INDUSTRIAL SOCIOLOGY: UNIT-3

Industrial Policy

Industrial policy means rules, regulations, principles policies and procedures laid down by the government for regulating, developing and controlling industrial undertaking in the country. It prescribes the respective roles of the public, private, joint and cooperative sectors for the development of industries. Naturally, the industrial development of a country will be shaped, guided, fostered, regulated and controlled by its industrial policy.
Industrial policy is an important document. It lays down a wide canvas and sets the tone for implementation of government's regulatory and promotional roles. It is probably the most important document which indicates the relationship between the government and business.

The industrial policy does not have a legal sanction and as such its violation cannot be challenged in the court. But it has justification for existence. There is a moral commitment on the part of the government to implement the policy in word and spirit.

Objectives

- Achieving a socialistic pattern of society
- Achieving industrial development
- Achieving a self sustained economy
- Alleviating poverty
- Updating technology and modernization of industry
- Liberalization and globalization of economy
- Preventing wasteful uses of scarce resources
- Giving guidelines for importing foreign capital

INDUSTRIAL POLICY RESOLUTION 1948

The first important industrial policy resolution was issued by the Government of India on April 6, 1948. It had the following main features:

1. **Acceptance of the importance of both private and public sectors**: The industrial policy resolution accepted the importance of both public and private sectors in the industrial economy of India. It assigned a progressively active role to the state but the ability to

achieve the main objectives determined the immediate extent of State responsibility and the limits to private enterprise.

Under pre 1948 conditions, the mechanism and the resources of the State might not permit it to function forthwith in industry as widely as might have been desirable. The Government of India took steps to remedy the situation; in particular, they considered steps to create a body of men trained in business methods and management. They felt, however, that the State could contribute more quickly to the increase of national wealth by expanding its present activities wherever it was already operating and by concentrating on new units of production in other fields, rather than on acquiring and running existing units. Meanwhile, private enterprise, properly directed and regulated, had a valuable role to play.

2. **Division of the industrial sector**: The resolution divided industries into 4 categories –

Industries where state had a monopoly

The Government decided that the manufacture of arms and ammunition, the production and control of atomic energy, and ownership and management of railway transport should be the exclusive monopoly of the Central Government. Further in any emergency, the Government would always have the power to take over any industry vital for national defence.

Mixed sector

In the case of the following industries, the state which in this context, includes Central, Provincial and State Governments and other Public Authorities like Municipal Corporations would be exclusively responsible for the establishment of new undertakings, except where, the national interest, the State itself found it necessary to secure the co-operation of private enterprise subject to such control and regulation as the Central Government might have prescribed:

1. Coal (the India Coalfields Committee's proposals would be generally followed)
2. Iron and Steel
3. Aircraft manufacture
4. Shipbuilding
5. Manufacture of telephone, telegraph and wireless apparatus, excluding radio receiving sets
6. Mineral oils

While the inherent right of the State to acquire any existing industrial undertaking would always remain, and would be exercised whenever the public interest required it, Government decided to let existing undertakings in these fields develop for a period of ten years, during which they would be allowed all facilities for efficient working and reasonable expansion. At the end of this period, the whole matter would be reviewed and a decision would be taken in the light of circumstances obtaining at the time. If it would have been decided that the State should acquire any unit, the fundamental rights

guarantee by the Constitution would be observed and compensation would be awarded on a fair and equitable basis. Management of State enterprise was, as a rule, through the medium of public corporations under the statutory control of the Central Government, who assumed such powers as might be necessary to ensure this.

The field of government control

There were certain basic industries of importance, the planning and regulation of which by the Central Government was necessary in the national interest. The following industries whose location must have been governed by economic factors of All-India import, or which required considerable investment of a high degree of technical skill, would be the subject of Central regulation and control:

1. Salt
2. Automobiles and tractors
3. Prime movers
4. Electric engineering
5. Other heavy machinery
6. Machine tools
7. Heavy chemicals, fertilizers and pharmaceuticals and drugs
8. Electro-chemical industries
9. Non-ferrous metals
10. Rubber manufactures
11. Power and industrial alcohol
12. Cotton and woollen textiles
13. Cement
14. Sugar
15. Paper and Newsprint
16. Air and Sea transport
17. Minerals
18. Industries related to defence

The Government of India, while retaining the ultimate direction over this field of industry, consulted the Governments of the Provinces and States at all stages and fully associated them in the formulations and execution of plant. Besides these Governments, representatives of Industry and Labour were also associated with the Central bodies which they proposed to establish, as recommended by the Industries Conference.

The field of private enterprise

The rest of the industrial field were normally open to private enterprise, individual as well as co-operative. The State also progressively participated in this field; neither did it hesitate to intervene whenever the progress of an industry under private enterprise was

unsatisfactory. The Central Government embarked on enterprises like large river valley developments which were multipurpose projects of great magnitude, involving extensive generation of hydro-electric power and irrigation on a vast scale, and calculated in a comparatively short time to change the entire face of large areas in this country. The Central Government had also undertaken the production of fertilizer on a very large scale, and had in view other enterprises like the manufacture of essential drugs, and of synthetic oil from coal; many Provincial and State Governments were also proceeding on similar lines.

3. **Role of small and cottage industries:** Cottage and small-scale industries have a very important role in the national economy. Offering as they do scope for individual, village or co-operative enterprise, and means for the rehabilitation of displaced persons. These industries are particularly suited for the better utilisation of local resources and for the achievement of the local self-sufficiency in respect of certain types of essential consumer goods like food, cloth and agricultural implements. The healthy expansion of cottage and small scale industries depends upon a number of factors like the provision of raw materials, cheap power, and technical advice, organised marketing of their produce, and where necessary, safeguards against intensive competition by large scale manufacture, as the education of the worker in the use of the best available technique. Most of these fall in the Provincial sphere and received the attention of the Governments of the Provinces and the States. The Resolution of Industries Conference requested the Central Government to investigate how far and in what manner these industries could be co-ordinated and integrated with large scale industries. The Government of India accepted this recommendation. It was examined, for example, how the textile mill industry could be made complementary to, rather than competitive with the handloom industry, which was the country's largest and best organised cottage industry. In certain other lines of production, like agricultural implements, textile accessories, and parts of machine tools, it should have been possible to produce components on a cottage industry scale and assemble these into their final product at a factory. It was also investigated how far industries at present highly centralised could be decentralised with advantage.

