Chapter-I

INTRODUCTION

During the Freedom Struggle, the development of Khadi and Village Industries was an instrument to meet the twin objective of self- reliance through local production and seeking active participation of the poor in the struggle for Independence through removal of hunger and unemployment. Their potential as an instrument of poverty alleviation was also recognized by our early planners. Accordingly, the Khadi and Village Industries Commission (KVIC) were created by an Act of Parliament to plan, promote and organize their systematic development and expansion.

While the output and employment of Khadi and Village Industries have grown manifold during the last four and a half decades, their role in the context of the new paradigm of development has been questioned. In particular, the effectiveness of the programme in terms of its employment generation capacity, resource -use efficiency and sustainability has come under attack from various quarters. At the instance of planning Commission, the Programme Evaluation Organization (PEO) undertook the evaluation of performance, adequacy, and effectiveness of the implementation mechanism and impact of the KVI programme. To test the relevant hypotheses and examine various issues, PEO relied primarily on the data base generated through a sample survey of 176 KVI units, 730 beneficiary households spread over 32 blocks in 18 states. The data from published sources as well as those from the offices of the implementing agencies were also collected and analyzed.

The major findings of the study are:

- The planning and implementation mechanisms are weak, as the linkages between production, sales and employment generations are not adequately considered;
- The monitoring is weak and the data base used for planning and management decision does not represent the grassroots realities;
- In terms of output, sales, job creation and efficiency in use of resources, the performance of the village industry sector is much better than that of the khadi sector;
- The KVI programme, in spite of its poor performance, particularly in the khadi sector, holds great potential as a poverty alleviation programme·, and
- It is possible to run the scheme with reasonable level of fiscal support if, certain corrective measures, as suggested in the report, is taken.

Before independence, the development of Khadi and Village Industries was entirely a non -governmental effort under the guidance of Mahatma Gandhi. After independence, the Government of India took the responsibility of bringing the development of Khadi and Village Industries within the overall framework of the Five Year Plans. Therefore, the Government of India set up Khadi and Village Industries Commission (KVIC), which is a statutory organization by an Act of parliament. This organization came up in 1956 and it plays a pivotal role in the strengthening of rural economy by promoting and developing Khadi and Village Industries. The Khadi and Village Industries programme plays a predominant role in providing employment opportunities to rural artisans more specifically the socio-economic weaker strata of the society. Since agriculture sector has been losing its ability to generate additional employment opportunities for the fast increasing workforce in rural areas, the importance of Khadi and Village Industries Commission (KVIC) has increased to find an alternative and appropriate employment for rural people.

The functions of the KVIC are generally to plan, promote, organize and assist in implementation of programmes for the development of Khadi and Village industries. To achieve this, it undertakes (a) financing of eligible (b) training of persons employed or desirous of seeking employment in Khadi and Village industries, supervisors and other functionaries, (c) building the reserves of the materials·, (d) R&D in Khadi and Village Industries sector·, (e) promotion of sale and marketing of Khadi and village industries products,(f) promotion and encouragement of cooperative efforts among the persons engaged in Khadi and Village Industries, etc. The implementation of Khadi and Village Industries programme in our country is a joint effort of the Khadi and Village Industries Commission, which is an Apex organization at the Central level and State Khadi and the Village Industries Boards, functioning in various Sates and union Territories. Though, the primary responsibility of carrying out programme of village industries lies with State Khadi & Village Industries Boards, they require drive and direction from central as well as state governments for the proper development of this sector. That is the reason when the Government of India decided to constitute a National Level Organization in the name of Khadi and Village Industries Commission (KVIC). It emphasized the need for similar organization in States also, to work in collaboration with the Central Organization. Subsequently, the State Khadi and Village Industries Boards were constituted in all States and Union Territories. At present, there are 30 State KVIBs functioning all over India. These Boards are mostly assisting the implementing agencies involved in the village industries programme. As on date, in general, about 77.96% of KVI programme, in terms of production, is being implemented by Sate Khadi and Village Industries Boards.

Though the basic objective of the KVI programme since very beginning was creation of employment opportunities in rural areas, it was

observed during the Eight Plan that in view of large scale unemployment in the rural areas this aspect would need focused attention. Therefore, a High Power Committee under the Chairmanship of Honorable prime Minister examined this aspect in detail in 1993-94 and recommended creation of additional two million jobs in the remaining 3 years of the Eight Five Year Plan. In view of the above recommendation, KVIC introduced the following major programmes for creation of additional employment.

Reactions against technology are not new. Throughout history man has been warned that he was creating forces he would be unable to control, that machines would eventually take over the planet and demand the total obedience of the human race (if, indeed, it was still allowed to exist), that to place one's faith in science and technology was to make a pact, like Faust, with the devil. St Augustine warned that 'for the injury of man, how many kinds of poison, how many weapons and machines of destruction have been invented·' The Industrial Revolution faced many critics who despaired at the growing importance of the new machines, and at the social problems they seemed to bring with them. Opposition to reason and to rationality, frequently embracing attacks on science and technology, has in particular been experienced by societies that have suffered a major upheaval or catastrophe. The defeat of France in the Napoleonic Wars is claimed to have been followed by a period of rampant mysticism, including a wide resurgence of interest in astrology. Oswald Spengler captured the imagination of a defeated Germany in 1920 with the publication of his Decline of the west and his prediction that 'Faustian man will be dragged to death by his own machine'· Aldus Huxley sketched out the blueprint of his nightmarish Brave New World during the depression of the early 1930s. George Orwell's Nineteen Eighty-Four, an equally damning indictment of the totalitarian possibilities

contained is advanced technology, was written in the years immediately following the Second World War.

Whatever one feels about these earlier critics, the current attack on technology is too serious and profound to be dismissed as a transient phenomenon. Our society depends s no other society it on the efficient running of a vast technologically- based machine. Furthermore, the present mood of disenchantment has emerged as much from direct experience of the growing social problems associated with contemporary technology as from consideration of the relationship of technology to abstract concepts such as humanity or progress. One can attack the increasing domination of 'scientific' over aesthetic or humanistic values, or quasi- religious deference to technical expertise. But the poisoning of one's local river by industrial effluent, the lung disease induced by working with asbestos over many years, the sclerosis of our cities caused by private motor-car, or the sight of Vietnamese child permanently scarred by the pellets of a fragmentation bomb, bring the same points home with much more force.

Many conventional discussions of such problem assume what is often referred to as a 'use- abuse' model of the social function of technology. They imply, in other words, that the social problems associated with technology stem from the uses to which technology has been put, and not from the technology itself, which remains blameless. Problems like those above are seen either as the intended or often consciously- harmful effects of the attempts of one individual or group to impose its will on another, or as the purely accidental side-effects of economic or political processes. It is this interpretation of the social problems associated with technology that I wish to challenge. I hope to indicate the reasons why this model is inadequate to interpret the essential nature of the role of technology in society. In its place I suggest how we must see technology itself as of the political process -even

though isolated machines may play a neutral role in this process - and hence the problems associated with it as resulting as much from the nature of technology as from the way in which it is used.

First, some definitions, In the way that the term 'society' is conventionally used to indicate not only a collection of individuals but also the relations between them, so 'technology' will be defined as an abstract concept embracing both the tools and machines used by a society, and the relations between them implied by their use. No distinction need therefore be made for the purposes of this study between machines and tools, both of which can be defined as objects selected or fabricated by man as a means of changing the state of his material environment. The above definition allows us to see technology, in common with the legal or the education system, as a social institution. It can also be distinguished from 'technique', which will be taken as the act of applying knowledge, whether directly or with the aid of a tool or machine- that is with the aid of an element of technology- to a particular task.[1]

If we look in details at the types of problems associated with contemporary technology, we should perhaps start with the problems of environmental pollution, and with the depletion of many of the world's non - renewable natural resources. These are by no means the only, nor, some might argue, the most important problems. They are nevertheless ones that have received a considerable amount of attention over the past few years and there is little need here to underline their severity. Inasmuch as environmental problems are often shared by countries that have adopted the same patterns of industrial development, but under very different political banners, it is possible to go beyond the argument that the problems are merely simple expression of political ideology. In addition, the very urgency of some environmental problems - in particular the short time limits within which it

has been estimated that certain scarce resources are likely to run out if they continue to be used at their present rate- has added an intensity to the whole debate on the nature of technology and made its implications very much more immediate.

Damage to the environment has always been associated with social and economic development. Long before the birth of Christ vast forests in the Near East were reduced to open plain by man's agricultural activities, and the loss of wind protection, together with centuries of over -grazing, soon turned these into arid desert. The problems of smoke pollution were so bad in medieval London that smoke control restrictions on log fires had eventually to be introduced in the seventeenth century and so great was the demand for wood from the forests of southern England during the sixteenth and seventeenth centuries that its use for burning as charcoal to smelt iron was banned to ensure a ready supply of material for ship- building.

In the past these types of environmental problem tend to have been relatively localized. A crucial aspect of present problems however is their global character. when a country 'energy or mineral reserves run out, it can usually obtain further supplies from abroad ; when the world 's supply runs out, the only alternatives are to find a substitute, or do without. Already the United States is facing a growing energy crisis which has led to petrol rationing and official requests to conserve electric power. Most Americans had got used to the idea that there would be a fuel and power critical shortages would not occur until the next century. Reports in 1973 that there were barely enough natural gas resources left to assure heating for homes, and that oil supplies in some areas were already running out, raised considerably alarm.

Programmes for replacing fossil fuels by the use of nuclear energy have run into both technical problems and heated opposition from environmentalists. It is now doubtful that nuclear energy or indeed, any large -scale source able to replace fossil fuels, will arrive soon enough, in sufficient quantities and with its socially -hazardous effects adequately contained to prevent a rapid rise in the cost of energy as supplies of conventional fuels become shorter. The political and economic problems this could present are enormous. Between 1960 and 1970 the amount of energy implored into the United Kingdom -mainly as oil-rose from 25 to 45 per cent of total consumption (although temporary respite may come from the discoveries of gas and oil in the North Sea). The dependence of the USA on imported energy rose from 6 to10 per cent over this period despite strong emphasis on attempts at self -sufficiency. And the Western world as a whole had a taste of possible political problems to come during the autumn of 1973, when the use of oil supplies as apolitical weapon by the Arab States, following the Middle East War with Israel, led to large -scale reduction in the supplies and the introduction by governments of wide -scale measures designed to reduce petrol consumption, as well as a sharp rise in the cost of oil.

The so-called 'energy crisis' is closely associated with the rapidly escalating use of energy in all branches of technological activity, both industrial and otherwise. Aluminum, to take a typical example, is one of the most widely used materials in more industry. World supplies of aluminum are plentiful, with little danger of being exhausted in the near future. The main problem with the use of aluminum lies in the large amounts of energy required during its industrial processing. According to professor Barry Commoner, aluminum requires about fifteen times more fuel energy per unit of 'economic good then steel, and about 150 times more timber, yet it has increasingly displaced both of these as a construction material. Twenty-eight

per cent of all industrial use of electric powering the US is claimed to be accounted for by aluminum and chemical production alone.

To many, advanced technology appears to be the prime cause of our present environmental problems. This case is argued strongly by Professor Commoner in his book The Closing Circle. Commoner claims that the levels of different pollutants in the United States rose by between 200 and 2,000 per cent from 1946 to 1971, and that neither increasing populations, nor a rise in the general standard of living, were sufficient to account for the most excessive of these increases. A survey of the average annual percentage change in production of several hundred items, which together were left to represent a major part of the total US agricultural and industrial Production, revealed some dramatic figures. The greatest was recorded in the production of non-returnable soda bottles, which Commoner claims increased by the equivalent of 53000 per cent over this period. Second place went to the production of synthetic fibers, with a 5,980 per cent increase; mercury used for chlorine production increased by 3,930 per cent, the production of air compressor units by 2,850 per cent, plastic by 1,960 per cent, synthetic organic chemicals by 950 per cent, and electric power by 530 per cent.

These increases are far in excess of any increase in population or general affluence. To Commoner, they demonstrate clearly that the most drastic changes over this period were in the type of technology and production processes used by US industry, rather than change in 'an overall output of the economic good, or any indications of the material aspects of consumption. Quoting examples such as innovations in agricultural technology, and the increasing use of plastics and non -degradable synthetic detergents, he concludes that 'the new technology is an economic success, but only because it is an ecological failure'.[2] He goes on to state his belief that 'the chief reason for the environmental crisis that has engulfed the United States in recent years

is the sweeping transformation of productive technology since world war II… productive technologies with intense impacts on the environment have displaced less destructive ones. The environmental crisis is the inevitable result of this counter-ecological pattern of growth'.[3] Commoner's conclusion is which is only coincident to its value, but with failure that results from its basic success in industrial and agricultural production. If the ecological failure of modern technology is due to its success in accomplishing what it sets out to do, then the fault lies in its aims'.[4]

Various environmentalists have disputed Commoner's conclusion about the primary importance of productive technology as a cause of the environmental crisis. It has been pointed out that there are a number of individual cases in which the combined effects of population increase and greater affluence are sufficient to account for the major part of increases in the presence of particular pollution. John Holden and Paul Ehrlich, for example, writing in Science and public Affairs, claim this to be true for nitrogen oxide emitted by automobiles. They argue against Commoner that 'faulty technology should be attacked directly wherever one finds it appoint we have never disputed. But the complacency Commoner encourages concerning population growth and rising affluence can only guarantee that the many environmental problems due to faulty technology will continue to worsen'.[5]

It seems generally agreed among environmentalists, however, that even if advanced techno is not the only culprit, it must nevertheless share a large part of the blame for the extent to which man is polluting the natural environment and using up the world's resources. Economists argue that the problem arise because industry has been able to ignore the so- called 'external costs 'of production. These are the social costs imposed on the community by a particular production technique or technological development which do not

enter into the usual accounting procedures. Pollution - the discharge of toxic effluent, for example, into a local river -is such an external cost the elimination of pollution is offered, but at a price; And despite claims that 'polluter must pay', the costs are usually passed on to the consumer through increased prices or taxation.

Despite fierce controversy over the methods used to predict the likely effects of pollution, overpopulation and resource shortage in the future, it is being increasingly brought home to us that there are very real finite limits to material consumption as well as to the degree to which the environment is capable of decollating itself. Some of these may indeed be closer than many of us would like to admit, and the important question now appears to be not whether it will be necessary to move to a steady -state economy, but when and how. Yet the existence of finite limits to resources is a fact which classical economic theory, despite its concern with concepts of scarcity, is virtually unable to take into account, at least when applied to the global situation. John Maynard Keynes even Suggested the necessity of accepting a certain unavoidable level of pollution by predicting that 'for at least another hundred years we must pretend that fair is foul and foul is fair; for foul is useful and fair is not'.[6] But we no longer have a hundred years to spare. It is physical impossible for the world to continue tracing out current patterns of industrial and technological growth for this length of time, without taking into account the physical limits imposed by the finite nature of the earth and its resources.

A particular formulation of case against contemporary technology is contained in the general critique of economic growth the relationship between technology and economic growth is complex one. It is argued by some that general scientific and technological development is itself sufficient to promote economic growth. According to this view, heavy support of research

and development activities is one of the most effective ways of stimulating such growth'.[7] However this process also work the other way. An economy based on rapid growth demands particular type of technology, one which is capable of producing the maximum innovation of new products, often with little consideration of real social need. As one Us businessman replied to recent survey on industrial research policies, 'the problem will be to obsolete our products before someone or something else dose'. The basic objective of industrial research is, in the words of a major Italian chemical company, 'the transformation of an idea or intuition into a new improved or less costly product', rather than the immediate desire to social problems'.[8] Given this symbiotic relationship, it is almost impossible to establish the exact nature of the links between the support of both public and private R&D activities and the rate of economic growth of a particular country (beyond the observable fact that higher the level of industrialization, the greater is usually the proportion of gross national product spent on R&D). We appear to have an integrated situation; the two factors - economic growth and technological change - are so intertwined that it is impossible to talk merely in terms of the effect of one on the other. Policies requiring economic expansion have been reflected in the particular forms of technology through which this has been achieved.

We cannot therefore discuss the possible necessity of limiting -or even stabilizing - economic growth without paying attention to the technological factors that are inevitably involved. If a massive wastage of resources is incurred by the products of a technology economically- based on the need for innovation and obsolescence, any change to a resource -conserving philosophy requires both a technology and economy based on very different principles. For a society which has almost adopted economic growth as a policy- determining ideology, such a change is unlikely to be welcomed by

those whose wealth relies on the interest that growth produce on capital investment, or indeed easily accommodated into the framework of classical economics.

If innovation and commercial competitiveness provide the incentive for the development of industrial technology, expenditure on research and development in the government sector is dominated by defence and military requirements. In Britain, these take up almost half of the total amount of money spent by the Government on R&D, accounting for $ 583 m ($l327m) in 1969.The military R&D budget in the Us at roughly $8000m in 1969, was almost as much as the total private and government expenditure on all branches of R&D in the United Kingdom, France and the Federal the Federal Republic of Germany combined. Technology has always been heavily dependent on financial support from the military sector. Many of the earliest engineers, Leonardo da Vinci being but one example, made much of their living from carrying out military projects for political leaders. The situation remains much the same today. In 1972 the increase requested by the Nixon administration in Federal support for military R&D projects was greater than increase requested for all other areas of R&D - including health, transport and social welfare[3] -put together; 52 per cent of R&D scientists and engineers employed by the US Federal Government in 1969 were working for the Department of Defense. A consequence of this concentration military application of technology in the US has been the build -up of vast industrial military complex. Major industrial firms Honeywell, Lockheed, so on - are now involved in the production of machines whose main purpose is the destruction of human life. One does not have to be a pacifist to be appalled by the type of atrocities made possible by the technique of 'scientific' warfare with its present atomic biological, chemical, electronic and even psychological dimensions'.[9]

A new set of problems emerges when we look at the relationship of advanced technology to the problems of underdeveloped countries. Many development economists still support the idea that key to development is to aggregated factors such as gross national product. Growth is usually to be achieved through a concentration on industrial production. This is considered the first step a way from a dependence on the export to the developed countries of primary commodities- tea, sugar, etc. and an equally burdensome dependence on the import from these countries of manufactured goods. Such theories of growth and 'primary import substitution' legitimate the massive transfer of advanced industrialize techniques and private investment from the developed to the underdeveloped countries. They lead to an idea of development expressed in overall measures measures of economic performance, in particular stressing the importance of economic growth as a means of achieving a strong position in world trade. A report prepared under the Canadian ex-prime Minister Lester pearson for the International Bank for Reconstruction and Development in 1969 states unequivocally that ' the majority view of those who now administer aid, whether bilateral or multilateral …(is) that increased allocations of aid should be primarily related to performance'.

The introduction of advanced technology into underdeveloped countries, however, can bring with it many problems. The first is the drain it creates on foreign reserves and the accompanying need for used to buy the capital equipment required for advanced industrialized production, and often to buy in addition both the expertise and raw materials needed to operate to equipment. A related problem is the increasing technical dependence of underdeveloped countries on the developed countries, with important economic and political implications. Many multi -national companies prefer to set up their own subsidiary in a foreign country rather than hand over

technical information to potential competitors through patents and licensing agreements. Often those agreements that are made have so many string attached covering aspects such as marketing and further innovation that, as one Latin American economist has put it, 'the only decision left to these licensee is whether or not to enter into an agreement for the purchase of a technology'.

A third problem of rapid industrialization is that of unemployment. This is often associated with the substitution of capital - intensive industrial techniques for the traditional labour -intensive techniques required by craft-work and other forms of small -scale production. It also reflects migration of rural population off the land into the towns in search of jobs. Unemployment is now estimated to be as 30 per cent in many underdeveloped countries. The lack of jobs partially results from the introduction into these countries of advanced technologies inappropriate to the prevailing social and economic conditions. As professor Hans Singer, director of the Institute of Development Studies at the University of Sussex, has pointed out, 'the underdeveloped countries are now importing what is called modern technology, though the world modern, like the word progress, means what is modern, what is progress, for the richer countries'.[10]

The effects of advanced technology, compounded with a world trade system dominated by the developed nations, have contributed to the emergence of a double development gap. The first is between the rich and the poor countries. According to the World Bank, the advanced capitalist countries' share of world trade rose from 60 to 72 percent between 1950 and 1969, while that of the 'less-developed countries' fell from 32 to percent over this period.

The second development gap is that which has occurred within the developing countries themselves. Over 80 per cent of those living in such countries still work on the land, yet technological innovation remains concentrated on the industrial sector, or on the intensive mechanization of the agricultural processes. The main benefits from both of these accrue to a minute section of the population. The contrasts of wealth and poverty in many developing countries probably exceed those of any other civilization at any other time in history', according to Judith Hart, a former U.K. Minister of Overseas development'.[11] Inequality is perpetuated by the availability and use of technology, a direct reflection of economists' emphasis on economic performance, rather than on the satisfaction of direct social need and the corresponding issues of political control.

To build a complete critique of contemporary technology, we have to go beyond purely environmental, economic and development considerations. Equally important are the effects that technology has on the individual in society. Even pollution problem can only be evaluated by the extent to which they affect the individual. This happens either directly, in terms of hazard to health and general well- being, or indirectly through depriving him of important material resources. Similarly an analysis of social priorities can lead only to directly political conclusions that embrace one's ideas of the position and role of the individual in society.

One of the apparent consequences of living in an industrialized society is that the individual finds himself further and further removed from many of the major decisions taken by -or perhaps one should say on behalf of -the society in which he lives Even a leader in The Times (27 May 1968) discussing a speech in 1968 by the then Minister of Technology, Anthony Wedgwood Benn, on the need to increase participation in decision - commented that's a paradox of modern technological society is revealed; the

society creates problems so complex that they can be handled only by those with specialist skill and intricate knowledge, and at the same time it produces people who are in general more highly educated and inquiring than previous generations. It centralizes decision making but spreads the desire to make decisions.

The spread of 'self -management' ideas, following in particular the success of work -ins at Upper Clyde Shipbuilders and elsewhere, demonstrate that this desire is by no means confined to the highly educated. Major decisions about a particular technological development, however, are taken not in the light of public debate about its general social desirability, but on its commercial viability and financial prospects in a world market. The debacle over the continuously escalating costs of the Concorde Project is one example. Two other important, but less publicized, cases are the contract to supply new telephone equipment to the British Post Office, and Britain's attempts to create a commercially viable nuclear power industry industry. In both of these cases, behind- the scenes discussions involving many millions of pounds of public have masked by wall of technical argument. This argument is often used to deflect any ' non -expert' questioning -in other words to discourage direct public involvement Any attempt at such intervention is often dismissed on the grounds that ' only the experts really know what they are talking about'.[12] Dr. Harold Agnew, director of the Los Alamos Laboratory Weapons Division in the U.S has been quoted as saying that' the basis of advanced technology is innovation, and nothing is more stifling to innovation than seeing one's product not used or ruled out of consideration on flimsy premise involving public opinion'[13].

The political problems that result from the technical necessity of using a high level of expertise have been widely discussed. In his book The

New Priesthood, for example, Ralph Lapp discusses the power and influence wielded by important scientists and technologists in the U.S. He quotes a remark made by Woodrow Wilson during his 1912 presidential campaign: 'what I fear is a government of experts. What are we for if we are to be scientifically taken care of by a small number of gentlemen who are the only men who understand the job? Because if we do not understand the job, then we are not free people'.[14] According to Ralph Lapp, the process has already happened, and democracy now faces its most severe test in preserving its traditions in an age of scientific revolution during which 'the nation becomes more and more dependent for its welfare upon the even fewer people who from a scientific and technical elite'.[15]

The extent to which the resources now required to service and maintain our technological society are welded into one mammoth 'techno structure' have been comprehensively mapped by economists such as J.k. Galbraith, and need little expansion here'.[16] Scientists and technologists become increasingly linked with the mechanisms of power. Knowledge of and hence advice on, scientific and technological issues becomes an essential part the political process. But whether in fact scientists and technologists really wield the power feared by Woodrow Wilson and described by Lapp is open to question. Undoubtedly many are in a position to advice on decisions with social and political implications. At the same time, however, they are only given the freedom to come to those decisions which are or can be politically sanctioned.

A typical example of the need for political acceptability is British Government's decision to ignore the conclusions of the Roskill Commission on the sitting of London's third airport, and to accept an alternative site to that recommended by the Commission. Another is the fact that when the British Cabinet's 'think-tank' proposed to the Conservative Government in 1970 that

the Concorde project should be abandoned, it is said to have been told, in the light of delicate Common Market negotiations, to think again; the 'think-tank' subsequently came back with the conclusion that Concorde should press ahead, and Anglo- French relations were preserved. Political considerations were similarly involved in the government's decision - based on the recommendations of Lord Rothschild- that a large part of the activities of the scientific research councils should be determined by the requirements of government ministries and departments. While publicly justified in terms of greater 'efficiency' and 'accountability', this restructure reflected a desire to strengthen and institutionalize the links of the techno structure in which government, industry and the universities combine to from a large corporate consensus. In the U.S. those scientists and technologists prepared to place their skill at the disposal of the American war effort in Vietnam were rapidly absorbed into the military establishment. This was done through, for example, the Jason group of the Institute for Defense Analysis, a committee made up of an elite selection of about 40 academic scientists from various US universities. Equally eminent scientists and technologists who spoke out forcefully against the war in Vietnam, producing documented evidence of the massive ecological damage caused by the use of herbicides and defoliants, were relatively ignored by those responsible for US military policy'. [17] Such examples indicate clearly that scientists and technologists wield Power only through their adhesion and allegiance to an existing political base.

We should also be concerned about the fact that scientists and technologists are frequently used, not merely to produce the instruments of political neutrality- to political action, but also to add a mask of objectivity- and hence political neutrality -to political decisions. The presentation of political issues as technical ones, accessible only to 'expert 'debate has important implications. It legitimates the individual having less say in major

decisions-which may range from the future development of the telephone system, or of supersonic transport planes, to Britain's joining the common market, a political decision ‘justified’ by economic as well as cultural argument -that are likely to have important effect on life Often the only way to challenge such decision is by collective pressure -group activity. Here it is those with the largest amount of resources at their disposal that have the greatest chance of success; expert advice, unless offered voluntarily, can be expensive, and is thus usually available only to those who can afford it.

Taken to its extreme, the 'de politicization' of advanced industrialized society could have even more severe consequences. It provides a powerful weapon for achieving the closely coordinated control of the actions of all members of society -the path towards totalitarianism. The tendency has been made increasingly possible by developments in cybernetics - the science of controlling information and communication-and in the design of computerized communication networks. Early in 1973 Chile was conducting, experiments under the guidance of a British cybernetician, Stafford Beer, to find the extent to which the country's economy could be regulated through the use of a computer to record the daily activities of every factory. It was also claimed to be trying to discover whether it is political and economic measures’.[18] Echoes of totalitarianism are already contained in the report of the Royal Commission on Local Government in England, the Redcliffe-Maud Report, published in 1969, which states that 'the new and more sophisticated techniques of management also give an impetus to the development of central management. French prospects are opened up by the computer'.[19]

Professor Frank George, director of the Institute of Cybernetics at Brunel University, has argued that 'the real danger that cybernetics… may bring about, and indeed already is, that it makes more likely and more easy the establishment of a fascist autocracy: a community wholly controlled by

central government'.[20] A study of totalitarian dictatorship and autocracy by two social scientists, Carl Friedrich and Zbigniew Brzezinski, reached the conclusion that four out of six elements common to most dictatorships and autocracies-namely monopolistic control of communications, weapons, terror and the economy-relied on some form of technological base'.[21]

This is not to imply that the increasing use and reliance on technology or the application of cybernetics to social planning itself leads to totalitarianism. Indeed, dictatorships have existed at all leads to technological development. The main point, however, is that the increasing 'de politicization' associated with advanced technology could make such a system appear a 'rational' economic necessity lying outside the field of political considerations, a scenario predicted by George Orwell in his Nineteen Eighty-Four. This tendency is already apparent in various arguments put forward in support highly authoritarian policies for population control. By dressing up political issues as complex technical ones, the technocracy removes responsibility from the political process.

Already we can see how contemporary technology tends to accentuate reinforce class divisions and inequality rather than remove them. Those who lack sufficient resources to make use of available technology are placed at a permanent disadvantage. We seek, for example, the plight of those who have been labeled the 'transport poor', members of the community who are penalized and discriminated against for not owning a private car by the lack of adequate public transport facilities. Similarly many of the benefits of contemporary medical research are devalued in Britain by a National Health Service which permits those patients who can afford private treatment almost immediate access to a consultant's skill and training, while others may have to wait months or even years for such treatment. New telephones can be provided immediately for British people requiring them for business or

commercial purposes; Pensioners and others in need often have to wait years to be connected.

Far from being the great democratization that was to bring equality to all, technology has become yet one more means by which one social class maintains supremacy over another. The more sophisticated that technology becomes the greater is this effect. The British Society for Social Responsibility in Science points out in its policy statement that 'Scientific and technical knowledge is an important source of power, but only large institutions have the resources needed to exploit it… thus science is used directly to increase the power of the already powerful and to frustrate the expectations of the powerless'.[22]

As well as removing him from the political process, technology also provides the means by which the work is removed from control over the process of industrial production and presents him with the pre-defined role he is required to play in this process. Karl Marx used the term alienation to describe the way in which, under the capitalist system of production, the product of a man's work is immediately taken away from him, and he loses all control over what happens to it. To Marx, productive activity was the main way in which man established his relationship both with the natural world, and with the other members of society. It was also the process by which the individual fulfilled his full potential as human being. Marx saw work as the concrete manifestation of that which differentiated man from the rest of the animal kingdom. In the German ideology, for example, he writes that men 'begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence, a step which is conditioned by their physical organization'.[23]

Marx identified four aspects of alienation in capitalist society that impeded this process man’s alienation from his work from, the human species in general. Alienation was primarily a function of the relations of production rather than of the particular modes of production (the machines and techniques used by a society) ; it remained specific to capitalist society, and would disappear once this had been substituted by a communist regime.

The concept of alienation has been widely debted since Marx's time. Some dismiss it as an 'unscientific' concept belonging to Marx's early, more 'humanist', writings; they point to the fact that it is scarcely referred to in the three volumes of Capital to argue that by the time Marx had come to write his major work, he had 'corrected' his earlier ideas and had discarded alienation as a useful concept’.[24] others see this as a misinterpretation of Marxism, and have developed Marx's idea of alienation further, particularly in the light of the theories of Freud and others concerning the nature of the human unconscious. Some of these have attempted to extend Marx's critique to include the idea that man is alienated from himself-or 'dehumanized'-as much by the nature of the contemporary social environment as by the fact that it is controlled by a dominant social class; they suggest that the modes of production may be as important as the relations of production in determining man' be state of alienation in industrial society. The psychologist Erich Fromm, for example, has written that 'man, as a cog in the production machine, becomes a thing, and ceases to be human… the passiveness of man industrial society today is one of his most characteristic and pathological features… being passive, he feels powerless, lonely and anxious’.[25] Fromm refers to this as the 'syndrome of alienation.

The somewhat abstract nature of Marx's concept of alienation makes it difficult to apply as an analytical tool to particular work situations. Five different aspects of alienation, however, utilized by sociologists and

operational categories have been identified by Melvin Seeman. These roughly correspond to Marx's own four aspects of alienation They are: the powerlessness of the individual when he feel himself controlled or manipulated by other people or by an impersonal system (such as technology); the meaninglessness that he associates with his work, a feeling increased by the division and fragmentation of production tasks, and often apparently encouraged by bureaucratic structure; the self-estrangement of the worker who often experiences a form of depersonalized detachment from his work; and finally a general formlessness and isolation that can lead to social alienation or the general break- up of integrated communities and is often associated with the French sociologist Emile Durkheim's concept of anomie.[26] These four aspects of alienation were used by the US sociologist Robert Blauner in a wide- ranging study of the factory worker in American industry. His general conclusion was that, although each dimension of alienation varied in from and intensity according to the industrial system being studied, 'inherent in the techniques of modern manufacturing and the principles of bureaucratic industrial organization are general alienating tendencies.[27]

Blauner found that workers in an automated chemical plant showed a far lower degree of subjective alienation than those working in a textile factory on automobile production line. He ascribed this to factors such as the unpredictability of chemical processes which adds interest, excitement and challenge', the flexibility in work rhythms that is mind possible by automatic control, and the increased amount of 'on –the –job leisure' that was usually taken up with 'reading… conversation and joking with fellow workers'. Blauner's general conclusion from this was that 'since work in continuous-process industries involves control, meaning and social integration, it tends to be self – actualizing instead of self –estranging'.[28] In other words, increased

automation and the work- style that this introduces is seen by Blauner (and a large number of liberal industrial sociologists) as one way of removing the problem of alienation.

