

Module – 5 - Micro and Small Enterprises :		
Introduction		
Medium and small enterprises form the bread and butter of Indian economy and life support of millions of people across the country. As our country is characterized by abundant raw materials, abundant manpower, poor finance, problem of unemployment, lack of technical knowhow etc. Small Scale Industries have played an important role in the process of industrialization of the country by making use of local raw materials, local skills, local finance and generally local markets which helps the cause of socio-economic development which has made small scale business sector as dynamic and vibrant sector for the Indian economy in the recent years by the establishment of about 5 million successful SSIs as testimony		
According to the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 “ an enterprise means an industrial undertaking or a business concern engaged in the manufacture or production of goods, or engaged in rendering any service ”		
Classification of Micro, Small and Medium Enterprises according MSMED Act, passed by the Govt of India in 2006 is as follows		
Classification	Manufacturing Enterprises	Service Enterprises
Micro	2.5 million/25 lakh	1million/10 lakh
Small	50 million/5 crores	20million/2 crores
Medium	100 million/10 crores	50million/5 crores
Short note on Micro Enterprises, Small Enterprises and Medium Enterprises		
1.Micro Enterprises		
If the amount of investment in the plant and machinery is limited to Rs.25 lakhs irrespective of the location of the unit, it then becomes Micro Enterprise and if it is a service provider, then the investment in equipment should be less than 10 lakhs		
Examples: Laundry, hatching and poultry ,Xeroxing ,garage, dentist, legal services etc.		
2.Small Enterprises		
If the amount of investment in plant and machinery is limited to 5 crores, irrespective of the location of the unit, it then becomes Small Enterprise. If it is a service provider. Then the amount of investment in equipment should less than 2 crores.		
They can be further classified into two categories		
I Traditional Industries II. Modern Industries		
I Traditional Industries		
1.Khadi and Village Industries 2.Handloom Industries 3.Handicrafts 4.Coir 5.Sericulture		
II. Modern Industries		
(i)Small Scale industrial undertaking (ii)EOU(Export Oriented)SSI units Same as definition of Small Enterprise but with an commitment to export 30%of its production (iii)Ancillary industrial unit has to have the following features (a)should be engaged in manufacture of parts, accessories, components, sub-assemblies, tooling’s etc. (b)should supply 50% of the production to other industries (c)In case of service oriented SSI it has to supply 50% of its volumes to other organizations		
3.Medium Enterprises		
If the amount of investment in plant and machinery is limited to Rs.10 crores, irrespective of the location of the unit, it then becomes a Medium Enterprise. If it is a service Provider, then the amount of investment in equipment should be less than 5 crores		

Module – 5 - INSTITUTIONAL SUPPORT :

Institutional support system in Karnataka State

- 1) Karnataka Industrial Areas Development Board (KIADB)**
- 2) Technical Consultancy Services Organization of Karnataka (TECSOK)**
- 3) Karnataka State Finance Corporation (KSFC)**
- 4) Karnataka State Industrial Investment and Development Corporation (KSIIDC)**

Karnataka Industrial Areas Development Board (KIADB)

Came into existence in the year 1996 due to the availability of rich natural resources, wealth of mineral resources, rivers, waterfalls, harbors, forests and moderate climate which contribute to the thriving agricultural sector.

- 1) KIADB is a statutory body which came into existence in 1996 under the Karnataka Industrial Areas Development act with primary objective of promoting and assisting in the rapid growth and development of industries in the industrial areas by means of
- 2) acquiring land and providing well developed well laid out plots of suitable sizes to suit different industries with requisite infrastructure facilities in the form of
- 3) basic facilities which include roads, drainage, water supply and power supply and Amenities which include banks, post-offices, telephone exchanges, fire-stations, police stations, canteens, ESI hospitals, bus-depots, petrol- bunks etc.
- 4) has so far developed 68 industrial areas in almost all taluks of the state
- 5) Land to an extent of about 39,297 acres has already been acquired and 21,987.30 acres of land had been developed in all the districts of the state up to the end of March 31, 1996.
- 6) Developed industrial plots had been allotted to 7,882 units comprising to an extent of 14,356.45 acres in different industrial areas at the end of March 31 1996.

Procedure for the procurement of land

Mode of allotment: application for the allotment of land may be obtained on payment of Rs.54/- from any of the following offices

- (i) The Executive Member KIADB, Bangalore
- (ii) the General Manager District Industries Centre of the concerned district
- (iii) The Zonal Office of KIADB at Mysore, Mangalore, Dharwad, Gulbarga, Bidar, Hassan & Belgaum

Applications duly filled must be accompanied by

- (i) a brief project report
- (ii) details of the constitution of the company
- (iii) provisional registration certificate
- (iv) Earnest Money Deposit (EMD) of Rs.500/- or part thereof subject to a maximum of Rs.10000/-
 - (a) 20% of cost of land in respect of industrial areas in Bangalore and Mangalore
 - (b) 15% of cost of land in respect of industrial areas in Mysore, Belgaum, Hubli and Dharwad
 - (c) 05% of cost of land in respect of industrial areas in all other districts

For allotment of land for small scale industries in all districts other than Bangalore applications have to be submitted to

the General Manager of the concerned District Industries Centre

For allotment of land in Bangalore applications have to be submitted to

the Executive Member, KIADB, No 14/3 II Floor, RPB, Nrupathunga Road, Bangalore

Process of allotment of land by the KIADB on the receipt of applications for districts other than Bangalore

- 1) Discussion about the project will be held in the respective district head quarters along with promoters
- 2) the allotment committee will take a decision on allotment of land to SSI units at the district level

Process of allotment of land by the KIADB on the receipt of applications at Bangalore district

1)the screening committee comprising of of the Executive member, KIADB; Director (small industries service institute) SISI and the chief advisor TECKSOK will discuss the project and make the necessary recommendations to the sub committee

2)the subcommittee in turn will allot the land in the industrial area in Bangalore District

3)as soon as the State Level Single Window Agency clears the location and determines the extent to which the land to be allotted to medium and large scale units the executive member will issue a letter stating the cost of the land allotted by the board payable as follows

I)industrial areas in Bangalore and Dakshina Kannada DISTRICT

(a)20% of the cost of the land along with application

(b)80% of the cost of the land to be paid within six months of the date of issue of the allotment letter

II) industrial areas in Mysore, Hubli and Dharwad district

(a)15% of the cost of the land along with application

b)85% of the cost of the land to be paid within six months of the date of issue of the allotment letter

III) industrial areas located in other districts

(a)05% of the cost of the land along with application

b)95% of the cost of the land to be paid within six months of the date of issue of the allotment letter

Time Schedule

The time schedule prescribed to complete the formalities subsequent to the issue of receipt-cum intimation letter will be as follows

a)For taking the possession of land

One month from the date of issue of the receipt-cum-intimation letter

(b)for the execution of lease-cum-sale agreement

30 days from the date of the receipt of the receipt of the possession certificate

(c)For getting board's approval of blue prints

One month from the date of execution the lease agreement

(d)For commencement of civil engineering works

Three months from the date of approval of blue prints

(e)For the completion of the construction factory buildings

12 months from the date of issue of receipt-cum-intimation letter in respect OF SSI units and 18 months in respect large scale units

(f)For the commencement of production 24 months from the date of taking possession

Other details

1)industry should be started after obtaining the necessary license/clearance/approvals from the concerned authorities such as the Government of India or the State government

2)plans for the proposed factory/buildings can be constructed only after the prior approval of the board

3)the fencing of the compound should be done before the construction of the factory/buildings

With approval of the engineer-in-charge

4) if the land being allotted is not being used in proper use the board reserves the right to renter and take the possession of the whole or part of the land.

5) the leasehold rights of the allotted land can be offered as a security to obtain financial assistance from the government or corporate bodies with the prior permission of the board.

