

# ACCOUNTING AND FINANCIAL PRACTICES OF SMALL SCALE INDUSTRY

(A Study Of Selected Units From Goa)

*Thesis submitted to the*  
**GOA UNIVERSITY, GOA**

*for the award of degree of*

## DOCTOR OF PHILOSOPHY



*in*

**COMMERCE**

*by*

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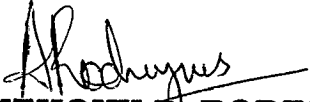
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## **DECLARATION**

I, Anthony P. Rodrigues, hereby declare that this thesis for Ph.D. Degree in Commerce titled "**Accounting and Financial Practices of Small Scale Industry (A Study of Selected Units from Goa)**", is a bonafide record of independent research work done by me under the guidance and supervision of Dr. B. Ramesh, Professor and Head, Department of Commerce, Goa University. I also declare that this thesis or part thereof, has not previously formed the basis for award for any Degree, Diploma, Associateship, Fellowship or any other similar title.

  
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Place: Goa

Date: 23/12/2002

# **CERTIFICATE**

*I hereby certify that this thesis for Ph.D. Degree in Commerce titled “**Accounting and Financial Practices of Small Scale Industry (A Study of selected Units from Goa)**” is a bonafide record of independent research work done by Anthony P. Rodrigues, Research Scholar, Department of Commerce, Goa University under my guidance and supervision. I also certify that this thesis or part thereof, has not previously formed the basis for award for any Degree, Diploma, Associateship, Fellowship or any other similar title.*



  
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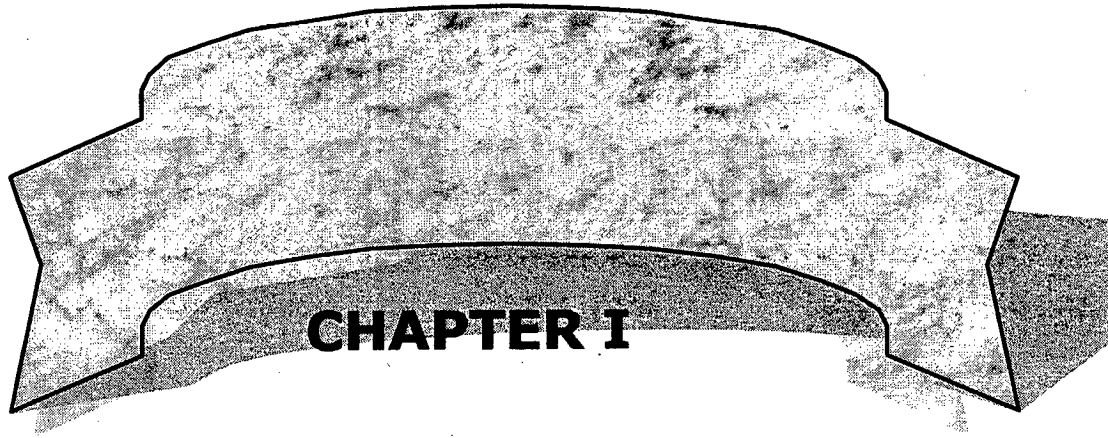


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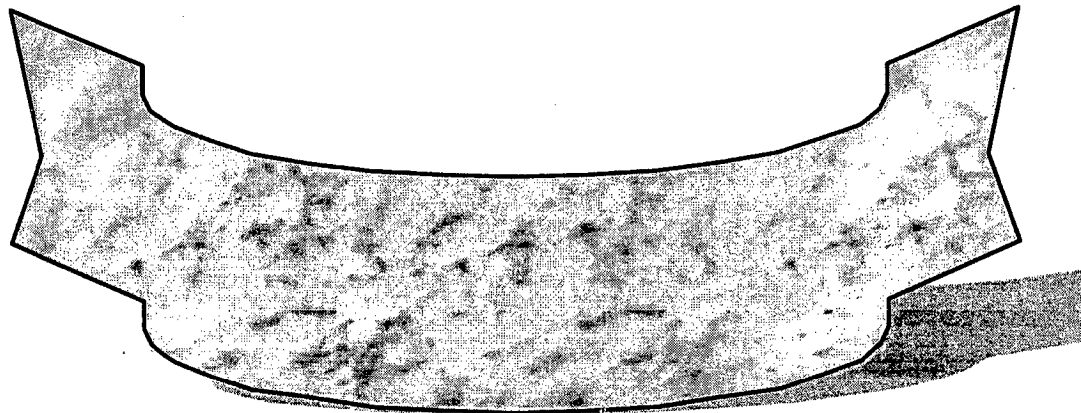
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## **CHAPTER I**

# ***INTRODUCTION***



## CHAPTER - I

### INTRODUCTION

Small Scale Industrial sector plays a predominant role in Indian economy in terms of employment, production and export potentials. It has recorded a high rate of growth since Independence inspite of a stiff competition from the large scale sector. Prior to Independence the Small Scale Industry (SSI) in India occupied almost insignificant place in the national economy. The small scale industry was commonly known as a cottage Industry, which were located in rural areas. The Central Government began to take an active interest in the development of Small Scale Industry from 1947 onwards.

The SSI Sector which plays a pivotal role in the Indian economy in terms of employment and growth mainly due a to small capital layout and provides better employment as compared to the large scale sector. It does not require highly sophisticated technology. It can therefore, be used successfully in backward areas where the people have yet to be trained to meet the challenge of sophisticated technology. It helps to solve the problem of over crowding of cities due to decentralisation and the dispersal of industrial activities. It utilises the resources which otherwise would remain unused, employment generation solved the problem of surplus manpower in non-agricultural jobs, generation of foreign

exchange, diversification of industrial structure, entrepreneurial development, regional development and industrial dispersal.