What Baluner's analysis of automated work was unable to foresee were the changes that have been brought about by the development of more sophisticated control techniques in the ten years since his studies were carried out. Fail- safe and other automatic monitoring devices have tended to reduce the involvement of the operator to a minimum, one again removing much of his regained Sense of responsibility. In such circumstances, alienation and frustration are only aggravated by the process of automation.[29] One survey of automobile workers found that many complained of the social alienation brought about for example by the greater distances between work posts in the automated workshop and by the fewer breaks and opportunities for contract between workers. They complained of a feeling of establishment from their productive process under automated work conditions. [30] According to one sociologist, B. Karsh, 'automation seems to disconnect man from the machines … mass production having dispossessed the man of the creative forms of work, he remains disposed by automation of control over his work.'[31]

A major effect of the introduction of increasingly capital- intensive technology results from the requirements it place on the habits of the workforce. Above a certain level of capital investment, a maximum return can only be achieved through the maximum use of equipment, and labour charges become a relatively insignificant part of the overall costs. A survey of British firms carried out by management consultants concluded that 'the average British company's computer is used only half the time it could be, and is productive for only two thirds of the time it is used, wasting about £3,000 a month'.[32] The total wastage bill for 104 computers investigated

exceeded £3$^{1}/_{2}$m. a year, this situation being the result, according to a director of the firm which carried out the survey, of 'serious management failings'. To avoid this type of 'wastage' computer operators are now obliged to organize their lives to meet the demands of the computer, and not the other way round. According to one British trade unionist, 'high capital equipment, such as computer aided equipment, is now becoming more widespread in technical areas. In consequence of that, the employers will wish to ensue that all employees who use this equipment accept the same type of subordination to the machine that they have already established on the workshop floor'. A direct result is the result is the relatively new phenomenon of university graduates finding themselves on shift- work and the general 'proletarinization' of technical workers.

The problems of unemployment and redundancy created by automation are more difficult ones to discuss. Undoubtedly the increasing productivity of British industry in recent years has been achieved at the expense of a declining number of jobs in particular industries or firms. In GEC, for example, the largest private employer in the UK, the number of employees fell from 2,30,000 to 1,81,000 between 1969 and 1972, while profits rose over this period from £ 77m. Undoubtedly, too it is possible to correlate redundancies in certain firms and industries with the introduction of certain types of automation. One can point to the construction of vast chemical complexes representing an investment of many million pounds, yet employing no more than a dozen people.

The reasons for the dramatically high unemployment figures in the early 1970s however- including for the first time a high level of unemployment among qualified scientists and engineers – were as much the result of political and economic policy as they were due to changes in the technology of production. Indeed, to blame such unemployment

directly on the effects of automation is yet another example of 'de politicization', the concept of 'efficiency' being invoked to justify measures taken on the ground of economic performance rather than social need. Instead, we should look for the causes in the function of a system which prefers to employ many thousand more skilled engineers and draughtsman on the design of supersonic aircraft, or sophisticated military technology, than on the problems of urban public transport systems or medical equipment.

Taken individually, a large number of the social problems associated with advanced technology that we have discussed may well have piece-meal technical solutions. These often lead politicians and others to affirm a strong belief that such problems can be solved by new and better technology, in the same way that they suggest that the problems associated with economic growth can only be solved through further economic growth. They point out that many pollution problems, for example, can be solved or diminished by the introduction of adequate pollution- control devices, and occasional adaptation to production processes. Similarly, some of the more immediate psychological problems created by the stress of modern working conditions such as 'job enlargement' and the re-integration of previously fragmented work –tasks. The problems of city transport could (theoretically, at least) be solved by the elimination of the private motor car and a massive financial and technological investment in computer-controlled overhead transport networks. The list of such 'technical fixes' that are available could be extended indefinitely, for the problems which technology is best able to solve are precisely those which have been isolated from their social environment. Faith in technology is left unrented. Referring to the problems of pollution and nuclear war –fare, Donald Schon has written that 'while these unwanted effects of technology

are disturbing, they do not leave us without a clear course of action. We must simply apply more energetically and more exhaustively the kind of practical reason central to technological advance'. Amore sophisticated approach to the 'technical fix' is the development of social institutions designed to predict the likely social consequences of particularly technological developments (such as the recently established Office of Technology Assessment in the US) so that attempts can be made to minimize these before they occur.

Despite such frequent reaffirmation of faith in the powers of technology by both politicians and technologists, attitudes towards science and technology have begun to change dramatically over the past few years. The quarter of a century that followed the Second World War, and particularly the 50s and early 60s, was a boom- period for technology. Scientists and technologists, having won their spurs on successful wartime projects such as the development of radar and atomic bomb, found themselves riding the crest of a wave of optimism spending on research and development in the US increased almost 60 times between 1940 and 1965, from $20,000 million a year. Similar increases occurred in most other advanced industrial countries. Political leaders went round publicly affirming their confidence in science and technology to come up with the solutions to all the world's major problems. President Kennedy, for example, announced in 1963 that 'as we begin to master the potentialities of modern science we move towards an era in which science can fulfill its creative promise and help bring into existence the happiest society the world has ever known'. Mr. Harold Wilson described the labour party's aim in 1960 as being to harness socialism to science and to science to socialism; four years later, a few moths before becoming prime Minister he was telling a conference in Birmingham that Britain's further was ' to be

forged in the white heat' of a government- inspired technological revolution. By the mid -60s, however, the wave of optimism had begun to break. Once the race to get a man on to moon had been won, there was an immediate decrease in expenditure on space- related research, which fell from a total of 20.4 per cent of the US Federal Government's total R&D expenditure in 1965 to almost half this figure in 1970. The cut –back in space research contributed to a 16 per cent decrease in the number of research scientists and engineers employed in the aerospace industries between 1970 and 1971. The failure of the US to achieve any from of victory in the Vietnam War, despite its vast technological supremacy, severely dented the official success image of technology even further. In Western Europe, the apparent inability of technology to help solve the economic problems experienced by many countries in the lead to a gradual dampening of political enthusiasm for spending large sums of money on research and development with no immediate economic pay – off in sight. While General de Gaulle had previously emphasized the need to 'push relentlessly our technical and scientific research in order to avoid sinking into a bitter mediocrity or being colonized by the activities, inventions and capacities of other countries', many politicians now seemed to agree with the Treasury official, giving evidence before the House of Commons Expenditure Committee in its 1971/72 session, who remarked that 'most people would feel that the return the nation has had from its R&D expenditure has been disappointing'.

The path from disillusion to distrust is a short one. In January 1973, Mr. Harold Wilson gave a speech in Edinburgh warning of the dangers of technological advance, and describing the forces of technology which were 'riding across people's lives' leaving a trail of misery and destruction. The problems of man in modern technological society, he said, his frustrations,

his tension, his seeming impotence, were common to every advanced country. The contrast with his speeches of ten years previously, with their high gloss of technological euphoria, could hardly be more marked. The next issue of private Eye contained a cartoon in which Mr. Willson was instructing his secretary to ‘dig out my election speeches of 1964 and replace wonders of technology with horrors of’.

This disillusion has been reflected and sustained by several writers who have attempted to synthesize an analysis of the problems of our modern technological society. The most prominent of these have been Jacques Ellul, Herbert Marcuse, continued in his book The Technological Society published over twenty years ago, has been directed at la technique. This is perhaps best translated as technological practice, which

He says has ‘fashioned an omnivorous world obeys its own laws and which has renounced all tradition… man himself is overpowered by la technique and becomes its object’. His arguments bear close rebalance to those of the Victorian writer Samuel Butler in Erewhin, whose central character comes across a society that had banished the machine, after it had realized the increasing oppression and dominance of man by ‘mechanical consciousness’. Marcuse’s one –Dimensional man by and Roszak’s The Making of a Counter Culture are both strong attacks on industrial society. For Marcuse, ‘The liberating force of technology –the instrumentalization of things – turns into a fetter of liberation; the instrumentalization of man, while Roszak states that ‘in the case of technocracy, totalitarianism is perfected because its techniques become progressively more subliminal’.

Until recently, most of these attacks had fallen outside the mainstream of political critique. They could be dismissed by both Left and

right as little more than the rumblings of discontented or frustrated romantics. To question the very nature of technology, rather than the uses to which it was put, seemed to challenge the whole basis of rational thought; the apparent political neutrality of both science and technology left responsibility for these activities as part of the conventional political process. Attacks on the ‘counter- culture’ philosophy in particular, with its almost complete rejection of the conventional life- style of contemporary industrial society, have tended to look upon the move away from modern science and technology as some from of regression to the dark ages. Jacob Bronowski has described the counter- culture as ‘a recapitulation in modern dress of the anti – intellectual, irrational and illiberal prejudices that have always been endemic in America. An armory of old and scaly prejudices is being foisted on the young in the disguise of a gospel of nature’.

Whatever one feels about the political significance of the counter – culture movement, one of the more important practical ideas to have emerged from it is that which forms a major theme of this research, the need to develop an alternative technology. The roots of alternative technology are to be found equally in th social and political critiques of those concerned with what they see as anti- human and alienating aspects of contemporary technology, and among those who argue primarily on environmental grounds that the polluting and resource- wasteful elements of such technology make the search for an alternative mode of technological development an urgent necessity.

Alternative technology is now attracting a growing number of advocates from each of these camps. Its general approach starts from the premise that the roots of the problems created by modern technology are to be found as much in the designing of the technology itself as in the uses to

which it is put. Eschewing any patching –up attempts of piecemeal social engineering, it suggests that solutions can only be found through a radical overhaul of society's technological and industrial base. Robin Clarke, one of the co- founders of Biotechnic Research and Development (BRAD), has described 'the new view' as being 'that science and technology will not themselves find a way out of the present crisis –but that any real way out will involve a science and a technology, even if those activities in the future bear little qualitative or quantitative resemblance to science and technology today.'

It would be wrong to imply a complete harmony of interests among those who make up what might loosely be called the alternative technology movement. To a certain extent the different approaches are reflected in the particular names that have been selected to describe the activities in question. Some of the names suggested, and adopted by different groups or individuals, include: soft technology, radical technology, low impact technology, intermediate technology (applied, in particular, to the technological requirements of underdeveloped countries), people's technology, libratory technology, and so on. The approach of each group however usually contains some combination of a set of common elements. These include the minimum use of non – renewable resources, minimum environmental interference, regional or sub- regional self – sufficiency, and the elimination of alienation and exploitation of individuals. Groups differ in the relative emphasis placed on these, however, and differences between groups are often as marked as their similarities. Some consider alternative technology as a type of 'insurance policy' to cover the possible technological collapse of society through some massive ecological disaster. Others see it as a means of preventing such a collapse from occurring, and as forming the only sound basis for future social developments, with each

country developing a set of technologies relevant to its own particular resources and needs. While for many, alternative technology means the tools and machines by which both man and nature will be liberated from the domination and exploitation inherent in our present technology, emphasizing the extent to which it provides a framework for both a political and a technological alternative.

When we talk of alternative technology, therefore, we are primarily referring to a set of approaches to the alternative designing and use of machines and tools, rather than to a particular set of machines. The concept of commune –based society in which the activities of all communes are coordinated through a complex computer network may well qualify as an 'alternative' technology in terms of self –sufficiency and the decentralization of control; it might be argued, however, that the expertise and resources required to from the alternative technology category. Whichever attitude is adopted, the main importance of alternative technologies dose not lie in the particular solutions which may be offered to certain problems. Rather it is in the approach that they represent, that technology should be designed to meet human needs and resources- and not the other way round –and the recognition that radically different patterns of technological development may nit only desirable but necessary.

None of the social problems associated with contemporary technology, when taken in isolation, are sufficient to condemn the whole basis of modern technology. Looked at as a whole, however, it is difficult to avoid the conclusion that what is required is the based on political and environmental criteria which allow potential problems to be taken into account before the technology has been designed rather than after it has been implemented. Such an alternative technology might concide with

Aldous Huxley's suggestion that we need a differently oriented technological progress (resulting in) a progressive decentralization of population, of accessibility, of ownership of the means of production, of political and economic power'. Equally it ties in with Gandhi's recommendation that 'every machine that helps every individual has a place, but there should be no place for machines that concentrate power in a few hands and turn the masses into mere machine- minders, if indeed they do not make them unemployed'. Both underline the fact that alternative technology may prove in the long –run to provide the only basis for a life – style that is personally fulfilling, socially just and economically and ecologically viable. On these criteria also khadi and village industries neatly fits in. It is labour –intensive and capital saving. In view of the scarcity of capital and high technology khadi and village industry is essential to serve the need of the society and nation at large.

References:-

01. J.K. Galbraith, in his the New Industrial State (Harmondsworth, 1967).
02. Barry Commoner, The Closing Circle: Confronting the Environmental Crisis (London, 1971), 0.151.
03. I bid, P.177.
04. I bid, P.186.
05. Johan, P. Holdren and paul R. Ehrlich, "One -Dimensional Ecology Revisited", Science and public Affairs , Vol. XXXVII, No.6 (June,1972).
06. John Maynard Keynes, Essays, in persuasion (London, 1952), p.372.
07. Sir Alec Cairncross, Presidential Address to the British Association for the Advancement of Science (September, 1971), p.2.
08. Keith Pavitt, in "Technological Innovation in European Industry :The Need for a World perspective", Long-Range Planning (December, 1969),

p.8.

09. R.Clarke, The Science of War and peace (London,1971).
10. An Oxfam Special Report, Oxford, 1972,p.3.
11. Judith Hart, Aid and Liberation (London,1973), p.42.
12. Mr. Arthur Hawkins, The Guardian, December 19, 1973.
13. Noam Chomsky, American power and the New Mandarins (Hrmondsworth, 1969), p.24.
14. Ralph Lapp, The New Priesthood (New York, 1965), p.1.
15. I bid, p.2.
16. Galbraith, Op. Cit.
17. Science Against the people: The Story of Jason, Berkeley, 1973.
18. Joseph Hanlon, "The technological power broker", New Scientist (February 15, 1973).
19. The Report of the Royal Commission on Local Government in England, Cmnd. 4040(HMSO,1969), p.125.
20. Carl J.Friedrich and Zbigniew K. Brzinski, Totalitarian Dictatorship and Autocracy (New York, 1966).
21. Frederick Enels and Karl Marx, The German Ideology (London, 1938),p.7.
22. Erich Fromm, The Revolution of Hope: Towards a Humanized Technology (New York,1968), pp.40-41.
23. Melvin Seeman, 'On the meaning of alienation', American Sociological Review, Vol. 24 (1959).
24. Roert Blauner, Alienation and Freedom (Chicago, 1964), p.3.
25. W.A. Faunce, "Automation in the Automobile Industry: Some Consequences for in -plant structure', American Sociological Review, Vol.23,1958.
26. B.Karsh 'Work and Automation' in H.B. Jacobson and C. Roncek, New York, 1959.

27. Mike Cooley, Computer- Aided Design: Its Nature and Implication, London,1972,p.75.
28. Jacques Ellul, The Technological Society, London, 1965,p.14
29. Herbert Marcuse, One -Dimensional Man, London, 1968,p.131.
30. Theodore Roszak, Making of a Culture, London, 1970,p.9.
31. Jacob Bronowski, "Thchnology and Culture in Evolution', Cambridge Review, May 8, 1970.
32. E.F. Schumacher, "The Economics of Permanence", Resurgence, Vol. 3, No 1, May -June, 1970.

CHAPTER-II

IMPORTANCE AND FUNCTIONS OF KHADI INDUSTRY IN THE RURAL ECONOMY OF INDIA

So long this country remains committed to the present pattern of economic development in which it sets up capital- intensive modern industries a t enormous cost, only to cater to the needs of the urban elite or to export their products at throw- away prices, not only will unemployment go an increasing and capital go on concentrating in the hands of a few, but it will also run the risk of going deeper and deeper into bondage to the affluent nations. The only and the right way of avoiding this bondage- in other words, of fostering financial and technological self -reliance is to make a clear break with the prevailing pattern of industrialization and take to the Gandhian path, adapted, of course to the changed or changing conditions. This path dictates, for example, that production of consumer goods by machines is banned, thereby virtually forcing the cottage industries to fill in the gap; chemical fertilizers are replaced with organic manures as rapidly as possible; urban planning is taken in with a view to minimizing the need power- driven transport; and building laws are framed which complete the rich and the poor alike to go in for low-rise, high density housing, using cheap, locally available building laws are framed which compel the rich and the poor alike to go in for low -rise, high density housing, using cheap, locally available building materials, like bamboo clay, bricks and tiles etc.

In fact, upto the time when full employment is achieved, mechanization has to be scrupulously eschewed not only in the production of consumer goods but also in the construction of office or residential buildings, roads, bridges, railways tracks or irrigation dams and reservoirs. Pre-fabricated housing factories and earth-movers and earth- excavators will, therefore, have to be shut down or scrapped. Nor will electro-computers, automatic laundries or automic telephones and mechanized bakeries, which the Congress Government established all over the country, be allowed to function. They will be replaced by the old system which will provide more employment. (So far as agriculture is concerned, only small machines may be used, as in Japan, which will supplement but not supplant human labour).

In a country like India where unemployment is widespread, it is economically with productivity (that is, production per worker) constant than by increasing productivity with employment constant. Mechanization or further mechanization of the economy has; therefore, to be discouraged till all the people without jobs have been fully absorbed. Meanwhile, to repeat, if the and wherever we are faced with a choice between two techniques, one of which will employ more workers, and the other fewer workers, to produce the same result or amount of GNP, with rate exceptions (which immediate national interest may demand), it is the former that will be chosen.

To conclude: Nehru had written thus on the subject of industrialization in the form of a Forward to China Builds for Democracy, by Nym Wales, in 1942:-

"Gandhi has, I think, done a great service to India by his emphasis on village industry. Before he did this, we were all, or nearly all, thinking

in a lopsided way and ignoring not only the human aspect of the question but the peculiar conditions prevailing in India. India like China has enormous manpower, vast unemployment and underemployment. It is no good comparing it with the tight little countries of Europe which gradually became industrialized with small and growing populations. Any scheme, which involves the wastage of our labour or which throws people out of employment, is bad .From the purely economic point of view, even apart from the human aspect, it may be more profitable to use more labour power and less specialized machinery. It is better to find employment for large numbers of people at a low income level than keep most of them unemployed. It is possible also that the total wealth produced by a large number of cottage industries might be greater than that of some factories producing the same kind of goods."

The Nehru of later days, however, proved to be a different man. To our politicians use of hands or manual labour is a sign of backwardness, if not outright exploitation. On the other hand, the use of machine is a sign of progress- socialist transformation even though workers may be starving in the neighbourhood for want of bread because of want of work.

It is being constantly forgotten or ignored that in all spheres where a work can be accomplished or virtually accomplished by hand, the modern machine does not add to production but saves labour and thus creates unemployment. The machine comes in only when the hands for a job required are too few or the job cannot be executed with hands at all.

If India has to live and make the grand, the vast unemployment and underemployment, which afflict its economy, must be wiped out at the earliest date. It must, therefore, be unequivocally laid down that the aim of our economically has been changed from increasing the gross national

product to increasing productive employment. In fact, the creation of more jobs would inevitably cause of a rise in GNP but when, if all, faced with the choice between a higher rate of growth with more jobs, on the other, we will unhesitatingly opt for the latter course.

On the one hand, we have a labour force that is not only abundant but redundant, and our capital resources are scarce; on the other, like other underdeveloped countries, we are faced with a technology which increases output per worker through increase in capital investment but saves labour. This technology suits developed countries which enjoy high incomes and, therefore, posses a high capacity to save. It is out of tune in industrially backward, but populous countries with a dense agrarian economy like India, with low margins of domestic savings-in countries with plentiful labour and little capital. Our problem is to work out production methods or techniques which will economize on capital or require less capital per worker rather than those which economize on labour or require less labour per unit of investment. In our conditions, obviously, it will be more conducive to development to apply the available capital extensively to a larger fraction. of the labour force than intensively to a smaller fraction. Just as in agriculture we have to maximize production not per worker but per acre, so in industry we have to maximize productivity not yet worker employed, but per unit of capital invested.[2]

Special attention will, therefore, have to be give to organizing innovations or promoting technological improvements in cottage and labour intensive enterprises dispersed over the countryside, so that the out per head is increased even while the capital used is not large.

This means that the champions of village industries should welcome rather than resist modern techniques and links with modern industry. The

success of the handloom industry in using yarn produced in modern factories of cotton as well as synthetics, and weaving them into fabrics which caplet in the world markets, hand a lesson of much wider implication. Gobar gas plants can make a great contribution in providing village communities with organic fertilizers and a gas which can be used as source of energy.

Those engaged in industrial research should, for their part; concentrate on evolving the type of technology which can develop new cottage industries. The watch industry in Switzerland offers an outstanding example of decentralized production. A more recent instance is offered by the electronics industry which can be developed as a cottage industry. Still another industry is provided by the Central Research Institute for Village Industries at Wardha which has designed a potter's wheel with ball-bearings that has not only doubled the production but also halved the physical effort.

In fact, there are a whole range of ideas waiting to be explored. In building houses, for example, bamboo and brick can usefully replace cement and steel.

Mahatma Gandhi, the torch bearer of village industries and handicrafts, had a clear mind on this question. He was not opposed to machines as such or to introduction of improved techniques. He once said: "what I object to is the craze for machinery, and not machinery as such. If we could have electricity in every village home, I should not mind villagers playing their implements and tools with electricity". Fifteen years earlier, he had said: "I would favour the use of the most elaborate machinery if thereby India's idleness and resulting pauperism could be avoided.

Nor was Gandhiji opposed to the use of devices or contrivances placed by modern science and technology at the disposal of man which helped ease the drudgery or lighten the burden of physical labour. Indeed, a handloom worker's cottage of his conception could be equipped with a telephone which saved time and avoided of physical labour. For, while a substitute of the handloom that was available, viz., a textile mill, served to create unemployment, exploit the labour of workers employed and concentrate wealth in the hands of a few, there was no seek or convey information, walked the distance or used a vehicle .[3] Once a friend asked Gandhiji whether he proposed to replace the railways with bullock -carts and, if he did not, how he expected to replace mills with spinning wheels. He wrote,[4] "I told him that I did not do so even if I swished."

Three hundred millions carts would not destroy distance. But I would replace mills with wheels. For railways solved the question of speed. With mills, it was a question of production is which the wheel could easily compete if there were enough hands as there in India."

To revert: the scientific study of production techniques, however, has still now been confined almost entirely to Western countries where the main goal in view has been the reduction of labour costs rather than capital costs- with the result that in our country, where most of the equipment has been western-designed, and industrial engineers largely western-trained, improved techniques even in small -scale industry are based on a context of high wages and cheap capital. If, therefore, India has to make the best use of its resources engineers have to conduct researches into production techniques and equipment that are appropriate to our conditions of low wages and dear capital. They have to rely on local resources and skills, and not merely ape the West. Our engineers will not prove unequal to the task, provided they are set the task specifically only if the Government accorded

first priority to problem and down guidelines for research institutes and university science departments. Considering that we have the third or fourth largest number of scientists and technicians in the world, there is no reason why solutions cannot be found.[5]

In a way, to repeat the situation that faces India which is rich in labour but poor in material resources, poses a new economic problem and demands new technical methods for its solution. More specifically the problem is how to develop a new type of industry-radically different from the present cottage and handicraft industries as also from the present large-scale factory industries either- a type which, for the same amount of capital investment, can at the same time produce more goods per worker than the former and provide more employment than the latter.

What is required of science and technology are methods and equipment that are cheep enough, that are virtually accessible to everybody, and therefore, suitable for small -scale application, so that we have production by the masses as against mass production, and are compatible with man's need for creativity.

Hitherto, it is technology which has largely determined the relationship between the size of plant and efficiency. Higher technology has meant a bigger plant with greater efficiency which means greater production per worker. But in sheer theory, science and technology are not concerned primarily with size or appearance; nor can science be confused or equated with technology. Fortunately, as if to met the challenge set by dense populations to economic growth, technological improvements today are tending to promote a smaller rather than a large scale of operations, which make possible a larger increase in output with only a small increase in output with a much smaller amount of capital.

Our scientists have to proceed with the conviction that if the nation is survive, it cannot afford to follow the socio-economic pattern of the west. Also, that science or higher technology dose not stand in their way. Only if they strive and preserver, they will certainly be able to discover a technology which will be appropriate to our socio- economic conditions- where labour abounds, natural resources are scarce and certain traditions still persist, some which, for example, the caste system have to be shed, while others, that have stood us in good stead for centuries past, for example, the joint family system, have to be preserved.

So the new, improved or appropriate technology will have to satisfy as many of the following, criteria as possible: [6]

(a) It should seek to minimize the use of capital per unit of output or, conversely, aim at maximizing production from a given unit of Investment;

(b) It should also seek to maximize employment per unit of investment;

(c) It should aim at making the maximum use of local talents, raw materials and other resources available in the country, region or village, specially of The renewable ones;

(d) It should minimize energy consumption;

(e) It should minimize population of the environment and help in maintaining ecological balance in nature.

Needless to add, the aim of the discover or invention of new technology is provide or help provide one or more of the basic necessities of mankind, such as food, drinking water, clothing, shelter, health /medical care and the like at a cost which can be within the reach of the common man - the man who is living below the poverty line today.

"The concept of appropriate technology in this context", as Shri N.P. Singh, Secretary to the Governor of Karnataka, wrote to the author in a letter dated 19 march, 1979, ‘‘Need not be kept confined only to the industrial sector, but must be extended to cover agricultural, housing, health and sanitation and, in fact, all other facets of human life-style and activities. In view of our country's predominantly rural population the identification of problems concerning the rural areas, especially those of the small and marginal farmers, rural artisans and craftsmen and the landless labourers, and efforts at finding their solutions through the application of science and technology would obviously deserve special attention and support in this connection. An illustrative list of the specific fields that could be covered for this purpose in India on a priority basis would include.’[7]

(a) Small farmer technology;

(b) Agricultural implements and tools;

(c) Water management systems (both for irrigation and drinking purposes);

(d) Low cost, but improved seeds, fertilizers and pesticides for agricultural use;

(e) Post-harvest technology (including grain store and infection problems);

(f) Processing of cereals and pulses;

(g) Dehydration and preservation of fruits and vegetables etc;

(h) Improved animal husbandry, poultry and dairy-farming techniques;

(i) Energy systems including solar energy, wind power and bio-gas plants (both community and family -sizes);

(j) Transportation system in village (including bullock- cart improvements);

(k) Low cost housing techniques and materials;

(m) Inexpensive medical and health care (covering Ayurvedic, Unani, and Homeopathic as well as Allopathic systems). It would seem important to initiate a programme of research in various indigenous system of medicine along modern scientific lines;

(n) Educational technology for removal of illiteracy and spread of functional literacy, etc. Special emphasis has to be laid on the development of needed technical skills and attitudes of self -help in the people;

(o) Textile technology (covering the problems of khadi, handlooms and sericulture);

(p) Gur, khandsari and sugar- making;

(q) Leather tannery, shoe-making, ceramics, pottery, carpentry and problems concerning other rural industries, arts and crafts;

(r) Miscellaneous agro- based and frest based industries;

(s) Rural engineering workshop for repair of agricultural machinery, implements, etc; and

(t) Recycling and utilization of human, animal and vegetation, wastes, etc.

While it may be taken as established that science and technology can be harnessed to small machines which will require less capital, the question still remains whether they will also provide more employment, or at least, not lead to unemployment or exploitation, by the capitalist. However, if research is unable to make a break through we would prefer keeping our vast manpower employed with hand-powered tools rather than have a few capital- intensive automatic machines which may produce the required quantity of goods but will aggravate capitalism and render vast numbers unemployed.

In that case, that is in the case of failure of research to find a way a out, as discussed earlier, the country will do well to place or continue to emphasis on (agriculture and) handicrafts and small scale decentralized industries of low capital-intensity which will from the main pattern of industrial economy. With increase in people's income there will be increase in demand for industrial goods. If at this stage there are unemployed workers in the country, the State should ensure that the existing techniques remain unchanged, so that, in order to produce more or requisite quantity of goods, more persons may be put to work. But if full employment has already been reached, than the state will allow replacement of existing techniques by improved techniques so that the existing number of workers may be enabled to produce more goods. And again, to repeat, as the incomes increase further and further, in other words, availability of capital outpaces the increase in the number of workers so will be techniques go on improving further and further.

Village and small industries have made a significant contribution in the First and second plans in realizing the objectives of expanded employment, larger production and more equitable distribution. With the larger dimensions of the tasks to be accomplished in the Third plan, their role will be even more important. The objectives of the programmes for these industries as set out in the Industrial policy Resolution, 1956, and in the Second plan are to create immediate and permanent employment on a large scale at relatively small capital cost, meet a substantial part of the increased demand for consumer goods and simple producers goods, facilitate mobilization of resources of capital and skill which might otherwise remain inadequately utilized and bring about integration of the development of these industries with the rural economy on the hand and large- scale industry on the other. They also offer a method of ensuring more equitable distribution of the national income and avoiding some of the problems that unplanned urbanization tends to create. With improvement

in techniques and organization, these industries offer possibilities of growing into an efficient and progressive decentralized sector of the economy providing opportunities of work and income all over the country. One of the principal aims of planning in this field, therefore, is to assist in the adoption of improved techniques and more efficient forms of organization, so that full advantage is taken of the basic facilities and services available as a result of general economic development, and over a period the entire sector becomes self- reliant and -supporting. At the same time, there pace of technical change will have to be so regulated that large-scale technological unemployment with consequent hardship and misery to millions of people's is avoided.[8]

An important lesson of the past decade is that where individual small industries, including village industries. Have failed to adopt improved techniques or to achieve economies of scale and or organization through cooperation, production costs have remained relatively high and problems of unsold stocks and of decline in production and employment have arisen. These problems have come up in some of the traditional industries. Constant adaptation to the conditions of rapid change in a dynamic economy and adoption of new techniques, methods and forms of organization are important factors in the stability and development of various village and small industries. In the last ten years, large programmes of assistance have been organized for these industries and considerable support has been given to them through provision of loans, subsidies, technical and marketing advice and, in some cases, through reservation of Spheres of production. In latter part of the Second plan, marketing conditions for some of the small scale industries improved markedly following the intensification of import restrictions. The need for these restrictions may not continue indefinitely. Moreover, with the supply of electric power over large areas of the country improvements in means of transport and communications, use of modern machines and techniques and the general

advance of science and technology, the entire economy is being transformed. The problems of village and small industries, therefore, need to be constantly reviewed and necessary measures taken to realize the full potential of decentralized industry as essential and continuing element in the national economy.[9]

The progress during the First and Second plans of different small industries, including handloom, khadi, village industries, small scale industries, handicrafts, sericulture and coir, was reviewed towards the middle of the second plan by a number of Working Groups and Committees. A special Study Team assessed the working of 25 industrial pilot projects which were taken up in community development blocks about six years ago. The programme Evaluation Organization also made a study of rural industries in selected community development blocks. Data collected in the course of these studies and the findings and conclusions reached have been of considerable value in formulating programmes for the Third Five Year plan.

So far as the kind of industrial the economy that will suit India is concerned, it depends upon the answer to the question as to what we aim at. If we aim merely at the highest output per person employed, output being positively correlated with capital per head, we must have an economy with a capital structure on the pattern of Western countries where this amount is large. But as the reader will find in the succeeding pages, if we have the good of the people as a whole at heart, by and large, in a capital-poor and labour-rich country like India, there is no escape from an economy which Mahatma Gandhi advocated. His kind of economy will, not only in the present context produce greater wealth in the total, but will also serve all our other aims, that is, it will provide maximum employment, ensure equitable distribution of the national product and promote a democratic way of life.

A few examples showing the relationship between capital and output in the cotton industry will serve to show that on the whole, it is less capital -intensive structure that meets India's needs best. According to late Dr. P.S. Loknathan, textile fabrics in India were manufactured in the forties, broadly speaking, by four different methods of production involving an ascending degree of capital intensity (that is, capital investment per head of worker). Relevant details are roughly as given in the following table:

Table:2:1.

CAPITAL AND OUTPUT IN COTTON WEAVING IN INDIA

Method of production	Capital intensity (or capital investment per head of worker)	output (or net value added per head)	Capital coefficient (or ratio of net value or output to capital	Amount of labour employed per unit of capital
01.Modern mill or large composite factory consisting of spinning - cum-weaving establishments (large scale industry)	1200	650	0.54	1

02.Powerloom or small factory consisting of establishment alone (small scale industry)	300	200	0.66	3
03. Automatic loom (cottage industry)	90	80	0.90	15
04. Handloom (cottage industry)	35	45	1.29	25

Source: Eastern Economist, July 23, 1943

According to anther source, Shri A. K. Sen, quoted by UN's World Economic Survey, 1961, p.54, figures of relative productivity of capital and labour for five different techniques prevalent in the Indian cotton weaving industry some 17 years later, would stand as shown in the table below:-

Table:-2:2

ESTIMATES OF PRODUCTIVITY OF CAPITAL AND LABOUR IN INDIA COTTON WEAVING INDUSTRY USING ALTERNATIVE TECHNIQUES

Techniques	Value added per unit of fixed capital	Value added per worker.
01. Fly-shuttle handloom.	9.0	450
02.Semi-automatic handloom.	7.5	1500
03. Cottage power-loom.	1.5	2250
04. Factory non- automatic powerloom.	1.5	6000
05. Automatic powerloom.	0.6	48000

Soure: A. k. Sen, Choice of Techniques,Oxford University press, 1960

Below is given yet another table worked out by the noted economists, Dr. K.N. Raj:-

Table:2:3

	Artisan type (traditional	Small- scale (Semi-automatic loom)	Large- scale (Full automatic loom)
Capital cost per loom.	Rs.50	Rs.200	Rs.1000
No. of looms workable by a worker	-1	1	16
Capital cost per worker	4yards	20yards	80 yards

Net value added per loom per year (On the assumption of 20 paise per yard and 300	Rs.400	Rs.400	Rs. 6000
Working days per year)			
Net value added per worker per year.	Rs.300	Rs.1500	Rs. 96000
yearly wage usually earned by a worker	Rs. 300 (@ Rs. 1 per day)	Rs.900 (@Rs. per day)	Rs.1500 (@ Rs. 5 per day)
Surplus per worker per year	Nil	Rs.600	Rs.94500

Source: Economic Nightmare of India, National publishing House, New Delhi, 1981, p.443.