2) Technical Consultancy Services Organization of Karnataka (TECSOK)

About TECSOK

- 1) is a professional, technical, and management consultancy organization promoted by the Government of Karnataka and other state level institutions in 1976
 - 2) is leading investor friendly professional consultancy organization in Karnataka.
 - 3) provides appropriate investment advice, procedural guidance, management, consultancy, mergers and acquisitions, process reengineering studies, IT Related studies detailed feasibility studies and reports
- Provides consultancy services both for starters and existing enterprises

For starters

- 1)TECSOK sharpens project ideas through feasibility studies, project reports, market surveys sourcing o finance and selection of machinery technologies, costing and also providing turnkey assistance
- 2)facilities global exposures, updated technologies, different market strategies, financial restructuring and growth plan to improve the profitability of an industry

For existing industries

- 1)provides an impartial consultant to provide insight on its work
- 2)can identify an incipient sickness in industry and facilitate its turn around
- 3)can provide expertise in rehabilitation of sick industries by availing rehabilitation packages offered by the government

TECSOK also provides

- a)Technical and market appraisal of products
- b)industrial potential surveys
- c)fact-finding and opinion reports
- d)corporate planning
- e)collection and collation of information
- f)impact assessment
- g)evaluation of schemes and programs
- h)asset evaluation
- i)infrastructure development project proposal
- i)event management and publicity campaigns
- k)organizing seminars and workshops

TECSOKS human resources availability, focus on women entrepreneurs, publications and focused consultancy areas

TECSOKS

(i)Human Resource:

- a)Has over 25 well experienced engineers in different disciplines, MBAs, economists, and financial professionals
- b)has business partnerships with reputed national and multinational consultants and outsources expertise for professional synergy

(ii)focus on women entrepreneurs

- (a)activities include conducting training and education programs, exhibitions for promotion of products and services and escort services for women entrepreneurs
- (b) Government of Karnataka's women officers are engaged in women development activities by means of Yashawsini

(iii)publications:

Brings out Kaigarika Vaarte monthly magazine Directory in industries and commerce. also publishes the guide to

entrepreneurs, directory of industries and other information on monthly basis.

Focused Consultancy Areas

(i)Promotion of Agro based Industries:

TECSOK

(a) Has been recognized as a nodal agency by the Ministry of Food Processing Industries, Government of India, for project appraisal to avail grant and loan assistance under the special schemes of the ministry.

(b) Has joined hands with Centre for Professed Foods, a professional institution of international repute, to assist food processing industries.

(ii)Energy management and audit:

(a)has been recognized as a body to undertake energy audit and suggest energy conservation measures.

(b) Undertakes studies and project proposals for availing assistance from the Indian Renewable Energy Development Authority(IRED),New Delhi.

(iii)Environment and ecology:

TECSOK

(a)undertakes assignments relating to environment education, environment impact assessment, environment management plans and pollution control measures

(b)has joined hands with Karnataka Cleaner Production Centre(KCPC),to provide consultancy support in the area of environment

(iv)Human Resource Development:

(a)designs develops and organizes business development programs, management development programs, management development workshops, skill improvement programs and provides in-house training packages.

(b)Undertakes programs related to the empowerment of women and organization of Self-Help Groups (SHGs).

(c)organizes skill up-gradation and entrepreneurship development programs benefiting the underprivileged sections of the society

(d)awareness campaigns and motivation programs also organized in various taluks and districts throughout Karnataka

Other TECSOK activities

1)guidance in project selection and project identification for investment/feasibility and viability reports

2)market survey and market development advice

3)assistance in obtaining statutory and procedural clearances

4)consultancy for agro-based industries a nodal agency of government of India

5) Diagnostic studies and rehabilitation of sick industries.

6)Environment impact assessment(EIA) studies, environment management plan(EMP),and propagation of cleaner production techniques

7)Energy management and audit

8)Valuation of assets for mergers and takeovers

9)infrastructure development project reports

10)port tariff study and retake areas

11)system study and software development

12)Management studies, company formation, corporate plan enterprise restructuring

3)Karnataka State Finance Corporation(KSFC)

1)Established in the March 1959 under the State Financial Corporation Act 1951 for extending the financial assistance to set up tiny small-scale and medium scale industrial units in the state

2) Has decentralized system of working. Each district has a branch office, some districts having more than one branch.

3) Extends financial assistance and hire-purchase assistance for acquisition of machinery equipment/transport vehicles.

4) has a merchant banking department approved by the Security Exchange Board of India(SEBI)

- 5)takes up the management of public issues, underwriting if shares, project report preparation, deferred payment guarantee, syndication of loans, bill discounting and similar tasks
- 6) Fund based activities like subscription to nonconvertible debentures is also considered.

KSFC gives preferences to the projects which are

- Promoted by technician entrepreneurs
- In the small sector
- Located in growth centers and developing areas of the state
- Promoted by entrepreneurs belonging to the weaker sections
- Characterized by high employment potential
- Capable of utilizing local resources
- In tune with declared national priorities

Eligible Concerns for Financial Assistance

Assistance available from KSFC to industrial concerns for those engaged /to be engaged in manufacture, preservation and processing for goods, mining, power generation, transport, industrial estates, hoteliering, research and development of any product or process connected to industry, weigh bridge facilities, power laundries, Photostat / photocopying, providing telex/telecommunication facilities, providing drilling rig facilities, mining equipment, hiring out of heavy material handling equipment, cranes, earthmoving equipment and other similar equipments, hospitals, nursing homes, medical stores, computers, tourism related activities, construction of roads, tissue and floriculture, software development, software technology parks, black board vehicles, office construction, godown and warehouse construction, mobile canteens, commercial complexes, market related activities, training institutes, office automation and so on as defined under the State Financial Corporations Act 1951

Area of operation

KSFC extends loans to industrial concerns established//to be established in the State of Karnataka. Industrial concerns having registered office outside the state can also avail financial assistance provided the place of business is Karnataka and if they agree to shift their offices in Karnataka

Various loan schemes under KSFC

1. Composite loan scheme: This scheme essentially designed to meet the complete financial assistance requirement of rural artisans for acquiring equipments well as for meeting the working capital needs of the project under this scheme, loans up to Rs.50, 000/- at nil margin is available for units at places not exceeding 5lakh out of which Rs.1000/- is embarked for construction of shed/building for the project.

2. Disabled Entrepreneurs Loan Scheme: is essentially designed for rehabilitation of the disabled persons, who intend to establish rural, cottage or small units.100% financial assistance is available without any restrictions or constraints and the maximum loan assistance is Rs.5000/- for acquisition of plant machinery and working capital needs of the unit Visually, aurally and orthopedically challenged persons can take advantage of this loan scheme for setting up their enterprises.

3.Scheduled Caste and Scheduled Tribe Loan Schemes:

This scheme is designed to meet the complete financial requirement of both equipment finance and working capital needs of the scheduled caste and scheduled tribe entrepreneurs for setting up their small/service industry. The maximum loan assistance is Rs.50000/- for meeting the cost of the plant nad machinery and working capital needs of the unit. Assistance is available for the establishment of the units in the State without any population unit.

4. Ex-Service man loan scheme: this scheme is available for ex-servicemen/widows of ex-servicemen to set up small industrial units, acquire transport vehicles, and set up hotel/tourism-related activities for gaining self employment. Maximum loan assistance available Rs.11.25 lakh with ceiling of the project cost of Rs.15 Lakhs.15 percent of the project cost subject to a maximum of Rs.2.25 Lakhs is available as soft capital and the promoter's contribution is only 10%of the project cost.

5. National Equity Fund Scheme: provides equity type of assistance up to Rs.2.50 Lakhs to existing and small entrepreneurs for existing and new projects in the tiny, small-scale, service sector, and for rehabilitation of potentially viable sick units. Ceiling on the project is Rs.10 Lakhs and the promoter's contribution is 10%

of the total project cost.
6.mahila Udyama Nidhi Loan Scheme: is meant for extending financial assistance to first generation women entrepreneurs to set up new SSI units and existing tiny/SSI service units also are eligible for expansion/diversification/modernization costing up to Rs.10 lakhs. The ceiling on the project cost is Rs.10 LAKHS
7. Single Window Loan Scheme: this loan scheme provides assistance to new tiny and small units whose project cost does not exceed 30 lakhs and the total working capital requirement at the normal level of operation is Rs.20 lakhs. Term loan for fixed assets and term loan for working capital is fixed on the basis of debt equity in the ratio of 2:1 for loans above 10 lakhs and 3:1 for loans up to Rs.10 lakhs
8.transport loan scheme: assistance is provided in the form of term loan up to 75 to 80 per cent of the cost of purchase of trucks, tippers, tractors, taxis, three wheelers, LCVS, cars auto rikshaw for transportation of public goods vehicles The applications for acquiring new vehicles only and those owners who have already six vehicles are not considered. black board vehicles such as cars, vans and Omni busses are also financed
9.equipment loan scheme: This scheme for existing SSI/medium-scale sector/units working on profitable lines with a good track record. the assistance is available for acquiring original equipments/capital goods with indigenous and imported for meeting expansion and diversification
10.Diesal generator loan scheme: existing small scale and medium industrial units can avail loans under this scheme for acquiring DG sets for their captive consumption the loans are available under liberal scheme up to 90 % of the cost of the equipment. Assistance is also extended for hiring mobile generators
11. Computer loan scheme: assistance under the scheme is available to SSI units up to a maximum of Rs.5 lakhs for acquiring computers for both production related and office automation purposes. Small hotels, hospitals ,nursing homes, tourism related activities with project cost not exceeding Rs.45 lakhs are eligible for financial assistance
12. Hospitals/Nursing Homes/Medical Store Loan Scheme: Hospitals and nursing homes are eligible for financial assistance up to Rs.240 lakhs for corporate bodies and Rs.120 lakhs for proprietary/partnership concerns/trusts for the establishment/expansion/modernization of their project. the project must be backed by expert services of postgraduate doctors.
13. Electro-medical Equipment Loan Scheme: This scheme extends financial assistance to hospitals/nursing homes/doctors for acquiring electro-medical equipment for diagnosis and treatment. The maximum loan assistance is Rs.240 lakhs for corporate bodies and Rs.120 lakhs for proprietary/partnership concerns
14.modernisation loan scheme: units in tiny, small and medium-scale sector which are in existence and intend to modernize are eligible for financial assistance up to 240 lakhs for corporate bodies and Rs.120 lakhs for proprietary partnership concerns, modernization may include replacement and renovation of plant and machinery or acquisition of balancing equipment for optimum utilization of installed capacity
15. Tourism related activities: tourism related activities such as setting up of restaurants, travel and transport service: tourist service agencies, cultural and convention centers, amusement parks and so are eligible for financial assistance in the form of term loans. Commercial complexes with hotel facilities are also eligible for financial assistance. The maximum loan assistance is Rs.240 lakhs for corpora rate bodies and Rs.120 lakhs for proprietary/partnership concerns