India is confronted with several problems relating to capital, technology disparities as the Small Scale Industry required less capital with low gestation period having high potential for employment generation and its importance in realising socio-economic objective cannot be undermined. Thus the socio-economic justice could be achieved through the establishment of Small Scale Industrial units. Ultimately, the SSI units will improve the standard of living of the people in the country.

SSI sector stands on priority as an instrument of industrialisation. Although large and medium scale industries generate sizable employment, they require huge capital compared to SSI. In SSI even the skilled, marginally skilled and unskilled workers could be employed effectively.

Over the years, SSI sector in India has emerged as a dynamic and vibrant partner in the process of development by consistently recording higher levels of growth as compared to overall industrial growth. It is important to note that the sector has demonstrated its strength through the years. The process of liberalisation and emerging World Trade Organisation (WTO) regime have thrown open new challenges particularly for the SSI sector.

The process opens up opportunities to expand and grow for some, while for others this poses a threat in order to turn threats into

opportunities and achieve self generating expansion. The policies need to be growth oriented enabling SSI's to face the competition.

The Small Scale Industry sector as an important segment of the Indian economy, accounts for around 95 percent of the Industrial units, 40 percent of the manufacturing sector output, 36 percent of exports and provides direct employment to 18 million people in around 3.2 million registered SSI units in the country. The sector enjoys the pride of being second largest employer in the country and offers a wide spectrum of products. The sector serves as a greenfield for the nurturing of entrepreneurial talent enabling the small scale units to graduate into medium scale. Therefore, the SSI sector has been receiving attention from the policy makers by way of support and incentives, infrastructural facilities, technology, marketing and other similar measures.

## **1.1 CONCEPT AND DEFINITION OF SMALL SCALE INDUSTRY**

**JANUARY 6, 1955**

A unit employing less than 50 persons if using power and less than 100 persons without the use of power, and with capital assets not exceeding Rs. 5 lakhs.

**MARCH 18, 1959**

Undertakings which employ per shift less than 50 persons when using power and less than 100 persons when not using power.

**JANUARY 4, 1960**

A Small Scale Industries include all industrial units with capital investment of not more than Rs. 5 lakhs, irrespective of the number of persons employed (capital investment includes land, building machinery and equipment).

**OCTOBER 31, 1966**

**(A) Small Scale Industries** - Small Scale Industries include all industrial units with capital investment not more than Rs.7.5 lakhs irrespective of the number of persons employed. Investment in plant and machinery only is considered for this purpose.

**(B)** A unit which produces parts, components, sub-assemblies and tooling for supply against known or anticipated demand of one or more large units, manufacturing/assembling complete products and which is not a subsidiary to or controlled by any large unit in regard to the negotiation of contracts for the supply of its goods to any large unit. This shall not, however preclude an ancillary unit from entering into an agreement with a large unit giving it the first option to take formers output.



**MAY 1, 1974**

(A) **A Small Scale Industries** - An undertakings having investment in fixed assets in plant and machinery not exceeding Rs.10 lakhs.

(B) Undertakings having an investment in fixed assets in plant and machinery not exceeding Rs. 15 lakhs and engaged in

(a) the manufacture of parts, components, sub-assemblers tooling or intermediates or

(b) the rendering of services and supplying or rendering or proposing to supply or render 50 percent of their production of the total services, as the case may be, to other units for the production of other articles. Provided that no such undertaking shall be a subsidiary of, or owned or controlled by any other undertaking

**DECEMBER 23, 1977**

All Industries with a capital investment of Rs. 1 lakh in plant and machinery and located in rural areas and small towns where population did not exceed 50,000 as per the 1971 census.

**JULY 23, 1980**

(A) **Small Scale Industries** - The limit of investment in fixed assets in plant and machinery has been raised from Rs. 15 lakhs to Rs.20 lakhs.

(B) **Ancillary Industries** - The limit of investment in fixed assets in plant and machinery has been raised from Rs. 15 lakhs to Rs.25 lakhs.

(C) **Tiny Industries** - The limit of investment in fixed asset in plant and machinery has been raised from Rs. 1 lakh to Rs. 2 lakhs.

### **MARCH 1985**

(A) **Small Scale Industries** - The limit of investment in fixed assets in plant and machinery has been raised from Rs. 20 lakhs to Rs. 35 lakhs.

(B) **Ancillary Industries** - The limit of investment in fixed assets in plant and machinery has been raised from Rs. 25 lakhs to Rs. 45 lakhs.

(C) **Tiny Industries** - The limit of investment in fixed assets in plant and machinery upto Rs. 2 lakhs.

### **JULY 24, 1991**

(A) **Small Scale Industries** - The limit of investment in fixed assets in plant and machinery has been raised from Rs 35 lakhs to Rs. 60 lakhs.

(B) **Ancillary and export oriented units** - The limit of investment in fixed assets in plant and machinery has been raised from Rs. 45 lakhs to Rs. 75 lakhs.

(C) **Tiny Industries** - The limit of investment in fixed assets in plant and machinery has been raised from Rs.2 lakhs to Rs. 5 lakhs irrespective of location of the unit.

### **JULY 1996**

**Small Scale Industrial units** - Small scale sector has been defined in terms of limit in investment in plant and machinery (original value). The present definition is as under

(A) Small Scale Industries (SSI)

Limit : Rs. 300lakhs

(B) Ancillary Industries undertaking

Limit : Rs. 300 lakhs.

(C) Export oriented units (EOU)

Limit : Rs. 300 lakhs

(D) Tiny Enterprises

Limit : Rs. 25 lakhs

(E) Small Scale Service and Business Enterprises (SSSBE)

Limit : Rs. 25 lakhs.