The relationship between labour, capital and output obtaining in the three kinds of techniques- cottage, small -scale and large-scale as evidenced in the three tables above, can be summarized as follows:-

Table :2:4

RELATIONSHIP BETWEEN LABOUR,CAPITAL AND OUTPUT IN COTTAGE, SMALL -SCALE AND LARGE-SCALE INDUSTRIES

Net output or value added per worker			Net output or value added per unit of capital			Labour employed per unit of capital		
Cottage	Small	Large	Cottage	Small	Large	Cottage	Small	Large
45	200	650	1.29	0.66	0..54	25	3	1
450	2250	48000	9.0	1.5	0.6	-	-	-
300	1500	96000	6.0	7.5	0.6	200	4	1

Source: Economic Nightmare of India, National publishing House, New Delhi, 1981, p.443.

The data presented in the above table, though they refer only to one industry, viz textile industry, textile industry, may be taken to illustrate the broad relationships obtaining as among the various techniques or technologies within a particular industry.

The conclusion of tables 1 to 4 are confirmed by the Report of the Textile Enquiry Committee (Sept. 1954). The Report says that the organized cotton textile industry in 1953 provided direct employment to approximately 2,50,000 workers; powerloom units in the country, both large and small, which had been given text- mark numbers by the Textile Commissioner, provided direct employment to 55,000 workers, and the handloom industry to 15,00,000 workers (in terms of whole-time workers) "The mill production is of the order of 4,800 million yards while the powerloom industry produces, under present conditions, approximately 200 million yards a year. The handloom industry is expected to produce, 1,400 million yards a year. For a production $3^1/_2$ times as large, the mill industry provides direct employment approximately to one -sixth as large a number of people as are engaged in the handloom industry (assuming that 2.5 lakh workers including assistants are directly employed in both shifts on nearly 2 lakh loom). The employment potential in the handloom industry is, therefore, nearly twenty times what it is in the mill industry, yard for yard, and for times that in powerloom industry.[10]

According to a report about the working of khadi and Village Industries section of the Industries Deptt., Govt. of India, during the Fourth plan period 1969-74 released in August 1974 the capital investment for providing employment to a worker in khadi and Village Industries was very low compared to large sector industries. The average investment in khadi and Village Industries was Rs. 530 against Rs. 10,000 in the textile industry and Rs. five to ten lakhs in the cement or steel industry. According to the Annual Survey of Industries (ASI) for 1974-75, the amount of investment required for

employment of the one person in large - scale sector as a whole, was Rs. 29,000.[11]

There is still another, a very significant set of statistics continued in an article written by professor Mahalanbobis, Statistical Adviser of the planning Commission who may, in a way, be considered as the architect of our heavy industry programme. The article is included in the journal of Indian Statistical Industries (ISI),the Sankhya December, 1955:-

Table:2:5

(Rupees in Lakhs)

One crore of rupees invested in	produces additional resources	And generates employment for
Heavy industry	14	500
Consumer goods (small-scale and household) industry	33	1500
Agriculture	57 to 69	4000

Source: Sankhya, Indian Statistical Institute, December, 1955.

The above conclusions and observations in regard to comparative benefits of labour- intensive and capital- intensive or small -scale and large scale industries, stand further confirmed by a comprehensive survey of industries (ASI) undertaken by the Government of India every year, since 1959 under the Collection of Statistics Act, 1953. The ASI replaced the Sample Survey of Manufacturing Industries (SSMI) which was being conducted on a voluntary basis since 1950.

The coverage of ASI is limited to the entire factory sector- factories being those registered under Section 2m (i) and 2m (ii) of the Factories Act,

1948, i.e. those employing 10 or more workers and using power, and 20 or more workers but not using power. Cottage industries fall outside the purview of the ASI.

Factories employing 50 or more workers with the aid of enumerated. 100 or more workers without the aid of power are completely enumerated. The remaining factories namely, employing 10 to 49 workers with the aid of 20 to 99 workers without the aid of power are covered on the basis of probability sample. The first group is called the Census Sector and the Second, the Sample Sector.

The Census Sector factories are the backbone of the industrial economy of India. Although they constitute just about one- fifth (21 of the number of registered factories, in 1970) they accounted for about 94 per cent of the productive capital 83 per cent of employment and 89 per of value added by manufacture.

The table below gives comparative figures for important characteristics of the census sector factories, both large- scale and small- scale, for the year, 1970- a small scale factory being one which had a gross investment in plant and machine of Rs.7.5 lakhs or less.

Table:2:6

STRUCTURAL RELATIONSHIP (SIZE-WISE) 1970

Items	Large	Small
01. Productive capital per factory (Rs.in lakh).	203.13	1.89
02. Employment per one lakh of rupees.	3.8	19.0
03. Employment per	777	36

factory (No.)		
04. Gross output per factory (Rs. in lakhs)	169.94	5.73
05. Value added per factory (Rs. in lakhs.)	42.68	0.96
06. productive capital per worker (Rs.in lakhs)	26,130	5.240
07. Gross output per worker (Rs. in lakhs).	21.861	15.917
08.Value added as per cent of value of gross output.	5,490	2,665
09.Value added as per cent of value of gross output.	25.1	16.7
10. Ration of:- (i) productive capital of value added: (ii) productive capital to value of gross output	4.76 1.20	1.97 0.33

Source: Census of Factories, 1970

The ratio of productive capital to value added for a small factory in 1970 was observed to be 1.97 against 4.76 for an average large factory. Like -wise, the ratio of productive capital to value of gross output in the case of a small-scale factory was much lower (0.33) in comparison with a large -scale factory (1.20) which means that to produce one rupee worth of factory goods, on an average, only 33 paise worth of capital was employed by a small- scale factory against Rs.1.20 employed by an average large factory and to produce one rupee worth of net value of 1.97 against Rs.4.76.

Similarly, on average a small factory provided five times more employment than a large factory per unit of investment 19.0 against 3.8.

It would appear from statements 12, 13 and 14 of the Annual Survey of Industries for 1975-76 that 76 per cent of the factories, that is , 54,374 out of a total 71,705 belonged to the small sector. The definition of a small- scale industrial unit in operation during 1975-76 was in terms of capital of Rs.10 lakhs or less in original value of plant and machinery. About 70 per cent of the units had not more than an investment of Rs. 5 lakhs each and 47 per of the factories, that is , 33,596 belonged to what may be called the tiny sector i.e. units with gross investments in plant and machinery not exceeding Rs. one lakh.[12]

Further, fixed capital per employee increased as the size of the industry increased. A similar trend was noticed in the case of value added per employee. profitability steadily improved as the capital size went up. But the average rate of return on capital was more for the small scale sector (0.26) compared to all factories average of 0.14. With in the small sector itself, tiny factories having an investment not exceeding Rs. one lakh each and accounting hardly for 1.6 per cent of the fixed capital, provided about 14 per cent of employment, 8 per cent of the output and 5 per cent of the value added.[13]

It will be seen therefore, that so far as net output (or value added) per worker is concerned, it bears a positive correlation to the size and technique of enterprise, that is, the output per worker increases as the size, capital- intensity or capital invested per worker, increased and/ or the technology improves. Cottage industry yields less per worker than small- scale industry, and small- scale industry in turn yield less than large -scale or capital intensive industry. Whereas, in terms of value added as also amount of labour employed per unit of fixed capital investment, the correlation is negative. That is, less goods are produced and less persons are employed in an enterprise as its capital intensity, that is, capital investment per head of worker, increases and technology improves.

The facts bring into relief the conflict between three possible tests, viz, output per head, output per unit of fixed capital investment and employment per unit of this investment. Different ends seem to compete with each other, but in view of our factor endowment, viz, scarce capital and abundant labour, there is little or no real conflict and, therefore, when it comes to making a choice between the techniques or kinds of industries, it should present us no difficulty. Because while capital- intensive enterprise may be advantageous to the person who are employed therein because they will get higher wages, it is labour- intensive enterprises that are advantageous to the country as a whole a country where capital is scarce (for, such enterprise require less capital), poverty is extreme (for, they yield larger product in the total per unit of investment). In western world, governments, and economists are concerned with increasing the productivity. of labour whereas we as a nation, should be concerned with increasing the productivity of capital because we are short of capital, not of labour as the advanced countries, are of the two routes, viz. high incomes for a few or the capital-intensive route on the hand, and modest but rising incomes for all producers or the labour -intensive route on the other Japanese route.[14]

The basic doctrine so tenaciously held and propagated in our country and illustrated in the tables above, viz, that cottage and small- scale enterprises deserve support, inter alia, because they provide more employment per unit of fixed capital investment and need a lesser capital investment than big industry to produce the same amount of output, has, however, not gone entirely unchallenged.

There are some economists and econometricians who believe that the most modern machinery yielded greater output per unit of capital invest than less sophisticated machinery which employee more people.

In a monograph entitled poverty in India published in the Economic and political Weekly, Bombay, January 2 and 9, 1971 V.M. Dandekar and Nilkanth Rath express it as their opinion that while cottage industry requires more labour to produce a given output and less capital to employ each person engaged in it, it is by no means certain that it requires less capital per unit of output. In fact according to them, a closer examination would reveal that often times it ,requires, least, the same amount of capital to produce a given output as its modern counterpart, not less. But they do not enter into a discussion, and do not quote any data in support of their opinion.[15]

According to a study,[16] made by P.N. Dhar and R.P. Lyndall, when the smaller plants are modern and mechanized, there is a tendency in some industries for the capital output ratio to be lower in large units. There is, large-scale enterprise gives a greater output per unit of capital investment than small - scale enterprises. Dr. Gunnar Myrdal, however, points out that while, as admitted by Dhar and Lyndall themselves, "the statistical material, they build on, is fragile, certain studies in other counties have yield somewhat different results. [17] Professor Dedly Seers says in this report to the ILO entitled Towards Full Employment (1970) that "capital -labour ration and capital -output ratios tend to be lower in small industries and in handicrafts."[18]

IN a Jawaharlal Nehru memorial lecture delivered on 13th November, 1970, in New Delhi, Jan Tinbergen has referred to the work of his collaborator, B. Herman who had collected statistic showing that from one million rupees both more income and more employment can be obtained in labour- intensive or intermediate than if invested in capital - intensive activities.

The following table taken from Development Reconsideration Authority by Edgar Owens & Robert Shaw and published by Lamington Books, D.C. Heath Co. Massachusetts, 1972 shows that each additional dollar invested in the small

plants in Taiwan created twice as much output as an additional dollar investment in the large plants.

Table:2:7

INVESTMENT COST OF INCREASING PRODUCTION AND LABOUR'S SHARE OF INCOME BY FACTORY SIZE TAIWAN.

1961

Size of industry by amount of investment	Investment cost of increasing output by $ 1.00	Labour's share of income per $ 1.00
Less that $2, 500	1.97	74 cents.
$2,500 to $25,000	5.52	72 cents.
$25,000 to $ 2,50,000	3.26	50 cents.
$2, 50, 000 to 2.5 million	3.66	39 cents.
More than $ 2.5 million	4.46	31 cents.

Source: HSIEH & LEE, Agricultural Development in Taiwan, 1961.

Indeed, not only in India and Taiwan, but studies made in Pakistan, Indonesia, Egypt, Chile, Mexico, Columbia, Ghana and Ethiopia also show that in many types of economic enterprise small units make more effective use of factors of production than large ones, at least in the early stages of development.

Taiwan herself has followed a policy of keeping as much development in the villages and small towns as possible. In the early 1960 only 34 per cent of Taiwan’s industrial employment was in the capital and regional cities, where 22 per cent of its total population lived. Under roughly comparable circumstance, Columbia had 7 percent of its industrial employment in its regional cities.

Even in Switzerland, Europe's second most developed country (in terms of GNP per head), only 35 per cent of the people live in large towns. Industry has been integrated into the villages producing high- quality manufactured goods that depend not on the economies of producing without a large supervisory bureaucracy.

It is clear that there are no economic of scale in manufacturing industry as a whole - so far as output per unit of capital investment is concerned. In other words, there is no law or rule of thumb operating in actual life which would show that the output-capital ratio grows with concentration of capital in an industrial enterprise. Nor is there any foundation for it in science. Mechanization and automation were introduced to increase the productivity of labour i.e. the output worker ratio, and their effect on the output- capital ratio may be just as well positive as it may be negative. Advances in technology only serve to eliminate labour- intensive enterprise at the cost of an additional input of capital without affecting the volume of output.

Evidence of economies of scale that we meet in in our text books is founded mainly on experience in highly industrialized countries. In India, it is mostly in Industries producing capital goods like steel that economies of scale are discernible or significant that is larger the plant and in production, the smaller the cost per unit. In consumer industries, as a whole, they are virtually non-existent so that the situation in industry is somewhat similar to agriculture. It has long been a tenet both of classical and socialist economic that small industry is less efficient than large industry and would gradually disappear. we are not learning that many categories of small industry are as efficient as or more efficient than large industry. The amount capital needed to increase production is less. The number of jobs crated per rupee of investment is more. Profit rates and hence the amounts of money available for additional investment are as high or higher. It is owning to the (cottage and small scale) industries produce more

and employ more per unit of investment than large industries that Marx's prophecy about their extinction has been falsified; similarly, about small peasant farms.

In fact, doubt about the efficiency of large units in the field of industry have grown even in the West. A most through investigation was made to this effect by the so - called Temporary National Economic Committee in the USA, just before the Second World War, in 1941. Its elaborate studies showed that in none of the mass industries were the biggest units the most efficient in productivity. Further, in a practical way the depression of the thirties served to show that smaller manufacturing units could more readily adapt themselves to changing conditions and markets.

To conclude: Industrialization in the modern sense of mills and factories began in India in the middle of the nineteenth century. Yet the contribution of factory establishments (that is, of all factories, large and small governed by the Factories Act, 1948) to the total product of the Indian Union in 1948-49 stood only at 6.3 per cent while that of small enterprises or enterprises not falling within the definition of a factory, at 10.0 per cent. After twenty years the disproportionately heavy investment in large scale industry, the former figure could be raised only to 10.7 per cent in 1968-69, whereas the latter came down to 7.0 percent during the same period so that the total contribution of manufacturing industries to GNP rose from 16.3 per cent in 1948-49 to 17.7 per cent in 1968-69. In 1977-78 the contribution made by manufacturing industry to NDP (Net Domestic product) of the country came to 15.6 per cent only (9.7 per cent by registered enterprise and 5.9 percent by unregistered ones). Despite spectacular industrialization pushing India to the eight or ninth position among the world's industrialized countries, the Indian standard of living is around the lowest in Asia; more than 35 crores of people are living on the border line of starvation.[19]

Mahatma Gandhi always laid great emphasis on eradication of unemployment and underemployment of our people, and reverted to the subject again and again. In his opinion handicrafts or cottage industries alone could find employment for hundreds of underemployed today.

It was his realization that large scale mechanized industries cannot solve the problem, which made Gandhiji such a strong advocate of handicrafts of cottage industries. To him Charkha (spinning wheel) was a symbol of all labour intensive enterprise:-

"The disease of the masses is not wants of money so much as it is want of work. Labour is money. He, who provides dignified laobur for the millions in their cottages, provides food and clothing, or which is the same thing money. The Charkha provides such labour till a better substitute is found it must, therefore, hold the field."[20]

Again, India has to live, that is, here millions have to live. There is not other country in the world where so many millions of people have only partial employment and where in spite of the civilization being predominantly rural, the holdings are barely two acres per head. To manufacture the whole of her cloth requirements through steam or electricity, or any means other than the human power behind the wheel is still further to deepen the unemployment of the population. An industrialized India must, therefore, mean utter extinction of many millions.[21]

"With crores of human being going idle", he emphasized; India cannot afford to have large machinery which will displace their labour. It would spell their unemployment and their ruin. Our problems is how to find employment for all the crores of our people, not how to save their labour. Continuous unemployment has already induced in them a kind of laziness or listlessness which is most depressing."[22]

Conceding that village industries were entitled to a central place in rural development programme, the Fist Five Year Plan (1951-56) had very correctly said "diminishing opportunities for gainful employment account to some extent for the reduction in the standard of living of some sections of the rural population. products of large scale industries have increasingly limited the market for several classes of artisans. Their occupations now give them only partial employment, so that tend to join the ranks of agricultural workers. Development outside the rural sector has not been rapid enough to arrest the increasing pressure of population on the land. The development of village industries should, therefore, be as much a matter of state action as the increase of agricultural production. Indeed one cannot be separated from the other, for; increase in agricultural production per- supposes fuller utilization of the available man- power and release of surplus workers for other occupation."

But everything changed with the inauguration of the Second plan in which village or cottage industries did not find any mention. In fact, as time passed, these words disappeared from the development jargon of the ruling party, the All India National Congress, altogether.

Labour- intensive enterprises not only comparatively produce more and employ more but also serve to fulfill our third aim also, viz. help in an egalitarian society- a society where economic power is not concentrated in a few hands and the difference in incomes are not wide. The question of gross inequalities between the income of one man and another does not arise at all in the case of a cottage industry where it is the worker and his family who themselves own the enterprises. Nor dose it arise in a small scale industry, where the number of workers being limited by law, the profits of entrepreneur cannot be large.

A highly capital -intensive undertaking, on the one hand, results in keeping a majority of the labour force unemployed or renders them unemployed and, on the other, tends to concentrated wealth in the hands of few- to concentrate wealth that would have otherwise gone as wages or earnings to numerous small men or worker into the pockets of the mill -owners as profits (and of the few worker that will be employed, as high wages). Thus, it serves to widen the gap between incomes, particularly in a country like India were labour is not only abundant but redundant. The is why, despite more than thirty years of political independence, widened further and further and despite more than five -fold increase in the number of factories, little or no difference in the living standard or level of consumption of the masses of the masses is discernible.

Statistics of growth in national income should not blind us to the stark fact that the sectors of wealth or those who can afford the good things of life, are few, indeed, and are almost smothered by an immense mass of poverty, destitution and squalor. As in many another country, so in India, points out the World Bank Report for 1972, aggregate statistics, in short, conceal the gravity of the underlying economic and social problems which are typified by severely skewed income distribution, excessive levels of unemployment, high rates of infant mortality, low rates of literacy, serious malnutrition and widespread ill -health. So, increased production alone is not the index of happy societies. The mode of distribution of national wealth is equally vital, if not more

The distribution of GNP or national income is profoundly influenced by the manner of its production. If GNP is produced a few, as Jawaharlal Nehru and also the present day Congress leadership desired, it will be consumed by a few and the gap between the rich and the poor will continue to widen. If GNP is produced by many as advocated by Gandhiji, then people in general will share in the national benefits economic growth so that as Dr. Schumacher said, technology is any thing but neutral. It is a most powerful political force, shaping

and moulding society into its own image. The technologies evolved during the last hundred year's amount exclusively by Western Capitalism are now the strongest fore pressing all societies which adopt them into the mould of Western Capitalism- whether in its private capitalistic or its State- Capitalistic from. They are the opposite of what Gandhi considered good for the people at large. They concentrate power in a few hands and reserve the privilege of creativity and production for the already rich or powerful multinational corporations, tycoons of various sorts, bureaucrats, commissars, and the like.[23]

The writer is not a Marxist at all, but is prepared to go with Marx completely when more than a century ago, he (Marx) wrote in the first small book of his economic studies as follows:

"The structure of distribution is entirely determined by the structure of production. Distribution itself is a product of production, not only with regard to the content, for only the results of production can be distributed, but also with regard to the from, since the particular mode of men's participation in production determines the specific from of distribution, the from is which they share in distribution."

There is scarcely is proposal for channeling a large proportion of benefits growth to the poor that, has not been enacted and for which institutional procedures and controls have not been devised in India. Yet, economic forces are so obdurate that the number of people living in abject poverty, has not been diminished- that still more than 350 millions of our people subsist on a diet that is deficient even in calories.

The experience of poor and underdeveloped Chile, Uruguay and Ceylon also is similar. There being not much income or property to distribute, the experiment of redistribution of property which was tried in these countries, actually amounted to redistribution of poverty. It did produce a few useful programmes,

but did little for GNP, less for the balance of payment and still less for political stability. The attempt to marry political democracy with economic communism, particularly in poor countries, has proved a failure. It is only in rich, countries like the USA and the UK that the experiment of achieving social justice through redistribution of private wealth in the from of social and economic benefits to the unemployed and other weaker sections has proved successful or some what successful.

As early as in 1955, that is when the Second plan was being finalized, many an Indian economist, particularly, C.N. Vakil and P.R. Brahmanand had argued that the very model of Indian economic growth implicit in our Second plan would condemn the people of India to an unnecessarily prolonged austerity and unnecessarily high unemployment and, through these wrong priorities, deny to the poor both fruits of and a sense of involvement in economic development. These economists had contended that a marketable agricultural surplus, food raw materials, did not exist in India because of overall low productivity. In such circumstances indiscriminate expansion of heavy industries was dangerous and as in the First plan, emphasis should continue to be laid on agriculture. It was necessary to satisfy the basic needs of the whole population before any kind of superfluity could be enjoyed by the more priviledged. [24]

The planning Commission and the political leadership, to whom the country had entrusted its destiny in full faith, however, did not pause even to ask the fundamental question in full faith, however, did not pause even to ask the fudamental question; for whose benefit were the plans being formulated? Could the total resources of the country support a life style, now enjoyed by the upper middle class, for even a simple majority of the population? In other words, how far was industrialization in the western sense possible in the context of Indian resources and the needs of its population? It was the duty of the state to create and maintain a national minimum standard of life before it could think of

private TV sets, private motor cars and establishment of 5 star hotels and, as contemplated for the Fifth plan (1974-79) manufactures for Vodka.

In a letter to Raj kumari Amrit kaur, Mahatma Gandhi had said as long ago as in 1939: "jawaharlal's plans would be a sure waste, but he was one who would not be satisfied with anything that was not big"

To stress again, the present situation has arisen that is, monopolies have come into existence and disparities have widened as a consequence of official policies followed since 1947. Ideology hampered economic progress and, paradoxically enough, assisted the very forces it opposed on the surface. Inequality was deliberately created in order or in the hope that surplus income available from big or capital- intensive units will be easy to mobilize and plough back into the economy and gradually a time will arrive when people displaced (or not employed) by them, will be absorbed into employment. The hope not materialize and, as Prof. Beb Dudley Seers has pointed out, never will India, in particular, had no excuse for this distortion of the economy and consequent misery; it had the benefit of Gandhi's teachings for so long which other countries did not have. Growth and distribution, GNP and social justice were not enemies of each other, both could so- exist.

Pandit Nehru realized his blunder, but then it was too late. He confessed in the Lok Sabha on December 11, 1963, that "planning should not lead to heavy accumulations of wealth in the hands of a few, but that both the Government and the planning Commission had failed to take effectively in future.[25]

Now, what is one to say to this? India was unfortunate in that on attainment of political power after centuries of subsection, she was blessed with a leader who, though pathetically trusted and passionately loved by the people, had no clear vision of her problems, and fumbled all along. As in the case of priority between agriculture and industry, and large state or cooperative farms visa Vis

individual peasant farms, so in the case of small labour -intensive enterprises vis-à-vis huge capital intensive undertakings. One thing today, exactly the contrary tomorrow (when the country's problems had, in the meantime, become more intractable).

Despite Nehru's confession so long ago and despite the bitter experience of 30 years, the mode of industrial production remains unchanged. Not only that big factories are multiplying, but existing big factories are becoming bigger and bigger. Speaking in Rajya Sabha on April, 25, 1975, Mr. C Subramaniam, former minister for industrial development, agreed with members that large house had become larger, some medium house had become large and the number of large houses had gone up. This, he said, was mainly due to certain factors which went in favour of bigger units something which was inherent in their process of industrialization. Heavy investment complicated technology, and long gestation period required in building core industries, went in favor of large houses.

As regards the fourth aim, viz. maintenance of democratic values and promotion of democratic trends; it is the individual who forms the run the village panchayat, the State Government or the Union Government for him. He should, therefore, be able to from a judgment or take a decision on his own responsibility, untrammeled by any restrictions or apprehensions.

Obviously, an individual cannot be free for develop an initiative if his work is cast in a big economic unit, a big firm (or a big farm) where hundreds and thousands of men work under a central unified management. The larger the size of an undertaking, the less the active participation of the members or workers in its affairs and fewer the opportunities for the management to come into direct contact with them. This will affect the understanding of the members about the problems of the organization and there will be a danger of decisions being taken

by the few which may not be in its true interest. Ordinarily, majority of the people have little time and little inclination to think and learn all the facts necessary to make wise decisions on public affairs of a large institution. They prefer to follow someone else who is willing to think or is in a position to think for them. So, in large matters people must delegate decisions to a relatively few representatives or a few persons at the top in whose hands power will ultimately be concentrated. Whether the firm (or the farm) is owned by the State or by private persons, does not make any difference. The psychology of the manager of a big unit, by whatever name called, is equally susceptible to the heads wine of power in both cases.

There can be no manner of doubt but that political and economic freedom of an individual are inter- dependent; an individual and, for that matter, a society enjoy one for long without the other. There alone will democracy bloom and prosper in the true sense where the individual, the bread - winner, is the matter of his tools or means of production. There he dose not have to take orders from or render account to, anybody or any group or association of individuals, fact, any authority outside of himself. He is the sole captain of his fate, free to regulate his conduct as best, or even as worst, as he likes. This is what Mahatama Gandhi wanted to teach us through the Charkha - the symbol of all labour- intensive enterprises. Decentralization in the growth of human communities and in industry, he believed was conclusive to the promotion of democracy. In any concentration, the individual ceased to have meaning in decision making.

In this connection, viz. the need for individual freedom, Mahatma Gandhi thus wrote in the Harijan, dated February, 1, 1942:[26]

"If individual liberty goes, them surely all is lost, for if the individual ceases to count, what is left of society? Individual freedom alone can make a man

voluntarily surrender himself completely to the service of society. If it is wrested from him, he becomes automation and society is ruined. No society can possibly be built on a denial of individual freedom. It is contrary to the very nature of man."

The message of heavy industry, the capital- intensive undertaking, is a message of increasing the number of people directly controlled by the Central Government until it reaches an absurdity so great that one man can freeze the wages of over two hundred million in the USA and two hundred fifty million in the USSR. We are heading for a similar situation in India.

It is in an economy of predominantly small units alone, small family farms and small industry or handicrafts, preferably the latter, that democracy prospers, that there are no glaring discrepancies between the status of one man and that another, that one man is largely independent of the other in the ordering of his life, that the personality of the individual blossoms froth. Only a broad distribution of private economic power can guarantee individual freedom, and this distribution of economic power is assured in an economy of cottage industries and other decentralized enterprises of low capital intensity. Such an economy will contribute to an increase in the number and dispersal of those exercising initiative and making decisions, and thus strengthen the roots of democracy in the country.

Cottage and other decentralized units will, as far as possible have to be reared on a federal cooperative basis. This not only means fostering, organizing and improving cottage and small scale industries and putting electric power at their disposal, where possible, but also making them a part of a system including workshops and small factories related to them. This system must integrate with agriculture and give optimum employment development that we have to aim at.

▲▲▲

References:-

01. Shreeman Narayan, principles of Gandhinian planning, Kitab Mahal, Allahabad.

02. Charan Singh, Economic Nightmare of India, National Publishing House, New Delhi, 1981, p.471.

03. I bid.

04. Young India, May, 28, 1925.

05. Charan Singh, Op. Cit., p.473.

06. I bid. p. 474.

07. I bid. pp. 474-475.

08.Third Five Year plan, planning Commission, New Delhi, p.426.

09. I bid ., p. 427.

10.Report of the Textile Enquiry Committee, September, 1954.

11. I bid.

12. Annual Survey of Industries for 1975-76.

13. I bid.

14.Charan Singh, Op. Cit., p.447.

15. I bid.

16. The Role of Small Enterprises in Indian Economic Development Asia,

Publishing House, Bombay, 1961.

17. Asian Drama, p .1223.

18. I. L.O. Towards Full- employment, 1970.

19. Charan Singh, Op. Cit., p.450

20. Young India, Dated June 18, 1935.

21. Harijan, dated June 18,1925.

22. Harijan, dated January 2, 1937.

23. E. F. Sxhumacher, Small Is Beautiful, Radhakishan, Delhi.

24. C.N. Vakil and P.R. Brahmanand, Planning for an Expanding Economy Vora & Com. Publishers pvt. Lted Bombay, 1956.

25. Speech of Jawaharlal Nehru in Lok Sabha on 11 -12 - 1963.

26. Harijan, February 1,1942.

CHAPTER- III

ROLE PLAYED BY KHADI AND VILLAGE INDUSTRIES COMMISSON

During the course of the implementation of developmental programmes, many organizations devised for their efficient management get so much ossified that their helpful impulses are completely denuded. A similar situation has arisen in the case of khadi and Village Industries Commission. It began under the inspiration of Mahatma Gandhi who wanted to organize an institution which could guide the socio-economic activities of rural areas. It was expected that this organization would promote production activities based on local resources and cater to the local markets. Such enterprises, according to Gandhiji, could eradicate rural poverty. They could transform the moribund villages into a radically dynamic centre of growth. The task was stupendous The establishment of the khadi and Village Industries Commission was expected to help in achieving this objective.

The historical background of the Khadi and village Industries Commission made it a semi- political, quasi-commercial and monopolistic institution. During the course of its growth and expansion, the Commission deviated from its original objective, got involved in excessive commercial activity without adequate managerial skill, so that it finally become very unwieldy, unable to stand the burden of its own structure. As a result of this situation, the Indian villages remained backward. Rural unemployment kept mounting up. Increasing proportion of the teeming millions continued sinking below the poverty line. Several times, the working of the Commission was reviewed and radical changes suggested. But, somehow the status quo was maintained. This chapter deals with some of the basic shortcomings of the Commission which have

resisted all changes. The working of the Commission has been reviewed with a view to indicating the reorientation which may be helpful towards rural regeneration.

Khadi which means handspun cloth was closely associated with Mahatma Gandhi for its revival and importance. The Khadi movement began with the twin objective of liberating the country from political subjugation and rejuvenating the rural economy against economic deterioration. In 1908, Mahatma Gandhi while in London conceived as if in a flash the spinning wheel as the panacea for these two urgent maladies of the country. He stated that there was no swaraj, or political independence without khadi which in his conception included not only hand spinning and weaving but also village industries. Khadi was considered the sun of the whole industrial solar system from which all other industries received their warmth and sustenance. By encouraging khadi and village industries, Gandhiji wanted to lay the foundation of economic and political redemption of the country.

The Gandhian conception of khadi was very comprehensive. He considered the spinning wheel not only as the key to swaraj but also a means of mass education, a link between the masses and classes, a symbol of the dignity of manual labour, a means for securing even distribution of the means of living, a check on drain of wealth to foreign countries, an occupational therapy for psychic illness affecting the West, an emblem of non-violence reconstructional peace and an instrument for village reconstruction. He deployed it both for promoting the spirit of swadeshi and carrying out the boycott of foreign cloth, describing these two uses as benign and terrible aspects of the spinning wheel.[1] Khadi, according to Gandhi, was the spirit in us which restricted us to the use and service of our immediate surroundings to the exclusion of the more remote. It was a programme for satisfying more the basic needs of the immediate

surroundings based on local resources than catering to the needs of urban and overseas markets.

In 1920, Mahatma Gandhi persuaded the Indian National Congress to adopt hand- spinning and he weaving of khadi as "measures of discipline and self - sacrifice for every man, woman and child". While forging the khadi programme as major political weapon for wresting independence from the British government, it was simultaneously considered a means of personal discipline for the political workers. Making it incumbent for the congress workers to spin and dress in khadi, Mahatma Gandhi made khadi a vehicle for carrying the political message to the masses; he also emphasized its importance in strengthening the economic foundation of the rural economy. It was necessary so that the advantages of political independence could be easily absorbed by the country.