   The Resolution of the Industries Conference recommended that Government should establish a Cottage Industries Board for the fostering of small scale industries. The Government of India accepted this recommendation and proposed to create suitable machinery to implement it. A Cottage and Small Scale Industries Directorate was also set up within the Directorate General of Industries and Supplies.

   One of the main objectives was to give a distinctly co-operative bias to this field of industry. During and before the last war, even a predominantly agricultural country like China showed what could be done in this respect and her mobile industrial co-operative units were of outstanding assistance in her struggle against Japan.

4. **Other important features:** The role of foreign capital in industrial development of the economy was recognised but the need for regulating and controlling it according to the needs of the domestic economy was deemed essential. Therefore it was stated that in those industries where foreign investments was to be done, Indians should have a major say in the ownership and management. The Government of India agreed with the view of the Industries Conference that, while it should be recognised that participation of foreign capital and enterprise, particularly as regards industrial technique and knowledge, would be of value to the rapid industrialisation of the country, it was necessary that the conditions under which they might participate in Indian industry should have been carefully regulated in the national interest. Suitable legislations were introduced for this purpose. Such Legislation provided for the scrutiny and approval by the Central Government of every individual case of participation foreign capital and management in industry. It provided that, as a rule, the major interest in ownership, and effective control, should always be in Indian hands; but power would be taken to deal with exceptional cases in a manner calculated to serve the national interest. In all cases, however, the training of suitable Indian personnel for the purpose of eventually replacing foreign experts was insisted upon.

   The resolution also called for harmonious relations between the management and labour since this was necessary for industrial development. Government recognised that maximum increase in production would not be realised merely by prescribing the respective spheres of the State and of Private enterprise in Industry. It was equally essential to ensure the fullest co-operation between labour and management and the maintenance of stable and friendly relations between them. A resolution on this subject was unanimously passed by the Industries Conference. For this purpose, the resolution enunciated a policy of just labour conditions wherein workers would be given fair wages. For purposes of maintaining industrial peace, labour participation in management was also stressed.

   Government accepted this Resolution. They also considered that labour's share of the profits should be on sliding scale normally varying with production. They proposed, in addition to the over – all regulation of industry by the State, to establish machinery for advising on fair wages, fair remuneration for capital, and conditions of labour. They also took steps to associate labour in all matters concerning industrial production.

INDUSTRIAL POLICY RESOLUTION 1956

The setting was favourable for the Industrial Policy 1956. The country gave itself a Constitution which set out certain directive principles. Planning began to be implemented on an organised basis and the First Five Year Plan was already completed. Parliament accepted the socialist pattern of society as the objective of social and economic policy. The country's resources also increased and the government's drive in expanding the public sector as a means for rapid economic development to countervail economic concentration and removal of regional economic disparities gained momentum. These changes and developments necessitated a policy and then it was announced on 30th April, 1956.

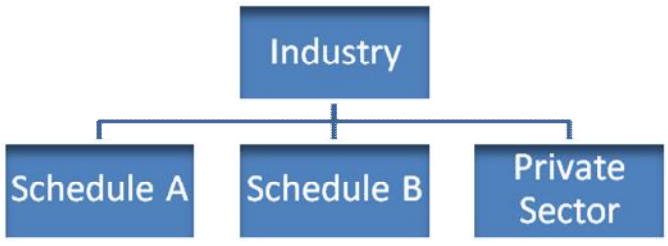
Objectives of 1956 policy:

- To accelerate the rate of economic growth and to speed up industrialization
- To develop heavy industries and machine making industries
- To expand the public sector
- To build up a large and growing private sector
- To provide opportunities for gainful employment and improving living standards and working conditions of the people
- To reduce disparities in income and wealth
- To prevent private monopolies and the concentration of economic power in different fields in the hands of small numbers of individuals
- To expand the cottage, village and small-scale industries
- To achieve balanced industrial development and other socio-economic objectives

Features

In the 1956 policy, industries were classified into three categories. These categories will inevitably overlap to some extent and too great a rigidity might defeat the purpose in view. But the basic principles and objectives have always to be kept in view as the general directions hereafter referred to be followed. It should also be remembered that it is always open to the State to undertake any type of industrial production.

The first category included the industries the future development of which was the exclusive responsibility of the State. The second category consisted of industries, which would be progressively State-owned and in which the State would, therefore, generally take the initiative in establishing new undertakings, but in which private enterprise would also be expected to supplement the effort of the State. The third category included all the remaining industries, and their future development was, in general, left to the initiative and enterprise of the private sector.



Industries in the first category have been listed in Schedule A of this Resolution. All new units in these industries, save where their establishment in the private sector has already been

approved, were set up only by the State. This did not preclude the expansion of the existing privately owned units, or the possibility of the State securing the co-operation of private enterprise in the establishment of new units when the national interests so required. Railways and air transport, arms and ammunition and atomic energy were, however, be developed as Central Government monopolies. Whenever co-operation with private enterprise was necessary, the State ensured, either through majority participation in the capital or otherwise, that it had the requisite powers to guide the policy and control the operations of the undertakings.

SCHEDULE A

1. Arms and ammunition and allied items of defence equipments.
2. Atomic energy.
3. Iron and Steel.
4. Heavy castings and forgings of iron and steel.
5. Heavy plant and machinery required for iron and steel production, for mining, for machinery tool manufacture and for such other basic industries as may be specified by the Central Government.
6. Heavy electrical plant including large hydraulic and steam turbines.
7. Coal and lignite.
8. Mineral oils.
9. Mining of iron ore, manganese ore, chrome-ore, gypsum, sulphur, gold and diamond.
10. Mining and processing of copper, lead, zinc, tin, molybdenum and wolfram.
11. Minerals specified in the Schedule to the Atomic Energy (Control of production and Use) Order, 1953.
12. Aircraft.
13. Air transport.
14. Railway transport.
15. Shipbuilding.
16. Telephones and telephones cables, telegraph and wireless apparatus (excluding radio receiving sets).
17. Generation and distribution of electricity.

Industries in the second category were those listed in Schedule B. With a view to accelerating their future development, the State increasingly established new undertakings in these industries. At the same time, private enterprise also had the opportunity to develop in this field, either on its own or with State participation.

SCHEDULE B

1. All other minerals except 'minor minerals' as defined in Section 3 of the Minerals Concession Rules 1949.
2. Aluminium and other non-ferrous metals not included in Schedule A.
3. Machine tools.
4. Ferro-alloys and tool steels.
5. Basic and intermediate products required by chemical industries such as the manufacture of drugs, dye-stuffs and plastics.
6. Antibiotics and other essential drugs.
7. Fertilizers
8. Synthetic rubber.
9. Carbonisation of coal.
10. Chemical pulp.
11. Road transport.
12. Sea transport.

