the necessity to counteract it.

There is no doubt that Kerala enjoyed a specially favourable position in the sense of the well entrenched library movement and also the political rule which was congenial to the propargation

of revolutionary ideology. Otherwise state might have put some fetters on the activating of the K.S.S.P. The K.S.S.P. bones about its political convictions and also its aim and goal to mobilise people for attaining that end. There was cognitic and ideological dimension to their Every single individuals right to information and knowledge accepted as a basic premise and consequently everyone encouraged who involved himself or herself. Even though and its dissemination was the major goal right from the start its activity was not confined, leave aside dominated, by scientists and particularly scientists of eminence like Parmeshwaran famous nuclear physicist, a Neuro Surgeon but even those administrative cadre were lower relatively worked a wholeheartedly welcome to join the growth. The purpose knowledge was not esoteric but meant to alleviate mass unemployment and its concomitant degradation of their conditions. in keeping which is concerned for the common piece of knowledge was conveyed through the mother tongue and no subject was regarded as abstruse to be conveyed in tongue, which facilitated reaching the common man in nooks and corners. For doing so various groups of young men women and ofcourse the band of scientists and others went to villages to not only convey the information but particularly make them and eliminate any kind of sense of distance between the people from the villages, some times illiterate and themselves. Naturally in this process the context of was continuously emphasized and that too by interaction with the common man so that he or she could become aware of the political cultural and economic dimension of science but their own condition (deprivation). All this was based the conviction that the participation of the poorer voiceless majority was absolutely a must if there was to be change in their situation. One of the fundamental contributions lives in demystifying the notion that science K.S.S.P.

scientists have an autonomous realm of existence making there intellectual pursuit unhampered by the mundane, and murky issues and problems. The appropriate slogan coined was "Science for social revolution". No wonder that the K.S.S.P. was seized of the much selling concepts of modernization and development, which according to the perceptions and of course convictions of K.S.S.P. were basically imperialistic in their nature. Ignorance superstition go together which by large provides to the feudal and exploitative social order and therefore it to be done away by providing the requisite inputs of knowledge. Concepts of modernization and development were exposed to their bone by spelling out the nature of international stratification and also stratification within the country such as the urban and tribal, the rich and the poor etc. In order attain its goal right from the beginning emphasis was placed recruiting young educated individuals and groups who had similar social political convictions, which were sharpened the interaction between the founders of the K.S.S.P and such individuals and groups and several camps were held, not the pristine purity of academic atmosphere but in villages and inhabited by the common people so as to perceive localities direct and intimate relationship between knowledge and every kind issue. No wonder that the content of social of its activity though primarily educating has also been agitational and some its activity is also related to production and generation income. The K.S.S.P. was called upon to provide "expert" regarding the basic problem of nutrition and health afflicted majority of the people and particularly in view of recurring droughts Kerala has been perhaps the only State which has been able to solve the problem of not only famine but also of nutrition through the inputs provided by the various scientists working in cooperation and unison. Instead of depending type of bookish knowledge detailed studies were undertaken of the specificities of situations in different parts of Kerala. The work of the K.S.S.P. and its message has spread far and wide has become necessary to properly scrutinize the groups into its activity or rather starting a similar activity in different parts of the country. It was very important to make sure about the motive force or philosophy which would sustain the enthusiasm of workers, what is the attitude of the establishment towards the K.S.S.P., what is the attitude of political parties, movement financed. Therefore the K.S.S.P. is the movement is based on both ideological convictions and pragmatic thinking. Without going into the details of its formative it can be stated that K.S.S.P. came into existence as a necessity Proper attention has to be paid times. about in course of time came organisational aspect and qualitative change in the composition of membership : From more school teachers and persons from other walks of life began to join K.S.S.P. with more active commitment and willingness to spare time for organisational work. The activity of the K.S.S.P. has to be observed also on the streets say in terms of a public a dramatic presentation of a burning social educational programmes and so on. As a result of introspection the K.S.S.P. decided to carry out its activity in the villages too. Economic activity being predominantly agriculture and agro industrial considerable time was spent on understanding the common man and programmes of education were problems of devised accordingly. Study and action was the hallmark of the activity of K.S.S.P. & that is why every person would not only welcome it but regard it as his own because of participation. Rural science forum is the outcome of such contact and interaction. There was diversification in its agenda in the sense of ranging from educational and scientific to irrigation, development of energy, health and pollution control. This reflects the organic unity of knowledge and even more comprehensive and radical approach of the K.S.S.P. to society and its problem. Initially scientific tracks were prepared dealing solar energy, idea of matter, substance, evolution etc. However later on science for revolution came to be increasingly or rather centrally emphasized. Taking science to people is often considered as an "unscientific" or "non-scientific" activity. It is not considered as a revolutionary activity which infact it is. Quite in keeping with its concerns the K.S.S.P. fought against the imposition of the silent valley project in Kerala. Issues about pollution of water because of industrial effluents was very actively taken up and the industry concerned was made to mend its way. Irrigation ecology naturally attracted the attention of the organisation. A document was prepared on education in which the major issues raised were as follows:

- The purpose of education is to develope the personality of the individual to the fullest extend so that he or she should be able to appreciate the cultural heritage of his or her own people and humanity as a whole. The present system of education does not serve this purpose and has to be rectified. Teaching methods destroyed every initiative and the examination system strengthens the distance between the bright and the backward. The value concepts imparted through education are archaic.
- 2) Health and nutrition
- 3) Exploring traditional knowledge so as to reach the common man for dealing with his medical problems.

One of the most remarkable aspects of the K.S.S.P. is democratic functioning and particularly the absence of any hierarchy in its working so that no distinctions what-so-ever is made between the president of this association and a filing clerk. Actually this expression itself is totally wrong in view of the philosophy of the K.S.S.P. because every activity pertaining to the K.S.S.P. is

attached equal importance and status. There is no such thing as election or scouting for any position. Even as a famous nuclear scientists may be president of the K.S.S.P at a point of time, though not for more than 2 years, the next president may be an administrative personnel from the accountant generals office. This is not a matter of the constitutional provisions but something which I have personally observed enjoyed and respected. The relevance of K.S.S.P. and the science movement which it initiated lives in the following. It has established a conviction that two factors influence such a change in the people's conditions

- The knowledge of laws of nature and society.
- 2) Participation in the productive activity of the society.

The first is obtained from science and the second from life experience of those who engaged in productive labour. One of the functions of mass organisations is to help its members to collectively analysed and organise their experience and to arrive at valid conclusions therefrom. Though they are not members of such organisations they are still important prisoners of their own world. Therefore it is very important to spread these two ideas and conviction and this exactly what the K.S.S.P. has done. Therefore it is not only a path finder but also a pace setter.

## Homi Bhabha Science Education Centre - Bombay

While the K.S.S.P. has provided the necessary philosophy and ideology, not to say impetus to science movement in India, the activity of Homi Bhabha Science Education Centre though woven round education - science education is also a social experiment. Various scientists from the Tata Institute of Fundamental Research, who wanted to convey the message of science to villages

and make the message of science palatable and acceptable to people at large by simplifying the concepts of science, were the founding fathers of this particular centre, which signifies a ideal and the requisite action. Science verv crucial particularly scientific text books tend to scare away students by abstract nature and therefore it was large by their to rewrite text books in science in absolutely essential simplified manner so that every student could catch its message easily comprehended. This necessarily meant curricular development, teacher's training and last but not the least the cooperation of the school authority where this particular experiment has been underway.

The main objective of the centre are :

- 1) To conduct research in curriculum development with special emphasis on identifying factors that hinder the universalisation of education and on designing, testing and evaluating methods to overcome these factors.
- 2) To develop methods of teacher training and to prepare instructional materials useful for teachers.
- 3) To prepare, test and publish textual and non-textual materials for pupils to help them develop an enquiring mind and an aptitude for science.
- 4) To generate simple and inexpensive experiments designed to nurture resourcefulness, an eye for detail and an ability to interpret experiences.
- 5) To develop teaching aids including audio-visual aids, demonstration experiments and charts.

"The Tata Institute has been collaborating with the education department of the Bombay Municipal Corporation, since 1961. The collaboration involved, among other programmes, a curriculum development project for improving science teaching in standards V, VI and VII, which was organised for three years 1970, 71 and 72.