In 1921, the All India Congress committee launched a definite programme for the propagation of spinning wheel with a target of introducing two million wheels in the country. It was the first large scale programme of its kind. It was made an important plank of the activities of provincial and district congress committees. The congress workers were to devote themselves enthusiastically to the khadi programme and daily spinning was made obligatory on them. The following year, in 1922, the All India Congress Committee crated an All India Khadi Department for supervising the work carried out by the provincial and subordinate congress committees... This department in due course emerged as the khadi and village industries commission. The programme was giving an institutional support by the creation of the All India Khadi Department S which in the following year was replaced by the all India Khadi Board. The All India Spinners' Association, an autonomous organization responsible for the propagation, production and sale of khadi, took over the work of the Board in 1925.

In 1934, the All India Village Industries Association was constituted so that requirements of village industries could be served effectively. The association was to strive to revive as many industries as per congress party with these associations greatly supported the extension of their network. By 1934, the production of khadi went up to 836 million metres valued at Rs. 3.4 million sold at 517 sales depots of which 288 belonged to the All India Spinners' Association, 38 were aided by it and 241 were running independently. The programme covered more than 6,000 villages. The increasing viability of the centres made the spinners' association adopt a general policy in the following year for running only those centres which could be self- supporting.

The political arrests during 1942 movement greatly interrupted the khadi programme. The objective of extending the programme to more than seven hundred thousand village earlier set out by Mahatma Gandhi could not be achieved. Nonetheless, the movement had gone much beyond the stage of commercial sickness: it had acquired a special status among the rural enterprise. It provided self- reliant employment opportunities to a large number of rural workers. In 1944, when Mahatma Gandhi reviewed the situation, he noted the failure of the programme in achieving wider extension and getting it accepted by the villagers themselves. He therefore formulated four points for the reorientation of the khadi movement. In this approach, Mahatma Gandhi focused his attention primarily on four aspects which were: first is, towards spinning for one's own consumption; second, self- sufficiency, was to be interpreted so as to allow scope for some production for sale so long as the sale was in the nearby village or district or at most the provinces; third, khadi was not to be viewed as an occupation or craft merely to earn a livelihood but as a means for uplifting the villages and thereby generating in the people spontaneous strength for swaraj; and fourth, the objective was to rejuvenate the village life as a whole and this could not be done by khadi alone but through a

rehabilitation of agriculture, cattle breeding and all other village industries.[2] The new guidelines issued by Mahatma Gandhi gave to the khadi including village industries a para-commercial status in which this movement was considered nucleus of efforts essential for economic, political, and spiritual regeneration of the country. Khadi was considered more a way of than an economic programme.

The contribution of Pandit Jawaharlal Nehru was great in reorienting the national policy towards khadi and village industries during the post-independence period of the country. He did not share the Gandhian outlook on the subject. Nehru was not averse to khadi and village industries but he did consider them as an earning in themselves; he was skeptical about the ideological content of the programme as well. He though that khadi and village industries' revival was of only immediate importance. The programme could enable the villagers overcome their present distress and even revive certain artistic artistic and cultural values, but in so far as it was a revolt against machinery and industrialism, it was not expected to succeed. Pandit Nehru was in favour of modernizing of village industries by incorporating advanced technology without which these industries would not be able to provide even the essential material and cultural goods that were needed. Mahatma Gandhi was more interested in inculcating the spirit of khadi which was more interested in inculcating the spirit of khadi which was spiritual in nature while Jawaharlal Nehru emphasized the importance of physical output which revealed his materialistic outlook. Nehru had a powerful personality which had a far-reaching influence in evolving the economic policy of independent India. Nehru's techno-economic approach to khadi very much overshadowed the idealistic conception of Gandhiji. By this time, the disenchantment of the congress workers with khadi and the decline of their missionary zeal for the programme began to surface. When the plan for economic development began

to be formulated, the official approach to khadi and village industries exhibited deep- rooted ideological conflict which planning authorities were unwilling to acknowledge and resolve.

Soon after independence, radical structural changes occurred in the khadi movement. The two associations separately concerned with khadi and village industries were combined together in 1951 when the new Akhil Bharat Sarvaseva Sangh was established. Meanwhile, the government had set up the union planning Commission which was considering the nature of organizational support which could encourage and develop different village industries. The constitution of the six boards was a significant step in this regard. The All India handloom Board was set up in October, 1952 and the All India Handicrafts Board in November, 1952. In February, 1953, task assigned to the Akhil Bharat Sarvaseva Sangh was taken over by the All India khadi and Village Industries Board. The Small Scale Industries Board was organized in November, 1954. The Silk Board which was functioning since 1949 was reconstituted in 1952 and a statutory Coir Board was established in July, 1954. Each of these boards had specialized responsibilities. The task originally contemplated for the two associations connected with khadi and village industries was now fragmented into six segments; the movement that initially relied on individual initiative of the rural artisans now becomes centrally directed.

The All India Khadi and Village Industries Board were assigned the responsibilities for formulating and implementing the programmes for the production of khadi and village industries. The board was expected to arrange for training of personnel, manufacture and supply of equipment and raw materials, organize for market research and study of economic problem relating to the various industries assigned to it Encouragement and promotion of researches in the techniques of production, cooperativization among the manufacturers, and certification of producers of and dealers in khadi or the

products of any the assigned village industries were also the responsibility of All India Board. Soon after the constitution of the board, it began to experience difficulties in discharging its responsibilities. The procedural, financial and other institutional limitations inherent in government financed institutions were restricting the working of the board. In order to overcome these difficulties, it wanted more powers. To overcome these limitations, the khadi and village industries board by an Act of parliament in 1956 was transformed into a statutory commission. The khadi and Village Industries Commission with its new power began to function since April 1, 1957.

The primary objective of the khadi and Village Industries Commission as a statutory organization was to plan, organize and implement the programmes relating to khadi and certain specified village industries. Khadi meant hand-woven cotton, silk, woolen or muslin cloth prepared from handspun yarn. Village Industries meant all or any of the industries specified in the schedule and include any other industry deemed to be specified in the schedule. The schedule of village industries has been expanding since the Commission was established. In the beginning only nine industries Board but by the time it was given the statutory status, bee- keeping, village pottery and fibre were already added to the list. In 1959-60, carpentry and blacksmith were also included. The scope continued increasing till 1968-69 when the number of village industries under the purview of khadi and village industries becomes 20. By the end of 1979. With the addition of lok - vastra, poly vastra and such other times of production, the schedule contained 24 industries. These are processing of cereals and pulses, ghani oil, village leather, cottage match, fire works and agarbattis, gur and khandsari, palm gur, non- edible oils and soaps, handmade paper, beekeeping, fibre, blacksmithy, carpentry, manufacure and use of methane gas and manure, lime shell and other lime products, manufacture of shellac , collection of forest plants and fruits for medicinal purpose, fruit

processing and preservation, bamboo and can work processing and preservation, bamboo and cane work, manufacturing of household utensils from aluminum, manufacture of gums and resins, manufacture of katha, lok- vastra and poly-vastra.

The main function of the Commission, according to the Act of parliament, are to organize training of personnel engaged in the production of khadi and village industries, build up reserve of raw materials and implements and supply them to the artisans engaged in such production activities, provide for sale and marketing, and encourage and promote research in the related production technology. The Commission is also expected to encourage cooperativization among the khadi and village artisans and grant of certificates to producers of khadi or any of the specified village industries.

The allocation of industries among the six socialized industries boards created confusion from the very beginning. There were many industries over which the jurisdiction of more than one board prevailed. A fine demarcation of the responsibilities was difficult as a result of which the promotional efforts became weak. The allocation of industries showed that khadi and Village Industries Commission and the Small Scale Industries Development Organization were both concerned with the development of leather tanning, match, agarbatti and fireworks, non- edible oils and soaps, pottery, blacksmith, carpentry and fruit processing and preservation. The All Indian Handicrafts Board was also concerned with village leather, pottery, carpentry, bamboo and cane works. In order to avoid duplication of programmes, many attempts were made to draw fine boundary lines between. The scope of different boards, but the general impact of this confusion has been absence of effective promotional measures in regard to these industries.

Another confusion was created by the listing of village industries themselves. The All India Village Industries Association was concerned with rural industries as a whole; there was no limitation on its activities. The Gandhian approach had indicated that the village industries could not be separated from one another and they all formed integral part of the village life. The village industries association was therefore concerned with the general village uplift programme. The schedule of industries specifying the jurisdiction of the commission precluded it from making any all comprehensive effort. The popular belief however remained that the commission was entrusted with all industries in the unorganized household sector. Due to this misconception no other promotional organization was devised for a large segment of rural industries.

Even in the industries entrusted to it, the commission has not been able to cover the bulk of them. The Administrative Staff College of India estimated the total number of artisans in the household industries sector in the country to be around 15 million in 1972-73 taking into account both full -time and part time workers. So far as the artisans in the specified village industries within the purview of the khadi and village industries commission are concerned, their number is estimated to be around 8 million. The development efforts initiated by the commission reached only 8, 37,000 artisans with a total production of about Rs. 1,010 million which formed 11 per cent of the employment and 22 per cent of production in the sector. If khadi and Village Industries were taken together, the commission covered only 1.84 million artisans by the end of 1972-73 with an annual production of Rs. 1,410 million. [3]

Detailed information about different specified industries is not available but the following table shows the proportion of artisans covered by the commission with regard to five specified industries. The commission has been able to cover only 1.05 per cent of village leather, 4.47 per cent in village pottery, 4.50 per cent in fibre and 14.78 per cent in ghani oil.

TABLE- 3:1

COVERAGE OF ARTISANS BY KVIC IN FIVE SCHEDULED INDUSTRIES

S.N	Idustry	Total Artisans in India (Millions)	Artisans covered by KVIC (Millions)	Percentage of Col. (4) to Col.(3)
01.	Ghani oil	0.23	0.03	14.78
02.	Fibre	1.00	0.05	4.50
03.	Village pottery	1.34	0.06	4.47
04.	Village leather	0.81	0.03	4.21
05.	Carpentry and Blacksmith	0.95	0.01	1.05

Source: Administrative Staff College of India, Hyderabad.

The three -tier organization through which the programme is implemented suffers from severe limitations as a result of which the advantage does not flow to the artisans effectively. Not only the organization is top- heavy, the administrative control over the different tiers of the organization is also neither centralized nor synchronized.

At the apex, the khadi and village industries commission is headed by a chairman by four members of whom one is member- secretary. The members are non- officials appointed by the government for a period of three years. The commission is advised by khadi and village industries board consisting of persons of experience and shown capacity in matters relating to the development of khadi and village industries, members of the commission, chairmen or presidents as the case may be of state khadi and village industries boards, and some other members not exceeding thirty nominated by the government from time to time. A financial adviser assists the commission in its financial transactions who are appointed by the government but is not a member. The head of the administration is the chief executive officer who is usually a senior administrative officer. Some honorary advisers are also appointed from time to time for their special expertise in specified areas. The administrative and technical functions of the commission are carried out by 32 directorates, four for the khadi programme, 12 exclusively concerned with village industries and the rest for general administrative and other matters. The Dirctors are entrusted with detailed working of the prgrammes in their respective areas. The apex organization employed 4,194 persons of which 161 are gazetted and 4,033 are non- gazetted: 2269 of these are technical persons and 1,925 concerned purely with administration of the commission of with 211 persons deal exclusively with financial matters. The administration of the commission itself has become so colossal that 45.93 per cent the total staff are engaged in house- keeping, 5.03 per cent are involved in book - keeping.

The state khadi and village industries boards' existing in almost every state (and three union territories) is statutory organizations responsible to state governments and legislatures. The khadi and village industries commission meets much of the administrative cost of these boards and also most of its development expendable artisans, institutions and cooperatives, though there are

some centres and voluntary organizations directly connected with the commission. Presently there are 694 registered institutions and 27,071 cooperatives engaged in the commission's production programmes; the commission also has 18 offices in various states and union territories. The linkages between state boards and centres through the commission indicates that the emphasis is more on administrative linkage rather than the state boards acting as effective pipelines for channelizing development efforts.[4] In fact, the artisans and institutions engaged in production are so distant from the central commission that much of the promotional efforts are lost in administrative rigmarole. Commenting on this network, the organizational study by the Administrative Staff College stated that 'the three-tier organization for the management of the whole industry pogramme has on examination revealed that adequate efforts have not been put in so far towards organizational and manpower development leading to poor economic gains for the artisans and a major credibility gap between programme management and the artisans.'[5]

The commission is charged with the responsibility for building up a reserve of raw materials and implements and supplying them to persons engaged in the production of khadi and in village industries. The commission has built raw materials depots for cotton, wool, and match industry, but generally speaks in, this aspect of the programme has been neglected in regard to village industries. The commission has however helped in the supply of improved tools and equipment. For example, in 1977-78, 6500 six spindle new model charkha were distributed ;3,306 improved atta-chakkis, 235 paddy dehuskers, 151 rice polishers, 132 power driven and 421bullock driven crushers for gur and khandsari, 26,409 bee- boxes and 1,386 honey boxes were distributed. In regard to pottery development, 272 new model pottery wheels and 118 shaila wheels were introduced to the artisans, and 1,760 bhatti sheds were built. As a result of the commission’s efforts to assist individual carpenters and blacksmiths,

distribution of improved tools under home-units to them amounted to 801 and 517 respectively.

The direct involvement of the commission in some production activities is also noticeable. Apart from half a dozen production centres run by the state khadi boards, the bulk of khadi production is carried by 694 registered institution and cooperatives of which 813 units are concerned with cotton khadi, 186 with woollen khadi, and 61 with silk khadi, 62 centres are exclusively devoting themselves to sales activity. The commission runs two departmental centres connected with carpentry and blacksmith, seven village leather centres, five match- agarbatti projects, one palm brush unit besides eleven extension centres. Whether the commission as a promotional organization is justified in entering into direct production enterprises is debatable issue but such involvements have become discriminatory. protests have been voiced about the commission not extending its assistance to those units whose production is not controlled by it or which do not receive financial assistance from it Entrepreneurs connected with methane gas installations, village pottery, match, leather and katha units have complained against such discriminations, and in case, with positive discouragement to them.

TABLE-3:2

RESEARCH INSTITUTIONS UNDER THE KHADI AND VILLAGE INDUSTRIES COMMISSION

S.N	Industry	Name of Research Centre	Location
	khadi	1. Research Development Section. 2 Instrumentation Section. 3.khadi Gramudyog Vidyalya: a) Central Training Institute and quality Control Laboratory b)Design-cum- Extension and Training Centre	
	Village Industries		
	01. Processing of Cereals and pulse.	Jamnalal Bajaj Research Institute	Wardha.
	02. Ghani oil	Jamnalal Bajaj Research Institute	
	03.Forest- Based products	Jamnalal Bajaj Research institute	Wardha .
	4. Palm gur making and	i) Central pal Gur and palm products Institute.	Madras.
	Other Palm	ii) Palm Gur Extension Centre.	Paighat.
	05.Methane Gas	Gobar Gas Research and Development Centre	Borivali
	06.Bee-keeping	Central Village pottery Institute	pune (Maharashtra)
	07.Village	Central Village Pottery Institute	khanapur (karnataka)
	08.Lime Manufacturing	i)Technical Extension Centre	-Dehradun (U.p.)

		ii) Central Qualty Control Laboratory, Jamnalal Baja Central Research Inst.	-Mohol (Maharashtra) -Kottayam (kerala) Wardha.
	09. Non- edible Oils and Soaps	i)Regional Analytical Laboratory ii)Regional Analytical Laboratory iii)Regional Analytical Laboratory	Jaipur (Rajasthan) Kodambakkam (T.N.) Rae Bareli (U.P.)
	01.Fibre	The Fibre Research Centre	Borivli (Maharashtra)
	11.Handmade paper	The Handmade paper Research Institute	Pune (Maharashtra)
	12.Cottage match	Cottage Match Centre	Borivli (Maharashtra)
	13. Village Leather	Flaying- cum training -cum Research centre	Korakend (Maharashtra)
	14. Multi- disciplinary workshop for various village industries.	Jamnalal Bajaj Central Research Institute	Wardha.

Source: Khadi and Village Industries Commission.

The mobilization of science and technology for the benefit of rural industries is a specialized programme entrusted to the commission. The khadi and village industries commission has made schemes for the introduction of research results in improving the production techniques. The training centres, training- cum- demonstration centres and extension centres organized by the commission benefit the artisans in raising their productivity enabling them to earn higher wages. The estimated benefit from these innovations as indicated for some typical industrial equipment show that the artisans connected with many of them would not be able to earn even the statutory minimum wages. Many of these innovations require capital investment much beyond the capacity of individual or household artisans; most of them have to run at factory establishments. The special requirements of rural industries, especially with regard to capital cost and work conditions have not yet drawn attention of these

laboratories. The practical advantages of these research establishments have so far been at best only marginal.

The commission has a network of marketing outlets. The products of the 24 state boards, 694 institutions, and 27,071 cooperatives, besides the production centres of the commission are sold through 3,328 khadi gramodyog bhandars, 10,500 sales counters and half a dozen emporia located in different metropolitan cities. The commission and the state board officials also explore the possibilities of supplying the products to government, army, and public undertakings against their bulk orders. The marketing activities of the commission have been expanding rapidly. Against a sale of Rs.53 million in 1955-56, the sale proceeds of khadi and village industries in 1960-61 went upto Rs. 424.0 million which in 1978-79 amounted to Rs. 2,895.0 million. The expansion has been very pronounced in the case of village industries which in 1955- 56 had amounted to only Rs. 9.0 million but in 1978-79 it was of the order of Rs. 2115 million.

The emergence of commission as an important source of financial assistance has been accidental but by now it is the most important function of the commission. The Act did not envisage the khadi and village industries commission as a lending agency. Or the total outlay of Rs. 910.8 million to khadi and village industries commission in 1979-80, the expenditure on establishment including that on science and technology amounted to only 6.67 per cent and the rest was expected to be loans and grants including interest subsidy. The loans advanced by the commission are generally irrecoverable as a result of which the government has to make book adjustments for interest subsidy.

The commission provides grants and loans to institution and artisans. Capital assistance is provided for the purchase of improved tools and equipment. The amount is given as outright grant to the institutions whilst the individual artisans

receive 75 per cent of the same as grant and 25 per cent as. For construction activities, 50 per cent of the amount is given as grant and 50 per cent as loan.

Assistance is also given for share capital to the individual artisans wishing to from or become members of cooperatives. The new units are given managerial grant for a period of five years so that they could have managerial competence from the very beginning of their activities. Grants are also provided for training facilities; special schemes are in operation for khadi gramodyog bhavans, resettlement of weavers, assistance to handicapped workers, agency sales, mobile shows and such other promotion activities. The working capital loans for khadi production are interest free and those for village industries carry an interest of four per cent. Transport subsidy is granted to the departmental activities of khadi and village industries commission for the purpose of transporting raw materials, implements and machinery.

The financial transaction of the commission could very well be approved and justified if the commission were a philanthropic organization working for the welfare of socially handicapped section of the community. As a promotional agency, these have been seriously criticized. It has been stated that the dominant posture of the total organization is of a lending agency rather than of developmental, leading to less relevance of programmes and schemes at the grass root level. Even lending is not managed effectively. It has been suggested that the khadi and village industries commission and the state boards should as far as possible desist from their current practices of becoming lending agencies vis a vis the village artisans. In case the financial powers of the khadi and village industries commission are abrogated, the commission could be streamlined and its operations made more effective.

The activities of the khadi and village industries commission in regard to planning, organizing and implementing programmes relating to khadi and

village industries are supported by the financial allocation of funds by the central government, and for the state boards, state governments also provide the financial support. It is expected that the financial disbursements of the commission would have the desired effect on employment, production, and general rural prosperity.

Financial operations of the khadi and village industries commission can be studied in various ways. It could be seen that the government by 1977-78 provided Rs.4, 814.9 million to the commission excluding Rs.497.9 million for no-plan expenditure. Grants are provided for such promotional activities as training programmes, and managerial subsidy, whilst loans are given for the purchase of tools, implements, equipment and machinery, construction of work sheds and godowns, and to meet working capital requirements of production and sales, Loan for share capital money needed to join or organize a interest free for khadi and on a nominal interest of four percent to village industries. Institutional financing to this sector has so far been negligible. In May, 1977, the Government of India issued a comprehensive scheme of interest subsidy under which the difference between the actual rates of interest charged by the borrower was provided as central subsidy. The khadi and village industries commission as on 31 March 1978 had obtained a cash - credit limit of the order of Rs.67.5 millon.[6]

It has been found that the establishment charges of the khadi and village commission increased from Rs.0.3 million 1952-54 to Rs. 47.0 million in 1977-78 showing an increase of 15.7 times. Establishment charges amounted to less than two per cent of the total expenditures in 1953-54 but in 1977-78 they accounted for 9.5 per cent. During the period 1953 to 1978, grant by the commission increased from a sum of Rs. 2.9 million in 1953-54 to Rs. 161.0 million in 1977-78 showing an increase of 55.5 times. Loans increased from Rs.

12.5 million in 1953-54 to Rs. 237. 8 million in 1977-78 indicating a nineteen - fold increase.[7]

During 1979-80, provision of Rs. 910.8 million was made for the khadi and village industries commission; Rs. 390.8 million was earmarked for grants and Rs. 520.0 million for loans. Table 3 shows the magnitude of expenditure for 1978-79 and the outlay for 1979-80 for khadi and village industries, besides the provision for interest subsidy and establishment charges.

TABLE-3:3

(Rs.Million)

S.No.	Sub-head	1978-80 (R. E.)			1979-80 (B.E)		
		Grant	Loan	Total	Grant	Loan	Total
1	Khadi	110.0	270.0	380.0	125.0	340.0	465.0
2	Village Industries	50.0	120.0	170.0	55.0	180.0	235.0
3	Interest Subsidy	100.0	-	100.0	150.0	-	150.0
4	Science & Technology	7.5	-	7.5	8.8	-	8.8
5	Establishment Expenditure	49.6	-	49.6	52.0	-	52.0
	Total	317.1	390.0	709.1	390.8	520.0	910.8

Source: Planning Commission, New Delhi.

The details of financial transactions of the commission indicate that the loan disbursements of the commission increased from Rs. 12.5 million in 1953-54 to Rs.237.8 million in 1977-78. The year 1960-61 was unusual when the amount

reached an unprecedented level of Rs.100.0 million but subsequently it declined to Rs.26.5 million in 1968-69 after which it showed an upward trend which was however not uniformly maintained. In 1977-78, the loans amount to Rs.237.8 million.

The disbursements as indicated earlier were meant for both capital investment and working capital. But the trend in expenditure dose not explains any close relationship with production of khadi and village industries. The loans given by the khadi and village industries commission are not generally repaid to the government. In 1964, the government considered the question of loan repayment and felt sympathetic to the special requirements of the commission which was engaged in uneconomic activities and as such its repaying capacity was greatly restricted. The social content of the problem necessiated that the government made book adjustments by way of considering subsidy in lieu of interest payments whilst the commission disbursed loans to the artisans, the amount remains with the commission and ploughed back in its activities. The details of the loans repayments are not available, but the subsidy in lieu of interest continues increasing; it increased from Rs. 19.7 million in 1961-625to Rs.94.7 million in 1977-78.[8]

From the very beginning of the programme, rebate or subsidy was provided for khadi. In 1975, the weaving subsidy was replaced by sales rebate. Presently, 10 per cent rebate on sales of cotton khadi is given throughout the year. On certain of varieties of woollen and silk khadi also similar rebate is allowed. Special rebate of five percent on sales of all varieties of khadi are given during Gandhi Jayanti. The government on this occasion permits special rebates for clearing accumulated stock as well as for sales promotion. These rebates have created expectations among the buyers that on frequent intervals they might get some concession in case they could hold back their purchases for some time. The consumer resistance is so great during non- rebate period that sales tardy and

stocks accumulate; to clear them rebate becomes necessary. With increasing production of khadi, the total rebate has also increased substantially over the year. As a commercial proposition, this practice is not a healthy one. The amount of rebate/ subsidy on khadi increased from Rs. 45.3 million in 1961-62 to Rs. 87.9 million in 1977-78 and Rs.108.0 million was estimated for 1978-79. This increase has taken place in spite of government's declaration[9] of abolishing subsidy as a permanent feature of the programme.

The production of khadi, in physical terms increased from 9.60 million square metres in 1953-54 to 84.85 million square metres in 1965-66: afterwards, there was a decline and the lowest level was reached in 1971-72 with 54.-0.7 million square metres of production. Later on, the production picked up and in 1977-78, the production of khadi amounted to 68.41 million square metres. The relationship between accumulation of stocks and the level of production has not been direct. The production of khadi and declined between 1965-66 and 1971-72, and stocks during the period were showing only marginal fluctuations. Sales generally showed an upward trend. This may be due to general rise in prices as a result of which the indices in value- terms distorted the trend. The relationship during the subsequent years becomes much uncoordinated. The production, stock and sales all three continued rising. Obviously, stocks which should have been adjusted according to anticipated levels of production and sales were not done so. Production of khadi seems to be based on business like considerations. Generally, the sales of khadi are less than its production, thereby leading to accumulation of stocks which adversely affected even employment. The following table showing growth rates of different indicators of the commission's programme indicates that disbursements are unrelated to production, sales and employment. With an annual rate of growth of 7.11 per cent in total disbursements, the commission achieved 3.08 per cent growth rate in khadi production and 13.81 per cent in village industries, but employment generation

incrased only by 0.22 per cent year in khadi and 3.95 per cent in village industries.[10]

TABLE-3.4

PROGRESS OF KHADI AND VILLAGE INDUSTRIES PROGRAMME

DURING 19 56-57 AND 1977-78

S.No.	Items	1956-57	1977-78	Annual Growth Rate
1	Total disbursements for khadi and village industries including establishment charges. (Rs.millions)	116.7	493.5	7.11
2	Khadi production (Millon square meteres)	36.2	68.4	3.08
3	Khadi Sales (Rs.Millions)	62.4	665.2	11.93
4	khadi Employment(Million persons)	0.88	0.92	0.22
5	Village Industries Production during the year (Rs. Millons)	127.2	1925.4	13.81
6	Village Industries	0.67	1.49	3.93

	Employment (million persons)			

The khadi programme has not made much significant impact on employment generations. Between 1956-57 and 1977-78, employment generation in khadi production was of the order of 0.22 per cent per cent annum, though the sales increased annually by 11.93 per cent, disbursements by 7.11 per cent and production by 3.08 per cent. Even in absolute terms, the number of workers in khadi production increased from 3,79,000 persons comprising 31,000 fulltime and 3,48,000 part- time workers in 1953-54 toc1.92 million persons consisting of 0.24 million fulltime and 1.68 million part- time workers in 1964-65. Despite increased sales and production, employment after this period gradually declined. In 1976-77, only 0.85 million part- time workers were engaged in the programme during 1977-78, khadi and village industries commission reported slight increase both in full and part-time employment raising the total figure to 0.92 million persons employed.

The per capita earning of khadi workers is very unsatisfactory. In 1953- 54, every khadi worker on an average earned only Rs. 34.7 per year which increased to Rs.348 in 1977-78. Even the increased earnings yielded less than a rupee income per day to its artisans. The monolithic organization existed for which objective it discarded all canons of efficient business enterprises, but the end result has been extremely discouraging.

During the last ten years, the per capita net disbursement on khadi almost trebled but the per capita production as it could be seen from the following table did not show any commensurate growth.

TABLE-3:5

PER CAPITA DISBURSEMENTS AND PRODUCTION OF KHADI

Years	Disbursement per Capita (Net)	Production per rupee of net disbursement
1968-69	415.81	0.46
1974-75	760.37	0.65
1977-78	1114.75	0.63

The physical achievements of village industries under the purview of khadi village industries commission show that the production of their industries increased from Rs. 5.9 million worth of goods in 1953-54 to Rs. 1,923.4 million worth in 1977-78; employment declined in 1964-65, 1966-67, 1971-73, though the general trend showed an upward movement. Production in village industries increased by 13.8 per cent per annum against 3.08 per cent annum growth in khadi production; employment generation was of the order of 3.93 per cent per annum in village industries against 0.22 per cent in khadi. Production per rupee of net disbursement in village industries amounted to Rs.3.59 against Rs. 063 in khadi in 1977-78. The input- output ratio in village industries was more favourable than in khadi production, yet village received less attention. The following table shows that the net disbursements per worker in village industries is higher than that in khadi production which suggested that the khadi and village industries commission was not distributing its resources evenly in order to optimize the returns either in physical terms or in financial terms. With increase in expenditure on village industries, employment as well as production both could have greatly increased but the commission in its own wisdom concentrated its activities on relatively less profitable sector of production.

TABLE-3:6

COMPARATIVE STATEMENT SHOWING PER CAPITA DISBURSEMENTS AND PRODUCTION OF KHADI AND VILLAGE INDUSTRIES

(In Rupees)

Years	disbursements per capita (net)		production per rupee of net disbursement	
	Khadi	Village Industries	Khadi	Village Industries
1960-70	511.00	271.68	0.46	3.17
1974-75	760.37	366.49	0.65	3.78
1977-78	1114.75	359.24	0.63	3.59

The khadi and village industries commission was set up to concretize the Gandhian vision of self-reliant village communities. The production programme of rural areas was woven around khadi spinning and weaving because they could generate adequate employment opportunities to provide higher living wages to village artisans. A primary objective of the programme was to provide basic necessities for the village community: the essential consumer items were to be produced locally based on inputs available in the neighbourhood itself. This chief characteristic of the Gandhian production system for which khadi and village industries commission was forged as an important instrument has been overlooked.

The khadi and village industries commission has evolved a programme for khadi and village industries which does not make any substantial impact on rural development. As estimate puts the artisans in household sector at about 14

million, but the full employment generated by the khadi and village industries commission in the sector amounted to only 0.35 million. The employment generated by the khadi and village industries commission in the sector amounted to only 0.35 million. The employment generated by the khadi and village industries programmes worked out to only 1.75 per cent of the total. If the part- time employment provided by the programme is also taken into account, it may account for a little more. The total artisans and workers in rural areas amounted full and part- time employment provided in rural areas, would account for 1.41 per cent of the total. This level of employment generation by such a highly capital -intensive institution cannot be considered very satisfactory. The impact of the programme on rural employment is only marginal.

As far as selected industries under the purview of khadi and village industries commission are concerned, the coverage has been very little. It covered only 1.05 per cent of the total artisans in carpentry and blacksmith, 420 per cent in village leather, 4.47 per cent in village pottery, 4.50 per cent in fibre, and 14.78 in ghani oil. Khadi which is a major programme of the commission does not account for more than 1.4 per cent of total textile production in the decentralized sector. In 1977-78, 9,400 million square metres of textiles were produced in the decentralized sector but khadi accounted for only 68.41 million square metres of it.

The amount spent on khadi and village industries programme has been unrelated to its achievements. The working of the commission was reviewed by several evaluation committees, and all of them have been critical of this aspect of the commission. It was stated that the khadi and village industries commission devoted itself more as finance disbursing agency rather than as a promotional one. When the term tending financial institutions are already active in rural areas, on organization like the khadi and village industries commission

concerned with financial disbursements amounting to Rs. 493.5 million in 1977-78 for a production level Rs.2574.5 million may be considered redundant. The disbursements generated employment to only 241.6 million persons. The khadi and village industries commission itself recognized that it promoted many units which are undersized and incapable of paying for it which in fact implied that many units under the purview of the commission are sick.

The impact of the commission on technological improvement has been significant in certain specialized areas. Besides incorporating improvements in khadi, it has done valuable work in rising to some extent productivity of artisans in several village industries. The commission has a great field in technology adaptation for which no other institution in regard to village industries exists presently.

The working of the khadi and village industries commission has been reviewed several times. These evaluation reports recommended many radical changes in its institutional framework and fundamental orientation in its functioning but most of these recommendations remained of academic interest.