KARNATKA STATE INDUSTRIAL INVESTMENT AND DEVELOPMENT CORPORATION (KSIIDC)

Introduction:

Is a premier State level industrial development corporation established under the companies act in 1964.KSIIDC is wholly owned Government of Karnataka undertaking with share capital and application money of Rs.112.44 crores. It is an ISO 9001 company, recognized by IDBI as Category “A” IDC
KSIIDC has its head office at Bangalore and branch offices at Hubli, Mysore, Mangalore and Gulbarga

Objectives:

the objectives of Karnataka State Industrial Infrastructure Development Corporation are as follows
1)to act as a catalyst promoting industrial growth in the state, especially in the medium and large scale sector by
a)by identifying industrial opportunities
b)providing guidance and advice to prospective entrepreneurs
c)providing necessary financial assistance and other related services to realize these opportunities
2)to act as designated government agency to
a)plan and formulate proposals for industrial infrastructure development projects after assessing the need in different sectors/areas and
b)monitor the specified mega projects during implementation as the nodal agency

Activities

The spectrum of activities undertaken by the KSIIDC spans the following areas

To act as a state level development finance institute

(i)provides a host of products and services, from project conception to post production stage, to new projects as well as for expansion, modernization or diversification of existing companies in the small, medium and large scale sectors, including sectors like health care, hospitals, hotels tourism and so on

As a development finance institute KSIIC offers the following

(i)Normal term loan up to Rs.600 lakh per company
(ii)equipment finance up to Rs.400 lakhs per company
(iii)lease finance up to 300 lakh per company
(iv)corporate loan up to 200 lakh per company
(v)bill discounting up to 200 lakh per company
(vi)nonconvertible debentures upto 500 lakh per company
(vii)bridge loan against subsidy
(viii)rehabilitation loan(need based)
(ix)deferred payment guarantees
(x)letter of credit

The financial services offered by the KSIIC are as follows

(i)Public/rights issue management (ii)investment in public issues(DFI quota)
(iii)bought out deals (iv)Project consultancy/project appraisal
(v)credit syndication (vi)management advisory services
(vii)underwriting of shares (viii)it is a category I merchant banker recognized by SEBI

To perform promotional activities

KSIIDC performs the following industrial promotional activities for growth of industries in the State

To perform developmental activities

KSIIDC is a designated nodal agency of the government to plan and formulate proposals for infrastructure development projects like

(i)Industrial parks/townships
(ii)industrial growth centers
(iii)airport international standard
(iv)minor airports and
(v)seaports

Small Industries Development Bank of India (SIDBI):**Introduction:**

Was set up by Government of India in October 1989 under a special parliament act as a subsidiary of IDBI to ensure larger flow of financial and non-financial assistance

The bank commenced its operations from April 2, 1990 with its head office at Lucknow

Has an outstanding portfolio over 4000 crores with an authorized capital of Rs.250 crores with a provision to increase to 1,000 crores

The important functions of SIDBI are as follows:

- (1) To initiate steps for technological up-gradation and modernization of existing units
- (2) To expand the channels for marketing the products of SSI sector in Domestic and International Markets
- (3) To promote employment oriented industries especially in semi-urban areas to create more employment opportunities and thereby checking migration of people of urban areas.
- (i) The SIDBI's financial assistance is channelized through the existing credit delivery system comprising of State Financial Corporations, State Industrial Development Corporations, Commercial Banks and Regional Rural Banks.
- (ii) Introduced two new finance schemes during 1992-1993
 - (a) Equipment finance scheme: for providing direct finance to existing well-run small scale units Taking up technology up gradation/modernization
 - (b) Venture capital scheme: Exclusively for small scale units with an initial corpus of Rs.10 crores
 - (c) Also provides financial support to National Small Industries Corporation for providing leasing, Hire-purchase and marketing support to the industrial units in the small-scale sector.

Year-wise sanctions and disbursements made by SIDBI since its establishments are given in table as shown below

Year	Sanctions(in crores	Growth Rate%	Disbursements	Growth Rate%
1990-1991	2408.7	-	1838.5	
1991-1992	2846.0	18.2	2027.4	10.3
1992-1993	2908.4	2.2	2145.8	5.8
1993-1994	3354.1	15.3	2671.3	24.5
1994-1995	4699.3	40.1	3385.3	26.7
Cumulative up To end-March 1996	16216.4		12068.2	

Over all Observations for the year 1994-95 as per the table shown above

- 1) Overall assistance sanctioned by SIDBI during the year grew by 40% to Rs.4699 crores
- 2) Disbursements during the year stood at Rs.3385 crores recording a growth of 26.7%
- 3) Cumulative financial assistance sanctioned by SIDBI to Rs.16, 216 crores.
- 4) Cumulative financial assistance disbursed by SIDBI upto to Rs.16, 216 crores.
- 5) Assistance sanctioned to backwards 1994-95 amounted to Rs.657 crores accounting for almost 18% of the total sanctions.
- 6) Disbursements to backward areas amounted to Rs.486 crores amounting to 17.8% of the total assistance disbursed.
- 7) New projects accounted to 67.9% of the total assistance sanctioned, 11.6% for expansion/diversification and 6.2% for modernization and the rest accounted for supplementary services.

Need for institutional support
<p>An enterprise whether be a business or industrial unit requires various resources and facilities. Small scale enterprises find it difficult to have on their own.</p> <p>Finance has been an important source to start and run an enterprise as it facilitates an to procure land, labour, material, machine and so on</p> <p>Finance can be considered as a life blood for an enterprise</p> <p>Recognizing this government through their financial institutions and nationalized banks have come forward the entrepreneurs to provide them funds.</p> <p>The financial is not the only criteria for the industries to flourish and run the enterprise but also should be provided with the minimum level of prior built up infrastructure facilities is needed which may be one of the reasons why the industries have not been developing in the back ward areas.</p> <p>In view of this the various central and the state government institutions have come forward to help small enterprises in this regard by providing them various kinds of supports and facilities</p>
NATIONAL SMALL INDUSTRIES CORPORATION LTD.(NSIC)
<p>The National Small Industries Corporation Ltd.(NSIC) an enterprise under the Union Ministry of Industries, was set up in 1955 to promise, aid to foster the growth of small scale industries in the country NSIC provides, a wide range of services, predominantly promotional in character to small scale industries.</p>
Its main functions are
<p>(i)To provide machinery on hire-purchase scheme to small scale industries</p> <p>(ii)to provide equipment leasing facility</p> <p>(iii)to help in export marketing of the products of small scale industries</p> <p>(iv)to participate in the bulk purchasing programme of the government</p> <p>(v)to develop the prototype of machines and equipments to pass onto small scale industries for commercial production</p> <p>(vi)to distribute basic raw materials among small scale industries through raw material depots</p> <p>(vii)to help in development and up gradation of technology and implementation of modernization program me of small scale industries</p> <p>(viii)to impart training in various industrial trades</p> <p>(ix)to set up small scale industries in other developing countries on turn-key basis</p> <p>(x)to undertake the construction of industrial estates</p>