"The collaboration with the Bombay Municipal Corporation continues. The corporation has very kindly made available to the Centre a wing on the third floor at the Nana Chowk Municipal School, situated at Nana Chowk, Bombay 400 007. The very choice of the school signifies the concern of this group of scientists to be really anxious about the common students or students coming from relatively lower socio-economic background. That curriculum development and rewriting of textbooks in science became rather the first priority. After a careful scrutiny of the student body it was found that students coming from socioculturally deprived and disadvantage section were vulnerable and therefore this group thought it necessary to devise an experiment to rectify their situation. Naturally this group resorted to a survey of the student's body which convinced them that the difficulties in cognition on the part of in subject like science and mathematic were related socio-cultural position - particularly those who came from and did not have the advantage of parental guidance because the parents were more often than not illiterate or in any case totally unfamiliar with sophisticated type of education. The experiment was consigned to Dalit Students only, who represented socio-economic and cultural strata. lowest Apart from simplifying testbooks in science and mathematics it was felt to strengthen their knowledge of English since necessary basically these textbooks were written in English and even more so if the product of the experiment i.e. the students had wanted to carry their education any further knowledge of English was a must. In addition for want of knowledge of English their ensued a kind of inferiority complex vis-a-vis those well versed English it has been a common experience that in even in national seminars teachers and research workers for want of their felicity with English language tend to shy away and form themselves into groups conducting conversation only in their regional The main purpose of conducting the experiment was to evolve remedial measures whereby the students would benefit considerably the experiment. The students will end of and overcome their deprivation and disadvantage by considerably this experiment Naturally it consisted of having an experimental to properly group and a control group so as access consequences of the conducted experiment. Without going details of the experiments so conducted it can be stated in brief that, those who belong to the experimental group stood to benefit substantially by scoring high percentage of marks subjects, mathematics and even English. some of the figures given for illustration. However, it is not only the quantitative of the experiment which is so important qualitative aspect too. It was very rightly hypothesised important parameter deprivation is an social motivation, cognitive development and school performance naturally remedial measures were deviced to overcome all Apart from simplifying the text books by removing unnecessary technical jargon, the fear of abstract reasoning has been also removed as well as a feeling helplessness on the part of generation learner. Their inherent incapacity to grasp difficult like science and mathematic has been properly knowledge appreciated and steps are devised to overcome such fear. interrelationship between different factors was stressed and knowledge of concepts was deliberately related to the experience, whereby there was no gulf between abstract, and substantative reality. Instead of dumping information knowledge efforts were made to encourage students to ask questions and seek answers so that a proper curiosity acquiring further knowledge could be kindled. One of the most features of this experiment has been to reduce distance between home and school why devising leisure time activities related to science if not mathematics. By leisure time activity is supposed to part company with knowledge, while in this experiment an organic link between knowledge leisure time activity and utility has been forged. The activity has been so devised as to contribute to income generation. e.g by creating commodities which could be sold No wonder that the parents could not object wards engaged in such activity, instead of being engaged household chores. In this way any kind of alienation between home and the school was cleverly overcome. These students were encourage to undertake surveys on any topic which interested them and sure enough their topic of interest were the problems faced by people similarly situated. That is why the product education was not at all torn away from the social environment. On the other hand the people in the locality felt reassured that their own children educated in this manner would be sensitive and sympathetic to their own woes. The self confidence generated by this experiment is reflected in various ways. In the first place the performance in examination has considerably few of them obtained first class improved. Ouite a marks Science, Mathematic and English while the percentage of belonging to the control group was considerably lower. Even the rate of failure was successfully curbed. The activities which home also centered round science such conducted at mechanics and so on. In addition there has positive change in their outlook on life & behaviour of has become more disciplined in a village. The participation class has grown considerably and there is a general acquiring self-respect and confidence. Therefore, this particular experiment proves the importance of a total approach rather than a piece meal approach to improve the scholastic performance of students particularly from the deprived and dis-advantage classes. Unless and until the hurdles are identified and appreciated, they cannot be overcome which requires not only intellectual ability but even more so empathy and concern. Therefore, such an experiment, though limited in its scope in a certain way has demonstrated the significance of action for bringing about change in the desired direction. i.e. equity, social justice and so on.

The findings of this experiment are certainly very encouraging because of the remarkable improvement in the academic performance of students from dis-advantaged groups and not only that but even more so a considerable increase in their self esteem. Of course, happens to them in later life both academically be very worthwhile watching. The level of occupational would aspirations has risen as well academic achievement as which would require appropriate opportunities considerably. further advancement of this group of students. In any case, study and the experiment on which it is based has given us idea as to how knowledge and nurture can help in overcoming traditional handicaps, which in itself is extremely significant. Intervention of this type has important social implications which cannot be ignored. Thus even without branding this experiment science movement it contains all the required ingredients of atleast a latent movement. This experiment establishes not only importance but knowledge of even more so that of Further the necessity of inquiring into the total situation also highlighted. The significance of politic approach is brought home. This experiment has been a pace setter and without crying hoarsely about inequality inequity injustices and so undertaking measures to remedy some of these a positive social service can be rendered. Infact a social movement does necessarily to be on the street.

### Maharashtra Association for the Cultivation of Science

<u>Historical</u>: "MACS is a non-governmental, fully autonomous institution, registered under the Registration of Societies Act of 1860.

Its activities mainly focus on the promotion of Science, on encouraging high standards in post graduate education and on research and developmental activities for the benefit of human kind and the Nation.

Science for the Service of Society is the Motto.

"The MACS owes its origin to the intensive efforts made, during 1941-46, by towering luminaries of Pune - the late Dr. M.R. Jayakar, the late Wrangler Dr. R.P. Paranjpe and the late Dr. S.P. Agharkar, who had just retired as Chose Professor of Botany the University of Calcutta.

They decided to set up a Science Institute under the Association, for conducting research and post graduate education in biological sciences, to meet major problems of social relevance service in the cause of national welfare. Dr. Jayakar first Chairman of the Association, and Professor Dr. Agharkar, the first honorary Founder - Director of the Research Institute. Quiet in keeping with the aims and objective mentioned above from time to time eminent scientists have tried to extend the of knowledge to field situation. Therefore frontiers the particular project of creating a healthy village extention of theoretical scientific knowledge to villages and to suggest concrete practical solutions to some of the problems faced by the villages, so that they would stand to benefit by the promotion and extention of such scientific activity. Dr. P.V. Sukhatme - eminent nutritionist thought it fit to launch a project - Towards a healthy village, wherein he wanted to apply the knowledge of nutrition and link it up significantly with health. Dr. Sukhatme has mentained that the problem of is not confined to calories only but needs a proper understanding of health or rather anything which impairs human health. That why he wanted to emphasize the importance of healthy practices by introducing preventive measures in villages through appropriate science. Instead of conducting experiments utilization of laboratories in cities and urban centers, a mobile laboratory was devised to conduct experiments in villages to start with even a simple portable microscope was used to educate the people about the unsafe nature of the water supply and not only that but linkage of unsafe water to various kinds of diseases impaired human energy and capacity. Knowledge was thus disseminated for direct utility, which was the basic intellectual and moral conviction behind the above mentioned project. customary to provide health services in villages which generally emphasize the curative aspects of medicine and neglect aspect of medicine. However in this preventive particular experiment the preventive aspect of medicine and health practices has been the main focus. Apart from encouraging research students to be a part of this activity, local children were earnest to act messenger of the importance of health practices. educating the school children right from the elementary stage that various concepts of preventive health measure were communicated to the people at large. 10 villages were adopted to conduct this programme. One of the most important point the significant role played by retired residing in villages who could be interested with task of ensuring people's participation and cooperation. originally linked with social service and was responsibility and that to at a young age. By conveying to the school children the importance of health practices sanitation and hygiene it became possible to successfully prevent various kinds of illness which had cut down the working days of the population. Thus by making it possible for the people to get safe water drinking some of the disease like diarrhoea and dysentery were effectively controlled. Of course the provision of such the local community had to raise not free but resources. What was provided was technical service children to effectively carry out Similarly for the responsibility of monitoring the health of the village people, suitable assistance was provided in the form of paramedical personnel and trained doctor who used to visit the village once Thus while the onus of responsibility was week. and their families as well as the community, suitable technical and professional health was provided free. Therefore experiment ensured self reliance and responsibility on the village community. Education as an input as be organically linked up with making identifying recipients of education a useful and socially oriented being. That is how education makes one an effective member the continuum This experiment establishes science, scientist and society. The organic relationship between these three is very natural though it can not be taken granted but has to be suitably implemented by undertaking such There is thus a judicious mix of education experiments. service which has to take care of the bogey of alientalion of the from society by undertaking children's education involvement in the village health services and practices. their has been an investment in man similarly by breaking the There traditional fact of donor-donee relationship and the resulting dependency pattern therefrom, a new model of self reliance and self respect has also been furnished.

## Pani Panchayat

Gram Gourav Pratishthan, Naigaon, Taluka Purandar, Dist. "The Pune, has been working in the field of Rural Development 7-8 years. A number of persons from various walks of life been visiting the work done by the Gram Gourav Pratishthan have and have expressed deep satisfaction about the new approach forth by the Gram Gourav Pratishthan, in Soil-Water-Manpower and socio-economic development, particularly management drought prone area of Purandar Taluka. The work done by the Gram Gourav Pratishthan is unique in the sense that without publicity or show it has been working for the rural upliftment through a small group of devoted personnel. The work done so not be a dazzling performance; but it is a grass-root work for the people in the drought-prone area. The people practically lost hopes of their betterment. But now they can face natural calamities. The people who visit the works of Gram Gourav Pratishthan are naturally curious to know how this transformation has been brought about. The same has been explained in this note.

Salunke, an engineer and the Managing Director of Accurate Engineering Company had an occasion to travel drought prone areas in Purandar Taluka in the year 1972. The severity of drought, and the plight of the people moved him. fight famine and thought of finding out decided to Shri to face recurring droughts. In 1972-73 approached the Collector of Pune for starting productive works in scarcity area and helped the Government organization preparation of plans and estimates of percolation tanks costing lakhs in about two weeks. One such percolation tank Rs. Salunke selected constructed near the village Naigaon. Shri Naigaon for further experiments in rural development and started working earnestly on soil and water conservation measures.