### **DECEMBER 24, 1999**

A unit having investment in plant and machinery upto Rs. 10 million is defined as an SSI unit, from an earlier limit of Rs. 30 million which was raised from Rs. 6 million with effect from December 10, 1997 is Rs. 10 million.

**Tiny Units** : is defined in terms of investment in plant and machinery and the present upper ceiling for this purpose is Rs. 2.5 million with the subsequent revisions in 1980, 1991, 1997. The ceiling in the value of plant and machinery for Tiny units was raised to Rs. 2.5 million.

## **1.2 GLOBAL VIEW OF SMALL SCALE INDUSTRY**

**United States of America** : In the United States of America, the manufacturing firm is officially a small business for Government procurement purposes, if it is not dominant in its field of operations and if it has less than 500 employees, or if it is certified as small by the small business administration purposes less than 250 employees, depending on the size and the standard set for different industries.

**United Kingdom** : Units employing less than 500 workers are generally referred to as small units in books and treaties on industrial subjects but it has no universal applicability.

**China** : Small Scale Industry is defined based on product Group, investment ceiling 30 million yen (US\$ 8 million). The definition of small Industry less quantified and vary with the product.

**Scandinavian Countries (Germany, Sweden, Norway and Denmark)** : There is no official definition of a small industry. Units employing upto 300 workers are considered to be a

small, and units which employ 10 to 100 workers are taken to be a small scale units.

**JAPAN :** Small Industries is meant those relatively small in the scale of management and capital investment, although the basis for classification varies according to the type of industry and cannot be generalised. The Government applies the term to those industries which employ less than 300 million yens (US\$ 133000) and the commercial and professional Services sector with a capital of less than 10 million yens (US\$26000) employing less than 50 persons.

**TAIWAN :** In a manufacturing and processing sector any business employing less than 100 persons or with assets worth \$ percent million is a small industry.

**KOREA :** In manufacturing with more than 5 and less than 200 employees employed or with total assets of less than 50 million won and in mining with more than 5 employees and less than 300 employees or with assets of less than 50 million won (275 won = 1 US Dollar).

**ITALY :** Units having a capital investment of not more than 1500 million lira and employing not more than 500 workers are considered to be small industries.

### **1.3 HISTORY OF THE DEVELOPMENT OF SMALL SCALE SECTOR IN INDIA**

In India, the small sector is a free sector, where the entrepreneur is not required to obtain the prior approval of the Government of India for setting up an enterprise in any manufacturing line of his choice. Each state has got his own policy for the development of Small Scale Industry.

In the first five year plan which came into existence in 1951 till 1956 an amount of Rs.43 crores (2.2 percent of the total plan outlay and 43.9 percent of the total industry outlay) was allocated exclusively for the development of small scale industrial sector inclusive of village industries. Out of the allocated amount Rs. 30 crores (69.8 percent of the allocated amount) was spent on village and small scale industries.

In the second five year plan (1956-61) stressed the need for a co-ordinated policy based on close collaboration between the Reserve Bank and Central co-operative Banks. An amount of Rs.180 crores (3.9 percent of the total plan outlay and 16.1 percent of the total industry outlay) was allocated for the development of SSI. Out of this amount a provision of Rs. 20 crores was made for setting of 'Industrial Estate' with a view to provide conditions favourable to working efficiency, maintenance of standard production. The actual expenditure incurred during this period was Rs. 175 crores (97.2 percent) of the allocated amount on village and SSI development.

Programmes for development in the third five year plan (1961-66) included expansion of existing schemes and in addition to increasing, diversifying production and secure integration between small scale and large scale units over a wide range of industries and the development of small industries as ancillaries. A provision of Rs. 264 crores (3.1 percent of the total plan outlay) and 13.2 percent of the industrial outlays in the third five year plan and Rs. 240 crores (90.9 percent of the allocated amount) was spent for the growth of this sector where as Rs.126 crores (87.5 percent) of the allocated amount was spent out of Rs. 144 crores proposed for three annual plans was 2.1 percent of the total plan outlay and 8.7 percent of the industrial outlay.

**The Fourth Five Year Plan (1969-74)** aims at the fuller utilisation of the capacity already established, intensive development of selected industries including ancillaries and industrial cooperatives, promotion of industries in semi-urban, rural and backward areas. An amount of Rs. 293 crores (1.8 percent of the total plan outlay and 9.3 percent of the total industry outlay) was earmarked for the growth of village and Small Scale Industries and Rs. 251 crores (87.7 percent of the allocated amount) was spent on this sector.

The broad strategy proposed to be followed in the fifth five year plan was to entrail a considerable enlargement of the development programmes for providing assistance and facilities in

various forms to these industries. An amount of Rs.510 crores (1.3 percent of the total plan outlay and 5.2 percent of the total industrial outlay) for the development of village and Small Scale Industries. But out of this only Rs.387 crores (75.9 percent) of the allocated amount) was spent on this sector. During the annual plan 1979-80, 75 percent of the amount allocated (Rs. 192 crores out of Rs.256 crores) was spent which stood at 2.1 percent of the plan outlay and 9.7 of the industrial outlay respectively.

**In the Sixth Five Year Plan (1980-85)** Rs. 1780 crores (1.4 percent of the total outlay and 11.9 percent of the industrial outlay) was earmarked for the growth of village and Small Scale Industry sector and expenditure of Rs. 1410 crores i.e. 79.2 percent of the total amount allocated was incurred on this sector.

**In the seventh five year plan (1985-90)** an amount of Rs. 2752 crores (1.5 percent of the total outlay and 12.3 percent of the industrial outlay) was allocated to Village & Small Scale Industry sector. In terms of production, the modern sector had a growth rate of 12.4 per cent as against the traditional sector showing a growth rate of 9.9 per cent in employment as against the traditional sector growth rate of 3.2 percent. The modern SSI showed a growth rate of 6 percent per annum.