KARNATAKA STATE SMALL INDUSTRIES DEVELOPMENT CORPORATION(KSSIDC)
Introduction:
<p>The state small industries Development Corporations(SSIDC) were set up in various states under the companies act 1956 as state government undertakings to cater the primary developmental needs of the small, tiny and village industries in the state/union SSIDCs with greater operational flexibility and wider scope of undertaking a variety of activities for the benefit of the small sector</p>
The important functions performed by SSIDCS include
<p>(i)to procure and distribute scare raw materials</p> <p>(ii)to supply machinery on hire purchase system</p> <p>(iii)to provide assistance for marketing of the products of small scale industries</p> <p>(iv)to construct industrial estates/sheds, providing allied infrastructure facilities and their maintenance</p> <p>(v)to extend seed capital assistance on behalf of the state government concerned to provide management assistance to the production units</p>

DISTRICT INDUSTRIES CENTRE (DICs)

Introduction:

The District Industries Centre(DICs) programme was started on May 8,1978 with a view to provide integrated administrative framework at the district level for promotion of small scale industries in rural areas. The DICs are envisaged as a single window with the entrepreneur at the district level. Services and support to small entrepreneurs are provided under a single roof through the DICs. they are implementing the arm of the Central and the State Governments of the various schemes and programmes. registration of the small industries is done at the district industries center. The SEEUY/PMRY for employment generation is also implanted by the DICs

Organizational structure of DICs

Consists of one General Manager, four functional managers and three project managers to provide technical service in the areas relevant to the needs of the districts concerned. Management of the DIC is done by the state governments. The scheme now has been transferred to the states and from the year 1993-894,funds will not be provided by the central government to the states for running the DIC.s

Functions of the DICs

The DICs role is mainly promotional and developmental. To attain this, they have to perform the following main functions

- (i)to conduct industrial potential surveys keeping in view the availability of resources in terms of material and human skill, infrastructure, demand for product, etc.
- (ii)to prepare the action plan to effectively implement the schemes identified
- (iii)to guide entrepreneurs in matters relating to selecting the most appropriate machinery and equipment, sources of supply and procedure for procuring imported machinery, if needed assessing the requirements for raw materials
- (iv)to appraise the worthiness of the various proposals received from entrepreneurs
- (v)to assist the entrepreneurs in marketing their products and asses the possibilities of ancillarisation and export promotion of their products
- (vi)to undertake product development work appropriate to small industries
- (vii)to conduct artisan training programmes
- (viii)to function as the technical arms of DRDA administering IRD and TRYSEM programmes

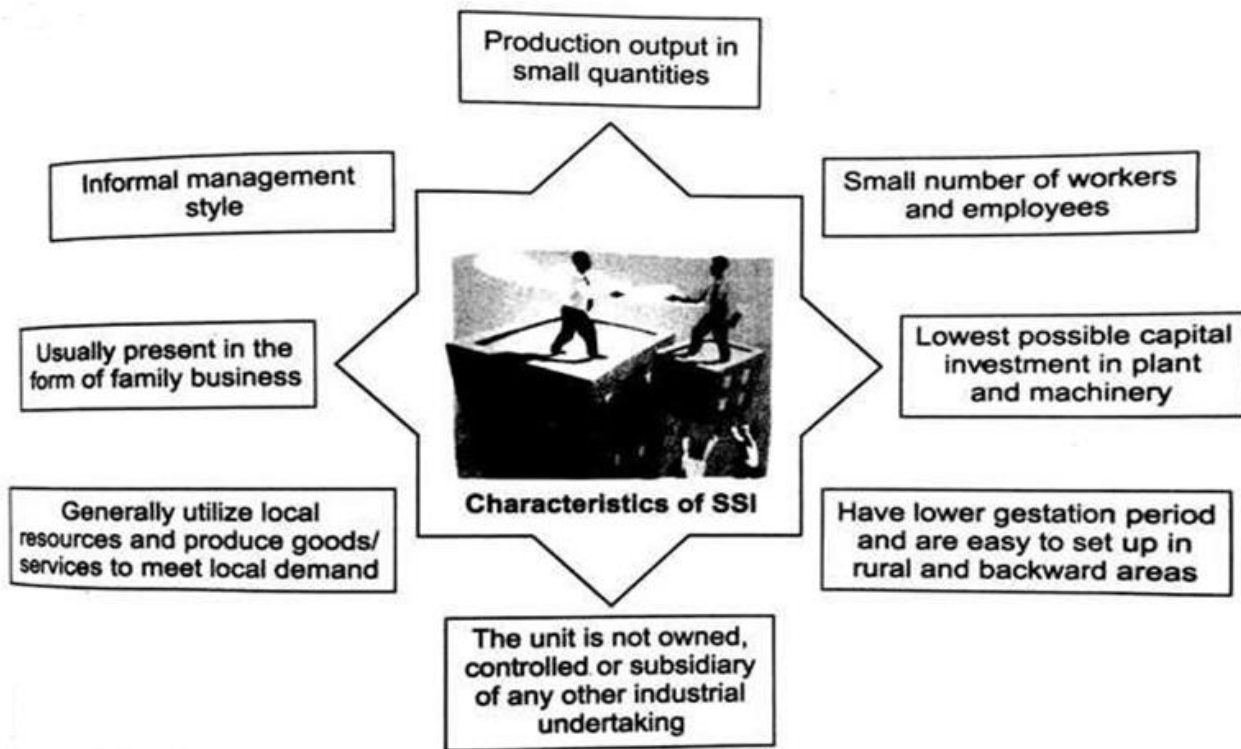
To conclude till March 31, 1988,422 District Industries Centers (DICs) have been set up covering 431 districts of the country leaving out metropolitan cities and some new districts

Module – 5 - Intellectual Property Rights (IPR):
Introduction
Intellectual Property Rights (IPR) can be defined as the rights given to the people over creations of their minds and which can be commercialized. They usually give the creator an exclusive right over the use of his/her creations for a certain period of time. IPR is somewhat similar to other properties that people own-real estate, jewelry, stocks, cars, equipment etc. and therefore can be transferred to other individuals known as assignees Intellectual property(IP) refers to creative output of human beings such as inventions, literary and artistic works, and symbols, names, images, designs, and so on
Important Rights protected under the latest Govt. of India National IPR Policy 2016
1.Patents 2.Copyrights 3.Trademarks 4.Industrial designs 5.Geographical indications of goods 6.Plant varieties and farmers rights 7.Undisclosed information
1.Patents
A patent is an exclusive right granted by law to applicants to make use of and exploit their inventions for a limited period of time (generally 20 years and above).The patent holder has a legal right to exclude others from commercially exploiting his invention for the duration of this period. In return for his exclusive rights, the applicant is obliged to disclose the information to the public who may replicate after the patent period ends. The patent system is designed to balance the interests of the applicants(exclusive rights) and the interests of society(disclosure of invention)
Patentable Invention
According to Patents Act, a patentable invention is a new product or process, and should have the following characteristics
(a)Novelty
The matter disclosed in the application is not published in India or elsewhere before the date of filing of the patent application in India
(b)Inventive Step
The invention should not be obvious to a person skilled in the art in the light of the prior publication/ knowledge/document
(c)Industrial applicable
Invention should possess utility, so that it can be made or used in an industry
Non-patentable Invention
The patent Act also lists inventions which cannot be patented
(i)Frivolous inventions which are contrary to well established natural laws (ii)inventions which are contrary to the public order or morality (iii)inventions which cause serious prejudice to health or human, animal, plant life or to the environment (iv)Method of agriculture or Horticulture (v)Any process for medicinal, surgical ,curative, diagnostic therapeutic or other treatment of human beings (vi)Mathematical method or business method or algorithms or computer programs (vii)Inventions which are Traditional Knowledge or an aggregation or duplication of known properties of traditionally known components (viii)Discovery of a scientific principle or the formulation of an abstract theory(or discovery of any