In 1974, Mr. Salunke established a charitable trust called "Gram Gourav Pratishthan" at Naigaon village in Purandar taluka in Pune district, with the following aims and objectives:

- 1) To provide initially relief to the farmers of the Purandar taluka by improving their economic conditions and to remove the cause of recurring droughts.
- 2) To create facilities to raise their social and economic conditions to attain welfare of the people in this Taluka.
- 3) To conduct research studies in socio-economic conditions, so that the urban interests will be linked with the process of creating integrated rural development.
- 4) To do all such lawful things as are conducive or incidental to the attainment of all the above aims and objectives.

He selected this village for two reasons: Firstly, it falls in the area which is worst afflicted during the droughts. Secondly, the Trust could get 16 hectares of land on lease to carry out experiments on his ideas of fighting the drought. The people of Naigaon gave belongings to the village temple.

The intention behind carrying out the experiment was to find out a permanent solution to overcome the recurring drought. It was important to understand what risks were involved in the new approach before asking the villagers, whose existence was too precarious, to take any themselves.

The investigation revealed that the precipitation received during the south-west monsoon (between June and September) in Naigaon usually fluctuated between 250 mm and 500 mm. The precipitation received from north-east monsoon (October November) comes in

heavy concentrated dosages. Most of it runs off in seasonal streams and rivers, in the absence of any water conservation work it. As a result of protective irrigation under cultivation. However this experiment did immediately interest the farmers particularly in In course of time there was record production of food grains, the farm generated full time employment and supported animals 400 trees on the rocky rimland and 200 fruit trees along field buds are thriving. The water stored in a small percolation Naigaon has proved quite sufficient to irrigate 2.43 in Kharif, 8.20 hectares in Rabbi and 0.5 hectares hectares summer or about 11.00 hectares in all. These experiments prompted Mr. Salunke to float the idea of Pani Panchayat - which literally means management of water. It is customary to talk about the scarcity of land in villages being mainly responsible for the poverty of the people, Mr. Salunke thinks very rightly that water is the crucial variable in Western Maharashtra. has been a considerable investment in commercial crops such Sugarcane which requires plenty of water. On the other hand food get any water, but the poor farmer crops do not is certainly interested in growing food crops which offer him a means sustenance and whatever little land such a farmer might left uncultivated. Therefore it is extremely important is provide water to every cultivator so that he could raise food crop for his own consumption, that is how Mr. Salunke paid utmost attention to the problem of water storage in villages in such a manner that it would go round the whole year and not leave land uncultivated. There are lift irrigation which generally favour the bigger farmers and therefore Salunke insisted that water to be made available to the should not be linked with the size of the land but only with size of the family. Thus he made people agree to restrict the supply of water on the basis of half an acre per person and maximum should be only 2 & 1/2 acres i.e. taking care of a family

In fact before launching this experiment persons. distribution of water Mr. Salunke prevailed on the villagers accept this principal of equitable distribution of water. Further the management of water and its distribution - rationing per family would be entrusted to the village committee, which would perform its cast without favour or fear. Initially even if available certain other inputs like etc. were not available to the poor farmers fertilizers, Salunke hit upon the bright idea Mr. of therefore orchards which would put cash income in the pockets farmer. Generation of cash income meant a considerable change the status of the poor farmer, particularly from the point view of his emancipation from the clutches of the moneylender. Moreover water being distributed evenly there was no such thing a rich landlord and poor or marginal farmer, practically them were on a part and that is why there was no conform to the earlier hierarchy and power structure villages. Of course in order to implement the irrigation mentioned above capital had to be raised and Mr. Salunke was able to make people raise and invest 20% of the cost, while the from other financial and credit institutions such cooperative bank and the state government. Another important decision which was implemented by the people was that the rights go to the land, but to the individual water do not beneficiaries for increasing their own agricultural income. land is sold, the rights of water revert to the Trust. leadership capability and skills of the rural people are recognised and enhanced. As a matter of fact if one travels south Poona whether by Railway or bus one can see stalls of grown under this scheme. This speaks for the new prosperity people. Earning of cash income and the possibilities making a living in the village itself has prompted the process of reverse migration. Therefore those who had left the village in search of petty manual job in urban industrial area were able

back and enjoy for themselves natural environment and friendly intimate surroundings. Actually the crux of rural economy is its inability to feed the people for want If employment is provided or rather if self is generated, apart from earning income domination will give way in favour relationship of relationship based on equality, because no body is so rich and is poor. When the world went round about the success this scheme many villagers wanted to be enrolled in this they say in English, proof of the pudding is in eating like wise the very success both economic social and political fascinated the labouring villagers which in itself is adequate evidence of its supreme need and efficacy of this experiment. I would not like to burden you with quantitative figures. However, qualitative change which has come about in the lives of people is, to my mind, very significant. All the same one figure would be quiet telling : An acre of land which hardly produced 50 kg of grains is now producing 400 kg to 500 kg of food grains.

# Land-Water-Manpower Management Training Centre

This measure of success could not be attained overnight and people had to be trained to conduct this experiment.

In order to ensure that the schemes of Pani Panchayat do not meet the fate of some of the co-operative lift irrigation societies, it has been decided to create a cadre of well-trained extension workers from rural dropouts aged 15 to 20. It is intended to admit 30 students each year for a course of two years and they will be absorbed in the expanding programme of pani panchayat. The syllabus will include the following:

1) Use of modern science and technology to increase maximum agricultural production with minimum water.

- 2) Water and soil conservation.
- 3) Agro-engineering
- 4) Lift irrigation schemes
- 5) Water distribution
- 6) Crop planning
- 7) Crop diseases
- 8) Use of fertilizers and insecticides
- 9) Marketing
- 10) Storage
- 11) Prevention of diseases among human beings and animals
- 12) Horticulture
- 13) Afforestation
- 14) Maintenance of pumps and motors
- 15) Keeping of accounts

The training Centre besides training the extension workers will also run periodical short courses for the group leaders in management of the scheme and for the beneficiary farmers in al aspects of agricultural practices.

Mr. Salunke has been dealing with the government and has created public opinion in favour of diverting water or rather wasting of water for raising commercial crops i.e. sugarcane in particular. Similarly he has been wanting the government to finance expenses partially of various lift irrigation schemes of the Pani While the government would like to appropriate successful schemes it is not in favour of the alteration of the power structure in villages which is an integral part experiment. Vested interests of various types thus militate against the success of the scheme because it would provide alternate model of development sans the power play. Mr. has been more or less single handedly responsible for working out the scheme and ensuring peoples effective and willing cooperation implementation. The most significant aspect experiment lies in almost total removal of absolute deprivation and considerable reduction in relative deprivation, both of which contribute to hierarchy and power structor in villages urban areas too. One word should be added namely that as they say Charity begins at home, Mr. Salunke's conviction has been cent percent shared by his wife, who is very much involved in working of the scheme and has been a great asset particularly for the women folk of the villages, not to say the men folk too.

## BHARATIYA AGRO INDUSTRIAL FOUNDATION

Dr. Manibhai Desai who was the principal originator of this whole idea, ideology philosophy and also the pragmatic dimension of the experiment was fired by Mahatma Gandhi who asked him to work in rural areas. Quiet in keeping with Dr. Desai convictions there was a very appropriate perception of rural society in his mind, which helped shape this whole experiment. He had clearly perceived that though villagers were steeped in poverty and ignorance, they had tremendous grip to survive and were equally willing to learn and work very hard in order to change their

situation. Therefore providing gainful employment was taken upon as the most crucial variable in the uplift of the rural In fact the word uplift would not be acceptable to Dr. Desai persons of his kind and therefore I should hasten to add that actually an uplift of people like us from the urban areas whose duty it was to be a partner in the development of the rural folk. It is alright to think of gainful employment, but how is it to be done? Dr. Desai was convinced that in order to do so modern science and technology will have to be harnessed so as to day to day problems of the rural people. He rightly looked upon Mahatma Gandhi as a socio economic and political sage, a way underplaying the spiritual dimension of Mahatma Gandhi because he had the pulse of the people and knew exactly what needed in order to become self respecting, and very useful and happy people, on whom the urban economy depends for being fed and also for the various materials.

The BAIF has spread its network of activities nation wide and back by appropriate technology, requisite dose of sacrifice and research as well as training programm so that this experiment is rendered upto date from time to time. inspired by Mahatma Gandhi it should be stated at the outset that Desai was very much concerned with evaluation and to make sure that the inputs made into programme bore the expected fruit or result. This is a peculiar combination of Gandhian in sight and conviction as well modern calculus of management, which is a very significant rationality. And it is quiet consistent with the belief that harnessing of science and technology has to play a major role the transformation of the rural scene. Of course there no question of copying blindly modern science and technology, neither relevant nor feasible in the rural situation, but involve appropriate science and technology input it can be easily mastered and handled to their advantage by rural people. Thus the asymmetrical nature of the traditional relationship between the provider of science and technology and the receiver is undone.