**The Eight Plan (1996-97)** allocated a sum of Rs.6334 crores, 11.15 percent of the total public outlay for the development of village & SSI. However, the actual expenditure was Rs. 7094 crores



i.e. 1.4 percent of the total outlay. In employment is concerned, the village and Small Scale Industries were able to provide employment to 575 lakhs persons in 1996-97. Out of this, the modern SSI sector provided employment to 228 lakhs person (1.e. 40 percent of the total) and traditional sector to 347 lakh persons (60 percent of the total). A praiseworthy achievement of the village and small industries is their contribution to exports to the tune of Rs. 52230 crores in 1996-97 i.e. 44 percent of the total export.

This proves that Village and Small Scale Industries are very important in our effort to globalise the Indian economy.

**Ninth plan mentions (2001-02)** that non reserved areas have been higher than the reserved categories which is a proof of their inherent strength and resilience of small scale sector. As per the recommendation of **Abid Hussein Committee**, the Government has enhanced the investment from Rs.60 lakhs to 3 crores for Small Scale Industry and from 5 lakhs to 25 lakhs for the tiny enterprises. Government started setting up specialised branches of Banks exclusively meant for providing credit to SSI. The major problems faced by SSI sectors are (i) inadequate flow of credit; (ii) use of obsolete technology, machine and equipment; (iii) poor quality standards; and (iv) inadequate infrastructural facilities.

Regarding employment, total employment in the SSI sector will increase from 57.5 million to 66.6 million indicating an additional employment generation of the order of 9.1 million, out of

this modern sector contribution will be 3.6 million and that of the traditional sector by 5.5 million. Over all the growth of employment will be of the order of 3.0 percent per annum which is higher than the rate of growth in any other sector of the economy in the ninth plan. The exports of SSI sector expected by 2001-02 of the order of 104000 crores, the share of the modern sector will be Rs.86950 crores i.e. 83.6 percent.

It is obvious from the above analysis that small scale industries represent a very dynamic sector of the Indian economy and deserve all help, protection and encouragement.

### **1.3.1 SMALL SCALE INDUSTRIES IN THE PLANS AND POLICIES**

Small Scale Industry has formed an integral part of the programmes of development during the five year plans. The growth of modern small scale industries in India has been regarded as one of the significant features of planned economic development. Both the central and the state governments of India have taken several measures to encourage small scale sector after evaluating its importance. In fact, the increasing allocation made in successive plans, cheap credit on priority basis, tax benefits, subsidies, concessions in import of raw materials and machineries, reservation of several items for exclusive production etc. reflect the promotional and protectionist policies adopted by the government towards the development of this sector.

## **INDUSTRIAL POLICIES**

According to the Industrial Policy 1948, cottage and small industries have got a very important role in the national economy offering scope for individual village or co-operative enterprises and means for rehabilitation of displaced persons according to this policy the health, expansion of cottage depend on a number of factors such as provision of raw materials, cheap power, technical advice organised marketing of their products and education in the use of best available techniques.

### **Industrial Policy 1956**

In this policy an attempt was made to rephase Industrial Policy in the light of changes that had taken place in the intermediate period of eight years the state would constantly endeavour to support these industries by restricting volume of production in the large sector by differential taxation, direct subsidies and reservation of spheres of production.

### **Industrial Policy 1977**

This policy had given emphasis on effective promotion of small and cottage industries widely dispersed in rural and small towns. Also defined small scale industries as industrial units with an investment upto Rs.10 lakhs in case of ancillaries with an investment infixed capital upto Rs.15 lakhs. The promotional measures suggested include the list of items reserved for this category was expanded from 180 items to 807 items in May 1978, a

district industries centre was set up to provide services like credit facilities etc.

### **Industrial Policy 1980**

The policy emphasised mainly on the broad socio-economic objectives. The limit of investment for small scale units and ancillaries was enhanced from 20 lakhs and Rs. 25 lakhs to Rs. 35 lakhs and Rs.45 lakhs respectively but the number of items reserved for the small scale sector was reduced by deservng 200 items.

### **Industrial Policy 1990**

As per this policy, small scale industries have been defined as undertakings having an investment in fixed asset in plant and machinery not exceeding Rs. 60 lakhs. In case of ancillary industries, the limit of investment in fixed asset in plant and machinery has been increased to Rs.75 lakhs and the investment ceiling for tiny units has been fixed at Rs. 5 lakhs and Rs.2 lakhs for small service establishment.

The primary objectives of the small scale industrial policy measures for promoting and strengthening small, tiny and village industries particularly in terms of growth of output, employment and exports. The sector has been substantially delicensed further efforts would be made to deregulate and debureaucratise the sector

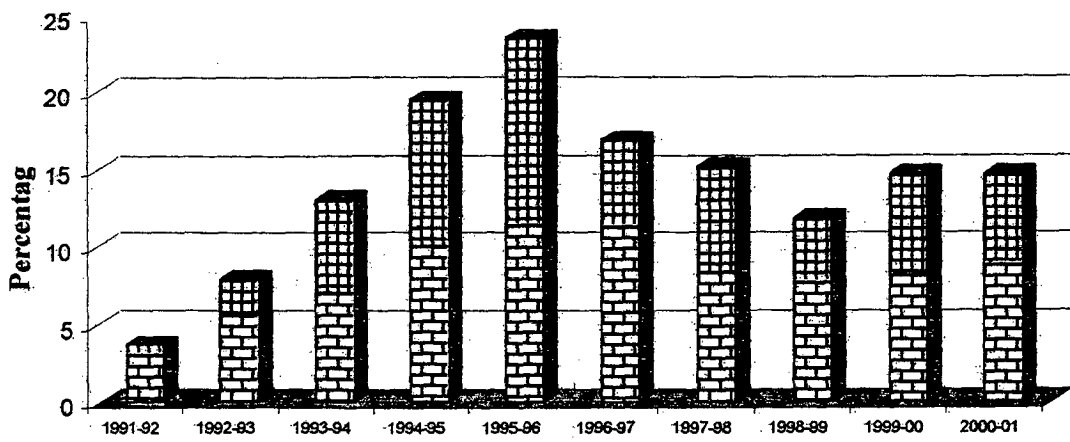
TABLE 1.1

The Growth of SSI Sector in India (Percentage)