<p>living thing or non-living substances occurring in nature)</p> <p>(ix)a substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance</p> <p>(x)A mere scheme or rule or method of performing mental act or method of playing game; merely a presentation of information</p> <p>(xii)Topography of integrated circuits</p>
2.Copyrights
<p>Copyright is an exclusive right granted to the author or creator of an original work including the right to copy, distribute and adapt the work. Copyright lasts for a certain time period (generally for 60 years) after which the work is said to enter the public domain. Copyright gives protection for the expression of an idea and not for the idea itself. For example, many authors write textbooks on such topics which are also covered in books by other authors, but each author will have a copyright on the book written by him, provided the book is not a copy of some other book published earlier.</p> <p>Copyright ensures certain minimum safeguards of the rights of the authors over their creations, thereby protecting and rewarding creativity. Creativity being the keystone of progress, no civilized society can afford to ignore the basic requirement of encouraging the same. Economic and social development of a society is dependent on creativity. The protection provided by copyright to the efforts of writers, artists, designers, dramatists, musicians, architects, cinematograph films and computer software, create an atmosphere conducive to creativity. But unfortunately in India, rampant photocopying, privacy and misuse of others intellectual efforts have shifted the creative output which results to the loss of country as a whole</p>
Indian Copyright Act
Indian Copyright Act affords to separate and exclusive copyright protection to the following seven clauses of work
<p>(i) Original Literary Work(ii) Original Dramatic Work(iii) Original Musical Work</p> <p>(iv) Original Artistic Work(v)Cinematography(vi)Sound Recording(vii)Computer Programme</p>
3.Trademarks
Trade Marks are distinctive symbols, signs, logos that help consumers to distinguish between competing goods or services. In other words, a Trademark is a visual symbol which may be a word, signature ,name device label numerals or combination of colors used by one organization on goods or services to distinguish it from other similar goods or services originating from a different company
The key features required for any trademark are that it must be distinctive, and it must be used for commercial purposes.
Types of Trademarks
<p>There are four types of Trademarks</p> <p>(i)Trademark refers to all the logos of the companies abbreviated as TM</p> <p>(ii)Service mark similar to trademark but used only on services</p> <p>(iii)Collective mark Marks used by Cooperatives, Associations ,etc</p> <p>(iv)Certification mark A mark to certify its mark or quality ISI, Wool mark</p>
Functions of Trademark
<p>(a)It identifies the goods or services and its origin</p> <p>(b)It guarantees its unchanged quality</p> <p>(c)It advertises the goods/services</p> <p>(d)It creates an image for the goods/services</p>
4.Industrial Designs
<p>An Industrial Design refers to the features of shape, configuration, pattern, or colors applied to any article, whether in two or three dimensional forms .This may be applied to any industrial process which in the finished article appeals to and judged solely by the eye. Industrial Designs does not include any mode or principle of construction or anything which is mere mechanical device. It also does not include any trademark or artistic work</p> <p>An industrial design registration protects the ornamental or aesthetic aspect of an article. Designs may consist of three dimensional features, such as the shape or surface of an article .Designs may be applied to a wide variety of products of different industries like handicrafts, medical instruments, watches,</p>

jewelry, housewares, electrical appliances etc.
Essential Requirements for registration of a Design
According to the Design Act, 2000 a design should (i) Be new or original (ii) Not to be disclosed to the public prior to the filing date (iii) Be significantly distinguishable from known Designs or combination of known design (iv) Not comprise or contain scandalous or obscene matter (v) Not be a mechanical contrivance (vi) to be applied to an article and should be appealing to the eye (vii) Not be contrary to public order or morality
5. Geographical Indications
Geographical Indication (GI) is a name granted by the state to product, natural or manmade, identifiable with a specific geographical location for the uniqueness of the product. Once a GI has been granted to a product then no similar product made or produced elsewhere can be sold under the Geographical Indication which is valid up to 10 years
For Example, Mysore Silk has a GI tag attached to sarees made by Karnataka Silk Industries Corporation (KSIC). Other examples include Alphonso Mango, Tirupati Laddu, Mathura Peda etc.
6. Plant Varieties and Farmers Rights
The protection of Plant Varieties and Farmers Right Act 2001 has been enacted to facilitate an effective system for protection of plant varieties the rights of farmers and plant breeders and to encourage the development of new varieties of plants. Plant variety represents more precisely defined group of plants selected within a species with a common set of characteristics.
The objectives of the Act are
(i) To recognize and protect the rights of the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties (ii) to protect plant breeders rights to stimulate investment for research and development both in the public and private sector for the development of new plant varieties (iii) to facilitate the growth of seed industry in the country that will ensure the availability of high quality seeds and planting material to the farmers
7. Undisclosed Information
Generally known as Trade Secrets or Confidential information which includes formulae, patterns, compilations, techniques, processes etc. For example Coca-Cola held the process of making their drink a secret for a very long time, the process of making the food etc. it is better to hold processes of making as a trade secret rather than making a patent which lead to violation of IPRs in some countries especially in a country like India

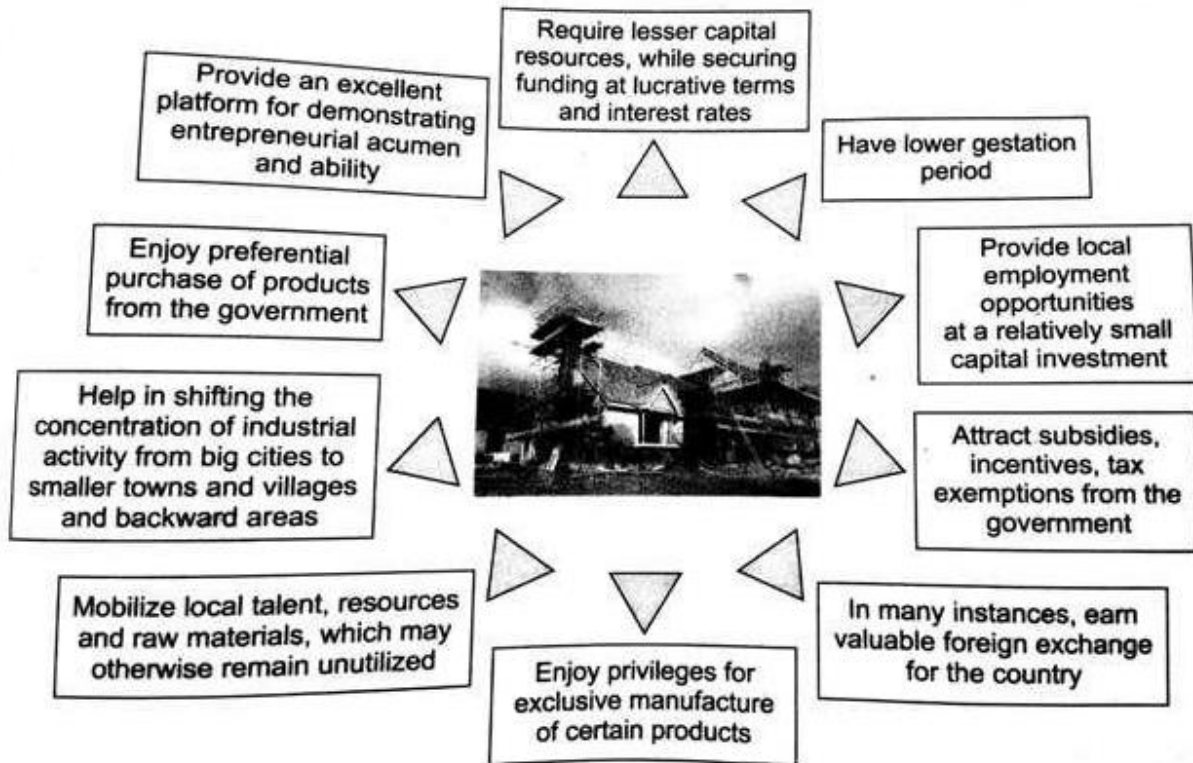
Characteristics of SSI



1. **Production output in small quantities:** By virtue of small planned capacity of SSI enterprises, the production output is small.
2. **Small number of workers and employees:** The small scale of operations in SSI requires small number of workers and employees.
3. **Lowest possible capital investment in plant and machinery:** The investment in fixed assets in plant and machinery whether held on ownership terms, on lease, or on hire basis does not exceed Rs 5 crore (MSME, 2009b).
4. **Have lower gestation period and are easy to set up in rural and background areas:** Gestation period is the time taken to conceptualize and develop the enterprise before its starts generating business. In case of SSI, the gestation period is lower than medium and large enterprise. For this reason, SSI's are easy to set up in rural and backward areas where resources are limited and local market is small.
5. **The unit is not owned, controlled or subsidiary of any other industrial undertaking:** Where two or more industrial undertakings are set up by the same person as a proprietor, each of such industrial undertakings shall be considered to be controlled by the other industrial undertaking or undertakings (MSME, 2009b). In this scenario, all such industrial undertakings would not be considered as SSI's.
6. **Generally utilize local resources and produce goods/services to meet local demand:** The small scale operations in SSI generally require utilization of local resources.
7. **Usually present in the form of family business:** SSI's are usually present in the form of family business not only in India, but also elsewhere in the world.

8. **Informal management style:** Informal management style is prevalent in SSI's, where members of family business, relatives, friends, and outside peoples assume multiple roles as warranted by the small business from time to time.