The report of the village and small scale industries (Second Five Year Plan) committee[11] set up under the chairmanship of Professor D.G. Karve emphasized the urgency of coordination of its functions policy and finance. The necessity of eliminating overlapping functions and various lacunas in the working of different all India boards concerned with traditional and modern small scale industries was impressed. The committee acknowledged that these difficulties arose due to special circumstances under which the boards were set up but it suggested that the opportune time had come "to consider the proper type of organization for implementing a regular and normal programme for village and small industries."[12]

The village industries evaluation committee set up in February, 1959 under the chairmanship of R.S. Hukkeriker pointed out similar shortcomings of the commission as indicated above and drew attention to its 'inadequacy of the organizational efforts made so far in relation to the scope and development of the industries judged by the availability of raw materials and the number of artisans engaged in the village industries.'[13] It highlighted the inability of state boards, development commissioners and directors of industries in implementing the programmes in their respective areas. The committee felt that these organizations had merely been disbursing the funds and doing the actual development work only marginally.[14]

A more critical view was expressed by the khadi evaluation commission set up by the Ministry of Commerce under the chairmanship of Dr. Gyanchand in 1960.The report underlined the imperative need to reorganize the intuitional framework of the khadi and village industries commission with a view to achieve the basic objectives of Mahatma Gandhi. According to this report, the khadi and village industries commission was suffering from unnecessary accretions, and the internal organization of the commission was not sufficiently coordinated and it suffered from a lack of cohesion and coherence; and in its relations with other institutions, State boards and the Government of India, the khadi and village industries commission had to accept positions which according to the evaluation report were not always above criticism. The report suggested that ' these limitations, as far as possible, be transcended, its internal organization rationalized and adapted to work at a higher level of efficiency and new purposes which must fulill.'[15] Emphasizing the need for incorporating greater efficiency in its activities, the report acknowledged the good work done by the khadi and village industries commission, but stated, done by the khadi and village industries commission, but stated, " It is no detraction the value of the work that it (the khadi and village industries commission) has done and the

role it has played to say that it too has not only to institute radical changes which we have in view, but to refashion itself as an instrument of greater efficiency and carry out its work with an adequate appreciation of the bearing of the new horizons, which are well within its view.[16]

The organizational structure of the khadi and village industries commission was rigorously examined by the khadi and village industries committee set up by the Ministry of Commerce under the chairmanship of Asoka Mehta in June, 1966 which recommended a radical overhauling of the institutional framework of the commission. The committee stated:-

It is essential that both at policy and administrative levels, there should be a high degree of coordination and cohesion among the various constituents of the organization so that it can functions in a dynamic and purposeful way. Further, to combat mass rural poverty, unemployment and underemployment, to mobilize rural resources, both human and material and to increase rural income, a somewhat different organizational set up would be needed which would cover all the rural industries with their scope properly defined, in place of the present limited schedule.[17]

The Asoka Mehta committee recommended the constitution of a rural industries commission in place of the khadi and village industries commission in order to make an integrated approach to the development of rural industries. The various organizations such as the handloom board, the handicrafts board, the small industries board, the coir board, the central silk board and the agro industries corporations while working as expert bodies in their respective fields could be coordinated in approach and programming under the administrative central ministry.

The Administrative Staff College at Hyderabad also, at the request of the Ministry of Industry studied in 1973 the organizational and functional

adequacies or otherwise of the khadi commission for the task entrusted to it. The study revealed that the majority of artisans were opposed to collectivization and to the programmes of khadi and village industries commission itself. Structurally and functionally the commission was geared only to serve the societies and not the artisans; the State Boards lacked the type of expertise for the type of activity entrusted to them. The pyramidal structure of the organization with hierarchy of controls suitable for highly routinized functions was unsuited to the task of developing village industries. The study highlighted the need for complete restructuring, revised role definition and more professionalization. Though many of the rural industries were bankable units provided well considered feasibility reports for their projects were made available to them, the commission and its other organizations laid over emphasis on supplying finances to non- viable units. This organization put emphasis more on products than skill, centralized planning and allocation of finds, dependence on the structure of cooperative institutions for channelizing the funds to the artisans as a result of which adequate efforts were not put towards organizational and manpower development leading to poor economic gains. Based on the identification of the nature of developmental task, the report postulated the hypothesis that the financial assistance would be channelized through banking system, and the consolidated fund of India should be used for training, research and development, creating common work centres and such other activities. The study also noted that the multiplicity of agencies for rural development activities with any of these agencies. These agencies were also administered by different administrative ministries which resulted into their poor performance. The report, in order to overcome these problems, suggested the khadi and village industries commission to function as an umbrella for better functioning of these agencies and for the industries which was not under their coverage of any of these agenicies.[18]

Many other studies are also available on the working of the khadi and village industries commission. The Estimate Committee of the Lok Sabha and the public Accounts Committee also examined the working of the commission. The basic inadequacy of the khadi and village industries commission in fulfilling the responsibilities entrusted to it was highlighted by all by these reviews. The task of rural industrial development is colossal. It is beyond the ability of any one organization to meet the complete requirements of this area. Institutions get fossilized. Vested interests develop. Reorientation of the organization is strongly resisted. A similar situation has arisen in the case of rural industrialization in India. At the initial phase of Indian economic development several organizations were set up which promised great impact. Many of them did achieve remarkable success, but now a time has arrived when their reorganization must be examined seriously.

The working of the Khadi and Village Industries Commission has been reviewed several times. Many evaluation committees and working groups have Mede in -depth studies of its organizational pattern and functional modalities. Most of them felt that the organization has deviated from its original objectives and it needed radical changes to become effective and serve its goal. The financial assistance rendered by the Khadi Commission has outlived its importance, especially in view of the commercial banks entering in a big way in rural areas to meet their requirements. The inability of this organization in tackling the planning and developmental problems of widespread rural industries has become apparent from the fact that the scheduled village industries under the purview of the Khadi and Village Industries Commission comprised only a fragment of the extensive rural industries and even in this limited sphere its contribution with regard to employment and production had not been very encouraging. The failure of the khadi organization to activate rural and cottage industries had been so glaring that the government also

announced its decision to ' revamp' the Khadi and Village Industries Commission.

But so far, the government has failed to recognize the Commission either structurally or functionally in any significant manner. The primary reason for this inaction seems to be psycho- political. Notwithstanding the economic and commercial shortcomings of the Khadi and Village Industries Commission, every government wanted to maintain control over it for political reasons to the grass-root of the India body- politic which could be easily done through it because of its extensive network. This incidental support afforded by the Khadi Commission has made it very coveted by all governments. The ' revamping' of the Commission would therefore, if done, be only ritualistic like religious vows with little intention of their observance.

In order to improve the living conditions in Indian villages, it is necessary to encourage and promotes village and cottage industries. No parallel organization can be set up with legitimate expectation for its success because of the existence of another in the field; therefore it is necessary to re- orient the existing one as far as practicable. In reorienting the organization, the first step is to recognize some of its special features which could be harnessed for better purpose.

The Commission so far has played very insignificant role in relation to cottage and household sector of rural industries. There is imperative need for reorganizing this sector of village economy, but other agencies like the handloom, handicrafts, sericulture and the small industries boards are concerned with certain specified segments of the rural economy, whilst the Khadi and Village Industries Commission has the potential for tackling the entire rural industries in a purposeful manner. In order to assume the responsibility, the Commission will have to shed its political affiliations and work on commercial lines creating a lobby for rural and household sector of industrial production.

This responsibility can be fulfilled by integrating together the various organizations working for rural industrialization. The Asoka Mehta committee had made a similar recommendation when it suggested the setting up of a rural industries commission. But there is a radical difference between the suggestion made here and that of Asoka Mehta committee. In the preset proposal we envisage that this organizational separateness of different boards will be completely eliminated. They will function like specialized divisions of a new department of the government, they should be constituents of a Central Ministry concerned with rural development programmes; the relationship between the various divisions and the structure of the new organization should be on the pattern of Directorate General of Technical Development affiliated it the Ministry if Industry. Unless the separate identity of different Boards is completely eliminated, the departmental aggrandizements would destroy the good work done by them as separate gentries. The structuring of the Integrated Rural Industries Directorate would necessitate de- scheduling of the industries presently entrusted to the Khadi and Village Industries Commission. The new set up would work for the promotion and development of all village industries and not with any specific segment of the same. It would be natural to anticipate resistance from all these Boards/ Commissions in the implementation of this proposal. But it is essential to acknowledge that the needs of rural development could be fulfilled only by dismantling the separate organizational boundaries of the various agencies working for the same.

The greatest asset of the khadi Commission is its extensive marketing network. This marketing channel must be carefully preserved and effectively nurtured, so that the various items of consumer and other good produced by different village industrial units could be conveniently distributed through the various marketing centres, bhavans, bhandars and retail points, already set up for the function.

The village industries required technological support which cannot be provided by those research installations which are catering to the needs of organized industrial establishments. Theoretically, the scale of these laboratories does disqualify them from serving the needs of rural industries but in actual practice they may fail to deliver the goods. The technological laboratories and research centres established under the Khadi and Village Industries Commission have the essential characteristics to fulfill the requirements of rural technological adaptations. But for doing this, they will have to be strengthened and developed more effectively.

In the new scheme of organization, the financial involvement of the Commission should be completely eschewed. The lending operations of the khadi and village industries commission are presently its strength as well as its weakness. All powers of the Commission flow from its financial stream controlling and directing the activities of various State Boards, institutions, cooperatives and the artisans. In rural reconstruction programmes, the Commission may cease to function as a lending agency. With this change, the working of the new department envisaged above would be very much promotional in nature which will give it the required motive power for taking up planning and programming of rural industrial development working in right earnest. The existing personnel of the Commission under the new organization cannot be completely absorbed in the Directorate for Rural Industries. As a matter of fact, the new organization to be effective should not automatically employ all of them. If that is done, it would completely annihilate any possibility of effective assistance from the new department. The qualifications and experiences of each officer should be reviewed by a service commission and those who are adequately qualified for new assignments in view of the reorientation of the work may be retained. Alternative employment for those who are not found suitable for the new programme may be deployed elsewhere.

The possibility of demobilizing a large number of ineffective workers of the Khadi Commission may be a stumbling courage, the restructuring and streamlining of the Commission may provide a new motive power to rural development programmes.

▲▲▲

References:-

01. M.K. Gandhi, khadi, why and How , Navjivan publishing House, Ahmadabad, 1955, pp.1-16, Quoted in Report of the Khadi and Village Industries Committee (1968), Ministry Commerce, New Delhi, p.8

02. M.K. Gandhi, Reorientation of Khadi 1964, Sarvodaya Pracharalaya, Thanjavur, passim, Quoted in I bid, p.11.

03. Village Industry profile and Organization Study, Administrative Study, college of India, Hyderabad, 1974-75, pp.33-34.

04. Ibid, p.xvi.

05. Ibid, p.xiv.

06. For Grant, Loan and Interest Subsidy: Commerce, October 15, 1977 and KVIC 's Annual Report 1977-78.

07. Khadi & Village Industries in the Indian Economy- Edited by shri Vadilal Dagli, p.12.

08. Statistical Supplements to Annual Report of KVIC.

09. KVIC 's Annual Report for 1965-66 to 1969-70 and Annual Report for 1977-78.

10. Prime Minister in May 1977 observed that subsidy must be given, but giving subsidy should come to an end some day. If subsidy is not abolished them strength of the people cannot increase.

11. The Report of the Village and Small Scale Industries (Second Five Year plan) Committee, Planning Commission, New Delhi, 1955.

12. Ibid, pp. 85-86.

13. The Report of the Khadi Evaluation Commission (1960), the Khadi and Village Industries Commission and the Ministry of Commerce, p.251.

14. Ibid.

15. The Report to the Khadi Evaluation Committee (1960), Ministry of Commerce, New Delhi, p.215. 16. Ibid, pp. 215-16.

17. The Report of the Khadi and Village Industries Committee, Ministry of Commerce, New Delhi, 1968, p.81

18. Village Industry profile and organization Study, Passim, op.cit.

CHAPTER-IV

PROMOTIONAL PRACTICES IN KHADI INDUSTRY IN BIHAR

Advocates of capital - intensive types concede that in the very short a unit of investment in a labour- intensive industry or process will provide a greater amount of employment than a unit in capital - intensive type. But, they contend, first that although in the case of agriculture the producer in our country is also the major consumer, it is not so in the case of industry. Consumer's interest, it is not so in the case of industry. Consumers' interest must, therefore, receive special consideration: prices of the basic necessities have to be brought down to a level at which the ordinary house- holder may, after meeting his basic necessities, have some surplus left which will provide him with some comforts also.

They further argue that the application of advanced technology and automatic methods constantly reduce the capital cost per unit of annual capacity which is reflected in lower cost of the product. Also, advanced technology leads to a lower cost of production in anther manner, viz. it utilizes the raw materials more fully than crude technology. For instance, a cottage worker cannot produce the same quantity of cloth from a given weight of cotton as a modern textile mill can. The wastage is so much greater at various stages of the operation. Similarly, a crude worker cannot expect the same extraction from sugarcane as a mill.

Second, that although output in labour- intensive types is greater relatively of the amount of capital invested and there is economy of capital,

output per man- hour or labour productivity goes down, and even though the total output would increase, it has to be shared by an increasingly larger number of workers in the industry. When this happens, the standard of living the workers declines.

Third, that economic development consists not in the maximum utilization of available resources, but in a rapid increase in these resources, particularly in capital resources, and over the long period, capital - intensive types will generate a greater surplus for capital formation, and so make a bigger contribution to employment and national income. Capital-intensive enterprises have the effect of concentrating additional income in the hands of those who are more likely to save and invest it in further industrialization of country. If production is distributed amongst so many workers having low income, all or large part of it is likely to be used up in consumption and little or nothing saved for capital formation, which is so essential for economic development.

Fourth, that in trying to substitute labour for capital in any given sphere of production, which is what the adoption of cruder or low capital-intensive techniques implies, we may actually create labour scarcity.

Fifth, that under a low capital - intensive economy we may produce goods which may not be acceptable to the consumer.

Lastly, it is argued- and Nehru agreed with the argument- that an economy based on Gandhian thought will make the country militarily weak and jeopardize its security a and independence.

There is no doubt that capital- intensive industry (based on advanced technology) leads to cheaper goods and better utilization of the raw materials. But in country where the progress of capital accumulation is slow and, and the fraction of the individual's income which is expended on the purchase of consumer goods (other than food) is not large, the somewhat high price of the

goods produced by the less efficient means of production is not an excessive price to pry for conservation of capital and provision and maintenance of employment.

In reply to this argument Mahatma Gandhi wrote in the 'Harijan', dated September 16, 1934:

"Strange as it may appear, every mill generally is a menace to the villagers. I have not worked out figures, but I am safe in saying that every mill hand does the work of, at least, ten labourers doing the same worker in their villages In other words, he earns more than he did in his village, at the expense of ten fellow-villages. Thus, spinning and weaving mills have deprived the villagers of substantial and weaving mills have deprived the villagers of a substantial means of livelihood. It is no answer in reply to say that they turn out cheaper, better cloth, if they do so at all. For, if they have displaced thousands of workers, the cheapest mill- cloth is dearer than the dearest khadi wove in the in the village.

"Coal is not dear for the coal miner who can use it then and there, nor is khadi dear of the village who manufactures his own khadi."

Planning for economic security- let us never forget- means, particularly in the conditions of our country first and foremost, planning to create and to maintain full employment. Also, in labour -intensive industries spread all over the countryside the producers themselves will constitute a large segment of the total number of consumers- far larger than what they will do in an economy with a capital -intensive structure where the number of worker-consumers is comparatively far smaller. So, the point about the possibility or desirability of cheaper goods being made available through a capital -intensive economy, to the consumers loses much of its edge; the producers in labour-intensive industries, in most cases, are consumers also.

As regards national economy in the use of raw materials, financial resources and provision of employment are equally important, if not more. Did we possess capital in the quantity we need for investment in large- scale industry and, were we not faced with unemployment, then, perhaps, no discussion, planning or laying down of priorities was necessary.

As regards the second argument about the standard of living, capital - intensive industry will raise the standard only of those who are employed. The level of living of the masses can rise only when there is full employment and this is far more ensured by labour - intensive decentralized industry. And it is this that should matter most, not the standard of living of a limited number of individuals. For, as conceded by critics, the total national product also will be greater in an economy of low capital - intensive or cruder technology. Japan offers an example. Its economy was, till the other day, overwhelmingly based on small units. Still, it's per capital income which was three times that of India in 1953 was far higher than that of many another country which possessed far larger physical or natural resources.

A decline in the level of unemployment, to which cottage and small industries will lead, will put purchasing power in the hands of the weakest sections of society, and hence increase their level of consumption and, thus, raise their standard of living. And, as Prof. Dudley Seers has recently pointed out, in economic like India's, where unemployment is to redistribute income; it is in fact almost the only way of providing the poorest group of the population with an opportunity to obtain a larger share of the total" Thus, a labour - intensive economic proposed in these pages, fulfills the aims both of social justice and increased GNP.

As for the third argument, viz. in regard to the capacity of owners and entrepreneurs of capital- intensive enterprises to save and invest: In other words,

if a more expensive technology is adopted, the initial cost is high but the output is much greater, so that within a few years it has paid off the initial costs and is making substantial profits. It seems to be forgotten, however, first, that a producer cannot sell his product unless there is enough money in the pocket of the consumers. If most of the workers or potential workers remain unemployed as they will be in a capital - intensive economy, they will have no money to buy the products and the factories will imply either not start at all or will have soon to close down. Second, the assumption that the whole of the excess over wages in capital - intensive industry will go to capital formation is not correct. Much of it will have to be set aside for capital replacement and a good portion is likely to escape into conspicuous consumption by proprietorship and the management. Further, the long-run advantage of capital- intensive industry over labour-intensive industry in regard to capital formation should only be an argument in favour of special efforts to encourage and mobilize the small units of voluntary savings and diverting income to capital formation through taxation.

The argument is partly based on the assumption that the total amount of non - wage income is lower in small industry than in large industry and those wage-earners in the former do not save at all. Both these assumptions are unproved. On the contrary, while it is true the income of the individual worker in a labour - intensive undertaking is less than a capital- intensive undertaking, the percentage of labour's total share in the income undertaking as a unit is higher in the former case than in the latter. As a Taiwan study embodied in a statement illustrates that while each additional dollar invested in the small plants created twice as much output as an additional dollar investment in the large ones, the labour's share in the income of the small plants was double that of the large ones.

As for actual savings of the small man: “it has been found that where the proprietor is craftsman- entrepreneur (rather than a merchant) who has moved

up the ladder by proficiency in his craft, the tendency to plough back the surplus into business is very prominent. This trend is particularly evident among the refugee craftsmen who have set up small industries in recent years."

Also, it is known that the marginal savings rates of farmers in Taiwan ranged from 30 to 50 percent during the 1960s, even though the average size of a farm in Taiwan is only 2.07 acres. In Japan the gross savings rate of non- farm small entrepreneur varies from 20 to 30 per cent.

While favouring capital - intensive techniques for heavy or producer goods industries, the planning Commission conceded that, so far as consumer goods industries were concerned, it was in the national interest that labour- intensive techniques were used.

"It particularly when the capital of decentralized production to accumulate surpluses is challenged" said the Second Year Plan, "that the conflict among different desirable objectives becomes a matter of some concern. The surplus generated per person in comparatively labour- intensive technique may be less than in more advanced techniques, but the total surplus available per unit of output for capital formation, taking into account the social and economic cost of maintaining those who would otherwise remain unemployed, may perhaps be large in the case of labour- intensive methods. In an under -developed economy where the distribution of doles to the unemployed is not practicable, the balance of advantage from the stand point of equity lies decidedly in favour of labour-intensive techniques . From the point of view of development, however, the difficulty in the adoption of such techniques lies in the mobilization of the available surplus from a large number of smaller units, but this is an organizational problem and requires to be faced."

So that, it is all a question of organizing the small savings of a comparatively large number of workers, not that the total amount of workers, saving in labour-intensive enterprises is bound to be less than that in capital - intensive ones.

A study made by Kedarnath prasad under the title, Technological Choice under Developmental Planning- A Case Study of Small Industries of India examines the relevance of techniques vis-a-vis the generation of savings and suggests that, with proper reorganization of the productive and marketing systems of cottage industries, their power to save can be created and suitably strengthened.

So it is false assumption that the poor cannot save, on the basis whereof government in India have failed to organize a system of capital formation in which the poor can participate. After failing to organize such a system, for them now to argue that the validity of their assumption stands' proven', would amount to arguing in a circle.

The argument about labour scarcity becoming a problem in case labour - intensive techniques are used needs only to be stated in order to be rejected. There is so much unemployment, overt and hidden, that we are all at our wit's end how to solve it. Labour scarcity in a country becomes a problem only when, under given techniques, the given labour cannot produce all the goods that the country wants. When that happy situation arises- if ever it dose- we can easily shift a part of our economy to labour- economizing, capital- intensive techniques.

As to the argument about products of cottage industry not finding a market: the past record of this country shows that the fingers of our workers can produce as fine and artistic goods as any that the machines can do. In fact, they can cater for individual tastes of customers with far greater ease, and they possess an adaptability which cannot be matched by machines.

In proof of the high quality of goods that Indian handicraftsmen were capable of producing, we may refer to the testimony of Sir Thomas Munro, who had come out to India as a young soldier in 1780, and later served as Governor of Madras from 1820 till 1827. He had used an Indian shawl for seven years, and had found very little difference in it after that long use. With regard to imitation shawls produced in England, he deposed before the Committee of the House of Commons in 1813: "I have never seen a European shawl that I would use, even if it were given to me as a present."[2]

Even today is a demand for our handloom products in certain world markets, where there is none for our mill products.

The apprehension entertained in certain quarters that an economy overwhelmingly based on small or cottage units will make the country militarily weak and jeopardize its security and independence, is ill- founded. Japan has been a military power to conjure with, for the last more than three quarters of century, although it is only since 1956 that the industrial economy of Japan has shown a marked shift towards heavy industry, since then small units have begun to lose their position of per- eminence and, with the attainment of full employment, there has come about a radical change in the Government's policy. Social considerations and small units are no longer encouraged. Even as it is, small units in 1978, mostly based on family labour, accounted for 99.3 per cent of all the business and industrial undertaking in the country and employed 70 per cent of the total labour force. (Out of these, industrial units numbered 45 lakhs and employed over 25 million persons.) It is a different matter, though, that owing to low productivity, the total value of their production was only 45 per cent of the national output.

Lastly, as the reader must have noted, it is not proposed to eschew basic or heavy industries altogether: those which are essential or inevitable will exist

side by side with cottage industries. We will, in the long- term interest of the country, have to have certain- a minimum unavoidable number of- heavy or capital -intensive projects and industries, i.e. the ratios of net value added and of labour employed per unit of capital invested, are comparatively lower. Mahatma Gandhi too was not averse to this course. He aimed not at eradication of all machinery but at its limitation as we have already seen, he was prepared to ' visualize electricity, ship- building, iron- works, machine- making and the like existing side by side with village handicrafts'. Obviously, he would also have had no objection to organization of defense industries on a large or heavy scale. The motives underlying the pattern of defense industries cannot be primarily social or economic: their organization and capital- intensity will be dictated largely by considerations of national security.

Like electricity and iron works, development of nuclear energy will also require heavy industry in which capital -output ratios will be irrelevant. India is particularly fortunate in possessing mineral resources of nuclear power in an abundant measure which, in course of time, can be developed to great economic advantage of the country. “India has the largest known thorium reserve in the world, equaling in amount the total world reserve of uranium. Several deposits of uranium also have been discovered in various parts of the country, which are still being proved by drilling. A deposit containing several thousand tons of uranium has already been established in Bihar. "[3]

According to Gandhiji, as we have already seen, the minimum and inevitable heavy industry that the country must have is to be owned by the State and, of course, used entirely for the benefit of the people. "I am socialist enough to say “he said, “that such factories should be nationalized or State- controlled. "[4]

If Gandhiji had known our inefficiency in managing the public sector undertakings which has become evident during the last two decades and a half,

he would have made establishment of heavy industry in the public sector and exception rather than the rule. As a matter of fact, latterly, he came to the conclusion that heavy industry, which the country will necessarily have to have, vested in private hands but controlled or regulated by the State, was preferable to a system of public ownership.

The problem of imbalance in regional development was acknowledged from the very beginning of Indian planning, but with every plan period the situation worsened. The various programmes introduced for bridging the gap between regional disparities did not seem to succeed. Towards the end of Third plan period, the government was very much concerned about the anomaly especially because the disparity continued widening with every increase in the plan size. The disappointment with the impact created by the Rural Industries Projects Programme had already begun affecting the planning approach to underdevelopment of various regions. The National Development Council by the middle of 1968 become much concerned about the task of removing the disparity and wanted to have some effective strategy for mitigating the gap formulated. In September 1968, the problem was discussed among the chief ministers, economists and the concerned ministries at the meeting of the National Development Council. At this meeting, R. Venkataraman, Member (Industry) of the Planning Commission Indicated that the establishment of large- scale central projects did not reduce rural poverty in any appreciable manner. According to Venkataraman, Bihar, Madhya pradesh, and Orissa accounted for a significant proportion of the central investment during the previous three- plan periods yet their per capital income remained substantially lower than the national average. On the other hand, Punjab and Haryana with very low investment on central projects enjoyed substantially higher than the national average of per capital income. He concluded that the magnitude of combined investment in private and public sectors in West Bengal and

Maharashtra was much higher than that in Punjab and Haryana, yet the latter enjoyed better standard of living. Similar was the situation in Tamil Nadu. With higher investment, it enjoyed lower per capital income. Recalling the significance and limitations of the various agricultural, industrial and investment programmes already introduced in radically different approach for eradicating regional imbalance and rural unemployment. At this meeting, he proposed that proper identification be done of backward areas with provision of appropriate fiscal and financial incentives for starting industries in these areas. The proposal was discussed at the National Development Council meeting in detail and it was finally approved that the question may be examined for the purpose. Accordingly one working group was set up under B.D. Pande, the then Secretary of the planning Commission, to identify the backward areas and to finalize the criteria for determining the same, and the second under N.N. Wanchoo, the then Secretary of the Ministry of Industrial Development for recommending fiscal and financial incentives for starting industries in those identified backward areas. The National Development Council also suggested that the final decision in the matter could be taken up after the recommendations of these working groups are available.

In accordance with the decision of the National Development Council decision, the Pande Working Group was constituted in November, 1968. It finalized its recommendation in February 1969. The group suggested two sets of criteria, one for identifying backward states and anther for backward areas within the state. It recommended that the industrial units of all sizes should be given support for their establishment in these areas. The assistance for them from financial and banking institutions could be mobilized for the purpose.

For identifying industrially backward states, the Pande Group laid down the guidelines based on (i) total per capital income, (ii) per capital income from industry and mining; (iii) number of workers in registered factories, (iv) per

capital annual consumption of electricity; (v) length of surfaced road in relation to the population and the area of the state. The Group recommended that there certain states which may not qualify for the concessions on the basis of these criteria but they deserved special treatment. As a matter of fact, the Working Group considered the criteria laid down by it are as the guidelines and not as rigid inflexible determinants. In the light of these guidelines, the conditions prevailing in each state had to be examined separately. It however identified certain states as backward and certain others advanced enough as not to need any concessional finance or any special incentive.

With regard to identification of backward regions within a state, the Pande Working group suggested the criteria to be (i) that the districts should be outside a radius of about 50 miles from large cities or large industrial projects; (ii) low per capital income starting from the lowest to 25 per cent below the state average; (iii) high density of population in relation to utilization of productive resources and employment opportunities as indicates by (a) low percentage of population engaged in secondary and tertiary activities; (b) low percentage of factory employment; (c) non and/ or under utilization of economic and natural resources like minerals, forests, etc. (iv) adequate availability within 1-2 years; (v) availability of transport and communication facilities or likelihood of their availability within 1-2 years, and (vi) adequate availability of water or livelihood of availability during 1-2 years. As it would be evident from the various criteria suggested that the Working Group was keen to provide assistance to those areas which had or were likely to have in near future the basic potential and favourable conditions for the development of industries to be located there. The Group stated that utmost care would have to be taken in the final selection of backward districts which, inter alia, satisfy that the latent resources and also the economic and social factors are favourable enough to

take advantage of the incentives that may be offered and types and size of industries which may have potential for development" .[5]

The Wanchoo Working Group was entrusted with the task of evolving adequate procedural, financial and fiscal incentives and concessions for encouraging industries to be located in the identified backward areas. The Group was also expected to examine the role of state government and financial institutions. The type of disincentives to be introduced to avoid concentration in metropolitan or highly industrialized areas was also within its purview.

The Wanchoo Working Group proposed a strategy of identifying two or three growth points for giving concentrated attention in every state. At these growth points, the state governments could initiate special programmes for constructing buildings, approach roads, transmission lines and for supplying electricity and building materials. In order to attract industries to these areas, it was suggested that the units establishing themselves in such areas, especially those basing themselves on local raw materials, could be de licensed, preferential treatment accorded for their inputs capital equipment, and other liberalized imports. At the same time, disincentives in order to dissuade industrial units from moving to congested metropolitan areas such as Bombay, Calcutta, Delhi and Madras were also favoured The government was recommended to arrange training facilities for the personal required for the industrial units established at the growth points. The Group also suggested that the term lending financial institutions should provide to the industrial units in those areas financial assistance on preferential basis at concessional terms, though the details of these concessions, the Working Group did not spell out.

The Wanchoo Group also suggested several measures for assisting capital formation in these areas. Special incentives in regard to fixed assets such as supply of developed plots, built -up accommodation, machinery and equipment

were suggested. Grant of higher development rebate and exemption from sales tax both on raw materials and finished products were also supported. An important recommendation of the Wanchoo Working Group was the introduction of transport subsidy equivalent to fifty years. to new industrial units set up in backward areas.

The reports of these working groups were examined by a committee of the National Development Council consisting of state chief ministers and other; they were also discussed by the Planning Commission and other concerned ministries and organizations including Reserve Bank of India and term- leading financial institutions. In September 1969 it finally approved the recommendations for providing concessional financial assistance to industries establishing themselves in identified backward districts which had to be mobilized through term-lending financial institutions, and it also approved the scheme on Central Outright Grant or Subsidy to identified backward areas. The modalities of these schemes however were left to be worked out by the Planning Commission and the concerned organizations. The recommendations regarding the grant of transport subsidy were referred to another committee of the Planning Commission for their further detailed examination. And the Planning Commission suggested acceptance of the transport subsidy as well.

The three schemes, namely, the Concessional Finance by the term lending institutions, the Central Outright Grant or Subsidy Scheme, and the Transport Subsidy Scheme, since 1971 become the major plant for selective industrial development in various backward districts.

Concessional Finance: The Planning Commission had considered the scheme on concessional finance in consultation with financing institutions in 1969 and certain guidelines were finalized for determining the backwardness of a district where this scheme could be introduced. The states and union territories

were asked on the basis of these guidelines to make their recommendations. Those districts which were less developed than state average were considered eligible for concessional finance. Based on the proposals submitted by the state governments and union territories, 246 complete districts were selected for Concessional Finance scheme. These concessions related to lower of interest, lower underwriting commission, initial moratorium for period of upto five years, longer amortization period of 15-20 years, reduced commitment charge of half per cent and participation in risk capital on selective basis. The scheme for providing concessional finance was announced in 1970.

Central Outright Grant or Subsidy Scheme: The scheme on Central Outright Grant or Subsidy as notified in 1971 envisaged providing outright grant initially to the tune of 10 per cent of fixed capital assets subject to a ceiling of Rs.0.5 million to those industrial units which established themselves or carried out substantial expansion of their establishments in identified backward districts. These districts were selected out of the list of districts selected for concessional finance. Originally, the backward states were asked to suggest two districts to qualify under the scheme, and other states and some union territories were required to identify only one such district. Forty- four districts were identified initially, but the number was considered inadequate to make any dent on the number was considered inadequate to make any dent on the country as whole. The scheme was reviewed in 1972 and its scope was enlarged. Each advanced state was now made eligible for three districts areas whilst every backward state was entitled for six such districts areas. The ceiling on capital asset was also waived though the amount of subsidy was restricted to Rs.0.5 million. Under the liberalized provision 101 districts areas were made eligible for the subsidy. In 1973, the rate of subsidy was increased to 15 per cent of the capital asset subject to a ceiling of Rs. 1.5 million.

Transport Scheme: The scheme on transport subsidy was notified in July, 1971. Under this scheme, fifty per cent of transportation cost of raw materials as well as of finished output to and fro between specified railheads and location of the industrial unit was granted as subsidy. This assistance was available to industrial units excepting plantations, refineries and power generation units. The public as well as private units both were entitled to it The scheme intended for the north- eastern region of the country and state of Jammu and Kashmir was afterwards extended to hill districts of Uttar Pradesh comprising the districts of Dehradun, Nainital, Almora, Pauri garhwal, Tehri Garhwal, Pittoragarh, Uttar Kasi and Chamoli. Subsequently, on request from Andaman and Nicobar Islands, Lakshadweep, it was also extended to them. In December 1977 Sikkim was brought under its purview and at the request of West Bengal, Darjeeling Hill district was also accorded this privilege.

The implementation of these three schemes did not show much promise from the very beginning. The concessional finance provided by the term lending financial institutions provided Rs. 6, 214.8 million by 31st March 1977 to industries located in backward districts. Apart from the fact that the amount was not large enough to arouse much enthusiasm for industrial mobility to these districts, the assistance was utilized primarily by a few states. For Example, Andhra Pradesh, Maharashtra, Tamil Nadu and Uttar Pradesh each accounted for about 11 percent of the total disbursements. While Assam, Karnataka, Rajasthan and West Bengal each shared less than seven per cent.

Even the benefit under Central Outright Grant or Subsidy Scheme did not flow uniformly to all the states. Those states which were more industrialized obtained large Scheme upto March 31, 1978 amounted to Rs. 416.5 million and industrially advanced states shared 54.7 per cent of it: Tamil Nadu (16.4 per cent), Maharashtra (12.6 percent), Karnataka (7.6 per cent), Gujarat (5.8 per cent), Haryana (2.8 per cent) and West Bengal (1.1 per cent).