Year	SSI Sector	Industrial Sector
1991 - 1992	3.10	0.60
1992 - 1993	5.60	2.30
1993 - 1994	7.10	6.00
1994 - 1995	10.10	9.40
1995 - 1996	11.40	12.10
1996 - 1997	11.32	5.60
1997 - 1998	8.43	6.70
1998 - 1999	7.70	4.10
1999 - 2000	8.16	6.50
2000 - 2001	8.90	5.77

Source: Laghu Udyog Samachar, January - March 2001.

The Growth of SSI Sector in India



SSI Sector

Industrial Sector

Chart 1.1

TABLE 1.2

Overall performance of Small Scale Industry

Year	No. of units in million	Production (Rs. Crores)		Employment (in millions)	Export (US\$ in bn at current price)
		(at current price)	(at constant price)		
1993 - 1994	2.39	241648	241648	13.94	8.07
	(6.22)	(15.46)	(7.10)	(3.95)	
1994 - 1995	2.57	298886	266054	14.66	9.26
	(7.53)	(23.69)	(10.10)	(5.16)	(14.75)
1995 - 1996	2.66	362656	296385	15.26	10.90
	(3.50)	(21.34)	(11.40)	(4.09)	(17.71)
1996 - 1997	2.80	411858	329935	16.00	11.06
	(5.26)	(13.57)	(11.32)	(4.85)	(1.47)
1997 - 1998	2.94	462641	357749	16.72	11.96
	(5.00)	(12.33)	(8.43)	(4.50)	(8.14)
1998 - 1999	3.08	520650	385296	17.16	11.64
	(4.76)	(12.54)	(7.70)	(2.63)	(-2.68)
1999 - 2000	3.21	572887	416736	17.85	12.51
	(4.22)	(10.03)	(8.16)	(4.02)	(7.47)
2000 - 2001	3.37	645496	450450	18.56	13.13
	(4.98)	(12.67)	(8.09)	(3.98)	(4.96)

Source: Laghu Udyog Samachar, January - March 2002.

Note : Figures in brackets give percentage growth over previous year.

Overall performance of Small Scale Industry

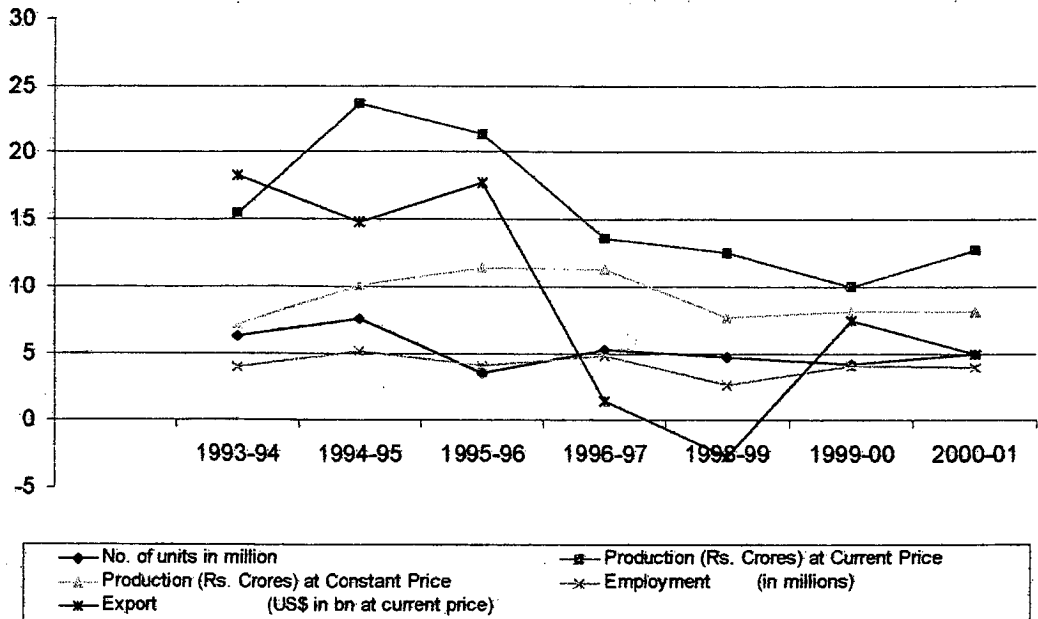


Chart 1.2

with a view to remove all fetters on its growth potential, reposing greater faith in small and young entrepreneurs.

#### **1.4 ABOUT GOA AND ITS INDUSTRIAL BACKGROUND**

Goa is one of the smallest and most beautiful State in the Country. Goa alongwith Daman and Diu were liberated from Portuguese rule on 19<sup>th</sup> December 1961 and became an integral part of Indian Union. On 30<sup>th</sup> May 1987 it was delinked from the Union Territory and conferred with Statehood. As per 2001 census, population of the State is 13.49 lakhs. The density of population is 316 per sq. km. Geographically situated between 15° 48' 14° 53' N latitude and 74° 20' E and 73° 40' E longitude. Its total area is only 3701 sq. kilometers. Administratively the State is organised into two districts namely North Goa comprising six Talukas with an area of 1736 sq. kms. and South Goa comprising 5 Talukas with an area of 1966 sq. kms. In all there are 383 villages of which 233 are in the North Goa Districts and 150 in South Goa District. There are 374 inhabited villages grouped into 183 village Panchayats. As per 2001 Census there are 31 towns of which 13 are municipalities and 18 are Census Town.