The whole programme is basically designed for the deprive and the disadvantage sections of society such as landless worker, tribals and proverbially the women folk, who constitute population and it is said that they contribute 60% of work while the remuneration they get in return for this work is only 10% what the men folk get. That is why some of salient features of this activity and programme certainly addressed themselves to this basic and stark reality. Programmes are formulated in such a manner that they are need based and tailor made with so as to directly useful to the people. In addition the participation of people is ensured, before launching any activity. This means very careful planning of the program and the inputs. Family being the most fundamental unit of indian social organisation, care taken to see that the whole family is involved and a part and parcel of the whole activity. The husband, wife and the children constitute a team. Everyone has something to contribute and is not left out. This makes every programme not only very comprehensive but also helps in accountability, is not nearly rational and financial but also programme has to be acceptable to the family and the delivery the programme is given to family as a basic unit, whether it cattle breeding programme, afforestion, water shed management, bio-gas and so on. The concept and the philosophy underlying thus made acceptable. In various state such programme is Andhra Pradesh, Uttar Pradesh, Rajasthan, Gujarat, Karnataka Maharashtra the various programmes are accepted by families landless labourers. Even though every programme is very carefully planned and designed, there is a certain amount of flexibility which is taken care of by the field development research center for grass-root unit of BAIF for the delivery system. Required modifications are made so as to be situation specific. research field programme is particularly meant to take care of the linkages of various factors such as the mineral status of land, forest and animals, climate, rainfall etc. As for the dairy development programme they have evolved a system as to continuously evaluate the benefits recording, so otherwise of the various inputs made. The same is the case with other activities too. 3 lacks of rural families are reached every and more than 1 million cows are bred every year. are also reached by evolving relevant programmes such as nursery, orchards growing. Every effort is made to indigenisation costlier inputs e.g. applied bio-technology or the programme frozen semen for cattle breeding. There is well established information research center - library, computer cell etc. is to communicate the results of research activity through audio visuals and the various undertaken from time to time. Various new activities programmes are undertaken like sericulture so as to produce cash While taking care of new income generating activities deliberate attention is paid to public health education sanitation and There is a strong team of health professionals immunization. which is put in charge of attending to such activity. It not at all be wrong to say that normally amenities available only in urban areas are taken to the door steps of the village families. All this requires involving people both in planning and implementation of these activities.

One of the most notable and significant feature of BAIF lies in its emphasis on idealism rather than ideology, which is evident in their development of a duel economy. The specialist and experts who joined the BAIF do so not for monitory gains but primarily for rendering service to village people on a lower scale of remuneration. On the other hand the administrative staff is paid competitive remuneration. Thus there is a very innovative

mixture of different scales for two different types of employees. Voluntarily these experts and specialist have chosen the path of service. This kind of calculus is reflected in BAIF services in the sense that there is no gratuitous advice. It economic service which matters to the people. These specialists have to continuously train the local staff so as equip them with the required degree of knowledge for handling not only day to day problems but even in any emergency which might The experts and specialists in Pune and in different field station are continuous contact with each other so that the best knowledge and service can be made available to the people in the field. There is a mixture of scientific outlook and social sensitivity. It is because of this mixture that expertise is used to manipulate people. The BAIF provides advisory services to other organisations too.

Generation of income through various activities such as plant nursery, balwadi has considerably helped the female sex not only to earn income but also to acquire status in society. reflected in removing inter family deprivation and discrimination in respect of food intake in particular. That is how through earning income there has been a significant rise intake of amongst women and children. Women are encourage to participate in banking activity and through the formation of self reliant groups various income earning activities are also added every year. traditional system of co operative activity amongst the tribals women called Vavli is used for organising women and for enhancing income and productivity. In fact quiet a few men made a plea BAIF authorities to allow men to participate in this activity, which is essentially a privilege of women. There instances of significant rise in the status of women, particularly amongst the tribals. Thus a tribal male elderly man sought the hand of a smart, economically very efficient and able tribal girl in marriage for his son who is not so bright.

Similarly in Balwadi the usual prejudices can be got over such as the lowly status accorded to a woman who has been deserted by her husband. Even a prejudice on the basis of religion is got over because of the contribution with a women mix to the village activity and particularly for educating the children and taking care of their growth and development. Agricultural activity is run on a commercial basis making agriculture a paying activity and such activity has spread in 8000 villages covering 500 thousand families which have been mainly disadvantaged.

Children are also drafted in various activities and by changing the atmosphere in the school there is a dilution of hierarchy in the school which becomes very palatable to the children. Acquiring knowledge is itself an interesting process and is linked up with gainful activity, thus making a child an economically useful member of the family. At the same time there are no readymade solutions to all the problems as and when they arrive but the basic confidence and initiative develop amongst the people makes them forward looking and confident. Thus they can handle their own money, their own norms, procedures and accountability. They can as well collect their own corpus funds for further investment and growth.

#### Human Resource Development

The whole stress is on income generation and participation. The inputs of science and technology are utilized to take of the various problems of production and distribution as they arrive. There is a development of the requisite man power at all levels which can ensure the efficiency of the programme and its sustaining. The techno-managerial capacity of the BAIF provide vital new inputs. There is dissemination of knowledge through

there is a continuous audit services and information measures taken. There is a interventionist the about cell in the BAIF which is engaged in evaluation of activities and one of their finding is that various generation holds the key to status, self confidence and also arresting the process of migration. The importance of working again and again which environment is brought out familiar accounts for a measure of happiness and contentment amongst people. Similarly there is a rise in the standard of living which reflected in housing, utensils, education of children, etc. In fact if you talk to any poor person in a village and him what he would like his children to have, which he himself did have, he would immediately say adequate food, footware, and schooling, ofcourse health facility.

The experiment undertaken by BAIF is indeed a very comprehensive programme ranging from cattle breeding, bio gas, non conventional sources of energy, afforestation, water shed management which have lent a large measure of efficiency and confidence to the people who have been served by these various activities. Manibhai Desai was a very shrewd person and yet very practical down to earth. This is very clearly reflected in his statement, "I'm interested and concerned in creating new small sticks instead of breaking the big one" thus he believes income generating activity instead of harping on impoverishing the rich.

the science movement has been its emphasis The upshot of and its utilisation for bringing about knowledge it is customary to stress the cognitive transformation. of knowledge, but mere the evaluative dimension is The relationship between man, nature and society was important. superbly clarifying and science was placed in Moreover science in itself was the mystifying and contacts. peoples science movement was launched. Application of knowledge was accepted as the main purpose. The pedagogical aspect was fully recognize and text books were made userfree i.e. could be read and easily understood by the student population, in this case student coming from this disadvantaged addition to rewriting of the text books families. In programme was undertaken to strengthen the cognition of students, who had no background of education in their families. Thus the educational experiment was vitally combined with social experiment and as such really constituted a model Similarly proper utilisation of science for social purpose. knowledge was used, though in a small way, for preventive help, improvement in nutrition and cutting down on the lost mandate by providing safe water supply. Knowledge was used for identifying water as the crucial, variable in agricultural economy and also by applying science and technology to make it available to everyone by storing and even more so by equitable That is how this particular experiment distribution. revolutionary in character. It helped people to delegitimise arbitrary power and contributed to overall development of common man or rather the poorer sections, both economically, socially and politically. Inputs of knowledge were augmenting village economy and by creating new social spaces for the tribals, women, etc. by facilitating self reliance, confidence and economic improvement in the conduct experiment. Idealism on the part of highly trained technologists and scientists were harnessed for providing efficient service to It is important to know that the basic unit of the people. social organisation namely family was also made as a central axis properly utilised. developments further traditional practices like womens co-operative activities were also brought into use.

#### ETHICO - RELIGIOUS MOVEMENT

## ETHICO RULIGOUS MOVEMENT

One may be tempted to question this type of movement in terms of usual constituents of a social movement such as protest, and struggle. The stage at which mobilisation, particular movement finds itself in as of today has having content of protest and therefore should be called a movement. in the evaluation of this movement, there instances of protest against unjust exploitation of man by fraudulent shop keeper and money lenders. As a matter , fact, in its fight against such a shopkeeper, the whole village to court arrest, but the struggle was carried out the had women folk. At the same time, the movement as of now, lays its on ideology rather than any""Ism" Further this emphasis particular movement had tried to revive the best in the stradition in order to attend to current problems like education, economy - in personal wealth, community or organisation to effect better community based on harmony, co-operation, mutual trust and Education has been devised to train the volunteers for this movement and the peculiarity of this movement lies fact of this movement and its activities been conducted spurely voluntary activity after pursuing ones own vocation. Therefore nobody would ever expect any return from participation in any activity or programme.

To counter the soul-destroying senualism and materialism Swadhyaya as a unique philosophy of life, \_developed. The contemporary state of affairs is shocking and any intelligent and sensitive person would naturally be pained by Therefore Shri Pandurangshastri Athavle thought of this. evolving and founding a movement so that such sensitive and intelligent minds would rally round him to evolve and consolidate the programme. Literally speaking, Swadhyaya means activity, study of self. This study was carried out in Pathashalas on proper college and university was established. "Knowledge, devotion and activity were sought to be combined

Right from the beginning, the usual distinctions between the rich and the poor, the intelligent and not so intelligent, the businessmen and the worker have been obliterated. It has been stated very emphatically right from the beginning that Swadhyaya is the true perspective or the vision which enables one understand deeper aspects of culture of religion. It is wisdom and as such means power of discrimination. Through the development of the self, a person does not become a victim of circumstances.