Taken together these states accounted for 42.4 per cent of the total subsidy disbursed by that time in the country. The industrially backward states accounted for 42.5 per cent of the total subsidy. Andhra Pradesh (13.4 per cent), Rajasthan (8.5 per cent), Madhya Pradesh (6.0 per cent) and Himachal Pradesh (4.0 per cent) took advantage of the scheme to some extent and among themselves they accounted for 31.9 per cent of the disbursements. Significantly, West Bengal did not show any enthusiasm towards the scheme. Probably because the state is already over saturated with different kinds of manufacturing establishments and though Purulia, Midnapore and Nadia had been very backward, new industrial ventures to these districts were lacking Punjab and Haryana with only 3.5 per cent and 2.8 per cent of total industrialization but not based on Central support: the viability and competitiveness of the undertakings located in these states had been their guiding principles in which they have succeeded on their own. Kerala which received 4.9 per cent of the disbursements is not yet prepared for large- scale industrial undertakings, and the quantum of subsidy to small units do not total up to any substantial amount.

The inability of the Central outright Grant or Subsidy Scheme in creating an effective impact also springs from its non- economic parameter. The state governments, non official agencies as well as political leaders were much concerned with extending and modifying the scheme rather than implementing the same more vigorously. The scheme was primarily intended to attract manufacturing units to those unattractive areas where the industrialists under normal condition would not establish their units. But the production of the scheme was considered a windfall and those units which were not eligible for the subsidy began clamouring for their inclusion so that they also could take this unexpected gain. In this process, agricultural operations, servicing and repair shops, retail outlets, marketing organizations, consultancy services, hotel

industry and others began asking for the extension of the Scheme to them. The decision to apply the scheme to districts as unit also aroused much protestation. The compromise formula of applying the scheme to an area of equivalent size of district provided it was selected from already identified concessional finance districts situated contiguously was taken advantage of by Tamil Nadu, Andhra Pradesh, and Madhya Pradesh. Maharashtra Uttar Pradesh and Punjab wanted a block or tehsil to be made the unit for eligibility. Uttar Pradesh and Haryana wanted the scheme to be a revolving one so that other areas could also secure the benefit. The allotment of three districts in advanced states and six in backward ones was criticized on the ground that this distribution did not take into account total population, size and other parameters of the state. Many states also argued that their original selection of the district was wrong made which should be changed. The essence of all these representations was the lack of public will to make the scheme a success. There was too much concern for obtaining the pecuniary benefit under the scheme rather than augmenting the production potential and employment opportunities in the identified for which the scheme to take greater advantage of the scheme whilst the smaller ones because of their lack of resourcefulness failed to reap the fruit.

The transport subsidy also faced similar difficulties. The identification of railheads for calculating claims was found unsatisfactory. The determination of freight for the distance to be subsidized when consignments covered larger distances extended much beyond the identified railheads was not easy and simple. The differential rates of subsidy graduated according to the transport cost as a percentage of the total cost were not provided. The Scheme therefore favoured items with high transportation cost. Industrialists in other areas were not happy at their exclusion from the purview of the scheme. They represented that the natural advantages enjoyed by them, which were basic in their decision to establish their units at different places were eroded by the scheme. They

argued that the governmental action in subsidizing industries located in handicapped areas did not only encourage their establishment there but it also enabled them to compete adversely against the already established units in various markets.

The desirability of the scheme was greatly counteracted by the apathy of the people in taking advantage of the same. The expected beneficiaries were discouraged from taking advantage of the scheme by operational intricacies of the scheme. The sum total of the effect therefore remained almost negligible. During the first five years of the scheme, upto the beginning of 1976, no amount was disbursed under the scheme. Disbursements began only in 1976-77, but by the end of 1977-78, only Rs. 0.59 million was sanctioned. The entire amount was claimed by three states, namely Assam (61.0 per cent), Tripura (33.9 per cent) and Manipur (5.1 per cent). Other areas did not share in disbursements under the scheme by that time.

During the course of the implementation of these schemes their inadequacies became apparent. The inadequacies became apparent. The need for an integral comprehensive view to tackle the question of regional imbalance, rural poverty and unemployment was recognized. In order to examine the difficulties and remove objections expressed by the beneficiaries, many study groups was organized to go into the matter. The Raghuraj Committee set up by the Industrial Bank of India in 1976, the Nayak Committee set up by the Ministry of Industrial Development in 1975 and the Chakravarti Committee by the Planning Commission in 1972 were important in this regard, while their recommendations were yet to be processed, and in some cases to be finalized, a proposal was initiated to establish a Backward Area Development Authority exclusively for assisting industrialization of the backward areas. It was another effort towards institutionalizing an important development effort, but it did not get much official support. Many financial institutions were already operating to

meet such requirements of different regions. The proposal was considered to be premature and consequently, put into abeyance.

The non- finalization of Chakravarti Committee report for such a long period induced the Planning Commission to set up a National Committee on the Development of Backward Areas under the Chairmanship of B. Sivaraman, who was retiring from the membership of the Planning Commission in 1979. The Central Outright Grant or Subsidy Scheme and the Transport Subsidy Scheme had also out-run their duration and they needed decision for their continuance or otherwise: they were already being extended from year to year, a very unsatisfactory situation for such promotional programmes. The National Committee on the Development of Backward Area was expected to make a comprehensive examination of the problem and evolve a suitable strategy to tackle it.

The Committee approached the question of regional imbalance ab-initio but in doing so, the original goal of generating rural employment and balanced regional growth was overlooked. It became chiefly preoccupied with reducing congestion of metropolitan areas. Dividing the industries in two groups, consisting of small and medium industries and the other large scale units, the Committee concentrated on financial and other incentives for the second group; it also gave some thought to the need for creating infrastructure at certain focal points away from the metropolitan nucleus of industrial growth. The main objective of the Committee seemed to be reduction of strain on metropolitan resources and to direct the fresh industrial growth to peripheral towns. The financial incentive for the dispersal is expected to be mobilized through term-lending institutions. With regard to the development of small and medium industries, the Committee recommended that the necessary assistance to them could be mobilized though the strengthening of exiting institutions likes Khadi

and Village Industries Commission, marketing societies, Small Industries Development Corporations and such other institutions.

The basic problem of rural poverty and employment did not draw adequate attention the Committee. The problem which Jayapraksh Narayan highlighted in his paper submitted for the creation of Rural Industries Projects was again by-passed. The Committee had raised much hope but it got enmeshed in peripheral problems. It did not resolve the basic contradiction between large scale investment and rural poverty and regional imbalance which was highlighted by R.Venkataraman when he approached the National Development Council in 1968 with these problems and proposed the constitutions of Pande and Wanchoo Working Groups for going into the details of the problems so that the contradiction in Indian Planning could be resolved.

On the basis of parameters decided by various experts bodies Bihar is a backward state of a backward region. Therefore, it deserves special care for saving and investments in order to boost output and generate employment on the basis of list possible cost. This is why the khadi and village industry deserves special treatment in a backward state of Bihar which is treated as a cow belt and is characterized by Hindu Rate of Growth.

Bihar is an enigmatic sate. She is richly endowed with mineral, agricultural, forests and industrial capabilities, yet she is one of the poorest states in the country. Irrigation facilities have been provided to more than 26 per cent of cultivable area. Her case crops included sugarcane, oilseeds, tobacco and jute. Forests covered 17 per cent of its geographical area, which yielded rich supply of timber, lac, gum and resin. Among the industries already established in the state, one may mention the Tata Iron & Steel Company, Tata Engineering and Locomotive Company at Jamshedpur, the Fertilizer Factory at Sindri, the Heavy Machine Tool Factory and Foundry Forge Project at Ranchi, the steel Plant at

Bokaro, the oil refinery at Barauni, the aluminium Plant at Muri Hindustan Copper Corporation at Ghatsila and such other establishments. The State has 29 sugar factories, seven cement factories, seven distilleries, three jute mills and two wagon- making units. There are 18,918 small scale industrial units in the state. In spite of such a heavy concentration of activities, the poverty of the state in general and rural areas in particular has been colossal. It has been officially estimated that 55.82 per cent of the rural population and 43.45 per cent of urban population in Bihar lived below poverty line.

One of the main reasons for this situation has arisen from the fact that the industrial establishments have mainly generated employment generated by the organized manufacturing units, 24.97 per cent were in basic metal and alloy industries; machinery accounted for 9.70 per cent, transport equipment 8.40 per cent and non- metallic products 13.57 per cent. The food products accounted for 17.72 per cent of employment in the state. These units are generally located in urban conglomerations and in the South Bihar leaving a vast tract of the state without much industrial activities.

Even the agro- manufacturing units which could generate employment in dispersed rural areas have not been much helpful. Bihar accounted for 10.28 per cent of the total population in the country, but agro- based units in the state provided only 4.66 per cent of the employment generated by them in the country. The employment generated by them in rural areas amounted to 5.73 per cent of the total employment generated in the rural India against the rural population in Bihar accounting for 11.55 per cent of the rural population in the country; in urban areas 3.33 per cent were employed against 5.16 per cent of the national urban population residing in the state. The achievement of agro- based manufacturing units was much more restricted, 0.46 per cent for rural population and 1.96 per cent for the urban have got employment in them. The pattern of agro manufacturing units in Bihar suggested that the north was much

dependent on agriculture as the main source of its sustenance whilst the south had much diversified sources of dependence. Activities connected with food processing accounted for 42.11 per cent of the units in the State which generated 41.66 per cent of employment. Excepting Bhagalpur which had only 28.52 per of its agro- manufacturing units engaged in food products generating 28.03 per cent of employment in the district, Santhal pargana which had 19.76 per cent of units generating 18.68 per employment, Palamau with 37.01 per cent units and35.03 per cent employment, Hazaribagh with 33.58 per cent of units generating 34.59 per cent employment, Ranchi with 23.33 per cent of units generating 23.11 per cent employment and Singhbhumi with 19.37 per cent of units engaged in food processing units generating 16.73 per cent of employment in the district, all other districts depended mainly on this line of activity. Champaran provided mainly on this line of activity. Champaran provided 74.35 per cent of agro- employment in the district with 64.18 per cent of units engaged in this item of production. Other districts with heavy concentration of food processing activities were Saran having 65.76 per cent of units generating 68.01 per cent of employment. Saharsa with 59.76 per cent of units generating 62.30 per cent of employment, Sahabad having 52.87 per cent such units with 54.46 per cent of employment therein, Muzaffarpur with 48.79 per cent of units and 52.31 per cent of employment, purnea 42.20 per cent of units and 50.62 per cent of employment, Darbhanga 42.54 per cent of units and 45.50 per cent of employment, and Dhanbad 41.73 per cent of units and 43.32 per cent of employment. Excepting Dhanbad, all other districts chiefly connected with food products are situated in north Bihar. Such a level of concentration in one line of manufacture has been due to lack of opportunity of any other agro-manufacturing activity in any significant manner. This also explained their heavy concentration in rural areas; 76.96 per cent of them providing 66.12 per cent the total agro -employment in Bihar were located in rural areas. This phenomenon of realization is also related to their being primarily undertaken in

household sector, 62.82 per cent food products units generating 34.08 per cent employment were in the household sector, unregistered sector accounted for 45.78 percent of the units providing 39.19 per cent of employment and the registered sector with 1.38 per cent of units generating 26.71 per cent of employment.

In textile weaving and allied activities there were 19,346 units which amounted to 15.04 per cent of the units in the state. They provided 14.49 per cent of employment. These units were concentrated mainly in Gaya (17.63 per cent of units generating 22.60 per cent employment).

Darbhanga (15.95 percent of units and 16.92 per cent of employment), Bhagalpur (45.62 per cent of units and 47.58 per cent of employment), Santhal parganas (48.09 per cent units and 40.44 per cent of employment), Ranchi (31.78 per cent units, 31.08 per cent employment) and Singhbhumi (16.88 per cent units and 7.98 per cent employment). These districts combined together accounted for 76.92 per cent of units engaged in textile weaving and other allied activities in the Sate which generated 76.28 per cent of employment in this sector.

Those units were engaged in made-up garments and wearing apparel accounting for 13.58 per cent o the units provided employment to 33,523 persons or 9.69 per cent of the employment in agro- manufacturing units. These units were mainly concentrated in patna (17.93 per cent units and 12.78 per cent employment), Champaran (15.44 per cent units, and 7.24 per cent employment) Muzaffarpur (15.79 per cent units and 11.77 per cent employment), purnea (16.09 per cent units and 11.60 per cent employment), Palamau (16.28 per cent units and 15.07 per cent employment), Hazaribagh (20.23 per cent units and 15.28 per cent employment), Dhanbad (31.36 per cent units and 22.43 per cent employment) and Singhbhumi (21.28 per cent units and

10.30 per cent employment). Together they accounted for 52.81 per cent of the units engaged in ready - made garments industry and they accounted for 51.25 per cent of employment.

The textile weaving and apparel making industries are well demarcated in Bihar. As it would be observed from the above, excepting Singhbhumi the groups of districts taking up weaving and allied activities do not specialize in ready- made garments. Tradition played an important part in inducing Bhagalpur, Darbhanga and Gaya to take up weaving; the tribals in Santhal parganas, Ranch and Singhbhumi districts had depended upon this activity for a long time. Their output is intended for wider markets. Any attempt to direct them to local consumption would restrict the scope of their expansion. Those districts which are engaged in apparel making are oriented towards local markets. In order to open them to wider demand forces it would be necessary to incorporate better designing, workmanship and marketing support.

Tobacco and tobacco products are mainly concentrated in three districts namely, Patna (12.04 per cent units and 22.18 per cent employment), Darbhanga (10.30 per cent units and 13.31 per cent employment) and Monghyr (23.10 per cent units and 47.63 per cent of the units and 45.54 per cent of employment generated in tobacco processing industry. About 68.56 per cent these units are located in rural areas. They provided 64.85 per cent of employment. Only 5.24 per cent these units were in the registered sector, 61.63 per cent in the unregistered sector and 33.13 per cent in the household.

Gaya (16.98 per cent units, 16.25 per cent employment), Darbhanga (18.98 per cent of units, 16.71 per cent employment) purnea (27.99 per cent units per cent of units, 21.45 per cent employment), Santhal pargana (20.41 per cent units, 19.32 per cent employment), Hazaribagh (28.28 per cent unit, 31.26 per cent employment) and Ranchi (26.66per cent units, 28.33 per cent employment)

have concentrations of wood and wood production. Among themselves, they acccounting for 52.00 per cent of the units and 50.05 per cent of employment in the sector. The scope for expanding this activity is considerable specially in South Bihar. Appropriate exploration of forest resources in South Bihar should provide greater employment opportunities specially to the tribal population. But leather units could be more widely dispersed. Presently in Palamau district alone, leather units accounted for 21.25 per cent of the units in the district providing 15.10 per cent of the employment. Such units are scattered in different districts only in small numbers. It suggested that the carcass utilization and hide fly in the state deserved better attention. [6]

▲▲▲

References:-

01. P. N. Dhar, Small- scale Industries in Delhi, Asia publishing House, Bombay, 1958, p.82.

02. Romesh Dutt, The Economic History of India (1757-1837), p.266.

03. Third plan, p.196.

04. Mahadeo Desai's article in the " young India' dated 13-11-1924.

05. Identification of Backward Areas: Report of the Working Group, Planning Commission, New Delhi, February, 1969, p.14.

06. Bepin Behari, Unemployment, Tchnology & Rural Poverty 1983, pp. 184-189.

CHAPTER - V

CONCLUSSION AND SUGGESTIONS

During the Freedom Struggle, Mahatma Gandhi, The Father of the Nation, was witness to the grinding poverty of our people, and realized that the poor could not be organized for the struggle, without the problem of hunger, poverty and unemployment being addressed first., He conceived of the development of Khadi and Village Industries (KVI) which involved processing and conversion of agricultural produce into final good by the villagers/ locals themselves. During the Freedom Movement, the development of KVI was used as an instrument to meet the twin objective of self- reliance through local production and seeking active participation of the poor in the struggle for Independence through removal of hunger and unemployment. During the initial years of planned development, its potential as an instrument of poverty alleviation was recognized, and the Government took the responsibility of bringing its development within the framework of Five Year Plans. A statutory body, called the Khadi and Village Industries Commission (KVIC) was created by Act of Parliament in 1956. Commission is required to Plan, Promote, organize and assist in the implementation of the programme through:

- Financing of eligible units;
- Training of persons for employment;
- Ensuring supply of raw materials to units/ entrepreneurs;
- Promotion of sales of Khadi and village industries products; and
- undertaking research and development activities for the growth and spread of khadi and village industries.

The KVIC has been implementing the Khadi and Village Industries programme (the programme, henceforth) through its regional/ State level offices and the Khadi and Village Industries Boards (KVIBs). The state boards (KVIBs) implement about ninety per cent of the village industries programme and receive funds from both KVIC and the state governments. Almost the khadi sector programme and a small part of the village industries programme are being implemented by KVIC directly. Both the KVIC and KVIBs are promotional bodies, which extend a network of institutional, infrastructural and financial support to the Khadi and Village Industries units/ institutions.

The role of khadi and village industries in the context of the new particular, the effectiveness of the programme in terms of its employment generation capability, resource use efficiency and sustainability has come under attack from various quarters. The High Power Committee (HPC) under the Chairmanship of the then prime Minister (Shri P. V. Narasimha Rao) examined the relevant issues and suggested a series of measures in their report (July 1994) . Among other things, the HPC recommended for creation of two million additional jobs through additional financial support during 1994-97. To achieve this target, KVIC identified 21 most backward district in the country with a target of creating 10.000 employment opportunities/ District. These districts are

in addition to the 50 districts and 125 RPDS blocks selected under the Special Employment Programme (SEP) of KVIC.

At the instance of KVIC and Planning Commission, Programme Evaluation Organization (PEO) undertook the evaluation of the performance, adequacy and effectiveness of the implementation mechanism and impact of the KVI programme.

The specific objectives of the evaluation study, inter alia, include assessment of:

- Performance with respect to production and employment target of two million jobs during 1994-97;

- Performance w.r. to development of infrastructure in the identified areas;

- Financial performance;

- Cost effectiveness of the scheme; and

- Impact of the KVI programme on the intended beneficiaries.

In addition, the study is required to examine the adequacy of the Planning, execution and monitoring aspects of the programme, and suggest measures to improve its performance. The reference period for the study is the entire period of the Eight Plan (1992-1997). Construction and testing of the hypotheses relating to the study objectives would require information on the details of scheme parameters, implementing agencies, functioning and operational aspects of the KVIC units/ institutions and social- economic profile of the beneficiary households. Based on the assessment of available secondary data and discussions with the stakeholders, it was decided to generate the greater part of the data- base through structured questionnaires for the different nodes of the implementing agencies, functionaries of the KVIC units and the beneficiary

households. A multi- stage stratified sample design was adopted for the study to select 18 States, 32 blocks in 32 districts, 194 KVIC units/ institutions, and 730 beneficiary households (for details, Chapter- II). The selected sample of KVIC units and beneficiaries included representation from different relevant strata.

Formulation of annual Plan involves receipt of proposals from the institutions/ units, their scrutiny at the district and state level, and by banks and KVI headquarters. Because of the involvement of multiple agencies, inter- agency coordination assumes great importance in Planning and implementation of the programme. The guidelines for implementation prepared by KVIC do address these issued by explaining the steps and procedures for project formulation and implementation on the3 one hand and the role of various agencies on the other, During the Eighth Plan, nearly 95% of the project proposals of the khadi sector and 80% of the village industries sector were accorded approval in the selected states. However, only 37 % of these sanction, 5% later during the plan period, and no definite information about the remaining 58% is available with the implementing agencies are: non- availability of funds in time (56% of state level agencies), procedural delays (33%) , inability of the funds (17%) Does KVIC provide the necessary help to ensure timely implementation of the sanctioned projects? The response received from KVIC (state) offices tends to suggest that while they provide technical guidance to the units, the problems faced by the units are not adequately addressed. This has resulted in closure and in optimal functioning of the institutions/ units, high drop- outs among the new entrants, low employment growth and inefficient use of public resources. Another major weakness in Planning is the inadequate linkage between production and marketing. The KIVC seems to believe either in the Law that supply creates its own demand or in a fixed and non-expandable market size for KVI products. It expects that the loyal customers will come to their outlets to pick up the products on display. This passive marketing strategy has resulted in

accumulation of stocks, untimely payment to institution/ units whose rebate and investment get locked for years, adversely affecting the economic production. The failure in planning and implementation of the programme is also reflected in the inability of KVIC in maintaining an inventory of closed/ sick units, ensuring adequate raw material supply, identifying the constraints of the units/ institutions and in generating reliable statistics on employment, earning, production, sales, stocks etc. all of which provide important management information for planning, implementation and corrective interventions. As will be clear from the analysis of the survey results in the report, the data base with KVIC is not only inadequate, but it also does not reflect the grassroots reality. The system of information generation relies heavily on routine feedback from the units without much verification for accuracy, nor is the available information used for problem solving and appropriate intervention. The entire MIS of KVIC needs overhauling, if planning and implementation are to be oriented towards meeting the primary objectives of the scheme.

The budgetary support of the Centre constituted more than 80% of the resources of KVIC till 1994-95, i.e. before the implementation of the Margin Money Scheme. During the last two years of the Eight Plan (i. e. 1995-97), the share of budgetary support came down to around 35%. The other sources of funds for the implementation of KVI programme are the credit from Consortium Banks (since 1995-96, more than 50% of the plan expenditure was spent for the khadi sector. Since the introduction of REGP, the khadi sector continued to receive a larger part (32.5%) of the divisible Pool of the budgetary support, but a larger chunk (45%) of such resources went to the REGP for which the sectoral break - up between khadi and village industries is not available. Based on the information supplied by the states, the REGP fund was allocated in the ratio of 37.63 between khadi and village industries sector. On a rough estimate, about two- thirds of the budgetary resources during the Eight

plan went to the khadi sector in the form of ' grants',' loans' and ' interest' subsidy'. This bias in allocation in favour of the khadi sector is not commensurate with its performance in terms of employment generation and output.

During the Eight Plan, allocation to KVI programme was Rs. 1498 crore, as against the revised budget proposal of KVIC for Rs. 5864 crore. This wide divergence between the "proposals" and "actual allocation" and multiple revisions of proposals point to the weaknesses in the budget formulation processes of KVIC. The financial resources of the Khadi and Village Industries Boards (KVIBs) which implement about 90% of village industries programme come from KVIC, the state governments (plan and non- plan), bank and refund from its subsidiary units. The shares of alternate sources vary across states. In the Eight Plan, the share of KVIC was more than 50% for Andhra Pradesh, Jammu and Kashmir, Karnataka, kerala, Meghalaya, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, While the share of the state governments was substantial for Assam (89%), Gujarat (52%), Himachal pradesh (99%) and Tripura (59%) It may however, be mentioned that except that in Himachal Pradesh and Karnataka, the actual release and utilization rates of available resources were extremely low (less than 10% in some states) in both the khadi and Village Industries sectors. No wonder, the employment and production targets of KVI programme remained unfulfilled.

During the Eight Plan only 8.01 lakh additional employment opportunities were created, as against the target of 20 lakh set forth by the HPC for the three year period 1994-97. Of this, the share of the khadi sector is only 0.59 lakh and that of village industries sector is 7.42 lakh. These figures include both part-time and full time employment figures (supplied by KVI) into full -time equivalent (FTE) using earnings of workers yields the following scenario. It may be mentioned that FTE employment dose not necessarily mean adequate

earnings of workers. In 1996-97, an FTE workers is reported (source: KVIC) to have earned Rs. 4835 in the khadi sector and Rs. 4323 in the village industries sector.

Year	Full Time Equivalent Employment (in lakh)	Khadi Sector Village Industries	Total
1991-92	5.09	24.02	29.11
1996-97	5.39	29.42	34.81

The above results indicate that employment growth in the khadi sector was negligible during the Eighth Plan, while that in the village industries sector grew at the rate of 4.14% per annum. About 95% of the additional employment generated during the Eighth Plan was in the village industries sector. In the khadi sector, the physical output of cloth remained more or less constant productivity in value terms increased by more than 70% between 1992-93 and 1996-97, without any major change in the composition of output in terms of Cotton, Woolen, Silk and Muslin. This large increase in value of output cannot be adequately explained by the rise in cost of production due to inflation. Thus, additional budgetary resources (grants and rebates) allocated to the khadi sector seem to be getting absorbed year after year without any corresponding increase in employment, output and sales realization. In the village industries sector on the other hand, there has been positive growth in employment (5.40 lakh FTE), labour productivity (35%) and sales realization (32%) during the Eighth Plan. The Directorate of HRD is responsible for Planning and organizing training of working persons and potential entrepreneurs through 611 training centres functioning under KVIC. As per secondary statistics, during the Eighth Plan only about 1% of the 58 lakh workers of the khadi and village industries units/institutions could be trained In the selected states, however, this percentage could be trained .In the selected states, however, this percentage was

much less and wide variations, from a high of 1% in Maharashtra to a low of 0.01 % Uttar Pradesh, were observed. It was also noted that the training programmes are not designed keeping in view the employment situation /potential of the various sectors. Thus, during the Eighth Plan, 38% of khadi and 62% of village industries workers were trained, whereas their share in employment was 25.5% and 74.6% respectively. Similarly, 24.5% of the trainees were from Engineering and Non- Convention Energy Industries which employ only 5% of the workers, whereas the share of agro- based industries which employ more than one -fifth of workers was 10.7% in the total number of workers trained in the Eighth Plan. The khadi and village industries can face competition from organized industries only through continuous upgradation of their products and technological improvements. Regular training by competent staff must be imparted to the artisans through a wide network of training institutions of the present study has not examined the functioning of the training institutions, but has noted that existing training methods and practices are not effective . It is felt that a comprehensive evaluation of KVI training institutions is conducted and the necessary steps be taken to revamp and reorient these so that training helps contributed to labour productivity and development of khadi and village industries.

Derivation of cost norms for job creation and maintenance is beset with problems, primarily because of various types of part time employment in khadi and village industries units, multiple sources of funds and the practice of accounting followed by KVIC. Several assumptions had to be made and primary data from the units had to be used to standardize the definition of employment and circumvent the problems relating to financial flows for derivation of the cost of job creation from secondary data. On the basis of the analysis of primary data collected from KVI units, it is found that:

- Average public cost of job creation in the khadi sector is Rs. 27,259/ FTE (Full Time Equivalent) job;

- Average cost of job creation in the village industries sector is Rs. 43,366/ FTE, to which the contribution of the government is estimated at Rs. 38,775;

- Annual public cost of maintaining a job in the khadi sector is estimated at Rs. 4979/ FTE. Thirty three (33) percent of this amount comes in the form of 'Grant' from KVIC, 61% as an interest subsidy on loans, and the rest is the cost of administering the programme;

- Annual public cost of maintaining a job (FTE) in the village industries sector is Rs. 2158;

- As per statistics maintained by KVIC, the estimated annual earning per (FTE) worker in the khadi sector is Rs.4835 and that in the village industries sector is Rs.4323 (at 1996-97prices). However, survey data revealed that an FTE worker in the khadi sector earned Rs.2740/ annum, while no major difference from secondary data was noted in the case of village industries sector. The government pays about 182% of the wage bill to the khadi sector and 50% of the wage bill of the village industries sector. These estimates may be taken as the delivery costs of maintaining jobs created in the KVI programme; and

- In aggregate terms the annual public cost of maintaining 5.084 lakh (FTE) jobs in the khadi sector comes to around Rs. 253 crore, while it is Rs.601 crore for maintaining 27.83 lakh (FTE) jobs in the village industries sector.

On an average, a sample khadi unit was found to have machinery and equipment worth Rs. 4,96,305, invested Rs.61,39,744 in working capital and employed about 246 FTE workers during 1997- 98 . An average khadi unit generates a surplus of Rs. 5987 per FTE worker under the present pattern of financing. However, this surplus is not translated into profit, as the entire

production of the unit is not sold during the year. The average unintended stock buildup is around 35% of the annual production, and for small units, it is as high as 80%. The economics of khadi production will work out very differently if the inventory of fionished goods could be reduced to, say, 5% of annual production. In such a scenario, khadi unit will generate a profit of Rs. 5131/ FTE worker or more than Rs.12.6 lakh as total profit for the unit. Another area of concern is the high raw material to output ratio. For some units, the ratio is as high as three - fourth. A ratio of more than 25% is neither justified, nor sustainable. While large khadi units have been able to keep their input- output ratio low (less than 20%), most of the medium and small units have shown very high ratio- implying high input prices, or dominance of production of lower count khadi items. or both. The third area of concern brought out by the survey result is the low wage payment to workers. As per secondary statistics brought out by KVIC (on the basis the returns from the units), the average annual earning of full time worker was Rs. 4835 in 1996-97. However, our analysis shown that an FTE worker got only Rs. 2740during 1997-98. Not only is this earning much less than what is reported in secondary statistics but, it also forms a relatively small proportion of the value added by an FTE worker. It is also important to note that the opportunity cost (of sustaining khadi production) to the government in the form of grants, concessional loans and rebate works out to Rs. 4979/ annum per FTE worker. This implies that only 58% what the government spends on a khadi unit reaches the khadi workers.

On an average, a village industry unit invested Rs. 6, 97,940 and employed 16.2 FTE workers. As per MMS pattern of financing, 25% of this investment is government grant, 65% loan and 10% own contribution. The composition of capital observed among the sample units, however, shows much higher proportion of own capital, because of difficulties in obtaining concessional loan of under CBC. The village industries units are commercially

viable and capable of sustaining themselves without much government subsidy. The average wage payment to an FTE worker is almost 58% higher than that in the khadi sector. The government bears only 50% of the wage bill of Village Industries units implying positive contribution by Village industries to the social goal of generating employment opportunities at low public cost.

One objective of the study is to examine if the benefits of KVIC programmes are flowing to the intended beneficiaries and contributing to their well being. For this purpose, 1071 workers from 494 household were approached. The PEO field teams also interviewed 158 key persons (presidents/ secretaries) and 78 ordinary members of institutions/ units. The findings are as follows:

- The workers of KVIC units/ institutions were found to be mostly poor, disadvantaged, illiterate and local people. The REGP was designed to attract this group.

- The annual per capital income of the beneficiary households (workers) is Rs.5655 and the earnings from KVIC programme constitute 52.71%. The income of an average village industries worker's family is 70%more than that of khadi workers' family. The khadi workers' families earn about 58%. The relatively low income of khadi workers' families is because of the dominance of part- time employment in the khadi sector.

- More than two- thirds of the 494 sample households (workers) originally belonged to the families below the poverty Line. Of these poor households, about 71 % have actually crossed the poverty line with the help of additional income from the KVIC programme. Here too, the performance of the village industries sector (80.5 %) far outweighs that of the khadi sector (62.3%).

- A comparison of the household expenditure patterns sector suggests that

- High earnings from KVIC have enabled the beneficiary households to spend a lower proportion on education, health and clothing (Table 7.6.). Thus the programme has contributed towards improvement in the wellbeing of beneficiaries.

- The key persons (presidents/ secretaries) are also direct beneficiaries of the KVIC programme. The average annual income of such households is estimated at Rs. 73,598 at 1996-97 prices. Analysis of survey data reveals that more than 50 per cent of the household income of the key persons come KVIC programme. This happens even though there are 3 to 4 earners in such families. While such a situation can be explained in the case village industries, the share of income from the unit seems very high in the khadi sector.

- The non working members of the governing bodies of the units/ institutions also receive financial benefits from the programme. On an average 15% of their annual household income of Rs. 70072 comes from the KVIC programme. About one fifth of earners of such households in case khadi and one-fourth in case of village industries units were found to be employed in the units were found to be employed in the units/ institutions.

The khadi and village industries programme holds great potential for generating gainful employment opportunities for the rural poor, arresting migration of rural unskilled workers to urban areas and for promoting the strategy of sustainable development. It can also be a viable and effective social safety net to enable the poor to ward off the adverse impacts of structural adjustment and economic reforms on their wellbeing. However, this potential can not be realized without addressing some basic weaknesses with regards to the design and implementation of the programme and without making it fiscally sustainable.

The evaluation study has brought out a number of weaknesses of scheme in each area of operation of KVIC. In fact, KVIC has spread its net too wide and has got involved in areas of operations where it has very limited expertise and which can be better done by other government agencies and the private sector. Because of this imbroglio and all pervasive weaknesses in its implementation, the programme warrants major changes is policies and implementation methods.

The very first aspect of the programme that merits attention at the highest decision- making level is to examine whether it would not be more appropriate to have two separate implementing agencies for the khadi and village industries. It is proposed that the KVIC may be reorganized into two separate organizations, e.g. the "khadi Commission" and "village Industries Commission" with suitable representation from the respective associations of institutions/ units. It may be mentioned that about 90% of village industries programme is currently being implemented by the State KVI Boards. Thus, such a division of responsibilities is very much in tune with the present implementation mechanism. The division of responsibilities will help avoid much in the mix -up that has taken place, and fix accountability for the performance of each sector. At the state level, the khadi units/ institutions of KVIBS can be brought under the purview of the 'khadi Commission' and KVIBs may renamed as "Village Industries Boards."