Advantages of SSI



1. **Requires Lesser capital resources:** By virtue of their small scale of operations, SSI's require lesser capital resources. Central and state governments have created financial institutions to support SSI's and they provide funding to the SSI entrepreneurs at lucrative terms, conditions, and interest rates.
2. **Have Lower gestation period:** Lesser initial capital in SSI's is recovered faster by revenues generated by them, resulting in lower gestation period. This is in contrast to medium and large scale enterprise which have relatively much longer gestation period.
3. **Provide local employment opportunities:** Many of the SSI'S are located in local and background areas with much lower capital investment for purchasing land, buildings, etc. The overall capital requirement is much lesser due to small scale of operations as well.
4. **Attract subsidies from the government:** As we shall study in the section on government policies for SSI, the government takes a very supportive view of SSI's by providing subsidies, incentives, tax exemptions, etc. This makes them have a competitive advantage against their large-scale rival enterprise.
5. **Earn valuable foreign exchange:** Indian handicrafts and khadi garments are very popular in developed nations due to their exclusivity and low price. Similarly there are other unique products manufactured by SSI's, which make them earn valuable foreign exchange for the country.
6. **Enjoy privileges for exclusive manufacturing:** As studied earlier under the section or scope of SSI's, small enterprise are protected by the government by imposing restrictions upon large-scale enterprise in manufacturing items identified for exclusive manufacture by SSI's.

7. **Mobilize local resources:** SSI's utilize the skills and talent of local populations and also use local natural resources and raw materials in most instances. In the lack of SI's, these resources may remain unutilized.
8. **Help in shifting the concentration of industrial activity:** by virtue of having better infrastructure and other facilities, big cities have been successful in attracting huge industrial investments. Government intervention in promoting SSI's in small towns, villages, and background areas has helped in reducing this regional imbalance in industrial activity.
9. **Enjoy preferential purchase of products:** As we shall study under the section on government policy for SSI's, the government has granted preference to purchase of goods manufactured in SSI's compared to their large scale counterparts.
10. **Demonstrate entrepreneurial acumen and ability:** Entrepreneurship helps in restoring the confidence and pride of people having entrepreneurial acumen and talent, particularly the unemployed youth in the country

Step in starting MSE

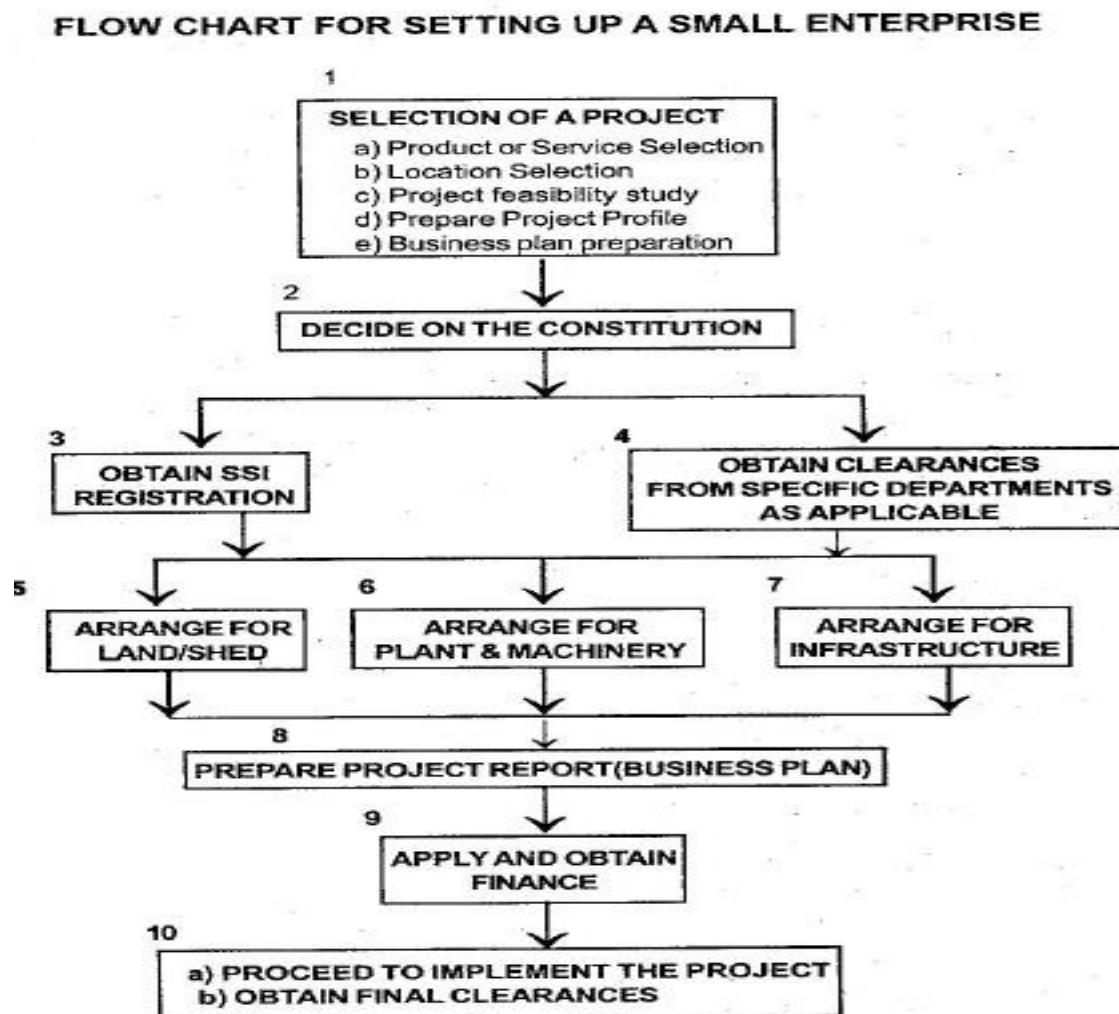


Fig 6.2 Flow Chart for setting up a small enterprises

The Steps are discussed below:

1. **Project Selection:** Entrepreneur is the Most Important person for the Success of a Project. In order to set up a Small Enterprise, the Entrepreneur has to decide or choose a suitable project. The Entrepreneur has also to decide on a suitable location for the project. Based on these selections, a project feasibility study has to be conducted & then a brief project profile has to be prepared for the proposed project. The Project Selection & the Preliminary Activities involve the following:

- a) **Product or Service Selection:** This is the first & most important step in setting up a small enterprise. The further prospects, actions & efforts in setting up the small enterprise & commencing its commercial activities successfully depend on this decision. Therefore, the Entrepreneur has to be very careful in the choice or selection of the Project. The main factors to be considered in deciding a suitable project are as follows:

- 1) Background & Experience of Entrepreneurs
- 2) Availability of the Right Technology & Know – How for the Project.
- 3) Marketability of the Product / Service
- 4) Investment Capacity (i.e., Financial Resources)
- 5) Availability of Plant & Machinery, Indigenous or Imported
- 6) Availability of Raw Materials
- 7) Availability of Proper Infrastructural Facilities i.e. Land/Shed, Power, Water, Communication, Transport etc...
- 8) Availability of right kind of Labor i.e. Skilled, Semi – Skilled & Unskilled

Considering all above aspects & taking the help of Governmental Support Organizations like *TECSOK*, *KIADB*, *KSSIDC* etc & even private consultants, the Entrepreneur has to choose & decide the project for implementation.

- b) **Location Selection:** After deciding on the Project, the next important decision an Entrepreneur has to make is about the Location of the Project. There are a Few factors associated with the same:

- 1) Availability of Raw Materials
- 2) Nearness or Proximity to Market
- 3) Availability of Transformation & Communication Facilities
- 4) Availability of Govt Incentives / Concessions
- 5) Govt Industrial Policy

- 6) Availability of suitable Infrastructural facilities
- 7) Availability of Labor
- 8) Convenience for the Entrepreneur's

c) Project Feasibility Study : The important facets of Project Feasibility Study are as follows :

- 1) Market Analysis is carried out to find out the aggregate demand of the proposed Product / Service & what would be the Market Share of the proposed project.
- 2) Technical Analysis seeks to determine whether the prerequisites for the successful commissioning of the Project have been considered & reasonably good choices have been made with respect to Location, Size, Process & so on.
- 3) Financial Analysis seeks to ascertain whether the proposed project will be financially viable in the sense of being able to meet the burden of Servicing Debt & Satisfy the return on Investment Expectations of the Promoter's.

- 4) *Economic Analysis*: (Social Cost – Benefit Analysis) is concerned judging a Project from the larger, social point of view. In such an evaluation, the focus is on the Social Costs & Benefits of the Project.

d) Project Profile: This gives a Bird's Eye View of the Proposed Project. This may be used for obtaining Provisional Registration Certificate (*PRC*) from the District Industries Centre & for making an Application to *KIADB* for allotment of Land or to *KSSIDC* for allotment of Shed & other Infrastructures.

A *Project Profile* generally contains information about the Project under the Following Heads

- 1) Introduction.
- 2) Promoter(s) Background (Education, Experience).
- 3) Product(s) Service(s) Description (Specification, Uses etc.)
- 4) Market & Marketing.
- 5) Infrastructure needed.
- 6) Plant & Machinery (Description, Capacity, Cost etc.)
- 7) Process Details.
- 8) Raw Materials (Requirements, Specifications, Cost etc.)