#### **SWADHYAYA**

# The Answer to the Problems raised by Philosophers and Thinkers of the World

Swadhyaya work is spiritual in thought, attitude and orientation. It asserts that "To aspire for the Divine is to work for it". This divine work is the spiritual imperative to transform the individual as well as social life. Some philosophers like Hobbies and Helvetsius assert that self-love, selfishness or egoistic pleasure is the only motive of human action. According to them, there is no possibility of individual action or collective work done purely out of non-equistic motives. Swadhyaya work has shown "that man can rise above self-love or self-interest and can , selflessly do the divine work of human upliftment or improvement. Nietzche, the great German philosopher, has said that "will of \*power" is the only drive of human action. Man cannot act out benevolence. Everybody wants to dominate others. Nietzsche is against the virtues of kindness and compassion, because, in his opinion, it is not possible to practice them selflessly, as in their practice, one tries to show that one is superior to person to whom kindness is shown. We Swadhyayees, while doing \*Swadhyaya work, are not guided by the will to power. We have

the slightest desire to dominate others. We do not profess to teach or change others. Swadhyayees do not consider themselves to be superior to others. Swadhyaya work does not generate any inferiority complex in the minds of the others. Swadhyayees are doing their work entirely out of selfless love and this they have been doing continuously even though there is no selfish motive involved in it. The puzzle in the mind of Nietzsche is well understandable, but Swadhyayees are solving it through devotion.

Our work shows that man is good at heart. He can do altruistic work without entertaining the slightest desire to get power others or to get political power. Our Swadhyayees do God's work selflessly and lovingly, in rural and urban areas, and among the rich and the poor, as well as among the educated and the Its sweep is so large that it cannot be done by a uneducated. single individual. It can only be done collectively. Hence, the necessity arises for an organization of Swadhyayees. Ordinarily, is the feeling of being different from others that brings organization into existence and makes it thrive by creating a sense of opposition to other people and organization in the minds its members. Many organizations come into existence to socio-economic problems of the people. Thus, political parties and trade unions have sprung up. While capitalists are motivated by selfishness, the trade unions and communist parties are around the principle of collective and centred selfishness. Capitalist social order brought about economic conditions in which the "haves" exploited nots". Marxists stress collective ownership of capital, property, land, factories, etc. to overcome this problem. Hence, have come up. In these experiments individual loses himself. has no freedom of thought. He is suppressed. The experiments in farming also neglect the individual and his co-operative existential or specifical human problems.

Philosophers like Bertrand Russell and existentialist such as J.P. Sartre are opposed to any sort of organization because it is detrimental to individual's freedom and creativity. It destroys man's self-respect and initiative. Man in any organization or society has to willingly conform himself to the policy and norms of the organization. There is no room for independent thinking and free will. Russell, therefore, argues that the cult of the organization makes man a mere cog in the organizational or social machine.

Our organization, however, is unique. It is not a The work started prior organization. to the formation of is a purely informal one. It is based on organisation. It principles which underlie a family. It has no formal membership and therefore, the question of membership fee does not arise. person is required to apply in order to become a member. members are not bound by any formal oath or pledge. A member's Commitment to its principles over a period brings him into fold of those who are already committed to it and thus the family of Swadhyayees goes on increasing. It is as good as a big family, whose members are spread all over the world. All the individual is free to leave it any time. It does not individual's initiative and self-respect. Again, there place for hostility to or hatred for any group or community. Such hostility or hatred is not necessary for this organization it is constituted out of pure and positive love for the same. it is dynamic and vigourous all its activities. Every man is rationally convinced the philosophy of devotional activism or instrumental devotionalism well as devotional concentration in God with and qualities. Once John Dewey, an American philosopher and educationist, said that theism or religion dries up the springs of human action. But our work falsifies this general statement by showing that all our activities eventually spring from he

spiritual urge or love for God. Thousands of Swadhyayees actively involved in spreading the robust message of the Geeta. They do this both by precept and practice, but the master underlying their endeavor is the heartfelt gratitude and towards God who is very much with us and within us. expression of the principle that devotion to God can be a force. According to Adler, Jung and Freud, ego is a every-where. Individual ego is responsible for split organization. But our Swadhyaya organization is not hurt anyone's ego because of the unique method of our working. When a Swadhyayee does any Swadhyaya work, he keeps his ego away. But for Swadhyaya work, a Swadhyayee can maintain his ego because ego is necessary to adopt and imbibe good qualities and to fight one's weaknesses and vices. Because of the devotional nature Swadhyaya work, which also helps a man in his self development, everyone keeps his ego away while working in our organization. In short, a Swadhyayee uses his ego, but is not used by his ego.

Man is social by nature. Those who are afraid of man's submerging in the collectivity - religious, social or political - go to other extreme and advocate atomic or ego-centric individualism. Man is not a mere part of the state or society, yet each one fulfill his social duties. Hence, some emphasize his social nature. G. Mercel rightly expresses his fear of treating man as a mere bundle of functions. He is more than an embodied function. Our work has tried to show the way to get out of this your work, each one has his social status and the roles attached it. But besides these roles, he has spiritual vocation. The philosophy of our work rightly and successfully combines the ·claims of self-realization with those of altruism. Swadhyaya is altruistic in as much as its activities are carried out only part of upliftment of all, and that too with a view to doing service to God.

The concept of alienation is Hegelian. But the problem of alienation was formulated and analysed by Feuerbuck, Marx and other social thinkers in the second half of the nineteenth century. It is also highlighted by modern psychologists and social philosophers like E. Fromm.

Karl Marx was a great social philosopher and social activist 19th century. He is well-known for his social and political But his psychological contributions are neglected by ideology. those who swear by Marxism and communism. Marx had analysed the human situation in terms of psychology of human nature. had rightly stressed the phenomenon of alienation and loneliness of man in capitalist or industrialized society. He rightly said that in capitalist social order money has become God. of human activity. But, unfortunately it has become God who is ruling over the minds of and the among the people. And thus it has become an alien, something which stands against man. Marx has succinctly expressed this when he said : 'The less you are the more you have'. Marx has analysed this phenomenon of alienation in four ways :

- 1. Alienation of man from the product of his activity.
- 2. Alienation of man from his productive activity itself.
- 3. Alienation of man from man.
- 4. Self-alienation or self-estrangement.

Alienated person is one who feels that the products of his activity are somehow aliened to him. His activity itself becomes forced labour. It is not an expression of the worker's self or personality. This is true even of intellectuals and thinkers. The classes of exploiters and the exploited, and the classes of haves and have nots get formed. Based on this, we come across various forms of alienation. The class of rulers is alienated from the class of the governed. The bourgeoisie stands against the

proletariat. The two classes have no interests in common. The haves always exploit the have-nots. Marx's political solution has not overcome the problem of alienation.

We Swadhyayees are trying to solve the problem of alienation. Man is alienated from his product because he has become oblivious of his own greatness. He has lost sight of the fact that God is with him, and that there cannot be anything greater than the its own independent goal to achieve in self, which has distinct from the enjoyment of the fruits of his labour. regards alienation of man from man, it has to be remembered everybody is imperfect and, therefore, the other is bound to superior to oneself in one respect or another. We are trying to solve this problem by establishing relationship between man man and pointing out that all men belong to one divine under the fatherhood of God. Similarly, the of concept relationship of father and son eradicates the impression of man being any inferior to God or alienated from his own self.

types of people. The afflicted Marx influenced three and exploited accepted Marx as a liberator of them from poverty and Some persons who were iealous of economic exploitation. the wealthy in society accepted Marx because he was against the rich. The haters of the rich were happy when he talked about the expropriation of the capitalists. The intellectuals were also pleased because Marx stood against all sorts of slavery -exploitation.

Our work is against exploitation of man by man. We are against slavery. Slavery must be removed from human society. But elimination of slavery should not destroy every kind of loyalty from society. We accept slavery in affection, principles and respect. Slavery in essence means working for others against one's wish or doing something one is not convinced about. Forced

slavery should be differentiated from voluntarily accepted 'slavery. Such accepted slavery takes the form of loyalty. One can be loyal to principles or to great men. Marx himself remained loyal to principles and great men. Marx himself remained loyal to his ideology. Swadhyayees try to be loyal to God. Our work is the outer expression of our devotion to God. It is reasonable and essential to retain some loyalties in society and life.

Marxism has been accepted as an official philosophy of social change in socialistic countries. But the people there have been able to solve the problem of alienation. On the contrary, they appear to practice state capitalism. The workers become mere cogs in the communist regime. They cannot express their thoughts and grievances freely. Communism neglects the individuality of Individuals are submerged in the state. Human beings disappear from sight into some sort of group. In a sense he seems are deindividualised, soul. Such persons his Their voice is depersonalized and consequently dehumanized. suppressed. Labour has again become a forced thing. It is not a solve way of self-expression or self-realization. To this malaise, it is necessary to develop self-respect. Such respect should generate from man's relationship with God and his own level of self development.

Bertrand Russell and others have raised the problem of creativity. According to them, creativity with which man is endowed is a curse for humanity. This is so because creativity brings about production, which cultivates the idea of ownership, which in turn gives rise to personal greed and jealousy in society.