After liberation from Portuguese rule in 1961, Goa has achieved significant progress in Industrial development. The contribution of secondary sector to the Net State Domestic Product is about 30 percent. Goa has over 6000 registered Small Scale

Industrial Units and 138 large and medium industries most of them located in 18 industrial estates established in different parts of the State.

The Tenth five year plan will ensure that all new industries are green and eco-friendly, non-polluting and preferably labour intensive to generate employment for the people of Goa.

#### **1.4.1 FIVE YEAR PLAN IN GOA**

In Goa the Five Year Planning process started in the year 1961. The State was brought into the mainstream of national development through implementation of the five year plans soon after liberation since third year plans onwards. The Table below gives the sectoral, sub-sectoral approval outlays and actual expenditure during five year plans holidays for village and small industry in Goa since 1962.

Goa is one of the beautiful place not only in India but also known all over the world due to its long stretching beaches, churches, temples, mountains and valleys, historical monuments, climatic condition etc. The main occupations of the Goans were Agriculture, fishing, toddy tapping. It was only after the liberation that the pace of industrialisation started spreading up in Goa i.e. from manufacturing to export processing. It also attracts lots of tourists in the state and became the main tourist spot which results in flourishing in the hotel industry in Goa.



TABLE 1.3

Sectoral / Sub-Sectoral approved Outlays and Actual Expenditure during Five Year Plans Holidays for Village and Small Industry in Goa. (Rs In lakhs)

Plan	Plan Period	Approved Outlay	Expenditure
IIIrd Five Year Plan	1962 - 1966	79.14	39.00
Plan Holiday	1966 - 1969	38.88	21.89
IVth Five Year Plan	1969 - 1974	56.60	72.26
Vth Five Year Plan	1974 - 1978	78.00	38.21
Plan Holiday	1978 - 1980	75.00	66.97
Vth Five Year Plan	1980 - 1985	242.81	242.54
VIth Five Year Plan	1985 - 1990	513.09	521.21
Plan Holiday	1990 - 1992	620.00	1010.74
VIIth Five Year Plan	1992 - 1997	1267.50	1357.78
IXth Five Year Plan	1997 - 2002	2855.00	NA

Source: Directorate of Planning & Statistics, Government of Goa

Sectoral/Sub-Sectoral approved Outlays and actual expenditure during Five Year Plans Holidays for village and Small Industry in Goa.