- 9) Power, Water & other utilities required.
 - 10) Manpower needed (type of Personnel reqd & salaries / wages)
 - 11) Cost of the Project & means of finance.
 - 12) Cost of Production & Profitability.
- f) *Business Plan Preparation*: This is a Document where the Entrepreneur plans his Business to have an Organized & effective response to a situation which may arise in future. A Business Plan is used to make Crucial Start Up Decisions to reassure Lenders, Investors, to measure Operational Progress; to Test Planning Assumptions ; to Adjust Forecasts; & to set the standard for good Operational Management.

A Workable Business Plan has the following features:

- ☐ Determines where the Company needs to go.
- ☐ Forewarns of possible hurdles along the way.
- ☐ Formulates the responses to contingencies.
- ☐ Keeps the Business on Track to reach its Planned Goals.

3. **Decide on the Constitution :**

To start any Enterprise, the Promoter's have to decide on the Constitution of the

Unit. There are 3 Major Alternatives:

- a) *Proprietary Enterprise*: A Single Individual is the Owner of such an Enterprise. The Proprietor may proceed to obtain PRC from the DIC.
- b) *Partnership Enterprise (Firm)*: This is an Association of Two or more Persons, subject to a Maximum of 20 Persons. They are governed by the Indian Partnership Act, 1932 & rules framed there under the State Govt. It is advisable to have a Partnership Deed Agreement on Stamp Paper of Appropriate Value.
- c) *Company*: This may be a Private or Public Limited Company. A Private Limited Company can be formed with a minimum of 2 Persons & a Maximum of 50 Persons. A Public Limited Company can be formed with a Minimum of 7 Persons & Maximum number of Persons is unlimited. Company is governed by the Companies Act, 1956.

In fact, this has to be decided at the initial stages of the Project & necessary formalities should be completed by the time the application for Provisional Registration Certificate (PRC) is made to DIC (District Industries Centre).

4. **Obtaining SSI Registration :**

Entrepreneurs desiring to start a Small Enterprise have to initially obtain a *PRC* (Provisional Registration Certificate). Once the Unit goes into Production, the *PRC* has to be converted into a Permanent Registration Certificate (*PMT*).

5. **Specific Clearances** :

There are a number of Statutory Clearances required to start Micro & Small Enterprises.

Some of them are given below :

- a) Agricultural Land Conversion into Non – Agricultural Land (NA Conversion).
- b) Building Plan approved by the Local Authorities.
- c) Factories Act & Labor Dept.
- d) Trade License from the Local Authorities.
- e) Pollution Control Board Clearances.
- f) Food Adulteration Act License. Etc..

6. **Land or Shed Selection** : For any Industrial Project, suitable Industrial Site or a ready Industrial shed is reqd. The Promoters of the Unit could consider taking an Industrial Site & constructing a shed as per their requirement, alternatively, could consider taking a ready Industrial Shed on Ownership Basis also.

Whom to approach:

- i. KIADB for Land.
 - ii. KSSIDC for Shed requirement.
 - iii. Alternatively, the Entrepreneur can also approach directly the Jt. Director, DIC in the particular District also for requirement of Land / Shed for the proposed Enterprise.
7. **Plant & Machinery**: This requirement for a Particular Project could be purchased from recognized manufacturers / dealers. This could also be taken on Hire Basis operated by National Small Industries Corporation Limited (*NSIC*). This is a Govt of India promoted Corporation.
8. **Infrastructure Facilities**: For Micro or Small Enterprises the main infrastructure facilities are Land or Shed for the Project, Power Connection, and Water Supply & Telephone & Internet Facility. As said earlier, for Land or Shed , the Entrepreneur can approach either KIADB or KSSIDC as the case may be. For the requirement of Power, an application may be made to the local electricity company in the region. For Telephone connection & Internet facilities, Entrepreneur has to approach BSNL or other operators. District level Single Window Agency (*SWA*) assists the Entrepreneur in getting all the above facilities. Hence, the Entrepreneur can forward an Application on a plain paper to the Jt. Director , District

Industries Centre of the District giving his requirement of various infrastructural facilities for speedy approval & sanction

9. **Project Report**: For any New Project or Enterprise to be set up, Proper Planning is necessary. A detailed Project Report provides such a plan for the Project. The Report is useful to the Entrepreneur for Planning & Implementing the Project. This is essential for Obtaining Finance & other clearances for the Project. In fact, the Project Report gives a detailed insight of the *Techno – Economic Viability of the Project*.
10. **Finance** : Finance for such Projects are under 2 main categories :
 - i. **Term Loan**: For starting a Small Enterprise, Term Loan Finance for the Fixed Assets like Land, Building, Plant & Machinery etc ., can be availed. This Loan can be availed from Karnataka State Financial Corporation (KSFC) & or from the Commercial Banks.
 - ii. **Working Capital Loan**: It is always preferable to approach Commercial banks for Working Capital Loan. All Commercial Banks finance up to 75 % of the Working Capital Loan & the remaining 25 % has to be pooled in by the Promoters.
11. **Implementation of the Project** : The Entrepreneurs will have to take necessary steps to physically implement the Project after obtaining the various Licenses, Clearances, Infrastructural Facilities etc. Following are the Major Activities that the Entrepreneurs have to undertake for implementing the Project.
 - i. *Construct Shed*
 - ii. *Order for Machinery*
 - iii. *Recruit Personnel*
 - iv. *Arrange for Raw Materials*
 - v. *Marketing*
 - vi. *Erection & Commissioning*
 - vii. *Obtain Final Clearances*

Case study

1. Microsoft

No single innovation in recent memory has created more millionaires so quickly than the personal computers. These millions have come not only by the making of personal computer but also from supplying the chips that go into them and from supplying the software that is needed to run them.

Manufacturers such as **Compaq, Dell, Apple** and **HP** who make personal computers.

Suppliers such as **Intel, Cyrix, AMD, Toshiba** and others who supply chips, disk drives, and other components that go into the personal computer.

Complementary innovators such as **Microsoft, IBM, Oracle** etc. who **supply software's**.

Microsoft was founded by **Bill Gates** and **Paul Allen** in **1975**.

Their first successful products were **compilers** for the computer programming languages **BASIC, COBOL**, and **FORTRAN** which programmers used to write software's.

Their **biggest break comes in 1980**, when IBM decided to enter the personal computer market and went to Microsoft for help. They wanted Microsoft to develop the programming languages BASIC, FORTRAN, and COBOL for the upcoming PC and also an operating system.

Microsoft bought an operating system called **Q-DOS (Quick and Dirty Operating System)** from **Seattle Computers, Japan** for \$50,000. And sold it to IBM for \$186,000. But they didn't take entire amount instead they made an **agreement on licencing a product**. Bill Gates knew that good IBM products were usually cloned. So in the contract selling operating system to IBM, Microsoft made sure that IBM had the right to sell its own PCs with the modified Q-DOS in them, but not the right to license DOS to other makers of personal computers. That right belonged to Microsoft.

As it turned out, Microsoft was right. Many firms decided to clone the IBM PC and Microsoft could sell its operating system to them.

Microsoft had one problem: **CP/M-86**. This was a **competing operating system developed by IBM in August 1981** had been offered as an alternative operating system for PC and considered superior in performance through its memory management and other features. But Microsoft was the leading producer of languages such as BASIC, COBOL, and FORTRAN for PCs. These languages ran only on DOS but not on CP/M-86. When it gets an offer

to deliver such languages for CP/M-86, Microsoft Priced them 50% higher than comparable languages running on its DOS. The version of BASIC that Microsoft sold for CP/M-86

which has graphics in it. Since these languages were the major tools that software firms used in the development of applications.

Microsoft went aggressively after firms such as Compaq that wanted to build IBM PC clones. It gave them a 50% discount over the listed price of \$95,000, which was very low for an operating system. But CP/M-86, was already deliverable and had many applications running on it.

With all of this going for Microsoft, its DOS quickly emerged as the standard for personal computer operating system and the major source of its profits. **The PC had so-called character-based interface** where all users could see only numbers and letters. They must communicate with the computer by typing commands, which they have to remember every time.

Macintosh used **(GUI) graphical user interface** with which the, users can see not only characters but pictures, or icons. With the use of something called a mouse, they can click on these self-explanatory icons to invoke programs instead of having to remember the exact file name and typing it correctly.

One reason for Microsoft's commitment to developing the applications programs for the Macintosh was its belief that the future of computing was in GUI, and the earlier it started developing the capabilities to exploit it, the better. They hired **Charles Simonyi** from **Xerox's Palo Alto Research Centre (PARC)**, where **GUI had been invented**.