All the remaining industries fell in the third category, and it was expected that their development would be undertaken ordinarily through the initiative and enterprise of the private sector, though it was open to the State to start any industry even in this category. It was the policy of the State of facilitate and encourage the development of these industries in the private sector, in accordance with the programmes formulated in successive Five Year Plans, by ensuring the development of transport, power and other services, and by appropriate fiscal and other measures. The State continued to foster institutions to provide financial aid to these industries, and special assistance was given to enterprises organised on co-operative lines for industrial and agricultural purposes. In suitable cases, the State also granted financial assistance to the private sector. Such assistance, especially when the amount involved was substantial, was preferably be in the form of participation in equity capital, though it might also be in part, in the form of debenture capital.

The division of industries into separate categories did not imply that they were being placed in watertight compartments. Inevitably, there was not only an area of overlapping but also a great deal of dovetailing between industries in the private and the public sectors. It was open to the State to start any industry not included in Schedule A and Schedule B when the needs of planning so required or there were other important reasons for it. In appropriate cases, privately owned units might be permitted to produce an item falling within Schedule A for meeting their own requirements or as by-products.

There was ordinarily no bar to small privately owned units undertaking production, such as the making of launches and other light craft, generation for power for local needs and small scale mining. Further, heavy industries in the public sector might obtain some of their requirements of lighter components from the private sector, while the private sector in turn would rely for many

of its needs on the public sector. The same principle would apply with even greater force to the relationship between large scale and small scale industries.

Merits and demerits apart, the 1956 policy continued to constitute the basic economic policy for a long time. This fact has been confirmed in all the Five Year Plans.

Industrial Policy Resolution 1977

For the past 20 years, Government Policy in the sphere of industry had been governed by the Industrial Policy Resolution of 1956. While some of the elements of that Resolution in regard to desirable pattern of industrial development still remained valid, the results of actual policies in the industrial field had not been upto the expectations or declared objectives. The growth of per capital national income during the last 10 years from 1977 had been about 1.5 per cent per annum and was clearly inadequate to meet the needs of a developing economy. Unemployment had increased, rural-urban disparities had widened and the rate of real investment had stagnated. The growth of industrial output in the last decade had been no more than 3 to 4 per cent per annum on an average. The incidence of industrial sickness had become widespread and some of the major industries were the worst affected. The pattern of industrial costs and prices had tended to be distorted; and dispersal of industrial activity away from the larger urban concentration had been very slow.
The new Industrial Policy was, therefore, directed towards removing the distortions of the past so that genuine aspirations of the people can be met within a time-bound program of economic development.
The close interaction between the agricultural and industrial sectors of our economy cannot be over-emphasized. Much of our industrial production is based on agricultural raw materials. Similarly, in order to increase the agricultural productivity by adaptation of modern technology and agronomic practices to our own conditions, important inputs had to come from our industrial sector. It was only by such a process of reinforcing interaction of the agricultural and industrial sectors that employment could have been found for the large number of the rural population who couldn't be absorbed in the agricultural sector.

Small Scale Industries: The focus of industrial policy so far had been primarily on large industries neglecting cottage industries entirely relegating small industries to a minor role. Industrial Policy Resolution 1977 was a firm policy of the Government to change this approach and mindset.

The main thrust of the new Industrial Policy was on effective promotion of cottage and small industries widely dispersed in rural areas and small towns. It was the policy of the Government that whatever could be produced by small and cottage industries must only be so produced. For this purpose an exhaustive analysis of industrial products, had been made to identify those items which are capable of being established or expanded in the small scale sector. This list of industries which would be exclusively reserved for the small scale sector had been significantly expanded and would now include more than 500 items as compared to about 180 items earlier. However, it was also ensured that production in this sector is economic and of acceptable quality. The list of industries reserved for the Small Scale Sector had to be continually reviewed

so that capacity creation did not lag behind the requirements of the economy. An annual review of reserved industries was undertaken in order to ensure that reservation accorded to the small scale was efficient and was also continually expanded as new products and new processes capital of being manufactured in the small scale were identified.

Tiny Sector: While the then existing definition of small scale industries was to be remained within the small scale sector, special attention was to be accorded to units in the tiny sector namely those with investment in machinery and equipment upto Rs One lakh and situated in towns with a population of less than 50,000 according to 1971 census figures, and villages. Schemes were drawn up for making available margin money assistance especially to tiny units in the small scale sector as well as to cottage and household industries.

Legislation for Cottage Industries: While there had been reservation for the small scale sector, there had been no special protection for cottage and household industries sector, Government considered introducing special legislation for protecting the interest of cottage and household industries with a view to ensuring that these activities which provide self-employment in large numbers get due recognition in the industrial Development.

District Industries Centers: In the past, there had been a tendency to proliferate schemes, agencies and organizations which had tended more to confuse the average small and rural entrepreneur than to encourage and help him. The agenda was to take away focal point of development for small scale and cottage industries from the big cities and State capitals to the district headquarters. In each district there was to be one agency to deal with all requirements of small and village industries. This was to be called the District Industries Centre. Under the single roof of the District Industries Centre, all the services and support required by small and village entrepreneurs were to be provided. These included economic investigation of the district's raw materials and other resources, supply of machinery and equipment provision or raw material, arrangements, for credit facilities, and effective set-up for marketing and a cell for equality control, research and extension.

Appropriate Technology: The development and application of technology appropriate and necessary to the socio-economic conditions had so far not received adequate attention. It will henceforth be an integral part of policy and Government will ensure that this important area gets adequate attention special arrangements will be made to ensure an effective and coordinated approach for the development and widespread application of suitable small and simple machines and devices for improving the productivity and earning capacity of workers in small and village industries. It will further be Government's endeavor to fully integrate such appropriate techniques of production with the broader programme of all round rural development.

Role of Large Scale Industries: In addition to small and village industries, there was also a clear and defined role for large-scale industry in India. However, the Government did not intend to favor large-scale industry and its development merely for demonstration of sophisticated skills or as monuments of irrelevant foreign technology. The scope of the role of large scale industry was defined for meeting the basic minimum needs of the population through a much wider

dispersal of small scale and village industries and strengthening of the agricultural sector. In general, the areas delineated for the large scale industry were;

(a) Basic industries which were essential for providing infrastructure as well as for development of small and village industries, such as steel, non-ferrous metals, cement, oil refineries;

(b) Capital goods industries for meeting the machinery requirement of basic industries as well as small scale industries;

(c) High technology industries which required large scale production, and which were related to agricultural and small scale industrial development such as fertilizers, pesticides, and petro-chemicals etc; and

(d) Other industries which were outside the list of reserved items for the small sale sector, and which were considered essential for the development of the economy such as machine tools, organic and inorganic chemicals.