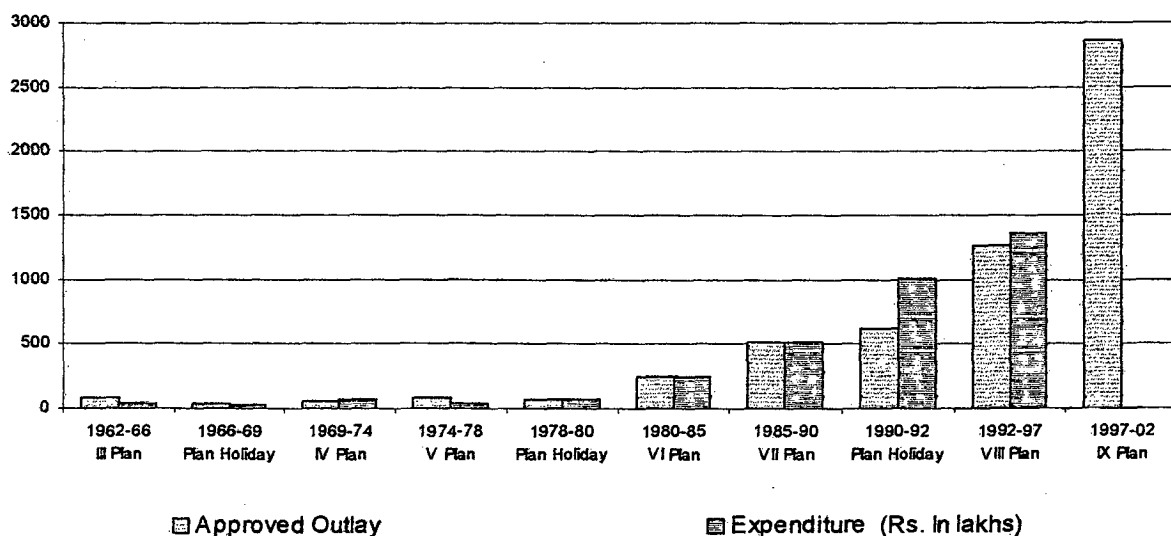


Chart 1.3

**TABLE 1.4**

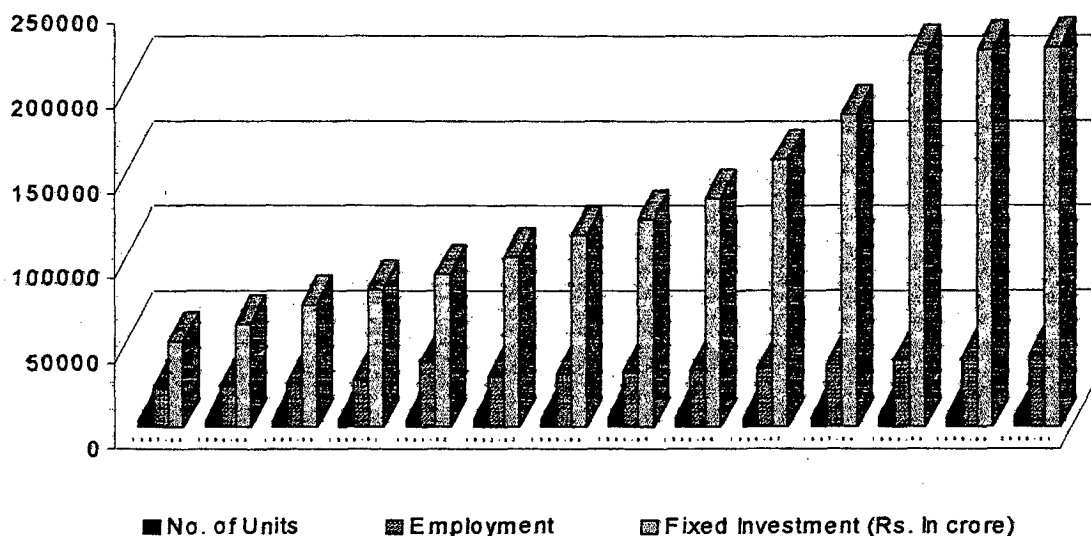
**Growth of SSI in Goa after the post-Statehood period  
SSI Units registered in Goa : 1987-2001 (Rs. in Crores)**

Sl.No.	Year		No. of Units	Employment	Fixed Investment
1	1987	- 1988	3271	22657	508
2	1988	- 1989	3602	24438	603
3	1989	- 1990	3924	26136	719
4	1990	- 1991	4120	27238	807
5	1991	- 1992	4344	38459	900
6	1992	- 1993	4558	29672	999
7	1993	- 1994	4787	30918	1126
8	1994	- 1995	4995	32042	1224
9	1995	- 1996	5118	33136	1344
10	1996	- 1997	5278	34472	1576
11	1997	- 1998	5488	36734	1841
12	1998	- 1999	5765	39432	2191
13	1999	- 2000	5949	40797	2215
14	2000	- 2001	6157	42312	2235

Source : Economic Survey 2001-02 Government of Goa

**Growth of SSI in Goa after the Post Statehood period**

**(1987-2001)**



**Chart 1.4**

**TABLE 1.5**  
**Directorate of Industries & Mines Yearwise No. of SSI Units,**  
**Investment and Employment in Goa**

Year	No. of Units	Employment (Number)	Investment (Rs. In lakhs)
1961 - 1970	305	3963	
1970 - 1971	118	1391	352.26
1971 - 1972	75	805	211.66
1972 - 1973	108	1003	402.59
1973 - 1974	80	649	236.12
1974 - 1975	70	478	238.59
1975 - 1976	94	712	353.32
1976 - 1977	95	887	115.43
1977 - 1978	129	1033	161.91
1978 - 1979	114	901	182.33
1979 - 1980	135	995	166.98
1980 - 1981	124	759	187.35
1981 - 1982	184	1070	252.17
1982 - 1983	238	1476	279.34
1983 - 1984	221	1024	222.65
1984 - 1985	220	896	184.74
1985 - 1986	282	1415	288.72
1986 - 1987	315	1705	392.61
1987 - 1988	364	1495	854.97
1988 - 1989	331	1781	942.33
1989 - 1990	322	1698	1167.80
1990 - 1991	196	1192	872.76
1991 - 1992	224	1131	929.05
1992 - 1993	214	1213	993.02
1993 - 1994	229	1246	1273.00
1994 - 1995	208	1124	975.46
1995 - 1996	123	1094	1204.31
1996 - 1997	160	1336	2322.20
1997 - 1998	210	2262	2653.36
1998 - 1999	277	2698	3491.55
1999 - 2000	184	1365	2350.49
2000 - 2001	208	1515	1863.94
2001 - 2002	312	1911	2436.57
<b>TOTAL</b>	<b>6469</b>	<b>44223</b>	<b>28559.58</b>

Source : Directorate of Industries and Mines, Panaji-Goa.

After liberation of the territory, the local self government, individuals and various developmental agencies and also Government of India took keen interest to develop industrial sector. At that time Goa's Economic and Social indicators were not particularly impressive. Prior to 1961, the dominant economic sector was Agriculture. After 1961, the Government of India in order to direct industrial investment to the region declared Goa as industrially backward area. A number of attractive incentives in the form of capital subsidy, sales tax exemption, tax holidays and exemption of other duties have been offered to the industrialist who intend to set up industry in this region. As a result the industrial growth of Goa has experienced a spurt and a number of small, medium and large scale industries have been established over this period specially in small scale industries (SSI) like manufacturing, food products, beverages, tobacco & tobacco products, textile products, jute, hemp and mosta, electronics, textiles, wood and wood products, furniture and fixtures, leather and leather fur products, engineering, paper and printing and allied industries, rubber plastics, electricals, petroleum and coal products, chemical products, pharmaceuticals and non metallic product, machinery tools and parts, manufacture of transport equipment and parts, electrical machinery appliances and supplier parts. By the year 1995-96 there was so much increase in the industries that the number of units reached to 5118 with an overall investment of Rs.13441.47 lakhs by generating employment for 33136 people.

All this was possible due to the constant support and encouragement given by Government of India, State Government, EDC, SIDBI, SISI, etc.

### **1.5 NEED FOR THE STUDY**

The Government of India and the State Governments has been pursuing a policy of protecting and promoting Small Scale Industry for a long time. In the planning process, the Small Scale Industry has been given a due recognition.

Generally Small Scale Industries encounter many problems such as inadequate supply of raw materials, lack of technical know-how, marketing facilities and inadequate finance etc.