The khadi commission may be brought under the Ministry of Textiles while the Village Industries Commission may continue to work under the Ministry of Small Scale and Agro and Rural Industries. The advantage of bringing the khadi sector in the Textiles Ministry will be manifold First, the subsidy on mill made yarn supplied to the Handloom Sector can be eliminated by meeting the yarn requirement of both khadi and Handloom sectors from a common source, viz; the khadi sector have however, to be reorganized and strengthened for such large scale production of hand- spun yarn. This would

involve supply of improved Charkhas to millions of spinners, supply of adequate raw material (sliver or, rovings) at reasonable prices, and a mechanism to ensure steady supply of yarn to the Handloom Sector. Secondly, for supply of adequate quantity of raw material (sliver/ rovings) to the spinners, the under-utilized NTC mills can be used, as the supply from KVIC's Sliver Mills will be inadequate to meet the requirement. Thirdly, it holds the potential potential for raising rural employment opportunities manifold. It may, however, be mentioned that the Textile Ministry needs to be sensitized about the potential of the reorganized khadi and Handloom sectors. The khadi Commission also needs to be given the autonomy it needs to translate this vision into reality.

- No major changes are suggested for the designing and implementation of village industries programme. Under the existing mode of financing, the units are viable and are contributing to the social cause of generation of gainful employment opportunities with justifiable level of fiscal support. However, since there is scope for improvement in certain areas of operation as also for reducing the public spending on job creation maintenance, the following measures are suggested.

- The Village Industries Commission should extend the necessary help to enable the village industries to expand the market at home and abroad. In the domestic market, the village industries products may be standardized and sold through the various marketing co-operatives federations rather than through KVIC outlets. For the export market, the commission should organise trade- fairs for Village Industries products both in India and abroad to enable the units to display their products and innovations.

- The Village Industries units encounter difficulties in obtaining the CBC financing facilities, even though their repayment record is good. The new commission should look into the various aspects and put in place a

mechanism that would ensure easy financing facilities for approved schemes.

- The existing monitoring mechanism of KVIC is very weak, as it does not help generate realistic picture of employment, production, number of functional units and utilization of government assistance. The new Commission should strengthen the monitoring system for generation of reliable information with the provision for periodic joint inspection of certain percentage of the village industries units.

The primary concern under the khadi programme should be to ensure that production of goods actually takes place on sustainable basis, so that its objective of generating employment opportunities for the unskilled rural poor is met.

The quantity and quality of employment are not satisfactory at present, because of low and shrinking production base. Factors, such as unintended stock build up, constraints to input availability, capital of institutions/ units getting locked up for years, non availability of improved technologies and repair facilities, outmoded product mix etc. have all contributed in different degrees to the present sorry state of affairs.

The first and foremost requirement is thorough overhaul of the marketing strategy for khadi products. Product development and marketing need a professional approach. The present policy of retail sale of khadi products through KVIC outlets and through the own effort of the units must be done away with, as it has led to unintended inventory build -up, malpractices and unsustainable and unjustifiable public spending (rebate, grants) . Even the attempt to boost sales using khadi as a brand name is unlikely to succeed unless some fundamental changes are brought about. One way of addressing this issue is to leave the entire marketing and product development to the private sector,

while the semi the -processed goods are produced by the KVI units/ institutions under the guidance and supervision of KVIC as at present. However, the exiting method of supervision and intervention followed by KVIC must be changed, as it is ineffective of the scheme. Production and employment bear a direct functional relationship. The primary task of the khadi Commission (KC) under the new regime should be to closely monitor the flows of input and output. This will automatically ensure generation of employment opportunities. The Commission should be made accountable for maintaining the input-output relationship. It should suitably reorient itself to undertake this task.

It is, therefore, proposed that the organizational structure of the proposed khadi commission be reoriented to ensure that: (a) the khadi units ' raw material requirement is met at per- fixed prices (reasonable prices) (b) the entire production (as per new cost charts) is received back as per certain quality standards. (c) The units may be prevented from undertaking processing and any retail sale of khadi products and, (d) upon receipt of output, the Commission must make prompt payment to the units to enable them to plough back the money, so that the process of production and employment generation does not get affected adversely. To make this possible, it is necessary to link availability of concessional funds to units with the delivery of output.

Rationalize the cost structure of Sliver Mills through better capacity utilization and other measures of cost control, including purchase of raw materials at fair prices. If the silver supply from its own mills is inadequate to meet the demand of the institutions, KC can enter into an agreement with the under- utilized NTC mills to supply adequate quantity of better silver for the institutions. The KVIC must ensure that entire raw material requirement of the units/ institutions is met at the lowest possible price and that the entire output produced is delivered to it is as per cost - chart.

KVIC should not undertake any retail sale of khadi products. Instead, the entire unprocessed khadi products be sold to the private sector either at cost price or, on auction, keeping cost - price as the floor price. The auction of khadi products should take place in the presence of the representatives of the units/ institutions to ensure transparency. This would also give an opportunity to the units/institutions to learn about the market demand for their products. The product development and marketing of khadi products can be left to the private sector. The details of this approach to marketing of khadi products need to be carefully worked out to ensure its viability and sustainability.

The reorganization and reorientation of KC should be done keeping in view the role it has to play in the new scenario. It should concentrate on:

- Technological upgradation and diffusion to continually raise labour productivity and improve product mix of units. The allocation to R&D must be substantially raised and the representatives of the units/ institution should be involved in R&D activities for this purpose;

- Ensuring supply of raw material and other inputs to all units at fixed (reasonable) terms;

- Ensuring delivery of output by the units to KC as per cost charts and inputs supplied, by linking release of concessional funds to delivery of output ;

- Imparting training to artisans and technicians more effectively than being entire cost of such training should be borne by the Commission. KC should also provide the necessary financial help to the units/institutions to bring about an improvement in the hygienic conditions of the work place (such as providing pollution mask for khadi workers);

- The monitoring of input delivery, output quality, assessment of need of the units in response to changes in market demand; and
- developing an appropriate MIS to get market information feedback from the private sector on the desired product mix, output quality, demand pattern and respond to the changes by reorienting production pattern of the units; and the like .

In the new scenario, no rebate on sale is necessary and the units should be run purely on the basis of bank finance (CBC). The concessional bank finance may be linked to actual production and delivery of output.

It may be necessary to constitute a Committee to examine the feasibility of the proposed model and to suggest suitable measures for restructuring of KVIC and its various activities, so that the primary objective of the scheme is realized with justifiable level of fiscal support. It is learnt that some specialist organizations (TISS and Arthur Andersen) are already studying various aspects of the scheme. The Committee may look into the findings of these reviews studies along with those of the PEO's evaluation study to arrive at a decision on restructuring of the programme and KVIC.

The problem of our poverty is essentially of the rural poor. To solve this problem the main attack will, therefore, have to be on rural poverty through providing employment opportunities to the large unutilized and underutilized agricultural labour poverty through providing employment opportunities to the large unutilized and underutilized agricultural labour and rural artisans. Hence the village industries including khadi are pivotal in our economy. The development of these industries is expected to provide work opportunity, albeit part time in certain cases, and thereby help mitigate rural unemployment and underemployment. It is for this purpose that the khadi and Village Industries Commission (KVIC) was established in April, 1957 under the khadi and Village

Industries Commission Act, 1956 to plan, organize and implement programme of development for Khadi and Village Industries .[1] The industries under the purview of the Commission are: (a) khadi (Cotton, woolen and silk); (b) processing of cereals and khandsari; (e) palm gur making and other soap; (f) cottage match; (g) non- edible oils and soap; (h) handmade paper; (i) bee-keeping; (j) village pottery; (k) flying, curing and tanning of hides and skins and ancillary industries connected with the same and cottage leather industry; (l) fibre other than coir ; (m) manufacture of gums and resins; (n) lime manufacturing; (o) collection of forest plants and fruits for medicinal purposes; (p) blacksmith; (q) carpentry; (r) manufacture and use of manure and methane (gobar gas) from cow- dung and other waste products (such as flesh of dead animals; night soils, etc.; (s) manufacture of shellac; (t) bamboo and cane work; (u) manufacture of katha; (v) fruit processing and fruit preservation; and (w) manufacture of household utensils in aluminium.[2]

The Commission has both executive and financial power and its activities cover a wide range. They include procurement of raw materials and their distribution to the producers at one and the disposal of the finished goods at the other. Training of artisans, supervisory, technical and managerial personnel is yet another activity of the KVIC. Besides, the Commission process and distributes improved tools, The KVIC provides facilities for research and assistance for setting up suitable organizations for khadi and Village Industries. All this has made the KVIC function complex and activities multifarious, while it is essentially a promotional and development organization.

The Commission consists of five members and generally consults the All India Khadi and Village Industries (Advisory) Board, and is assisted by a financial advisor appointed by the Government of India and a chief executive officer. Its working is regulated by the Central Government under the provisions of the khadi and Village Industries Commission is responsible to parliament

through the administrative ministry i.e. Ministry of Industry and Civil Supplies in the Central Government.

The policy and prgrammes for khadi and Village Industries are executed through State khadi and Village under State Legislations, institutions registered under the Societies Registration Act, 1860 and through industrial cooperative societies registered under state cooperative Societies Acts excepting in areas where pioneering work is required . In such areas the Commission directly shoulders the responsibility.

The Commission receives funds for developmental activities from the Government of India from out of the plan allocations in the shape of grants, subsidies and loans. In the First Plan however, establishment cost of the Commission is treated as non - plan expenditure and the other expenditure as Plan expenditure. All such receipts from government and repayment of loans, refunds and interest received from the Commission's assisted agencies are credited to two funds, namely, khadi fund and village industries funds , operated by the Commission. From out of these two funds, disbursements are made by the Commission to its executive agencies on the basis of previously approved budget and programme. The loans are given generally for 5 and 10 years and interest free out the development of khadi. An interest of 4 per cent is, however, charged on village industries loans. The Government of India, however, charges the Commission an interest about 5.5 percent on the loans given by it and the difference in interest is reflected in Government's accounts as subsidy in lieu of interest to Commission .[3]

For centuries, next to agriculture, cottage/ village industries of India were the mainstay of the village. Some of their products were well known the world over. However, with the advent of the British rule, these industries decayed on account of the flooding of the Indian markets by the British made machine

goods by the turn of the 19th century; this resulted in large- scale unemployment and under employment of the artisans engaged in these industries since centuries.

The establishment of the Commission was the culmination of the efforts made to organize these cottage village industries during the freedom movement. Under the guidance of Mahatma Gandhi, promotional activities of khadi, were started in 1922. It then symbolized the livery of freedom. Therefore, at the beginning khadi programme was closely linked with the course of freedom struggle. In order to disassociate khadi from the political struggle, a separate constructive body, independent of the All India Congress Committee and called the All-India Spinners' Association (AISA) was established in 1925 for organizing hand spinning and hand weaving. This was followed ten years later by the establishment on another organization called the All- India Village Industries Association (AIVA) in 1935 to look after other village industries such as hand- pounding of paddy, ghani oil, plam gur, bee keeping hand -made paper etc. But concerted efforts at the development of khadi and Village Industries could not be made until the country became free in August 1947.

With the advent of planning the role of khadi and Village Industries was re- assessed by the planning Commission in the light of the constitutional guarantee of right to work and the provisions under Directive principles of State policy in respect of cottage industries. The problem of growing rural unemployment and underemployment added another dimension to these considerations. By then, the organization, and the programme of khadi and Village Industries had also been given a new orientation by the Akhil Bharat Sarva Seva Sangh (Now Sarva Seva Sangh) which took over the work of AISA and AVIA around 1951. Under this institution, the revival of these industries was looked upon not as attempts in isolation but as a part of an integrated plan for rural industrialization.

On the recommendation of the Planning Commission, a body called All India khadi and Village Industries Board was established in February 1953 to Plan and organize the development of khadi and Village Industries . However, it was soon realized that certain procedural and financial difficulties stood in the way of speedy implementation of the programmes , and therefore , the Government of India constituted a statutory body called khadi and Village Industries Commission in April,1957.

The government of the India tried to evolve a general policy frame for the development of these industries. In the first plan, these industries were treated as an integral part of agriculture. The idea was that the diversion of population depending on agriculture, towards these industries would reduce its almost total dependence on the utilization of the idle manpower or leisure time in manageable industrial pursuits during the emphasis was to be on local consumption. Specific measures of assistance were to be supported by appropriate state policies in their programmes.

In the second plan, on the advice of the Village and Small Scale Industries (Karve) Committee, 1955[4] and in consonance with the Industrial policy Resolution 1956 khadi and Village Industries programmes[5] were made an integral part of the whole plan for the country 's industrialization.

The primary objectives were to expand work opportunities, raise progressively the standard the standard of living of artisans and thus to bring about a more balanced integrated rural economy. it was maintained that, with the growing investment in heavy industries, additional purchasing power of higher magnitude would be generated in the economy and that the village industries including Khadi should be able to meet the growing requirements of were locked upon as a means of reducing inflationary pressure which was likely to be generated owing to investment in the heavy industries.

To serve this end, the Government of India thought of a common production programme for such village industries which had to compete with large scale industries. This was package of protective measures of reservation of specific spheres for village industries, prohibition on expansion of capacity of large scale industries competing with the village industries, imposition of excise duty or cess on products of large scale industries, supply of raw materials and provision of technical research and training for the village industries. Organization of industrial cooperatives for village industries was recommended. Thus, the foundation for rural industrialization was to be laid once for all, positive correlation was to be established among old and new industries and subsidies and grants from the state were to be gradually done away with.

The third plan maintained the emphasis on these aspects while highlighting the need for an integrated approach. In the course of the Plan, fresh evidence about the status of all these industries became available through the 1961 Census. These data showed that there were about 12 million workers engaged in household industries. Of them about seven to eight million could benefit by the Khadi and Village Industries Programmes as compared with about 3.7 million or about two per cent of the total labour force engaged in large scale industries in 1961. In other words, for every one worker in large scale industries, there were two workers in village industries who required to be assisted through appropriate programmes.[6]

At the time of the formulation of the fourth plan, the position about village industries including khadi was reviewed in the light of the fresh data. The emphasis and policy was shifted from one of protection to positive forms of assistance such as improving skills, supplying technical guidance and better equipment and credit. The Plan highlighted the need to increase productivity and reduce cost. Thus the basic objective of and approach to the development of khadi and village industries in the fourth plan represented a departure from the

three earlier plans. Certain policies under common production programme followed till then though were to be continued, they were to be adjusted in the light of the new expectations. At the same time, it stressed the adoption of intermediate/ appropriate technology to ensure quality of production. In this process, the Plan expected a greater and more decisive role for the institutional financing agencies. By implication, all this meant that the traditional industries, sustained by the new methods and guided by sophisticated norms, would be able to acquire the status of well-run small industries though located in the rural interior.

The work of khadi and Village Industries Commission will have to be reviewed in the backdrop of policies laid down in the Plans. Just around 1951, the production of khadi amounted to a million metres. There were about three lakh spinners and weavers engaged in khadi. Some 100 constructive organizations affiliated to the AISA and AVIA were in the field with their centres in about 6,000 villages. Around 1957, when the commission was established, the production in khadi and village industries had risen to about Rs.21 crores. There were about 445 registered institutions and cooperative societies working in the field. The governmental assistance for their development came to Rs.14 crores, of which Rs.9 crores represented outstanding loans and Rs.5 crores grants and subsidies. The establishment of the Commission gave a great stimulus to the development of these industries. In17 years, as a result of the Commission's sustained efforts the work spread to about 1 lakh village and the Commission's achievement in khadi and village industries reached some impressive level in 1973-74.[7] Some highlights of the Commission's achievement during the plan periods are presented in Table1.

Table:5:1

SOME SELECTED INDICATORS OF PROGRESS KHADI AND VILLAGE INDUSTRIES

	1955-56	1960-61	1965-66	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
1. Organization (Nos)									
i. State Boards ii. Institutions iii. Cooperative	2 242 60	14 720 11765	15 1037 19371	15 678 20079	15 638 22241	15 675 23238	15 694 24313	15 697 23715	15 681 23715
Total	304	12499	20423	20772	22894	23998	25026	24432	24416
2. Production (Rs. Crores)									
i . Khadi ii. Village Industries	5.6 10.9	14.2 33.2	26.8 55.9	23.4 75.1	25.6 78.0	25.9 85.6	27.7 93.7	31.6 109.1	32.7 122.4
Total	16.5	47.4	82.7	98.5	103.6	111.5	121.4	140.7	155.1
3. Sales (Rs.Crores)									
i. Khadi ii. Village Industries	4.4 0.9	14.1 28.3	19.7 49.7	20.7 64.0	26.1 64.0	25.7 74.3	29.1 81.2	30.0 97.0	46.0 115.6
Total	5.3	42.4	69.4	87.7	9.3	100.0	111.3	128.0	161.6
4. Employment {Lakhs} [Khadi]									
i. Full Time ii. Part Time	0.62 5.96	2.06 15.08	1.82 17.13	1.32 12.03	1.27 9.73	1.17 8.24	1.21 8.42	1.25 8.73	1.07 7.77
Total	6.50	17.14	18.95	13.35	11.00	9.41	9.63	9.98	8.84
Village Industries									

i. Full Time	0.07	1.19	1.72	0.79	0.86	1.05	1.23	1.34	1.31
ii. Part Tim	2.94	4.46	7.03	7.38	8.18	8.75	7.15	7.03	7.96
Total	3.01	6.25	8.75	8.17	9.04	9.80	8.38	8.37	9.27
5. Wages (Rs.Crores)	6.9	15.1	26.9	25.5	28.1	29.4	31.8	35.9	38.5

Source: Vadilal Dagli, Op. Cit. p.5.

One of the most important achievements of the Commission is in the field of promoting improved technology in Khadi and Village Industries. This required psychological orientation of the artisan community as well as a study supply of consultancy, equipment and credit. The work really got underway during the third and the forth plan when much stress was put on the objective of improving the productivity of the rural worker and reduce the cost of production. The earlier stagnation of rural industries could be largely traced to the adherence to the outmoded technology. During the past decade and half of its existence, the Commission has introduced a wide range of modern tools and equipment and machinery in the viable fabric of rural industries, wherever possible or feasible. Power has been introduced in many processes, thus giving a hitherto un-conceived productivity orientation to Khadi and Village Industries. It was with this background in view that the sub - committee of Indian National Congress on the implementation of the Bhubneshwar Resolution on Socialism advocated "a dynamic approach to the entire problem of techniques in rural industries". This approach today is very much evident in the introduction and development of intermediate/ appropriate technology among the rural industries.

More efficient instruments have been designed, manufactured and distributed to the artisans in all the village industries including Khadi, six and twelve spindle new model charkhas, semi-automatic looms, Qualidux paddy dehuskers, gear sellers and rice polishers, improved bullock and power operated ghanis, hydraulic presses, small solvent extraction plants and improved potter's

wheels are some of the major achievements of the Commission in popularizing improved technology in different industries. Besides, the Commission has undertaken some pioneering work in the development of gobar gas plants using cow -dung and other waste material manufacture of soap from non- edible oilseeds such as neem, mahua, etc. scientific bee- keeping and of naturally deed cattle.

The continuous improvement in technology has resulted in increasing the income from various industries to a significant extent. However, there are wide intra-industry and intra- industry variations in the average income. These variations are mainly on account of the different levels of technologies in operation. Such differences are inevitable in view of some basic variants of economic and sociological nature which are inherently associated with Indian village.

Rapid strides were made in the production of Khadi since the establishment of the Commission in 1957. During the subsequent ten years, the total production of Khadi of all the three categories, namely cotton, woolen and silk, more than doubled in quantity and trebled in value. In 1965-66, the production reached a peak level of 85 million metres valued at about Rs.27 crores. However, the sales of Khadi for most of this period could not keep pace with the production. This resulted in accumulation of stocks. The production therefore, declined steeply after 1965-66. Thus, in 1973-74, the production had come down to 56 million metres. However, in terms of value, the production maintained a countries rise throughout fourth plan period. This was partly due to the increase in wages and cost of cotton. It was also partly due to the improvement in quality of production. [8]

The increase in the production of Khadi resulted in accumulation of stocks, in some major production centres. Thus, the Commission had to

concentrate its best efforts on the disposal of accumulated stocks on the one hand and increasing productivity and reducing production costs, on the other . Concessional sales of Khadi and curtailment of production of the slow going varieties were resorted to in order to stem the production and employment.

The employment in Khadi which had reached the highest level of lakhs in 1964-65 as against 8.81 lakhs in 1956-57 suffered a precipitate fall, the decline being very steep after 1966-67. The employment in 1973-74 at8.84 lakh persons was less than half of what it was in 1964-65 and only a little more than 8.81 lakhs persons employed in 1956-57. Table 2 gives the details of production, sales and employment in Khadi during the period 1959-54 to 1973-74.

Table:5:2

PRODUCTION, SALE AND EMPLOYMENT

Year	Production		Sales Rs.Crores	Employment (Lakhs)
1953-54	Million metres	Rs.Crore		
1955-56	6.60	2.19	1.30	3.79
1960-61	24.99	5.54	4.38	6.58
1965-66	53.77	14.23	14.07	17.14
1970-71	84.85	26.81	19.67	18.95
1973-74	56.74	25.85	25.73	9.41
Compound annual rate of growth between 1953-54 and 1973-74	55.72	32.72	32.72	8.84
	9.2	14.5	19.4	4.3

Source: Vadilal Dagli, op.cit.p.5.

Apart the productivity and sale ability of cloth, continuous efforts were made during the period 1965-66 to 1973-74 to diversify the production to such varieties as commanded good demand. All this is likely to stabilize the level of

production within next two or three years. This trend is also reflected in the steady improvement in sales from 1970-71 to 1973-74. It is also gratifying to note that of late, due to the technological improvements, the possibility of increasing productivity, bettering quality and reducing price has become almost a reality.

The evolution of all metal new model charkha with 6 to 12 spindles was a real breakthrough in the field of decentralized cotton spinning. This technology by and large, fits into the peculiar sociological conditions of the Indian village. Experimentation with the application of power on a bigger spinning frame with 48 spindles has shown clearly that the production cost could be brought down further and the price of cloth brought down to a level almost comparable to similar varieties of handloom cloth. Given the necessary organization and orientation of the existing some of the difficult problems which have hitherto blocked expansion of the programme.

Future emphasis on production will be selective, keeping in view the varieties, which have good and sustained demand. Particularly, coarser varieties of cloth, namely, furnishing fabrics, tapestry and ready-mades have expanding markets, both inside the country and abroad. Systematic efforts are being made to encase upon this opportunity to the best advantage of khadi .

Unlike in khadi, production in village industries has continuously risen during the last 17 years. The initial years from 1953-54 to 1958-59 were the period during which the Commission had to bend all its energies in setting up a proper organization and system of credit for the growth of these industries . Since there was not much experiences available in this field, special arrangements had to be made to train managerial and other personnel to be put in charge of the development programme. However, after 1959-60, the growth of village industries picked up and recorded impressive increase almost every

year. Thus, the production which was about Rs.26 crores in 1958-59, increased to Rs.56 crores in 1970-71 and Rs. 122 crores in 1959-60 to Rs. 50 crores in 1965-66 and Rs75 crores 1968-69. It further increased to Rs86 crores in 1970-71 and Rs122 crores in 1973-74. Similarly, sales also shot up from Rs19 crores in 1959-60 to Rs50 crores in 1965-66. In 1973-74 sales to village industries products stood at Rs. 116 crores. In line trends in production and sales, employment in village industries also rose significantly from 4.8 lakhs in 1959-60 to 8.8 lakhs in 1965-66. In1973-74, the employment was nearly 9.3 lakhs . Table 3 presents the details total production, sales and employment in village industries.

Table:5:3

VILLAGE INDUSTRIES PRODUCTION, SALES AND EMPLOYMENT

Year	production (Rs.Crores)	Sales (Rs.Crores)	Employment (Lakhs)
1953-54	0.59	0.59	0.01
1955-56	10.93	0.90	3.01
1959-60	27.62	19.08	4.75
1960-61	33.16	28.36	5.65
1965-66	55.87	49.73	8.75
1970-71	85.60	74.24	9.80
1973-74	122.40	115.64	9.27
Compound annual rate of growth between 1959-60	11.2	13.7	4.9

and 1973-74			

Source: Vadilal Dagli, op.Cit.

The total allocation for Khadi and Village Industries Under first, second,third and fourth plans and the intervening three year period of annual plans (1966-69) came to about Rs. 355 crores. These details are indicated in Table 4.

Table:5:4

KHADI AND VILLAGE INDUSTRIES PLAN ALLOCATION AND RELEASE

(Rs. crores)

Plans	public sector outly	Allocation			Actual Releases(a)			percentage of releases to the allocation		
		Khadi	V.I	Total	khadi	V.I	Total	khadi	V.I	Total
Frist plan	1960	8.2	6.8	15.0	9.3b	2.3	11.6	113	34	77
Second plan	4672	67.5	16.3	83.8	60.3	18.40	78.7	89	113	94
Third plan	8577	69.0	23.4	92.3	65.2	21.7	86.9	94	93	94
Annual plan	6756	39.7	13.4	51.1	39.7	13.4	53.1	100	100	100
Fourth plan	15902	75.0	36.0	111.0	66.1	31.6	97.7	88	88	88
Fifth plan	37250	76.8	56.2	208.0d						
Total	75117	336.2	152.1	563.3	240.6	87.4	328.0	93	91	92

Source: Vadilal Dagli, op.Cit.

The Government of India released during the period 1953-54 to 1973-74 a total amount of Rs.327.97 crores (about Rs.220.90crores grants and Rs. 107 .07 crores loans). The break -up of The releases for khadi and village industries is table 5.

Table:5:5

KHADI AND VILLAGE INDUSTRIES GOVERNMENT

RELEASES TO THE COMMISSION

Year	Khadi		Village Industries		Total		
	Grant @	Loan	Grant @	Loan	Grant @	Loan	Total @
1953-54 to 1964-65	72.54	48.67	20.10	16.74	92.64	65.41	158.0
1965-66	11.07	2.54	2.10	1.43	15.17	3.97	19.1
1966-67	10.76	3.00	2.50	1.96	13.26	4.96	18.2
1967-68	10.82	3.00	2.74	1.60	13.56	4.60	18.1
1968-69	11.05	1.05	2.97	1.60	14.02	2.65	16.6
1969-70	10.31	2.22	3.35	1.64	13.66	3.86	17.5
1970-71	10.55	3.20	4.01	2.05	14.56	5.25	19.8
1971-72	9.54	4.87	4.30	3.25	14.24	8.12	22.3
1972-73	11.32	2.95	4.50	3.30	15.82	6.25	22.0
1973-74	9.76	1.00	4.21	1.00	13.97	2.00	15.9
Total	168.12	72.50	52.78	34.57	220.90	107.07	327.9
@= includes interest subsidy							

Source: Vadilal Dagli, op.Cit.

From out these funds made available to the Commission by Government and also repayment/ refunds of loans and grants received by it from the assisted institutions, the Commission disbursed a total amount of Rs. 23695 crores during the 21 years period (from 1953-54 to 1973-74). Out of Rs. 236.95 crores, nearly Rs.91.26 crores were outstanding loans and the remaining Rs.145.69 crores were grant and subsidies. To this has to be added an amount of Rs.31.58 crores establishment expenditure of the Commission and Rs.46.92 crores sanctions by the Government in the form of interest subsidy on its loans during

this period. The details of the disbursements made by the Commission during 1953-54 periods are given in Table 6.

Table:5:6

KHADI AND VILLAGE INDUSTRIES DISBURSEMENTS

(Rs.Crores)

YEAR	Khadi			Village Industries			Total		
	Grant	Loan outstanding	Total	Grant	Loan outstanding	Total	Grant	Loan outstanding	Total
1953-54	0.29	0.67	0.96	0.08	0.05	0.13	0.37	0.72	1.09
1955-56	1.65	2.93	4.58	0.73	1.01	1.74	2.38	3.94	6.32
1960-61	5.56	26.29	31.85	1.82	10.26	12.08	7.38	36.55	43.93
1965-66	7.41	40.84	48.25	2.00	17.30	19.30	9.41	58.14	67.55
1970-71	6.05	51.44	57.49	1.07	25.39	26.46	7.12	76.83	83.95
1973-74	5.55	59.75	65.30	0.97	31.51	32.48	6.52	91.26	97.78
Total	117.28	59.75	117.03	28.41	31.51	59.92	145.65	91.26	236.95

Source: Vadilal Dagli, op. cit

The table7 present the details of establishment expenditure during 1953-54 to 1973-74 periods.

Table:5:7

KHADI AND VILLAGE INDUSTRIES COMMISSION ESTABLISHMENT

EXPENDITURE

(Rs. Crores).

Year	
1953-54	0.03
1955-56	0.23
1960-61	1.13
1965-66	1.98
1970-71	2.53
1973-74	2.98

Source: Vadilal Dagli, op. cit.

The null of the expenditure on Khadi is in the form of rebate and subsidies. This is, however, posed on to the consumer in the shape of reduced price. In addition, some grants are given for training, research and improvements, etc, The village industries, however, do not enjoy any rebate or subsidy but are given grants for employing training managerial personnel, training and research and for improvement and experiment.

Table 8 highlights the pattern of financing of loans for khadi and village industries 1965-66 to 1973-74.

Table:5:8

KHADI AND VILLAGE INDUSTRIES PATTERN OF FINACING OF LOANS

Year	Working Capital		Capital Expenditure		Share Capital	
	Khadi	Village Industries	Khadi	Village Industries	Village Industries	Total
	37.85	11.80	2.99	4.66	0.84	58.14
1965-66	42.06	13.44	2.86	5.08	0.78	64.22
1966-67	44.18	14.63	3.02	5.23	0.77	57.93
1967-68	45.59	15.97	2.91	5.43	0.73	70.63
1968-69	47.28	16.73	2.64	6.06	0.68	73.39
1969-70	48.84	17.66	2.60	7.08	0.65	76.83
1970-71	51.73	18.84	3.71	7.80	0.63	82.71

1972-73	54.43	20.67	3.71	9.18	0.83	88.82
1973-74	55.28	21.33	4.47	9.38	0.80	91.26

Source:Vadilal Dagli,op.Cit

An overwhelming proportion of loans for Khadi (about 92.5 per cent is working capital. Only a small portion was given for capital expenditure. In village industries, two-thirds of the loans were used for financing working capital expenditure. A fairly good sum of Rs.80 lakh was also outstanding as loans for share capital. This is a special assistance given to the village industries to enable them to organize themselves into viable cooperative societies.

It is significant to note that institutional financing has not so far played any part in financing village industries including khadi despite their capacity to dispose of almost their entire produce. It is also pertinent to observe that loans for khadi and village industries are covered by the Government of India under the Credit Guarantee Scheme for Small Scale Industries. It is, therefore, evident that some serious efforts have to be made, both by the Commission and the institutional financing agencies, to overcome the present state of inertia in order to cater increasingly to the credit needs of these industries. Then only some rapid development of these industries. Then only some rapid development of these industries can be made possible. This is all the more urgent in view of the alarming situation about unemployment. Since a break through in technology many of the village industries is already in sight, the problem of viability of these industries should no longer stand in the way of institutional and personnel available under the aegis of the Commission should be able to help the institutional financing agencies. A proper working arrangement with the institutions and personnel should help in breaking new grounds and stimulate the flow of institutional credit to these industries.

SOME RECENT DEVELOPMENTS:

1. Revised Fifth Plan of Khadi and Village Industries Commission (KVIC) March, 1974:

The Government of India intimated the KVIC a provision of Rs.180 crores (excluding establishment expenditure, hill border area programme and forest- based industries, new industries, Lokvastra and R & Dunder Govt. Finance for development of khadi and village industries during the fifth plan). According to the KVIC revised its plan in March, 1974. This revised fifth plan, visualized an outlay of Rs.470.32 crores (Rs. 208 crores under Govt. Finance and Rs. 262.32 crores under bank finance) with production and employment targets at the end of the plan (1978-79) at R.721.83 crores (Rs.257.02 crores under Govt. finance and Rs.464.81 crores under bank finance) and 63.96 lakh persons under bank finance) respectively. The Provision of Rs. 208 crores under Govt. finance consisted of Rs. 180 crores for khadi and village industries and interest subsidy, Rs.20 crores for forest based industries and Rs. 8 crores for R&D from the National Committee on Science and Technology (NCST).

2. Lokvastra (Manufacture of coarse cotton cloth by setting up rural fabrics centres):

The KVIC has proposed a scheme for the manufacture of coarse cotton cloth by setting up rural fabrics centers and requested the government of India for inclusion of Lokvastra activity as one of village industries under the purview of the KVIC. The Govt. of India in the Ministry of Industrial Development in1972, appointed a team of officers

to study the scheme of Tamil Nadu Government for rural testily units (Lokvastra) and ascertain the techno-economic feasibility of its wider application. The Committees findings were favourable. The KVIC in its fifth plan proposals to the Govt. of India, Included manufacture of Lokvastra as one its activities and proposed to set up 1,000 units during the plan period. The entire expenditure on the scheme will be the in the form of loan.