Large Houses: Past experience had shown that Government policies had not been much fruitful in restraining the disproportionate growth of large Houses. While a certain extent of growth of existing enterprises was inevitable and also necessary for continued health of these enterprises, the growth of large House had been disproportionate to the size of their internally generate resources and had been largely based on funds borrowed from public financial institutions and banks. This process must be reversed.

Expansion of Large House was subject to the following principles:-

- The expansion of the then existing undertakings and establishments of new undertakings continued to be subject to the provisions of the Monopolies and Restrictive Trade Practices Act. The provisions of this Act including those relating to dominant undertakings were to be effectively implemented;
- Except in the case of industries eligible for automatic growth of capacity, the expansion of existing undertakings into new lines and establishments of new undertakings by large House required specific approval of Government; and
- Large Houses were to rely on their own internally generated resources for financing new or expansion projects. While an appropriate debt equity ratio was permitted in the case of industries like fertilizers, paper, cement, shipping, petrochemicals, etc. which were relatively more capital intensive in nature, the debt equity ratio in the case of other less capital-intensive or less sophisticated industries was so fixed as to reflect the greater use of their own internally generated resources by the large houses.

In its licensing policy, Government regulated the activities of the large houses to bring them in line with the country's socio-economic goals, where large scale units, whether belonging to large houses or not were already engaged in the manufacture of items since reserved for the small scale sector, there was no expansion in their capacity. Government ensured that no unit or business group acquired a dominant or monopolistic position in the market. The industrial

activities of the large houses were scrutinized so that unfair practices arising out of manufacturing inter-linkages are avoided.

Public Sector: The public sector in India had transformed to a great extent. Apart from socializing the means of production in strategic areas, public sector sought to provide a countervailing power to the growth of large houses and large enterprises in the private sector. The role for the public in several fields was ever expanding. Not only was it the producer of important and strategic goods of basic nature, the public sector was charged with the responsibility of encouraging the development of a wide range of ancillary industries, and contribute to the growth of decentralized production by making available its expertise in technology and management to small scale and cottage industry sectors. It was also the endeavour of Government to operate public sector enterprises on profitable and efficient lines in order to ensure that investment in these industries pays an adequate return to society. The Government attached high priority to the building up of a professional cadre of managers in the public sector who were given the necessary autonomy and entrusted with the task of providing dynamic and efficient management to such enterprise.

Indigenous and Foreign Technology: The country had a comparatively well-developed infrastructure of scientific establishments by that time. Future development of industries in India ought to be based on indigenous technology as far as possible. Full scope was given to the development of indigenous technology. It was also essential that development of indigenous technology was responsive to the objective of efficient production in increasing quantities of goods that society urgently needs.

In order to promote technological self-reliance, the Government recognized the necessity for continued inflow of technology in sophisticated and high priority areas where Indian skills and technology were not adequately developed. Indian firms which were permitted to import foreign technology were required in appropriate cases to set up adequate Research and Development facilities so that imported technology was properly adapted and assimilated. The Government also set up a National Registry of Foreign Collaboration in the Secretariat of the Foreign Investment Board so that there was continuous monitoring of these efforts.

Foreign Investment: The Government also clarified its policy regarding participation of foreign investment and foreign companies in India's Industrial development. As far as then existing foreign companies were concerned, the provisions of the Foreign Exchange Regulation Act were strictly enforced. After the process of dilution under this Act had been completed, companies with direct non-resident investment not exceeding 40 per cent were treated on par with Indian companies, except in cases specifically notified, and their future expansion was guided by the same principles as those applicable to Indian companies.

Foreign investment and acquisition of technology necessary for Indian's industrial development were allowed only on such terms as were determined by the Government of India to be in the national interest. In area where foreign technological know-how was not needed, existing collaborations were not renewed and foreign companies operating in such fiends had to modify their character and activities in conformity with national priorities within the framework of the Foreign Exchanges Regulation Act. To guide entrepreneurs, Government issued a revised

illustrative list of industries where no foreign collaboration, financial or technical, was considered necessary since indigenous technology had fully developed in this field.

As a rule, majority interest in ownership and effective control had to be in Indian hands though Government could make exceptions in highly export-oriented and/or sophisticated technology areas. In hundred per cent export-oriented cases, Government could consider even a fully owned foreign company.

Indian Joint Ventures Aboard: A number of joint ventures had been set up with many developing countries by Indian Entrepreneurs in collaboration with local associates. At that stage of the country's industrial development, substantial export of capital from India would have been neither feasible nor desirable. The contribution of the Indian entrepreneur to the joint ventures abroad was, therefore, confined in the form of machinery and equipment, structurals and also technical know-how and management expertise. In cases where, in addition, some cash investment was found necessary, Government was willing to consider such investment up to a maximum limit to be prescribed for this purpose.

Import Liberalization: Self-reliance must continue to be a paramount objective of country's industrial and economic policy. Events in the international economy had demonstrated that the main burden of adjustment to external shocks and changing international environment had to be borne by the Country itself. Our industrial strategy, therefore, must be responsive to the objective of creating an industrial base, which was sufficiently diversified and sufficiently strong to withstand the vagaries of international trade and aid relationship. The creation of a strong and diversified industrial economy did not mean that the country should not or need not participate in international trade, both as exporter and importer of industrial goods. In fact, the favorable changes that had taken place in our foreign exchange situation and the progress that was made in the industrial field should now enable the economy to selectively dispense with import quotas and quantitative restrictions, while retaining the protection given through tariffs. Relaxation of quantitative import controls, must, however, be consistent with our overall Plan priorities. Such relaxation was in areas where existing quantitative restrictions were hurting rather than helping the future development of high priority industries. Indian industry was given all assistance to improve the competitive position and technology .

Location of Industries: Government had noted with concern that most of the industrial development that had taken place in our country since independence had been concentrated around the metropolitan areas and large cities. The Government decided that no more licenses should be issued to new industrial units within certain limits of large metropolitan cities having a population more than 1 million and urban areas with a population of more than 5 lakhs as per the 1971 census. The Government of India also considered providing assistance to large existing industries which wanted to shift from congested metropolitan cities to approved locations in backward areas.