Through our work, we have attempted to answer the problem of alienation, the problem of creativity and the other problems referred so far. With us there is no practice of traditional

'charity. The producers willingly, knowingly and lovingly contribute their efficiency at the feet of the Lord. They work together and produce impersonal wealth. It is the spiritual creation and spiritual use of wealth. Again, Swadhyayees from all sections of society go to villages without even the slightest thought of getting power or self prestige or position. They humble but self-respecting workers of the Lord. Thus, there is no religious alienation, because according to us God is with us, and is actively involved in all of our activities. The question of and distant God does not arise here. Out of gratitude and we serve Him by doing His work. Swadhyaya work is therefore the real worship of the Lord, because we offer refficiency, skill and labour at the feet of the lord who is with and within us. Such work spiral elevates the doer and uplifts the masses. It is the divine task of transforming humanity from the natural to the spiritual level. It and harmonizes both the aspects of development, namely selfimprovement and upliftment of humanity at large. This can be seen in our spiritual experiments such as Amrutalayam, Matsyagandha, Yogeshwar-Krushi, upavans, etc.

Idol worship is a scientific way of purifying and developing human mind. I am not trying to defend the ritualistic way of idol worship as it is performed in temples. Idol is essential for devotional concentration on the Lord. Such concentration purifies the mind and makes it powerful, progressive and sensitive. We have forgotten the noble philosophy underlying the Idol worship and the public temples. Friends, public temples were socio-economic centres in ancient times. The Lord works with me, naturally there is His share in my income. His share must be kept aside and offered to the temples. And the temples must distribute this divine income among the needy in the form of divine gifts. It must make man stand on his own legs. We want such active temples solving socio-economic problems of the people. It is the

duty of the temples to see that nobody starves and nobody has to beg in a village. We, the Swadhyayees, are trying to establish such active and people-oriented temples called 'Amrutalayam'.

The produce by 'Matsyagandha' i.e. fishing boats is spiritual. The boats belong to God alone. The fishermen Swadhyayees collectively go for fishing on the Divine boats by rotation and the produce belongs to God. No single fisherman can say that the produce is his. This wealth is to be utilized to solve sociodeconomic problems of the same community. Today, there are twenty four such boats and about seven are in the offing.

The wealth produced in our Yogeshwar Krushi farms is spiritual. The farms belong to God alone. The Swadhyayees collectively cultivate the Divine farm, grow crops and the harvest belongs to God. No single person can say that the agricultural produce is his. It is not polluted by anybody's ego or egotism. Ofcourse the group ego is there. This wealth is to be utilized to solve socio-economic problems of the same village. Today there are hundreds of such farms.

The produce of our Upvans is virtual Goddess of wealth. Everyday there is a new person to do his Divine service in each Upavan. These Upavans are "Spiritual Gardens" or Vruksha mandirs - Temples of Trees. God, being omnipresent, is very much there in His creation. The whole orchard can be developed and treated as a farm of God. The wealth produced in such orchards is not a commodity. It belongs to nobody. Moreover, it is not trained even with collective ego. It is wholly impersonal and purely divine. It is Goddess Laxmi who can serve Her needy children and nourish them emotionally and spiritually.

Here the ego is gradually dissolved without getting condemned. Its role in self-improvement is accepted. It therefore is

retained by sharing its place in our life. This Swadhyaya work is an attempt to transform humanity into the global family of Yogeshwar.

To use Arnold's phrase, our work is spreading "Sweetness Light" in the world. There is both enlightenment and brotherly love in our work. Fichte, the German philosopher, had said that miracle can deliver us from inertness, the lack of will impulse of above natural determinateness of the preservation. Our work has made this miracle a reality. Not only or two individuals but the whole group of thousands of persons has risen above the impulsive level. Today we can see our Swadhyayees doing God's work purely out of Love for God. They are never lured by any incentives in terms of social status or prestige as well as economic gain or seats of political power. It is because of selflessness and pure love that our work continuously progressing in its onward march of individual's self-improvement as well as the establishment and maintenance of healthy social order.

From: Light that leads - Lectures delivered by Rev. Pandurangshastri Athavale in the United States of America. (Pages 37 to 48)

#### The basis of Swadhyaya

Swadyaya involves four type of activities :

1. Meeting 2. Listening 3. thinking and 4. abandoning or living.

Knowledge which can not be put to use is sterile. True friendship abjures power.

#### Advantages of Swadhyaya

- 1. Generates self respect and self confidence in every human being.
- 2. Continues activity
- 3. Removes barriers between man and man.
- 4. Enriching both the aspects of life secular and sacred.
- 5. Cements the feeling of unity.
- There is a very firm insistance on non asking for any charity or health that is how the members of this fold are both independent and useful.

Alongwith the resurrection of the traditional vedic culture. \*Modern norms attitudes and values are also examined and temple is \*turned into a vibrant community center. Various institutions and arrangements have been interpreted so as to take note of current situation and problems. Education thus is expected to instruct and not to merely inform. Child development have also been started to catch them young. A Tatwaqyan Veedyapeeth has been started in Thane where the students are trained in both eastern and western philosophy. In addition, knowledge of various sciences and languages such as English, \*Hindi and Sanskrit is also imparted. Right from the school to post graduate level, education is provided. Special efforts are combine agricultural education made to and spiritual

enlightenment. Adequate thought is given to the status of women and their services or rather contribution has been suitably utilised. Devotion is socially oriented and devotion is transformed into activity helping others.

Secular activity and prosperity has also been equally emphasised which is reflected in Vriksha Mandir, a temple of trees, which is entirely a new concept on a common piece of land. Trees are planted and cared for nurtured and sustained by the local people. This could be done only by agreement and co-operation. Apart, from creating economic proceeds, this experiment has formed bonds of love among the residents of the surrounding villages.

To continue the success of secular activity, it has been linked devotion and as propounded in Geeta, efficiency encouraged and prized. In fact the worth of the person is set depend on how efficiently he or she carries out the work assigned This aspect of efficiency is him or her. Matsyagandha transferred to Matsyagandha and Krishiyoga. the fishermen who have been encouraged to develop ·modern fishing and also to contribute to the social can combine one's income earning activity with social good. particular maxim has been used for increasing prosperity and also the welfare of the entire community. Care has been taken to that nobody in the village remains unfed. Similarly nobody has ·been devoid of medicine for even employment combination of devotional and the secular has been indeed a remarkable , Farming activities are also been undertaken on the basis of . ownership and non-claiming of any profit in the product. Here the proceeds are utilised for the welfare of everyone the Actually the concept of impersonal wealth has traditional sintroduced and practiced, much to surprise of economics.

Temples have also been turned into effective community centers and a place of worship. Even though the word "ism" is scrupulously avoided every effort is made to undo the differences between various individuals and groups. This is done not by charity but entirely by invoking human moral duty. Moreover whatever is given to anybody is never disclosed and the receiver is never made to feel that he is being obliged. Efforts have also been successfully maade and youth is involved in the training of children. Idleness has been very rightly identified as the source of vice and as such it has been more or less rooted out.

#### Culture Dynamics & Social Development

Structuration and restructuration of society gives culture products - commonly denoted as social products - with reference society in being. Thus, the process is important and the process provides the requisite dynamic aspect. Society is together by culture, which constitutes social structure. a continous interplay between perception, and each influencing the other. The symbolic nature perception, culture product - beliefs, perceptions to interprete reality ·very well known. Culture is shared and learnt with explicit simplicit rules for perceiving, believing evaluating and acting. \*It is experience which generates social behaviour through sieve of cultural ideas. In fact, even gratification is selected •in an ordered fashion and the norms provide a direction which both an individual and society want to accomplish. a way, it is a symbolic system of meanings which element of order 'imposed' as if were on the realistic situation. (Talcott Parsons - Social system pg.11 - The Free Press, Glencoe, ·Illinois 1951). Culture provides both stimulus and legitimacy. In order to find a satisfactory solution to problems individual and group one has to continously make reference back and forth to culture. Communication of culture leads to conformity, discipline which gets inbuilt in the personality, while tradition gives rise to expectations as well as sanctions. However, it is necessary to motivate individuals and groups to internalise both expectations and sanctions, perhaps the later is , even more important for society. That is why the Swadhaya .movement has delibarately evolved and instituted Pathshalas.

Such a tradition functions only when it is a part of .actual (working) system. Therefore, Bhakti or Devotion has to kruti (action) and various activities on Then alone culture or rather devotion is linked Transmission of culture is due to system. processes which set the scene for a cultural change in an extant to fashion a new economy by reinterpretation In order to do so, the Swadhaya movement has made a tradition. very clever use of the traditional cultural idiom to create .economic structures, which would ensure prosperity and not removal of poverty. Therefore, a very important question arises. , "Does culture manifest only the gravitational force of inertia or the dynamic force to induce change in the society as well ?? (Ramkrishna Mukherjee - Society, Culture, Development pg.no. 40 -Sage Publications, New Delhi, Newbury Park, London, 1991). Instead of treating culture as a fixed entity if one agrees culture facilitates 1) survival of species 2) security of span of the individuals, 3) Material prosperity and 4) mental (moral) progress. That is why the movement mentioned above insisted on proper health and medical care as well as nutritional \*standards, not to say a peaceful social order which provides both , survival and security.

These elements which were mentioned have a dynamic dimension since the notions about these elements change from time to time.