The Lokvastra scheme visualizes manufacture of cotton cloth from yarn of 33 to 66 metric counts by setting up rural fabrics centers worked with power operated per- processing and power spinning frames with 40 spindles using indigenous cotton for spinning and Nepal loom for weaving .Each centre will cost Rs.5,10,500 Rs. 3,75,500 as expenditure from Govt. and Rs. 1,35000 as working capital from banks. Each centre will have a capacity to produce 1,13400 sq-mtrs. of cloth per year and provide full time employment to 69 per cay. The cloth will be comparable to controlled cloth in quality. The KVIC has proposed to set up these units in backward areas in the country with a view to generate employment opportunities for the vulnerable sections of the community. Through this the KVIC hopes to create employment opportunities in the backward rural areas on the one hand and augment supply of coarse cloth on the other.

3. Reservation of varieties:-

A suggestion was made at the meeting of All India Khadi and Village Industries Board held in January 1973 at New Delhi that, in the context of gradual decline in the production of cotton Khadi, certain varieties of cotton cloth should be reserved exclusively for production by

the certain varieties of coarse and medium cloth such as long cloth, shirting and board cloth, dosuti and tapestry including furnishing fabrics, and curtain cloth produced from yarn upto 20 counts may be reserved for production by khadi and handlooms. In addition of items like newar, tapes, durries, and handkerchiefs may also be considered for reservation for khadi and handlooms (except for export).

4. National Committee on Science and Technology (NCST):-

The NCST appointed two panels: (i) khadi and (ii) Village Industries for formulating concrete proposals for research and development (R&D) for khadi and village industries. these two panels consisted of eminent scientists, technologists and economists. Representatives of Development and the KVIC were also members of the panels.

5. Institutional Financing:-

The artisans not covered by the programme of KVIC are compelled to carry on their activities through funds borrowed from private money-lenders at usurious rates of interest. In order to assist such artisans and augment its resources and expand its activities, the KVIC, in its fifth plan proposals has proposed tapping of bank finance to the tune ofRs.262.32 crores for working capital requirements of such artisans at subsidized rate of interest, the subsidy being borne by the government.

The government has approved in principle institutional financing of working capital need of village industries artisans under different rate of Interest Scheme (DIR).

Total loans under the scheme to be received by an individual artisan would be of the order of Rs.1,500 for working capital only. All the criteria applicable to advances in DIR areas like the total annual earnings of Rs.3,000 in urban areas and Rs2,000 in rural and 2.5 acres in case of non irrigated land, etc .are applicable to this scheme. Under the scheme, the Commission would give interest subsidy equal to the different between the rate of interest charged by the bank and 4 per cent to be borne by the borrower.

The Commission approached the State Bank of India and Allahabad Bank has agreed in principle to sanction credit limit to the extent of Rs.1 crore at an interest of 14 per cent with margin of 25 per cent.

Similarly, Allahabad Bank has sanctioned a sanctioned a credit limit of Rs. 50 lakhs with 16 per cent interest and margin of 50 per cent .

6. Sub- Plans for Tribal Areas:-

The Planning Commission has directed the State Government to prepare sub- plans for tribal regions of their respective states. The objectives of the sub- plan are (a) to narrow the between their of the level of development and that of other areas and (b) to improve the quality of life of the tribal communities. The sub-plan will be financed from provisions out of state plan and from centre. The KVIC will co-ordinate its programme for the development of hill border and tribal areas with these sub-plans.[8]

The spectrum of industries in our country extends from the organized large and medium industries to Modern Small Scale Industries and unorganized Traditional industries. The last two, known as the village and small industries constitute an important segment of the economy. It provides

maximum employment next only to the agricultural sectors and accounts for more than one-third of the total exports of the country. It terms of value added it contributes about fifty percent of that of the manufacturing sector. The growth in this sector has a preponderance of self-employment, results in wider dispersal of industrial and economic activities and ensures maximum utilization of local resources, both men and material.

The VSI sector is divided into eight sub- sectors, namely, Khadi, Village Industries, Handlooms, Sericulture, Handicrafts, Coir, Small Industries and Powerlooms. While the last two represent the modern small industries, the other six- sub sectors constitute traditional industries. Modern small scale industries and mostly urban oriented usually generating full time employment and register comparatively faster growth whereas the traditional industries are mostly rural and semi- urban in character which sustain and create employment opportunities (both part and full time), increase income generation and preserve craftsmanship and art heritage of the country.[9]

The Village Small Industries sector has played a vital role in the development of the economy and still there is scope for increase in production and productivity in this sector. To facilitate modernization and achieve rapid growth in the sector, the upper limit on investment (in plant and machinery) has been raised in respect of small scale units from Rs. 20 lakhs to Rs.35 lakhs and in case of ancillary units from Rs.25lakhs to Rs.45 lakhs. Promotion of industries in this dispersed sector primarily falls within the responsibility of the state government. The centre, however, supplements their efforts.[10]

The products of this sector have been accepted on an increasing scale in the foreign markets and as ancillary items to the large scale units in the country. More and more sophisticated items of consumption are being produced by this sector. While there is lack of reliable data for the village and small industries

sector, more particularly for the traditional group of industries, the broad picture that emerges on the basis of certain accepted norms in terms of production employment and exports is given in Table 9.It may be observed from Table 9that production in this sector has increased from Rs.33,538 crores in 1979-80 to Rs.65,730 crores in 1984-85 and exports from Rs.2280.62 crores in 1979-80 to Rs.4557.56 crores in 1984-85 at current prices. With regard to employment, it has increased from 233.72 lakh persons in 1979-80 to 315 lakh persons in 1984-85. Within the manufacturing sector this rep resents about 80 percent of the total industrial employment, while powerlooms have exceeded the targets set for the terminal year of the Sixth plan, Plan, the small scale industries have achieved the targets in terms of output employment and exports. In case of handsome the long term objectives set for the village and small industries sector are still to be achieved. The modern small industries including powerlooms have not dispersed widely and within these states also, a few areas which are either large cities, developed urban concentrations of industrial complexes account for most of the activities. In the matter of credit availability also, while inclusion of small industries in the priority sector has helped in the increased flow of bank finance, its spread has not been uniform. In fact the smaller among the small scale units have not benefited adequately and have continued to depend on the money-lender for borrowing funds at exorbitant interest rates which reduces his margin.[11]

The growth and development of this sector has been constrained by several factors including technological obsolescence, inadequate and irregular supply of raw materials, lack of organized marketing channels, imperfect knowledge of market conditions unorganized nature of operations, inadequate availability of credit, constraint of infrastructure facilities including power etc. and deficient managerial and technical skills. There has been lack of effective coordination among the various support organizations set up over the period for

the promotion and development of these industries. Quality consciousness has not been generated to the desired level despite the various measures taken in this regard. Some of the fiscal policies pursued have resulted in unintended splitting up of the capacities into uneconomic operations and have inhibited their smooth transfer to the medium sector. All these constraints have resulted in a skewed cost structure placing this sector at a disadvantage vis-a-vis the large industries, both in the domestic and export markets.

Within the overall objectives of food, work and productivity laid down in the Seventh Plan, this sector would contribute towards improving the economic and occupational profile of rural, semi-urban and weaker sections of urban communities through promotion of village and small scale industrial activities. This sector would:-

(i) Assist in the growth and widespread dispersal of industries;

(ii) Increase the levels of earnings of artisans;

(iii) Sustain and create avenues of self- employment;

(iv) Ensure regular supply of goods and services though use of local skill and resources;

(v) Develop entrepreneurship in combination with improved methods of production, through appropriate training and package of incentives; and

(vi) Preserve craftsmanship and art heritage of the country.

The strategy for achieving the above objectives would constitute the follwing:-

(i) Improve productivity, enhance quality, reduce costs and re-structure product-mix through upgradation of technology and modernization.

(ii) Optimize utilization of existing capacities through supply of adequate and inputs including credit, power and raw materials etc.

(iii) Expand share of VIS products in the domestic markets through publicity, standardization, market support and increased participation in the Government purchase programme.

(iv) Strengthen the programme of ancillarization to establish and improve linkages between large and small industries leading to harmonious growth of the total industrial sector.

(v) Promote specialization in production and export- oriented industries.

(vi) Strengthen and enlarge skill profile and entrepreneurial base and management practices to increase opportunities for self- employment.

(vii) Improve general levels of welfare3 of workers and artisans through better workers and artisans through better working conditions, welfare measure and security of employment.

The policies to be pursued during the Seventh Five Year Plan would period would aim at rationalization of five year plan period would aim at rationalization of fiscal regime to ensure the rapid growth of the village small industries. Infrastructural facilities would be strengthened at various levels. Adoption of modern management techniques will be encouraged. Development and dissemination of appropriate technology to reduce drudgery, improve productivity and quality and lesson the dependence on subsidies, would receive dur emphasis. It is proposed to further upgrade skills in line with the degree of sophistication of the products in processes. Care would be taken to ensure that the introduction of technological improvements do not damage the distinctive character of products such those of handicrafts and handlooms. Initiatives would be taken to improve wage levels, enhance earnings and continuity of

employment so that artistic skills do not become extinct. Measures would be taken to adopt coherent marketing strategies both for internal and export markets. Linkages would be forged with marketing organizations so that products of the sector are competitive in the domestic and international markets.

Research and development efforts would be stopped up and the results thereof transferred to the field level agencies. Appropriate measures would be taken for adequate and timely supply of inputs including yarn, iron and steel, coal and coke, petro- chemicals and petroleum products etc. tiny units having investment upto Rs.2 lakhs would be accorded preference for availing of concessions and facilities. The thrust of these facilities would inter-alia to be served the interest of the consumer both in terms of quality and price. New incentives required for increased production of ancillary items through the sub-contracting system would be taken up both in the public and private sectors. The industrial development strategy for the sector would be so devised that it leads to creation of adequate infrastructure and results in dispersing these industries from developed urban concentrations to the less developed area. In this context rural industrialization is to be given adequate emphasis so as to check the exodus of artisans to urban concentrations. According, the need for a separate Commission for village industries and handicrafts would be examined. In view of this fact that cooperative form of organization ensures that economics of scale and made available to small entrepreneurs and their bargaining position both in respect of purchase of raw materials and marketing of their product is strengthened, importance has been attached to the programmes for promotion of industrial cooperatives. But a large number of weavers societies industrial cooperative are either sick or dormant mainly due to the weak quality of leadership, management as well as weak marketing infrastructure. Besides providing timely and adequate financial assistance, common service facilities,

technical inputs, etc. attention would also be focused on education of members and office bearers of the cooperative.[12]

The question of providing for the some of the welfare measures including housing cum- work shed facilities, thrift fund scheme for the benefit of the artisan type units would be considered. Existing co-ordinations are to be strengthened to provide machinery for continuous consultation with industry, trade and commerce, to enable the developmental agencies in Government and outside to extend package of assistance and work as a communication channel. The basic support in terms of functional assistance would be on the following lines:-

Marketing has been considered as one of the crucial problems faced by the small units which mainly how from their scale of operation, lack of standardization inadequate market intelligence, competition from technically more efficient units, insufficient holding capacity, etc. While measures have taken to provide marketing support to the village and industries sector, these have covered only a small segment. In the case of handlooms, the marketing support provided through public emporia has accounted for sale of goods of about Rs.250 crores of the against the level of production of handloom cloth of the value of Rs.2880 crores. Similarly in the case of handicrafts institutional support has accounted for sale of handicrafts goods of about rs.30 crores out of production valued at Rs.3,500 crores. The Khadi and Village Industries Commission have set up their own sales outlets but these are inadequate and the cost of rendering such a service to the artisans is high.

The marketing strategy needs to be reoriented to meet the consumer needs. This will necessitate diversification of markets and product-mix, introduction of modern marketing techniques, better inventory control, better management practices, exploring new markets, keeping the cost of marketing low and

efficacious use of mass media for consumer education and market promotion. Since launching of any new product and development of its market- vis-à-vis products from the large units would require considerable investment, assistance in the form of market development fund would need to be provided. The feasibility of availing of market outlets of large scale units and marketing companies for promoting sales of products of small industries would be examined.

The village and small industries sector suffers from lack of data base and also from its flow and regular intervals. In their absence, estimates of production employment, etc. for various sub-sectors have been arrived at on the basis of certain norms evolved for individual sub-sectors which are considered unrealistic. This aspect has been gone into by the Working Group set up by the Standing Committee on Improvement of Data Flow for Planning and policy making in the Planning Commission. The major recommendations made by the Group have been accepted by the Standing Committee. It has been decided that Economic Census carried out in 1977 and in 1980 would be made quinquennial so that these facilitate updating of the frame for the various sub-sectors of village and small industries. Further, data to be collected through the quinquennial census and their follow- up surveys would be processed at a sufficiently of the decentralized sector. The District Industries Centers which are to work inter- alia as data banks would be involved to carry out surveys for updating the data on behalf of support organizations to supplement the efforts of the CSO/ NSSO so as to obtain data at a finer level of geographical and sectoral disaggregation . The CSO would work as the coordinating and technical agency for rendering guidance and advice on the organization of the survey work to be done by the support organizations.[13]

In the light of the above, some of the support organizations have set up working groups for identifying the aspects to be studied by them during 7th plan.

The present policy envisages discouraging setting up industries in or around urban agglomerations and a package of incentive would be provided to attract industries in the backward areas. In order to make the maximum use of the existing infrastructure emphasis would be laid on the growth centre concept for promotion of industries in these less developed areas. The location of nucleus plants and promotion of ancillarization would be encouraged around the growth centres so selected or identified.

In the north eastern region particularly, industrial growth will have to be promoted keeping in view the totality of infrastructure including incentives that is available, and not merely in terms of financial concessions like investment and transport subsidies. However, the ecological and environmental aspects will have to be kept in mind. An inter- ministerial committee has been set up under the Secretary, Planning commission to review and revise the existing scheme of incentives for setting up industries in no- industry district/ backward areas.

The overall output at 1984-85 prices in the sector is targeted to increase from about, Rs. 65, 730 crores in 1984-85 of the Rs.1,00,000 crores by the terminal year 1989-90 of the 7th Plan, registering an annual growth rate of 8.8 per cent. During the same period, employment coverage (both full- time and part- time) is estimated to increase from 315 lakh, person to 400 lakh persons. The target for export by 1989-90 has been set at Rs. 7444 crores envisaging an annual growth rate of 10.2 per cent during the 7th Plan. Against the 6th Plan outlay of Rs. 1780.45 crores (expenditure Rs.1979.71 crores) the outlay for the 7th Plan in respect of centre, states and union territories stands at Rs. 2752.74 crores.

The Khadi and Village Industries Commission (KVIC) set up through an Act of Parliament has been implementing the programmes for the promotion of khadi and 26 specified village industries through the network of (i) State Khadi

and Village Industries Boards; (ii) 1114 Registered institutions; and (iii) about 30,008 Industrial cooperatives of Artisans covering about 1.5 lakh villages.

During the Sixth Plan the production of Khadi was targeted to increase from 82 million metres in 1979-80 to 155 million metres in 1984-85 and that of village industries in value terms from Rs. 348 crores to about Rs.1000 crores. During this period, employment coverage for both Khadi and Village Industries was to increase from 27.33 to 50.50 lakh persons and about half of additional employment of 23.17 lakhs was to be generated through new employment opportunities and the other half through extension of the coverage of existing artisans. In addition, about one million jobs were to be created under the Industry component of the Integrated Rural Development (IRD) programme Against these targets, the level of achievement in 1984-85 has been 127.82 million metres of khadi cloth valued at Rs. 170 crores and in respect of village industries production for 1984-85 would be of the value of Rs. 758.6 crores. As regard employment, the achievement reported under IRD Programme. In terms of compound growth rate, it is noted that the achievement for Khadi production was 9.3 per cent against the target of 15 per cent and that for village industries it was 8.0 per cent against the target of 26 per cent per annum.[14]

During the Sixth Plan period 5035 new model charkhas (MMCS) for spinning of khadi yarn were installed. The productivity of the MMCS in terms of spinning of yarn has increased substantially and the quality of the yarn has also improved. Resultantly there has been surplus yarn and efforts are being made to utilize the surplus in the handloom sector. A Committee to study the above problem and other connected issues has been set up. The KVIC has been doing pioneering work in the promotion of biogas in the rural areas and it has been concentration of R&D work to evolve new designs of biogas plants. During the Sixth plan, 67,951 biogas plants were installed by the agencies of the KVIC. Further out of 52 S&T project identified, about 35 were a various states

of implementation. A separate Directorate of Instrumentation was created in order to give exclusive attention to the fabrication of MMCS improved tools and equipments and their supply to the field agenices.[15]

KVIC had been taken up intensive development of khadi and some of the selected village industries under the Area development approach. A package of facilities in the form of supply of raw materials and improved tools/ equipments, upgradation of skills and marketing support was provided to match the requirements of different industries. A separate Directorate was created to exploit available forest resources for the promotion and development of forest based industries which provide gainful employment opportunities to Scheduled Castes and Scheduled Tribes who are mainly engaged in these activities.

There have, however, been certain gaps in the implementation of the programmes of the KVIC. It is noted that a large number of cooperatives of artisans engaged in village industries continued to remain engaged in village industries continued to remain dormant. While there has been marginal improvement in the productivity and earnings of the artisans, some of the problems have been traced to the lack of effective coordination between the KVIC and the State Board. A model bill to bring about uniformity in the composition and functions of the State KVI Board is under examination of the State Government . The question of adequate delegation of powers to the Re tension agencies at district/ block village level is very essential and would be gone into. There have also been inadequate linkages between the KVI Programmes and the General programmes of Area Development like IRD etc. There has been some improvement in the flow of bank finance to the artisans under the purview of the KVIC which increased from Rs.10 crores in 1979-80 to about Rs.80 crore in 1984-85. However, this step up has felled far short of the target of Rs. 150 crores for 1984-85.[16]

During the Seventh Plan, the value of output of this sub-sector is targeted to increase from about Rs. 929 crores in 1984-85 to about Rs. 2000 crores by the terminal year of the Seventh plan (1989-90). The employment coverage in this period is likely to increase from 36.99 lakh persons to 50 lakh persons. The targets set for khadi and village industries would account for growth rate of 7.1 per cent for khadi production and 17.5 per cent for village industries output. The employment coverage expected to grow at an average growth rate of 7 per cent for village industries. The achievement of the targets of this magnitude would need structural changes in the organizational and implementation pattern. The weakness noticed during the Sixth Plan period in the matter of evolving strong linkages with the IRD and TRYSEM Programmes at the block level would be rectified. It is expected that the KVIC and its agencies would have an increased role in the identification of beneficiaries for self- employment under the Industry component of the IRD programme. The question of setting up a separate Commission for village industries and handicrafts for giving exclusive attention to their promotion and development would be examined. Marketing infrastructure would be expanded adequately to match the production programme. The proposal for creation of a Central purchase Agency for selected products would be given consideration from the point of view of creating appropriate agencies to look after the arrangements for distribution finished products of village industries. Some of the new direction of institutional infrastructure at the block levels as necessary comprising (a) training facilities, (b) material banks, warehousing and (c) increasing KVI market outlets. Private distribution channels to market KVI products will also be explored. Efforts would be made for greater collaboration with organization dealing with handlooms, handicrafts, coir, silk at various processing stages. Projects profiles will be updated to facilitate setting up village industries and for availing of bank finance for the purpose. State governments will increasingly

participate in the promotion of village industries programmes and for this purpose they would inter- alia provide for adequate out lays in their plans.[17]

Over the period, the scale of actives of the KVIC has increased considerably, keeping pace with the development of the khadi and village industries. Also, new organizations have come into existence for the promotion of industrial and rural development. A Committee has been set up to review the role of KVIC, its policies and programmes and also its systems and procedures.

During the Sixth Plan, production of handicrafts has increased from Rs.205. crores prices. During the same period, exports have gone up from Rs.854 crores to Rs.1700 crores. The generation of employment in the handicrafts sector has considerably been stepped up from 20.3 lakhs persons to 27.40 lakhs persons during the plan period.

One of the important component of the Central programme relates to imparting of training in the 4 major export oriented crafts of hand knotted woolen carpets, art metal -ware, hand printed textiles and wood -ware. A total of 1.4 lakh persons have been trained these different crafts. The employment position of the ex-trainees has been quite satisfactory.

Educated craftsmen were provided training in marketing and export management and about 1200 artisans had been trained during 1980-84. An autonomous society under the name Rangatantra has been formed to provide design and technical input to the craftsmen. All the four existing regional design and technical development centres are proposed to be brought under the umbrella of this society. A National Institute for came and bamboo at Agartala have been set up while one for carpet weaving at Bhadohi in U.P. is being established. As regards marketing support to artisans, the equity base of the State level corporations/ apex societies have been strengthened. The turnover of the public sector emporia in 1984-85 is reported to be of the order of Rs.35

crores. Further, some of the measures taken for promotion of exports of handicrafts included (i) Sales -cum- Study Tours of West Asian Countries and Canada; (ii) Market Survey of West European Countries for lace and goods, embroidery and scarves; (iii) Import of carpet grade wool, (iv) Formation of Carpet Export Promotion Council and (v) Demonstration -cum - Training in improved Packaging techniques.[18]

The Seventh Plan would lay special emphasis on preservation of crafts skills with respect to cultural heritage, artistic and aesthetic beauty of certain handicrafts. Improving the value added and the general level of earnings among the artisans through training programmes, supply of inputs and better marketing arrangements. Encouragement would be provided to SC/ST artisans, and those belonging to minority communities. The support organizations provided raw material, credit and marketing facilities would be strengthened so as to reduce the role of the middlemen.

Production of handicrafts is targeted to increase from Rs.3500 crores in 1984-85 to Rs.5400 crores in 1989-90 and exports from Rs.1700 crores to Rs.2591 crores during the same period. Employment is projected to increase from 27.40 lakhs providing raw material, credit and marketing facilities 35.80 lakhs persons by the end of Seventh Plan period.[19]

Greater emphasis would be given on achieving higher skills through trough training programmes at the advanced training centres for woolen carpets. Besides weaving training would also be imparted in other processes like washing clipping, embossing and map drawing. Model centres in the nature of demonstration centres for design and improved technology would also be set up. Centres for intensive development of specific items like art metal-ware, cane and bamboo and wood-ware for intensive development would also be opened for providing a package of assistance to artisans. Monitoring of training of

training programme will be made more rigorous so that the feedback obtained would set the pace for improvements that may be necessary in the exiting modules. As regards marketing the functioning of the public sector emporia of the Central and State Handicrafts Corporation would be reviewed to improve their working. Marketing support to handicrafts artisans through marketing and extension service centres and emporia complexes would be strengthened. Simultaneously, programmes will be initiated to enable product development, supply of raw materials, procurement of finished products and boosting the general level of demand. The involvement of voluntary agencies would be encouraged and an artisan welfare trust created. Efforts would be made to improve working conditions to step up the productivity of the artisans.

The data base for handicrafts has been very weak and efforts would be made to improve the same. The data collected through the Economic Census 1980 would be followed up by surveys to collect additional information vital for planning for the growth of the industry.

The targets set for the Sixth Plan in terms of production, employment and exports will not be achieved. The production of handloom is expected to go up from 2900 million metres in 1977-80 to period, employment increased from 61.50 lakh persons to 74.66 lakh persons. The exports of handloom fabrics in value terms went up from Rs. 290.41 crores in 1979-80 to Rs. 348.86 crores in 1984-85.

During the Sixth Plan, the major thrust has been to increase the cooperative provide raw materials, managerial assistance and assist in marketing and make available finance and a regularly basis. Besides this research and development support has also been extended. As regards cooperativision about 16 to 17 lakh weavers have been brought within the cooperative fold. Although the gross coverage of is about 60 per cent yet the

effective coverage of looms in the cooperative fold is around 32 per cent, as many societies have become dormant. Efforts are being made to revitalize these societies by providing a wide range of assistance covering all aspects relating to management, marketing financial and technical. Equity capital assistance to Apex Societies has also been increased from Rs.85 lakhs in 1976-77 to Rs.356.60 lakhs in 1983-84. During this period the sale of handloom products from the 200 retail outlets, amounted to Rs. 400 crores. The RBI scheme of handloom finance operated by the National Bank for Agriculture and Rural Development provides refinance facilities to the state cooperative bank for financing the procurement and marketing of cloth apex-regional weavers' societies and on behalf of the central cooperative banks for financing production and marketing activities of primary weavers' societies. Under the scheme, short term credit limits sanctioned have gone up from Rs.51 crores in 1978-79 to Rs.332.76 crores during 1984-85, however, this falls short of the targeted requirement of Rs.350 crocres.[20]

The progress achieved under the intensive handloom development projects, transferred to the state sector from 1979-80 has not been satisfactory on account of various factors. Likewise the export production projects being implemented by the centre have also not achieved their objectives fully. The other support measures evolved during the Sixth Plan include setting up of the National Handloom Development Corporation for procurement and distribution of yarn and the North Eastern Handicrafts and Handloom development corporation to cater to the handloom and handicraft requirements of the North Eastern region. Suitable measures would be taken to ensure their effective functioning.

The strategy for the Seventh Plan for the development of the handloom sector would draw its strength from the Textile Policy announced In June 1985 which envisages that "In the weaving sector of distinct and unique role of the

handloom sector small be preserved and that the growth and development of this sector shall receive priority".

For the purpose of policies, the powerlooms in the organized mill sector and unorganized powerloom sector shall be treated at par and allowed to compete on the basis measure, however, would be evolved to prevent encroachment of the powerloom sector on items reserved for handloom. During the Seventh Plan emphasis would be laid on cooperativization and development of handlooms through centralization and development of handlooms looms and provision of technological inputs, ensure adequate availability of yarn and other raw materials increase the production of mixed and blended fabrics on handloom, design support to eliminate the cost handicap of the handlooms vis-à-vis powerlooms, improve marketing and infrastructure support and strengthen the data Reservation would continue under Handloom (Reservation of Articles for Production) Act, 1985. The provision of this Act would be enforced and the machinery for this purpose suitably strengthens. New spindle -age would be installed in cooperative sector to the extent possible. To improve the welfare of the handloom weavers, a contributory thrift fund scheme and work-shed-cum-housing scheme would be taken up in the Seventh Plan.

The target of production of handloom cloth has been placed at 4600 million metres and additional employment to be generated has been estimated at 23.47 lakh persons for the Seventh Plan. Exports of Handloom fabrics and products would increase from Rs. 348.86 crores to Rs485crores.[21]

The responsibility for the entire production of controlled cloth shall be transferred to the handloom sector by the end of the Seventh Five Year Plan. The quantum of controlled cloth and Janta Cloth which was fixed at 650 million metres shall be suitably increased in order to provide a larger quantum of cloth at prices which can be afforded by weaker sections of the population. Measures

would also take to improve the quality of the cloth and ensure that it reaches the target groups. The public distribution of the controlled cloth would also be strengthened and streamlined.[22]

Supply of inputs would be augmented and modernization of looms taken up expeditiously. During the seventh Plan, one lakh looms are proposed to be modernized. Along with this, research and evolution of improved types of handlooms and adequate arrangements for ensuring swift and smooth transfer of technology from the research institutions for services and training facilities for weavers would be streamlined and strengthened. Measures would be taken to assist handloom weavers both in the cooperative fold and those outside the cooperative fold in supply of inputs special attention would be given for development of Handloom in Hill and Tribal areas.

The production of coir has been on the decline due to drought conditions and spread of root- wilt disease. In fact, production of coir fibre by the terminal year of the Sixth Plan has been even lower than that achieved in 1979-80.

The exports of coir products have also declined due to recession in European countries and severe competition from cheaper synthetic substitutes.

There has however, been some improvement in the industry as regards adoption on programmes relating to quality improvement, product betterment, diversification of uses, design development and better marketing techniques. Research and development efforts however, would be intensified to arrest the declining trend in production and step up exports in the world market.

For the Seventh Plan the target of production of coir fibre has been set at 2.23 lakh tonnes against the production of 1.49 lakh tonnes and employment at 9.23 lakh persons against 5.90 lakh persons by the terminal year of the Sixth Plan (1984-85). The exports in the sector are targeted to increase from Rs. 26 in 1984-85 to Rs.32 crores by the end of Seventh Plan. The strategy for the

Seventh Plan broadly encompasses modernization particularly in product diversification as well as introduction of modern looms, restructuring/ revitalizing of cooperative societies and to develop a stable internal brown coir fibre would be assigned special importance in the Seventh Plan.

The restructuring of the Coir Board would also be examined to meet the changing needs of the industry. It will also be examined whether marketing of Coir products could be entrusted to State level co-operation specialized in marketing of other products of handlooms and handicrafts, etc.

Production of raw silk in the terminal year of the Sixth Plan would be 67.54 lakh kgs against the target of Rs. 100 crores is likely to be surpassed as achievement at current prices has been reckoned at Rs.129.05 crores. The employment generated in both the agricultural and industrial activities of sericulture during the Sixth Plan would be around 1.32 million persons. The bottlenecks still affecting this industry are non-availability of high grade Silk worm races, inadequate supply of disease- free seeds, delays in translation of research results from lab to land, decentralized and rural nature of reeling leading to non- standardization of silk yarn and the lack of reeling facilities besides developing 20 village grazing reserves for multiplication and production of commercial silk worm seeds. Against the original target of 6000 hectares under Inter-State Tasar Project, the achievement up to the end of 1984-85 has been 4657 hectares of Arjun bush plantation. The revised target under this project has been fixed at 7763 hectares by the end of 1985-86.[23]

The research institutes have evolved a package of practices for cultivation of mulberry to suit the new mulberry varieties and also increase the yield of leaf, per unit area. Improvising has also been carried out in the equipments used for silk- worm rearing. Silk reeling has also received due attention. In respect of non-mulberry, the measures taken have primarily aimed at reducing the

mortality rate and in improving their rearing technology. The Central Silk Technological Research Institute at Bangalore has fabricated an improved charkha and an improved type of paddle spinning wheel.

The progress under the World Bank Project in Karnataka has been hampered due to the non- availability of high grade silk worm races, lack of good quality seedlings, chawkle rearing centres; cold storages better reeling facilities and grading silk conditioning etc. would be provided with increased involvement of State Government.

During post independence period and specially after New Economic policy of 1991 khadi industries suffered various deficiencies like managerial problem and apathy of the government. This sector which potentially generated employment opportunities and produced rare commodities for exports suffered from indifference and sometimes negative attitude of the government.

Faced with a serious liquidity crisis in the wake of pending payments from the Government and the khadi & Village Industries Commission (KVIC), the country's khadi sector has demanded a loan waiver.

The non- repayment of debts - which have accumulated to a total of Rs.2,417 crore at present - has been due also to losses incurred in the past because of policy changes as the sector's involvement in the implementation of national policies on rural uplift and As for loans taken from banks under the Consortium Bank Finance scheme, the sector claim it has already paid Rs.580 crore since 1995, which is than the original loan amount.

"The woes are multifarious Khadi is in the negative list when it comes to getting funds. Khadi sector spinners and weavers are amongst the lowest paid in the country, but there are no pension schemes or medical insurance for them"

said Khadi Mission Sate coordinator Laxmichand Bhandari. The average from Rs. 3,000 to Rs.6,000.

Khadi activists now think that linking of the Mahatma Gandhi National Rural Employment Guarantee Scheme to the sector- as has been done in Kerala- will help ensure at least minimum wages to its workers and artisans.

Khadi elders- most of them are in their 70s and 80s- also small a conspiracy on the part of the authorities in keeping large chunk of land belonging to khadi institutions all over the country under mortgage.

"All our repayment which are due would amount to a maximum of Rs. 2,000 crore. The land mortgaged against the loans will be worth a whopping Rs.3 lakh crore or even more, "Mr. Vijay pointed out. The land housing the Khadi Mission Sewa Trust at Jaipur's Bajaj Nagar alone is worth Rs.2,000 crore, but most of it is lying unused for lack of permission as well as restrictions brought by terms of mortgage.

Acharya Vijay, who is the convener of the Save Khadi campaign, is of the view that the KVIC, set up to work independently to aid and assist the khadi sector, has lost its autonomy.

"The Commission is doing just opposite of what it is meant to do. It has become a mere department of the Government KVI organizations are swindled by the Commission, which lacks vision, accountability and experience," he said.[25] On the basis of above facts and circumstances KVI requires oxygen to revive health and be in a position to serve the purpose of Gandhian vision of Gram Sawarj and Village Republic and self- sufficiency of the masses.

References:-

01. Vadilal Dagli, Khadi and Village Industries in the Indian Economy, Commerce Publication, Bombay, 1976, p.1.
02. I bid.
03. I bid.
04. Karve Committee Report on Village and Small Industries,
05. Industrial Policy Resolution of 1956.
06. Third Five Year Plan, Planning Commission, New Delhi.
07. Vadilal Dagli, Op. Cit.,p.5.
08. Vadilal Dagli, Op. Cit., p.7.
09. Vadilal Dagli, Op. Cit, pp.13-15.
10. The Seventh Five Year Plan 1985-90,p.98.
11. I bid.
12. I bid.
13. I bid.
14. I bid.
15. I bid.
16. I bid.
17. I bid.
18. I bid.
19. I bid.

20. I bid.

21. I bid.

22. I bid.

23. I bid.

24. I bid.

25. The Hindu Saturday, August, 18,2012.