Sickness in Industry: One of the disturbing features of the industrial scene in 1970s had been the growing incidence of sickness of both large and small units. Government had had to take over a number of such units. In a many case, very large amounts of public funds had been

invested into the sick units which had been taken over but they continued to make losses which had to be financed by the public exchequer. This process could not continue indefinitely.

The Government aimed to take quick and effective measures for rehabilitation and reconstruction of such units and to ensure professional management of such units on a continuing basis. Government in co-operation with the Reserve Bank of India instituted arrangements for monitoring incipient sickness in industrial units so that corrective action could be initiated as soon there was evidence of mismanagement of financial and technological weakness.

Streamlining of Procedures: Government carried on with its effort to remove irritants in the industrial approval procedures which came in the way of accelerating industrial development. Since costs of delay are heavy and detrimental to the process of development, every effort was made to improve administrative arrangements so as to ensure further speedy and orderly approval procedures. In order to streamline and simplify procedures and policies relating to industrial licensing as well as imports and exports, Government had set up high level committees which submitted their report shortly.

The Industrial Policy Statement 1980

The Industrial Policy Statement of July 1980, which is based as the Industrial Policy Resolution of 1956, spells out the following socio-economic objectives:

1. Optimum utilisation of installed capacity;
2. Maximum production and achieving higher productivity;
3. Higher employment generation;
4. Correction of regional imbalances;
5. Strengthening of the agricultural base through agrobased industries and promotion of optimum inter-sectoral relationship;
6. Promotion of export-oriented industries;
7. Promotion of economic federalism through equitable spread of investment and dispersal of returns; and
8. Consumer protection against high prices and bad quality

Noting the erosion in people's faith in the public sector, it was decided to launch a drive to revive the efficiency of public sector undertakings through a time bound programme of corrective action on a unit by unit basis. Effective steps would also be taken to develop the management cadres of public sector undertakings in functional fields such as operations, finance, marketing and information system.

In order to eliminate the artificial distinction of conflicting interests between small and large scale industry, the concept of economic federalism would be promoted through the setting up of a few nucleus plants in identified industrially backward districts.

The nucleus plant would concentrate on assembling the products of the ancillary units falling within its orbit, on producing inputs needed by a large number of smaller units and making adequate marketing arrangements. The nucleus plant would also work for upgrading the units was enhanced to Rs.2 lakh, of a small scale units to Rs.20 lakh and of ancillaries to Rs.25 lakh. A scheme for building buffer stocks of essential raw materials for the Small Scale Industries was introduced for operation through the Small Industries Development Corporations in the States and the National Small Industries Corporation in the Centre.

In order to ensure fullest utilisation of existing industrial capacities, particularly in core industries and in industries with a long term export potential, the facility of automatic expansion of capacity of 5% per annum or 25% in a five year plan period to be taken in one or more stages was permitted to all Appendix I Industries. Requests for setting up 100% export oriented units and for expansion of existing units for purposes of export would also be considered sympathetically.

Industrial processes and technologies aimed at optimum utilisation of energy or the exploitation of alternative sources of energy would be given special assistance, including finance on concessional terms. Similar benefits would be given to activities that contribute directly to the improvement of the environment and reduce the deleterious effects on pollution of air and water.

Industrial Policy Resolution 1991

Policy measures initiated in the first three decades since Independence facilitated the establishment of basic industries and establishing up of a broad based infrastructure in the country. The Seventh Five Year Plan (1985-1900), recognized the need for consolidation of these strengths and initiating policy measures to prepare the Indian industry to respond effectively to emerging challenges. A number of measures were initiated towards technological and managerial modernization to improve productivity, quality and to reduce cost of production. The public sector was freed from a number of constraints and was provided with greater autonomy. There was some progress in the process of deregulation during the 1980s. In 1988, all industries, excepting 26 industries specified in the negative list, were exempted from licensing. The automotive industry, cement, cotton spinning, food processing and polyester filament yarn industries witnessed modernization and expanded scales of production during the 1980s.
With a view to promote industrialization of backward areas in the country, the Government of India announced in June, 1988 the Growth Centre Scheme under which 71 Growth Centers were proposed to be set up throughout the country. Growth centers were to be endowed with basic infrastructure facilities such as power, water, telecommunications and banking to enable them to attract industries.

The Industrial Policy Resolution of 1991 stated that “the Government will continue to pursue a sound policy framework encompassing encouragement of entrepreneurship, development of indigenous technology through investment in research and development, bringing in new technology, dismantling of the regulatory system, development of the capital markets and increased competitiveness for the benefit of common man". It further added that "the spread of

industrialization to backward areas of the country will be actively promoted through appropriate incentives, institutions and infrastructure investments".
The objective of the Industrial Policy Resolution - 1991 was to maintain sustained growth in productivity, enhance gainful employment and achieve optimal utilization of human resources, to attain international competitiveness, and to transform India into a major partner and player in the global arena. Quite clearly, the focus of the policy was to unshackle the Indian industry from bureaucratic controls.

This called for a number of far-reaching reforms. In pursuit of the above objectives, Government had decided to take a series of initiatives in respect of the policies relating to the following areas.

A. Industrial Licensing.
B. Foreign Investment.
C. Foreign Technology Agreements.
D. Public Sector Policy.
E. MRTP Act.

A. Industrial Licensing Policy

Industrial Licensing is governed by the Industries (Development & Regulation) Act, 1951. The Industrial Policy Resolution of 1956 identified the following three categories of industries:

- Those that would be reserved for development in the public sector,
- Those that would be permitted for development through private enterprise with or without State participation, and
- Those in which investment initiatives would ordinarily emanate from private entrepreneurs.

In order to achieve the objectives of the strategy for the industrial sector for the 1991s and beyond it was necessary to make a number of changes in the system of industrial approvals.

Industrial Licensing was abolished for all projects except for a short list of industries related to security and strategic concerns, social reasons, hazardous chemicals and over-riding environmental reasons, and items of etilist consumption (list attached as Annexure II). Industries reserved for the small scale sector continued to be so reserved. Areas where security and strategic concerns predominated, continued to be reserved for the public sector. (List attached as Annexure I).The exemption from licensing was particularly helpful to the many dynamic small and medium entrepreneurs who have been unnecessarily hampered by the licensing system.

B. Foreign Investment

While freeing Indian industry from official controls, opportunities for promoting foreign investment in India should have been fully exploited. In order to invite foreign investment in high priority industries, requiring large investments and advanced technology, it had been decided to

provide approval for direct foreign investment upto 51% foreign equity in such industries. There were no bottlenecks of any kind in this process. This group of industries had generally been known as the "Appendix-I Industries" and there were areas in which FERA companies had already been allowed to invest on a discretionary basis. This change would go a long way in making Indian policy on foreign investment transparent in India.