It is therefore very important to provide new inputs to take care

·of the changing scene. This is how science, technology and .calculus of inputs and outputs has to be built into the system. .On the one hand, the moral conviction and on the other hand techniques of science, technology, rationality efficient management of its sources has to be there. The focus not on maintaining the status quo but to improve upon the performance from time to time. It is here that the supreme emphasis placed on efficiency as being very near to the God is , very significant. Efficiency rather than routine and sloppy kind is condemned as being an anathema to God. activity one undertakes has to be continously scrutinized in order to improve upon the quality of performance. , "Development deliberate is induced in a configuration of human society in order to remove the overgrowth (of rich and forceful) or undergrowth (poor, disadvantaged, powerless) or rejuvinate its growth potential ? (Mukherjee Pg.no. 85). Such potential is not limited only to the economic and political dimension but it should include personality, in the sense of self respect, and freedom from every kind of injustice .confidence exploitation - to put it negatively. In reality positive and , deliberate steps have to be taken and are taken in Swadhaya to augment economic prosperity, political independence and self The dynamic aspect of development is written large on this whole movement and its work.

Without going into the details and providing statistical figures some idea is included in the following information.

#### Bhakti is a social force

Normally human beings use their efficiency for their self interest only. They forget that the efficiency is a gift from God. Pujya Dadaji has convinced the swadhyayees through the

concept of Gita viz." Yolah Karmasu Kaushalam i.e. devotion to God is also offering one's efficiency selflessly.

This concept has been translated by Swadhyayees of all vocations through the various projects all over the world as under :

Α.	Soci	- Economic Projects	No.	
	1.	Yogeshwar - Krishi	3,396	
	2.	Shri - Darshanam	12	
	3.	Vriksha - Mandir	18	
	4.	Amrutalayam	118	
	5.	Matsyagandha	71	
	6.	Hiramandir	10	
	7.	Goras	18	
	8.	Jayshree - Sagar	1	
	9.	Ekvira	10	
В.	Natural Resources Utilisation			
	1.	Kuwa (well) - Recharge	94,468	
	2.	Nirmal - Neer	208	
	3.	Shosh - Khada	32,000	
C.	Medico - Cultural Clinics			
	1.	Patanjali - chikitsalaya	4	
D.	Social Reformation			
	1.	Ghar - Mandir	295	

Enterprises

E.

1.	Parivar Stores	9.	Eknath Trading			
2.	Brass - Mandir	10.	Bhagvathi Enterprises			
3.	Jari - Mandir	11.	Sambhav Engineers			
4.	Parivar Kalara	12.	Asmita Enterprises			
5.	Vishwakarma	13.	Yog-Ali Maintenance Corpn.			
6.	Prasad Builder	14.	Yashoda Pujan			
7.	Shrirang 15.		Ojas Creatives			
8.	Ranganath 16. Rakhee Project		Rakhee Project			
Non	Formal Educational Ac	tivit	Les			
	8					
1.	Bhakti Feri		2,30,000			
2.	Bal sanskara Kendra	11,200				
3.	Mahila kendra 21,300					
4.	Swadhyaya / Utsav Kendra 1,20,000					
5.	. Vidya Prem Vardhan Pariksha					
	Candidates	75,000				
	Centres	1,200				
	Languages		9			
6.	Manav Pratisthan Kendra (Technical) -					
7.	Yantra Jignasa (Technical) -					
	Casual					
1.	Gita Trayah		100			
2.	Tirtha Yatra 500		500			
3.	Vayastha sanchalan		47			
Inte	egrated Personality De	evelop	ment .			
1.	D.B.T. (Cities)		)			
	Divine Brain Trust		) 15,400			
2.	Yuvakendra (Other P	laces)	)			

F.

G.

#### H. Publications

1. Tatwajnan (Monthly Magazine0

Gujarathi 1,35,000 Marathi 1,25,000 Tatwadip Hindi 40,000

2. Books on various Discourses of Pujya Dadaji : Gujarati, Hindi, Marathi & English (Other regional languages)

## I. Family Upliftment

## 1. Madhav - Vrind :

Beginning on July 12th, 1993 and lasting for 100 days until Pujya Dadaji's birthday. Swadhyayees planted 8.5 million trees. The survival rate was nearly 100%.----

#### 2. Parivar - Prarthana

Swadhyayee families hold their evening prayers together in all villages of Maharashtra & Gujarat. This practice has brought unity and cohesion amongst the members of the family.

The entire gamut of activities undertaken by Swadhaya is extremely broad and all embracing. We had already mentioned that culture is to be observed and practised in action which is quite evident from the activities mentioned above. It is not a matter of giving verbal expression to values but more so of implementing them in day to day action and social relationships. That is why culture in this case has manifested itself as a force to induce

change in the situation of the people concerned, materially, morally etc. Quite in keeping with not only the expectation but almost an 'edict' that every person of parivar must have an independent source of income and should undertake any activity on a full time basis so that he or she may succumb to the temptation of making money out of social only we look around we will find that majority of the political workers do not have an independent source of living, has certainly affected their functioning as 'public servants'. whether or not such people accept this fact. other hand memers of Swadhaya work for a common cause, which multifarious dimensions. As a matter of fact it has been found that not only that an individual member does not expect and want any fruit of his activity for Swadhaya but even the entire group foregoes the fruit of its activity, even though it is supposed to belong to that particular village or town for its own betterment. Instead of drawing on such funds and wealth created, been very symbolically and significantly styled as 'impersonal wealth', which is nothing else but collective, co-operative willing effort and contribution to the common good. This wealth is handed over for the common programme. As they say in Sanskrit Mama Na Tu Asmakam Api' which really means that the wealth but even to the to me group which contributéd to its creation. This raises the question of progressive verbiage like secularism, rationalism, socialism, 'equalism' etc. Without ever mentioning such terms in actual reality the essence of what underlies the use of such accomplished and that also Mas an act of devotion which entirely selfless and without any expectations of results (Personally). All same no effort is spared the to enhance productivity and therefore continously efficiency is improved from time to time and put the maximum premium upon. One is reminded of the definition of Yoga which signifies efficiency.

whole experiment raises several conceptual problems particularly the transformation of latent functions into manifest functions as an ongoing process or one might even say that what regarded as a multiplier effect is built into the system organically. Thus, efficiency, prosperity, common sharing caring for everyone right from employment to health, care, education and of course the cultural level and moral discipline, everything is subsumed under devotion. This reminds one of message of Gita, not to say Weberian thesis about Protestant Ethics. The idea here is to create prosperity instead of talking negatively of removing poverty. Quite a few economists abroad have been intrigued by this experiment, particularly when one's own vocation and employment (as a source of income) combined with the creation of common property and the ensuing Moreover, the traditional idiom of our culture prosperity. utilised, not to say harnessed to achieve this end, along with induction of modern science, technology and even management practises because of which efficiency is ensured. subscribing or rather succumbing to the western theories of growth, development etc., according to the demands of the local situation various formulations are made, both theoretically practically so as to make decisions about the inputs to be made. Thus, the project Matsyagandha is entirely geared to prosperity of the fishermen, individually and collectively, the project Vrikshayog or Krishiyog are entirely meant While the concept of development is basically common good. nationalist, a similar idea can be implemented and practised as for instance is being done in some elsewhere too, truly say that intellectual One can reconstruction of the 'real' is oreinted to the display of possibilities for the future lodged in the present and also the past. A judicious combination of the men of knowledge, technical expertise and ethical leadership has to established from time to time. It is here that the philosophy of

Swadhava reaffirms the proposition that knowledge is not substitute for service (social). Going further one can even that legitimacy and authority of knowledge needs to be questioned from time to time, otherwise there will be a domination by men of knowledge and technical expertise, which goes against very grain of development. Shri Athavale raised a very pertinant question namely whether science is reused as an instrument furtherance of human good and prosperity) or as a weapon. Similarly the cultural idiom which is rooted in a long standing tradition has to be invoked instead of importing new terminology. Moreover, what passes under the name of modern terminology been actually practised or can be practised in a different way, without in any manner compromising on the basic principles of mutual respect and eliminating humanism, liberty, freedom, exploitation of any kind. That is why what holds good for urban areas and towns does not hold good for the village, leave the tribal society whose needs and aspirations are determed from each other. In reality, there is a dialectical relationship between 'the expert, the leader and the common man', which means a continuous dialoque and effective communication. Effective communication cannot be taken for granted and reliance cannot be put entirely on the informanty/aspects of communication, but arrangements have to be made for ensuring such communication - socialisation - training and equipment for all those who want to participate in the programme. Of course distinction has to be made between the adults who have already made their careers and want to participate in the activities the young people who need to be trained so that they can participate later on.

#### Tatvagyan Vidyapeeth

It should be mentioned that the discourses offered in Mumbai are specially addressed to the adults who are interested and

committed to the activities of swadyaya and need refreshing from time to time in terms of modern knowledge. In fact, responses of Shri Athavale to various thinkers, philosophers clearly brings out the importance of responding to different currents of thought and also to point out as to how or rather to what extent their formulations have any validity for the situation. Thus, it has been clearly mentioned, if not asserted every cultural tradition evolves a particular theoretical framework, which cannot be torn from its context. The contextual factor of knowledge should not be underplayed. That borrowing concepts, not to say ideologies can be These discourses are addressed to the adults proposition. have already made their own career and want to be enlightened or refreshed about current thinking. On the other hand, the Tatvaqyan Vidyapeeth has been specially founded for training of the novices.