In January 1984, when Apple introduced the Macintosh, Microsoft offered Multiplan BASIC, and Word 1.0 (a word processing program). **A year later, Microsoft announced Microsoft Excel, a spreadsheet for Macintosh.**

Developing the applications programs for the Macintosh gave Microsoft an opportunity to **understand the GUI technology** and the **relationship between GUI and how applications programs interface with it**. Microsoft used this technology to develop **Microsoft Windows operating system** that is compatible with DOS. Microsoft quickly developed versions of its Microsoft Word and Excel for the PC and popular Microsoft **Windows 95** by using the same GUI technology.

2. N. R. Narayana Murthy & Infosys

Nagavara Ramarao Narayana Murthy better known as **N. R. Narayana Murthy**, is one among the seven founders of **Infosys Technologies, a global consulting and IT services company**. He is currently the **non-executive Chairman and Chief Mentor of Infosys**.

Born into a **Kannada Madhva brahmin family** in **mysore** on **20 August 1946**. Murthy graduated with a degree in **Electrical Engineering** from the **National Institute of Engineering, University of mysore** in **1967** after attending government school, and received his **master's degree** from **IIT Kanpur** in **1969**.

After his studies he worked as a **chief system programmer** on time-sharing system and designed and implemented **BASIC interpreter for ECIL** (Electronics Corporation of India Limited) at **IIM Ahmedabad**.

After IIM Ahmedabad, he joined **Patni computer** systems in **Pune**. He married **Sudha Murthy**, she was an engineer working at Tata Engineering and Locomotive (now known as Tata Motors) in Pune.

In 1981, he founded Infosys with six other software professionals. In its early days Infosys was supported financially by **Karnataka State Industrial Development Corporation (KSIDC)** and **Karnataka State Financial Corporation (KSFC)** which sanctioned Rs.24 lakh for the purchase of computers.

During a lecture delivered by Murthy at the **Stern School of Business**, New York University in 2007. He shared rare insights about the struggles undergone by him and Infosys during the early days:

He shared two incidents of his life

1. When i was a graduate student in Control Theory at **IIT Kanpur in India**. At breakfast on a bright Sunday morning in 1968, i had a chance encounter with a famous computer scientist on **sabbatical** (A period of paid leave granted to a university teacher for study or travel) from a well-known US university. He was discussing exciting new developments in the field of computer science with a large group of students and how such developments would alter future. I was inspired by his talk and went straight from breakfast to the library and read four to five papers he had suggested and left the library with determined to study computer science. **This is how one role model can alter for the better future of a young students**. This experience taught me that **valuable advice can sometimes come from an unexpected source**, and can sometimes **open new doors**.
2. The next incident happened in **1974 at Nis a border town between Serbia and Bulgaria**, I was way back to my home town Mysore. I was hitchhiking (taking lift from passing vehicles) by the time a kind driver dropped me at Nis railway station at 9pm on a Saturday night, the restaurants was closed. I could not eat because i had no local money. I slept on the railway station till the train comes. Finally the **Sofia Express** arrives. The only passengers in my compartment were a girl and a boy. I struck a conversation in French with young girl. She talked painful story of the people those who are living in Bulgaria. Suddenly some local police enters into the compartment they were summoned by the young man, who thought we were criticizing the communist government of Bulgaria. The girl was led away, my bag was confiscated and I was dragged into a small 8 X 8 foot room with a cold stone floor, I was held in that bitterly cold

room without food or water for over 72 hours. I had lost all hope of ever seeing the outside world again, when the door opened. I was again dragged out and told I would be released 20 hours later upon reaching Istanbul.

The guard's final words still ring in my ears "You are from a friendly country called India and that is why we are letting you go!", These incidents led me to start Infosys in 1981.

On a chilly **Saturday morning in winter 1990**, five of the seven founders of Infosys met in Infosys office in Bangalore. They decided to **sell Infosys for \$1 million**. After 9 years of business in India we were quite happy at the prospect of seeing at least some money. I let my younger colleagues talk about their future plans and the journey they had undergone. Finally, it was my turn. I spoke about our journey from a small Mumbai apartment in 1981 to this level. If still you want to sell I am ready to buy the company (though I did not have a cent in my pocket). There was a stunned silence in the room. I also remained silent, however after an hour of my arguments, my colleagues changed their minds to my way of thinking. I urged them that if we wanted to create a great company, we should be optimistic and confident.

In the seventeen years since that day Infosys has grown to revenues in excess of \$3.0 billion, a net income of more than \$800 million and a market capitalization of more than \$ 28 billion, **28,000 times richer than the offer of \$1 million on that day**. In the process Infosys has created more than 70,000 well-paying jobs, 2,000-plus dollar-millionaires.

3. Captain G. R. Gopinath (Deccan Airline)

Captain Gorur R. Gopinath, founder of India's **first budget airline** called **Air Deccan**. As a child, Gopinath often used to go barefoot to his school in his village Gorur, Karnataka, where his father was a school teacher. The young Gopinath **joined Indian Armed Forces** and rose to the rank of **Captain** within the eight years of service. Later he decided to quit and return to his native place for becoming a **farming entrepreneur**. During late 1970s, he landed at a place called **javgal**, a couple of miles from Gorur, his ancestral village. All of 27, having just left the Indian Army, all he had with him was a tent, some utensils and stretch of barren land that his family had inherited as government compensation.

When he returned home, his mind was afresh with memories of his village where he was born and attended school, where his father was a teacher, where he played bare-foot in the paddy fields and swim in the river hemavati. But now, he found it was in crisis, a dam had been built that flooded the ancestral lands. The government paid compensation in the form of a patch of land, which every villager decided to sell. But Gopinath decided to do farming in that land which was unfit for cultivation.

As an army man, Gopi had seen the life in tough places and wanted to start afresh. He knew it would be a tough journey, but when he saw the land allotted to his family with shrubs all around, it justified his presence there. After an ineffective start at farming, he set up a **gobar gas plant, bought cows for milk and manure**. Then he started **silk worm farming**.

At every step, life teaches you something. As Gopi was still learning to farm, he had a thousand thirsty coconut trees. In the dry season, as there was no electricity, he carried water to the trees by hand, one pail on each side. Then one day he saw a **dhobi's donkey carrying the entire load**. He started dreaming of donkeys. He struck a deal (four donkeys for Rs 65 each per day) and got his money's worth. Every morning, villagers gathered at his farm to see the "mad farmer".

Today, Gopi's farm is like a heaven it has verity of trees, Tall palm and coconut trees grace the area, there are birds, bees, insects, cobras etc.

At some point, Gopi moved Bangalore for his children's education. He meet his old friend from the army and together they realized that there was nobody at that time who was offering **customer-dedicated helicopter services**. The idea took shape and he launched **Deccan Aviation**, his helicopter business. The helicopter service grew and become **Air Deccan**. **He wanted to make every Indian fly at least once**. Thus, Air Deccan was formed as a unit of Deccan Aviation and began its operations in **August 2003**.

India has around 400 airports that were not connected through any flights at all before Air Deccan began operations. The cost of leasing or purchasing planes is the same for

everyone, fuel costs are the same for everyone, and airport landing fees the same, how was Air Deccan able to offer such low-cost tariffs? Simple, by cutting out all the frills. On Air Deccan flights, even water wasn't free. The **exterior of the plane had been sold** to the likes of **Sun Microsystems and NDTV** (as an advertising hoarding) and the **interiors** to the likes of **Chevrolet Tavera** for in-flight promotion.

Air Deccan **created history during august 2004** by flying passengers to Delhi from Bangalore for a fare of only Rs. 500. The budget airline has a capacity of 180 seats, in that 75 percent of the seats offered at rates ranging between Rs 500 and Rs 5,000 and the remaining 25 percent at around Rs 7,500, which was 25 percent less than the normal fare of Rs 10,500 on any other airline. The new fare system devised by the airline was called **Dynafares**. Passengers must book their tickets **90 days in advance** of the date of flight for availing an offer.

In June 2005, Air Deccan introduced **dirty cheap Re 1 scheme**. The logic behind offering 2-3 seats per flight was that it is better to provide seats at dirt-cheap rates, rather than flying with unoccupied seats. The idea behind is to promote sales of tickets.

During June 2006, Air Deccan created another aviation history. It overtook the national carrier Indian (earlier known as Indian Airlines) to become the second-largest domestic airline in the country.

On 1st June 2007 UB group (Vijay Mallya) spent Rs 550 crore for acquiring this stake and Air Deccan later came to be known as **Kingfisher Red**.

In the April 2009 General Elections, Gopinath decided to contest for the Lok Sabha from the Bangalore South Parliamentary Constituency.