C. Foreign Technology Agreements

With a view to injecting the desired level of technological dynamism in Indian industry, Government provided automatic approval for technology agreements related to high priority industries within specified parameters. Similar facilities were available for other industries as well if such agreements did not require the expenditure of free foreign exchange. Indian companies were free to negotiate the terms of technology transfer with their foreign counterparts according to their own commercial judgement.

i. Automatic permission was given for foreign technology agreements in high priority industries (Annexure III) up to a lump sum payment of Rs. 1 crore 5% royalty for modestic sales and 8% for exports subject to total payments of 8% of sales over a 10 year period from date of agreement or 7 years from commencement of production. The prescribed royalty rates are net of taxes and will be calculated according to standard procedures.
ii. In respect of industries other than those in Annexure III, automatic permission was given subject to the same guidelines as above if no free foreign exchange is required for any payments.
iii. All other proposals needed specific approval under the general procedures in force.

D. Public Sector Policy

It was time that the Government adopted a new approach to public enterprises. A greater commitment was needed to the support public enterprises which are essential for the operation of the industrial economy. Measures were needed to make these enterprises more growth oriented and technically dynamic. Units which may be faltering at present but were potentially viable were to be structured and given a new lease of life. The priority areas for growth of public were;

- Essential infrastructure goods and services.
- Exploration and exploitation of oil and mineral resources.
- Technology development and building of manufacturing capabilities in areas which are crucial in the long term development of the economy and where private sector investment is inadequate
- Manufacture of products where strategic considerations predominate such as defence equipment

At the same time the public sector was not to be barred from entering areas not specifically reserved for it.

Government was to strengthen those public enterprises which fell in the reserved areas of operation or were in high priority areas or were generating good or reasonable profits. Such enterprises were provided a much greater degree of management autonomy through the system of memoranda of understanding. Competition was also induced in these areas by inviting private sector participation.

E. Monopolies and Restrictive Trade Practices Act (MRTP Act)

The principal objectives sought to be achieved through the MRTP Act are as follows:-

i. Prevention of concentration of economic power to the common detriment, control of monopolies.
ii. Prohibition of monopolies and restrictive and unfair trade practices.

The MRTP Act became effective in June 1970. With the emphasis placed on productivity in the Sixth Plan, major amendments to the MRTP Act were carried out in 1982 and 1984 in order to remove impediments to industrial growth and expansion. This process of change was given a new momentum in 1985 by an increase of the threshold limit of assets. With the growing complexity of industrial structure and the need for achieving economies of scale for ensuring higher productivity and competitive advantage in the international market, the interference of the Government through the MRTP Act in investment decision of large companies had become deleterious in its effects on Indian industrial growth. The pre-entry scrutiny of investment decisions by so called MRTP companies as no longer required. Instead, emphasis was on controlling and regulating monopolistic, restrictive and unfair trade practices rather than making it expansion, establishment of new undertakings, merger, amalgamation and takeover and appointment of certain directors. Simultaneously, provisions of the MRTP Act were strengthened in order to enable the MRTP Commission to take appropriate action in respect of the monopolistic, restrictive and unfair trade practices.

Science, Technology and Innovation Policy of India 2013

Science in Shaping the Future of an Aspiring India

Science, Technology and Innovation (STI) have emerged as the major drivers of socio-economic development globally. India of the 21st century is an aspiring country. Faster, sustainable and inclusive growth is her aspiration. Science, Technology and Innovation leading to applications of products of Research and Development will need to play defining roles. The large demographic dividend and talent pool of the country offer unique opportunities the National STI enterprise for earning for itself a central position in national development though its excellence, relevance and performance.

What is innovation?

Scientific research converts money into knowledge and innovation converts knowledge into wealth. Innovation is more than mere conversion of knowledge into a workable technology. It implies an S&T-led solution that is successfully deployed in the economy or society. India has, hitherto accorded little importance to this aspect. There is now an urgent need to invigorate this aspect of the national STI enterprise.

Changing Phases of National Policies in S&T

India's Scientific Policy Resolution (SPR) of 1958, a pace setter in the world, remains valid even today. The SPR resolved to "foster, promote and sustain" the "cultivation of science and scientific research in all its aspects". Technology was then assumed to flow from the country's established science infrastructure. The SPR also emphasized the use of the scientific approach in all activities of the nation. The Technology Policy Statement (TPS) of 1983, enunciated at a time of constraints on import of technology, emphasized the need to attain technological competence and self-reliance. Several of its statements were converted into action. The Science and Technology Policy (STP) of 2003 brought science and technology (S&T) together. It emphasized the need for investment into R&D to address national problems. It called for integrating programmes of socio¬economic sectors with the national R&D system. It also articulated the need for technological innovation and creation of a national innovation system. The world has changed vastly since then in all spheres of human activity

Why another policy?

Today innovation is no longer a mere appendage to science and technology but has assumed centre stage in the developmental goals of countries around the world. Vertical integration of all dimensions of STI into the socio-economic processes seems the way forward in the modern world. New paradigms of innovation have emerged and systems that foster innovation are not universal. They have become country and context specific. The Prime Minister of India, at the Indian Science Congress-2010 declared 2010-20 as the "Decade of Innovations" and formed the National Innovation Council. The Prime Minister and Minister of Science & Technology declared at the 99th Science Congress the bringing forth of a policy that develops the synergy between science, technology and innovation. The STI Policy 2013 is in furtherance of the declaration and aims to bring fresh perspectives to bear on innovation in the changing context. The policy thus seeks to focus on both people for science and science for people and combine the benefits of excellence and relevance.

Policy for Science and Science Policy for Development: A New Paradigm

Science, research and innovation can exist separately on their own in disconnected spaces. But there are synergistic linkages. India's global competitiveness will be determined by the extent to which the STI enterprise integrates vertically and is able to create social good and economic good through innovation. Innovative structural mechanisms and models will thus need to be evolved to balance the priorities and develop interconnections of the three sectors.

India's STI system needs to deliver solutions to address the pressing national challenges of energy and food security, nutrition, affordable health care, environment, water and sanitation and above all employment .Thus discovery and solution dimensions of science and technology need to play major roles in shaping the future of the country. "Science and technology for the people" will be the new paradigm of the Indian STI enterprise. Indian society must emerge as the major stake holder for the national STI system.