Without burdening you with statistical figures, I would like mention that as of now there are 163 students - disciples are from NRI Swadhyayee families. Some of taken a drop from their educational career in America and deliberately come to India to become acquainted with the basic philosophy of Swadhaya. The student body is divided into 3 groups and the training is imparted in Nashik, Ahmedabad. young students join the programme after their 7th standard education and they also belong to the Swadhaya families. to undergo a course for 7 years. There is absolutely relationship between one's caste and community and joining this However, since these young students or children course. from Swadhayayee families, they have to give an undertaking that there will be a provision made for employment of these students and that there will be a source of living either through agriculture or any other technical job or commerce etc. Only far as agriculture is concerned, special training is imparted

the sixth year of the course. There is training in philosophy, \*culture, tradition, history and languages. Alongwith the Indian philosophy, western philosophy or at least its basic tenets are conveyed to the students. No wonder that emphasis on training in Sanskrit so as to properly appreciate Indian culture, tradition, history as well as philosophy. composition of the student body is as follows: 90 from Gujarat, from Maharashtra, 6 from Andhra Pradesh and some from The regime of education is naturaally elaborate not to say strict. They have to get up at 5:00 make sure that the entire surroundings of the mandir properly cleaned and when they have to make arrangements to puja there is also a Prabhat Feri from 7:00 a.m to 9:00 a.m. the morning. Formal lectures are held. Then the students attend to their personal work. They are also involved in cooking \*work at night. The month of May is vacation period. offered is quite rigorous and rooted in Indian tradition, philosophy and history. There are a few students who join the course only for a couple of years because they have already received formal training in a discipline of their choice, such as science, management, administration etc. There are a few instances of those who have been selected for the Indian 'Service examination. That is how academic basis and the necessary moral commitment is prepared during these years training. Of course as already mentioned these students from Swadhayayee families and therefore that also ensures continuity of Swadhaya philosophy and tradition. However, the decision about what these students are going to do after finish the course is left to them in the sense of choosing a particular activity or programme which are run by Swadhaya, depending upon the local situation and its needs. Thus, what may be done in a city or a town is not done in a village or a tribal All the same, there is a definite commitment on situation. part of these students to participate in some activities or the other. This training programme is designed for effective communication and as they say in English 'Catch them young'. Socialisation leads to involvement and effective performance of activity, although there is a considerable amount of learning on the job (activity) which these students choose to be engaged in. As a result of coming into contact with experts in agriculture or fruit growing or fishing they can enhance their skill from time to time. Simultaneously, with professional skill they are also taught the necessary principles of management of project activity.

#### Conclusion

Gathering the threads to purpose will be served by summarising the contents of the foregoing. However, certain issues need be highlighted in view of the empirical investigations on which the presentation and analysis is mainly based. At least social science, the various concepts and theoretical formulations they arise from time to time, are meant to take care various practical difficulties and problems which arise every now In fact, therefore, there is no such thing as a general theory which is applicable to every other situation, particularly when there is a considerable difference of space and Perceptions about reality are very important and even more so the action taken by various individuals and groups necessitate amendment to set perceptions, which to start with are of an a priori nature. That is why what is called received knowledge has to be treated with circumspection. The case point is the entire development theory which emanated from west and handed over to the east, with the expectation, almost certainty that it will be accepted as a readymade package.

Theoretical knowledge in social sciences developed in a given context of the evolution of economy, polity, and culture. The

propositions contained in such theory were held to be universally valid and solutions to concrete problems were said to be amenable to such theorising. However, recently even economists of repute have accepted that the formulations at least in Economics only to industrially advanced, prosperous Naturally the situation is much more complicated when it \*comes to sociology, psychology, cultural anthropology etc. Apart from the intellectual arrogance, explicit or not, there is .the attempt to dominate the developing or very frankly ? Along with knowledge there is a parcel of ideology, which is always weighed in favour of western societies. Not only that, knowledge so class on is determinate but even ideology which is certainly a matter for concern because it easily appreciated and understood. To put it rather development theory belongs to the category of policy sciences and naturally policy would tend to differ from one locale to another. Attempt is made to provide propositions, disregarding the specificities. That why generalisation spells closure instead of openness. such specifics of a situation adds to the openness. There can be no rule of thumb.

entire concept of planning revolves round acceptance of a) concern for development and b) philosophy of c) mechanics of development, not to say reconomy of development. The role of the expert is highlighted · which provides justification for his or her domination. could be further away from such domination because development is not GNP nor is it a computation of aggregate figures which conceal unpleasant and unpalatable reality. On the process of planning requires overall planning concern with aggregates and macro approach rather than micro Who is to do the planning ? By and experience is such that planning is left to the State, in which

case the role of the State becomes not only supreme but even monopolistic. It should be mentioned that irrespective of the economic system, whether socialist or capitalist, if planning is left to the State the consequences will not be far different for the common man.

It has been erroneously felt that concern for development is only a post war phenomenon, which is far from true. Even in the preindependence period in response to the poverty and deprivation and degradation of the common man (majority of the people) it was felt that steps should be taken with self effort to redress situation and several activities were launched. All the development became the pass word after independence and linked up with planning. What have been categorised as ·replacement, elites were naturally concerned with the problem of expediting the process of development by resorting to planning. In order to do so, several estimates were prepared to initiate development activities such as economic, public health, political Initially there was the view that development instruments etc. activity could not be successful without ensuring participation, which is reflected in the various development projects. However, the task of development entrusted to the administrative machine which the State had its disposal. Inevitably, the strangle-hold of bureaucracy tended to increase from time to time. Ideally the peoples representatives were expected to be a go between the State the common people. Perhaps the route of corruption lies in this ·because the go betweens were tempted to arrogate to themselves facilities of development, leaving the common man the Umpteen examples can be cited of misuse of facilities dry! so called peoples representatives, in collusion bureaucratic machinery. Several field studies have pointed a fingure to this phenomenon, which has acquired gigantic proportions today. The utilisation of administrative machinery

which naturally emphasized aggregates and reaching the targets, \*meant compromises and conhivance at the powerful sections, of the various resources and inputs made monopolisations Further, bureaucracy available through the various plans. is precedents rules and regulations which were hamstrung by formulated. God knows when! The impersonal relationship which characterised bureaucracy also stood in the way of development for the people, of the people and by the people. ·because of the intervention and the paternalistic role played by the State, people both in rural and urban areas were at a loss to as to what and how they could do to participate in the process of development.

Taking this situation in account men of knowledge and ideological conviction got together and questioned the correctness type of development, which had not solved the basic problems years of 'development' the majority of people even after 20 Knowledge was sought to be combined with \*after independance. social philosophy - ideology and moral committment. While a group of natural scientists played the catalytic role, they were quick to grasp the importance of breaking down the walls between .natural scientist, social scientist and the common man. they stressed the importance of combining concern for man, nature society. In order to approach the common man, in the place science had to reach the people for which concerted efforts made through publication of leaflets, pamphlets so that the message of science could vernacular language comprehended by everyone. In veiw of the intellectual conviction about the unity of knowledge and the purpose of knowledge the hierarcy and domination of the man of knowledge was also Even though the word has systematically demolished. overused for eg. 'grassroot level', one can say that this scientists and others tried to reach the 'thorn root level'. This was accomplished through street plays and appropriate use of

the media such as press, lectures, demonstrations particularly regarding vital issues which were afflicting common man such as the Bhopal gas tragedy, of environment. and so on. Various activities were undertaken improve nutritional standards by controlling public sanitation and hygiche which has been done in another experiment also, which have already mentioned. The key role of knowledge and being bolstered by ideological convinctions set the pace various groups of scientists to come That how education in particular was made easily accessible to from deprived and disadvantaged sections of society. Apart the pedagogy of education, social experiement was conducted as to bring on a common level disadvantaged students by providing extra inputs. Science knowledge was utilised for solving day day problems of environmental hygiene, sanitation and health, thereby cutting down the man-days lost and of course the general improvement in the standards of health. Children centrally involved in this activity so as to ensure participation and co-operation of the entire family. In fact the role of the family has been properly emphasized because the family is involved, any programme of development and is unlikely to Science and technology are succeed. harnessed to bring about a mini-revolution by removing absolute deprivation and reducing the edge of relative deprivation. such knowledge is imparted conditionally in the sense that all the people in a given village agree to share the scarce resource - water equitaly, which has helped the marginal farmers and even the landless labourers to benefit economically. even more so in terms of the change in their social status - from survile person to an independent self-respecting entity. potentiality of science for effecting strutural change in society has also been demonstrated of course coupled with ideological conviction. Here also the basic unit to be attended to family.

continue the discussion of importance of ideological studied convictions, an ethico-religious movement was alternate path to development. While the ethico religious , movement utilised the traditional cultural idiom, , problems attended to had contemporary significance such as income generating activity, sharing of common produce, reduction inequality, improvement in the standards of discipline, social commitment etc. The role of culture in holding society together has been brought forth in a pivotal fashion. various programmes under the rubric of culture undertaken from purely economic activities to integration of society, removal of poverty or rather injecting prosperity. is the fact of doing away with the ·distinctions of caste, language, education, income and .Various experiments are underway such as in the education and culture, agricultural activity, afforestion, inputs of new technology for improving the already existing occupation such as fishing, orchard growing etc. The cultural idiom subsumes it various secular activities although culture under demonstrated in action rather than by verbalising it. Knowledge and its importance has been thus brought out here too and basic unit on which attention was concentrated was naturally the family. It should be observed that except for bureaucracy there has been consistent involvement of the family as a basic unit for improvement, change and development. This is quite in keeping with the conviction of the continuum of knowledge and society.