India's STI-led developmental efforts should thus aim at faster, inclusive and sustainable growth. While global competitiveness in trade would call for high- technology inputs, inclusive growth would need to ensure access, availability and affordability of solutions to as large a population as possible. India needs 'inclusive innovation'. The policy will thus drive both investment in science and investment of science-led technology and innovation in agriculture, manufacturing and services that lead to socio-economic benefits to a wide cross section of society. Emphasis will be laid on bridging the gaps between knowledge and the economic sectors. The STI policy would develop symbiotic relationship with economic and other policies.

Capturing aspirations

The key elements of the STI policy will be:

- Promoting proliferation of scientific temper amongst all sections of society.
- Enhancing skill for applications of science among the young from all social strata
- Making careers in science, research and innovation attractive to the brightest.
- Establishing world class R&D infrastructure for gaining global leadership in some select frontier areas of science.
- Positioning India among the top five global scientific powers by 2020.
- Linking contributions of science, research and innovation system with inclusive economic growth agenda and combine priorities of excellence with relevance
- Migrating R&D outputs into commercial applications by replicating hitherto successful models as well as establishment of new structures.
- Facilitating S&T-based high-risk innovations, through new mechanisms
- Triggering changes in the mindset and value systems to recognize, respect and reward performances which create wealth from S&T derived knowledge.

Investment in Research and Development

Global investments in science, technology and innovation are estimated at $1.2 trillion as of 2009. India's R&D investment is less than 2.5% of the global investments. India's R&D investment has been under 1% of the GDP. Increasing Gross Expenditure in Research and Development (GERD) to 2% of the GDP has been a national goal for some time. Achieving this in the next five years is realizable provided the private sector matches India's public investment and the ratio of public to private sector investments in R&D changes from the current 3:1 to 1:1 within the next five years. This seems attainable as the industrial R&D investment grew by 250% while the sales growth was at 200% between 2005 and 2010. An environment conducive for enhancing private sector investment in R&D will be created.

Gross budgetary support for the science and technology sector has significantly increased during the last decade. Accrual of benefits of such increase in the GERD is becoming evident. India's global share of scientific publications has, for example, increased from 1.8% in 2001 to 3.5% in 2011. The Composite Annual Growth Rate (CAGR) of Indian publications during the last three years is around 12±1%. But the percentage of Indian publications in the top 1% impact making journals is only 2.5%. India should aim to increase its share of scientific publications from the current 3.5% to over 7% and quadruple the number of papers in top 1% journals from the current levels by 2020. Citation impact of Indian publications must improve and match at least the global averages. Initiatives under the new policy should enable this to exceed the global average by 2020.

India ranks ninth globally in the number of scientific publications and 12th in the number of patents filed. According to the Global Science Report of the UNESCO, India's current global ranking matches with its ranking with respect to the number of Full-Time Equivalent (FTE) of R&D personnel. In order to match the enhanced level of private sector investments in R&D and to maintain the tempo of public sector investments, it is imperative that within the next five years the total number of FTE of R&D personnel must increase by at least 66% of the present strength.

Nourishing the root of Science for promoting Excellence in Research

Ensuring sustainable pipeline of talented youth for science is a challenge. India has mounted some significant initiatives for attracting talent to science and careers with research. Empowering stakeholders for local actions is a key element of these initiatives. The policy framework will further enable school science education through improvement of teaching methods and science curricula, motivating science teachers and schemes for early attraction of talent to science.

Combining Excellence and Relevance: Way Forward for Indian Science

Basic research-led discoveries stimulate innovation in the long term. While Indian investment in basic research will be further enhanced by fostering excellence through global benchmarks and focusing on relevance for addressing national challenges.

The few inter-university centres set up earlier have proved the concept to be a successful and viable one. Such inter-university centres would be multiplied in different fields to enable a wide cross section of university researchers to access advanced research facilities and equipment which are otherwise not available in university environments. Grand challenge programmes, where resource deployment could bring tangible and intangible returns in the global setting, will be launched.

Participation in Creation of Large Global R&D Infrastructures and Big Science

Modern science is increasingly becoming resource intensive. There is a current trend to create high-cost global infrastructures through international consortia models. Given India's global standing in science, invitation to participate in such projects is expected to increase. Indian

participation in such consortia-led international projects will be encouraged and facilitated for improving access to facilities for advanced research in cutting edge areas of science.

Attracting Private Sector Investments in R&D

Supply side interventions have hitherto been the main strategy for public investment in R&D. The situation requires changing; equal emphasis on both supply side interventions and demand based investments is needed. While public investments in R&D should maintain the current rates of growth, private investment has to increase significantly for translating R&D outputs into commercial outcomes.

Public funds for partnerships with the private sector for social and public good objectives will be earmarked as a new policy initiative. A National Science, Technology and Innovation Foundation will be established as a Public Private Partnership (PPP) initiative for investing critical levels of resources for innovative and ambitious projects.

The focus of the policy environment will be:

- Facilitating private sector investment in R&D centres in India and overseas.
- Permitting multi stakeholders participation in the Indian R&D system.
- Treating R&D in the private sector at par with public institutions for availing public funds.
- Bench marking of R&D funding mechanisms and patterns globally.
- Aligning Venture Capital and Inclusion Innovation Fund systems.
- Modifying IPR policy to provide for marching rights for social good when supported by public funds and for co-sharing IPRs generated under PPP.
- Exploring newer mechanisms for fostering Technology Business Incubators (TBIs) and science-led entrepreneurship.
- Providing incentives for commercialization of innovations with focus on green manufacturing.
- Partnerships among Stake holders for Scaling Successes of R&D

Special and innovative mechanisms for leveraging academia-research-industry partnerships will be devised. Success stories in S&T-based innovations from Indian experience would be replicated and scaled up. Regulatory and legal framework for sharing of IPRs between inventors and investors, and for closing gaps in the translation of new findings into the commercial space, would be put in place. **Specifically the policy will focus on:**

- Prioritizing critical R&D areas like agriculture, telecommunications, energy, water management, drug discovery, material science including nano technology, climate change and space technology and promoting interdisciplinary research,
- Promoting innovations through mechanisms including "Small Idea-Small Money" and "Risky Idea Fund" to support innovation incubators
- Supporting STI driven entrepreneurship with high scaling coefficients and viable business models,
- Investing in young innovators and entrepreneurs through education and training.

Gaining Global Competitiveness through Collaboration

Open source discoveries for public and social good form interesting innovation systems. Knowledge commons is an emerging theme for managing IPRs created through multi-stake holder participation. The STI Policy will foster data sharing and access. Tapping global resources and especially Indian diaspora for accelerating the pace of technology-led development would be pursued. Multi-sectoral partnerships and alliances will be leveraged for upscaling national competitiveness in research and manufacturing. The new policy framework will enable strategic partnerships and alliances with other nations through both bilateral and multilateral cooperation in science, technology and innovation. Cooperation in areas like climate change and mitigating natural disasters are important and beneficial. Science diplomacy, technology synergy and technology acquisition models should be judiciously deployed based on strategic relationships.

Performance-Reward Relationships

Transparent systems for tracking individual research performers based on past and proven track record would be developed to enable grant based investments in such performers. A well-designed centrally implementable Performance Related Incentive Scheme (PRIS) for basic research leading to scientific publications would be put in place.

For R&D leading to technology development and knowledge services, the criteria would, however, be specific to the institution, the local conditions and the context. Incentives to public-funded R&D centres for outcomes leading to public and strategic goods could be introduced. Transparent performance- reward relationships and accountability for investments would form central theme of the policy.

Leveraging Innovation potentials for Social Inclusion

Global innovations systems tend to bypass large sections of the community. The instruments of the STI policy will aim at increasing accessibility, availability and affordability of innovations. Establishment of a Fund for Innovations for Social Inclusion will be a step in this direction.

Delivery systems for STI outputs to stake holders and Society

Migration of scientific outputs and technology interventions into the social systems is a multi-layered process. Direct delivery of scientific outputs through dissemination and public outreach by the scientific agencies and bodies is possible only in relatively smaller number of sectors. The entire delivery mechanism involves a large number of intermediaries from the public, non-governmental and private sectors. This requires strengthening of linkages between the scientific and socio-economic sectors. The STI policy will leverage the R&D allocations of socio-economic ministries through a shared vision on addressing developmental challenges, co-generation of values through partnerships, and co-investments, adoption of new delivery models and maximization of stakeholder value perceptions.

The state governments constitute important stake holders and measures will be taken to ensure that state-specific S&T vision and plans are informed by the new STI Policy.

Transition from perception to evidence-based approaches for investment decisions

Sound measurement principles for STI indicators are necessary for evidence based policy actions. New and globally relevant indicators, which integrate measures of excellence with relevance as well as inventiveness with affordability, will be developed. Around 10 sectors of high impact potential, with commitment to deploy commensurate resources, will be identified for directed STI intervention. Enabling policy instruments that facilitate both research and enterprise to focus their efforts in these will be put in place.

Global competitiveness of manufacturing sector is closely related to the technology intensity of the sector, which in turn is a direct corollary of the vitality of the R&D system in providing technology inputs. India's share of global trade in high technology products is presently only around 8%. The aim is to double this share through innovations in high-technology products. Appropriate supporting instruments will be put in place to stimulate the development and deployment of high technology by industry.

Triggering Ecosystem changes for Science, Technology and Innovation

A flexible approach that allows for fine tuning the Five Year Plan investments in R&D, technology and innovation in response to rapid changes in STI ecosystem would be put in place. Speed, scale and sustainability would be key governance parameters for the new approach. Internal processes of institutions need to build-in Trust as an integral principle in decision making. "Risks" are integral parts of a vibrant national innovation system and policies must provide for risk management strategies. Education is currently focused on understanding; it should now embrace emphasis on Applications as well. Venture capital systems need to adventure in risky innovations rather than to rely on incremental innovations, new financing mechanisms for investing in enterprises without fear of failure and options for foreclosing unsuccessful ventures are essential part of such an enabling innovation ecosystem. India's innovation machinery should aim to lead rather than to follow safe paths of discovery. Hence Trust, Risk, Application, Venture. Enterprise and Leadership should form new mantras of the new STI ecosystem.

Gender Parity in STI Sector

Participation of women in STI activities is important. New and flexible schemes would be put in place to address the mobility challenges of employed women scientists and technologists. A broad scope for re-entry of women into R&D and new facilitation mechanisms with special career path in diverse areas will also be made feasible.

Public Awareness and Public Accountability of Indian STI sector

Public understanding of science is an important dimension for introducing and reaching the benefits of modern science and technology to the people. Public and political understanding of

science should be based on evidence and debates with open mind. The civilizational aspect of science or scientific temper needs to be promoted across all sections of the society systematically. People and decision makers must be made aware of the implications of emerging technologies, including their ethical, social and economic dimensions. Effective science communication methods, by using tools such as the National Knowledge Network, will be initiated. These will enable all the stakeholders of the civil society to discuss and present a collective perspective on such developments. Mechanisms for assessing the performance of the national STI system by all the stakeholders and reporting to the nation on a periodic basis will be established. The national science academies will be accorded a major role in this endeavour of public accountability.

Science, Technology and Innovation to serve National Agenda

Agriculture: R&D policy for agriculture is articulated by the Indian Council of Agriculture Research (ICAR). Integration of the agriculture R&D policy with the national R&D system and STI policy will be brought about.

Manufacturing: STI inputs to manufacturing sector offer opportunities for enhanced employment generation. A strategic selection of sectors, where India can aspire for leadership, would be made for focused STI inputs. A special drive for stepping up R&D intensity in key manufacturing sectors with competitive advantage will be mounted. Small and Medium Enterprises (SME) generally have low R&D intensity. Special schemes to support R&D at the firm or collective level, will be devised and put in place.

Services: The R&D intensity of the service sector needs to be enhanced considerably and skill base also expanded significantly. Linkages between the services with educational sectors for establishing human capacities will be fostered through incentive mechanisms. For rapidly accomplishing the tasks of modernization of technology-led services, technology missions, aimed at achieving global leadership in some select areas in the services sector, will be identified. Deployment of technology-led services for increasing transparency in the Government machinery will also be supported.

Climate Change: Climate change is of global concern and India has articulated a National Action Plan for Climate Change (NAPCC). The S &T system will have to play an active role as a source of strategic knowledge for coping with the challenges of climate change as well as in meeting equity-based differentiated and shared responsibilities of India.

Policy Goal

STI policy 2013 is focused on serving India by connecting performance with excellence and relevance. The policy goal of the Indian STI sector is to accelerate the pace of discovery and delivery of science-led solutions for serving the aspirational goals of India for faster, sustainable and inclusive growth. A strong and viable Science, Research and Innovation System for High Technology-led path for India (SRISHTI) is the goal of the new STI policy. Aspirations of India would be serviced by an equally aspiring Indian STI system.