In Small Scale Industries financial reporting plays a very crucial role. Financial Reporting helps the management and top authorities to predict, compare and evaluate the firms earning ability. It makes it easy to take the economic decisions like investment and financing. The financial information of an enterprise is contained in the financial statements. Accounting is the guide post for management. A firm should know the financial implication of its operations. The financial records of a small scale enterprise are kept by the accounting system. It points out the problems faced or likely to be faced by the firm. It also brings to its notice opportunities that are likely to arise and indicates possible action when needed.

Financial reporting gives information for the various purposes such as making decisions concerning the use of limited resources, including the identification of crucial decision areas and determining the objectives of Small Scale Industry. It helps to effectively control and direct an organisation, human and material resources. It maintains and prepares on the custodianship of resources which facilitate social functions and control.

Financial accounting system gathers, classifies, analysis, processes, interprets and communicates data about the economic activities of the firm. Financial information is needed for a variety of purpose. They have direct or indirect interest in the work. The financial information helps the owner to know the return on investment and the security of the investment they have invested in the enterprise. They are interested to know periodically its performance. The managers are the custodian of their investment and therefore they must submit periodical financial reports to owners.

Managers are decision makers for the enterprise. They are responsible for the overall performance of the firm, profitability, return on investment, capturing the market share, introducing a new product line are some of the issues in which he has to be very much strategic in his decision making. Financial information regarding, debt equity ratio, profitability ratio's, working capital management in the relevant areas. Creditors are supplying on credit basis to the Small Scale Industry. They are interested in

continuing profitable performance of the firm so that they regularly receive interest and repayment of principal. They need accounting information to evaluate the firm's performance and to determine the degree of risk to which they are exposed. Investors are interested in the earnings, dividend and growth trends of the firm. Financial reporting gives them the fair idea about the performance and safety of their investments.

Trade Unions and employees also use financial information to bargain on matters relating to salary determination, bonus, fringe benefit or working conditions on the basis of the accounting information. Customers can judge the prices being charged by the firm. While Government is a regulating body which require financial information to provide various schemes for Small Scale Industry to determine the exact amount of taxable income of the enterprise.

Majority of the Small Scale Industrial units do not maintain any record about the financial transactions properly on day to day basis. The financial records are not maintained properly by the Small Scale Industry in Goa. They don't maintain all the books of accounts required, nor follow the accounting policy and their transactions are also not passed on daily basis. They are done quarterly or half yearly with the help of a private accounts writing clerks. As far as owners of the small scale enterprise is concerned they don't have any idea about the books of accounts needed to communicate to them. Some are doing it as a formality, not

knowing anything about the practices, system of accounting and its need. So their financial and other decisions are mainly ineffective with less trust and confidence in it. Decisions are just taken according to their imagination. The decisions are ineffective, which ultimately results in developing sickness over a period of time.

The main tool of control in case of Small Scale Industry is **Budgeting**. It is a most useful and widely used standard device of planning and control. It is an essential tool of the management for controlling costs and maximising profit. Costs can be reduced, wastages can be prevented when proper relationship between costs and income can be established, only when the various factors of production are combined in profitable way. Budget acts as a business barometer as it is a complete programme of activities of the business for the period covered. It is a process of determining various budgeted figures for the enterprises for the future period and for calculating variances, if any. In small scale enterprise, it is very essential for budgeting and control, which ultimately helps in profit planning and co-ordination.

***Cost Accounting started to be considered more as a technique for cost control as compared to cost ascertainment.*** Cost Accounting is a conscious and rational procedure by Accountants for accumulating cost and relating such costs to specific products or departments for effective management action. Cost Accounting establishes budget standard costs and actual costs. Cost Accounting helps to increase the profitability. Each and every unit,



cost control will ultimately increase the profitability of a concern. Cost Accounting thus provides information to the management of small scale units for decision making. There is an inverse relationship exists between costs and profit. Small Scale Industrial units concentrates more on cost ascertainment rather than cost control.

Standard costing is a technique which uses standard for costs and revenues for the purpose of control through variance analysis. It is a very important tool of cost control incase of small scale units. Standard costing involves the setting of predetermined cost estimates in order to provide a basis for comparison with actual costs. It provides a formal basis for assessing performance and efficiency and control cost by establishing standards and analysis of variances. In small scale units cost control techniques and awareness about it is mainly absent, as a result there are many unnecessary costs involved in a product structure. All these are the causes for unreasonable, irrational and baseless decision making in case of small scale units. If these irrational decisions make the product of small scale units more and more dearer resulting in higher prices and reduced turnover and less profit. Therefore it is very much essential to have a separate costing department in small scale units to take the right decision and increase the market share.

Another problem faced by Small Scale Industries in Goa is not maintenance of proper books of accounts by small enterprises

regarding their business such as sales, profit, stock, capital, assets and liabilities. Many small scale units even do not have clear cut idea regarding the quantum of finance required by them nor its effective utilisation for maximising production and profits. Thus the financial decisions will be totally baseless and irrational. The small entrepreneurs who seek financial assistance to start a new industries do not have thorough knowledge regarding the industries financial needs.

One more problem is of Capital Structure. Small scale newly established enterprises cannot collect sufficient debt as per their requirements, so easily because they are yet to establish their credit worthiness in the market. Naturally they rely on equity capital. But well established units generally have track record of their profit earning capacity, which helps them to create their credit worthiness. The lender feel safe to invest their funds in this type of units so they have an ample scope for this units to collect debt. Such units have to chalk out a plan to collect debt in such a way that the acceptance of debt becomes beneficial for the small enterprise in terms of increase in Earning Per Share (EPS) profitability and value of the firm. In Goa Small Scale Industry have a great problem in financing due to their low profitability and high burden of interest payment, which makes the small enterprises non-viable. It has to strive hard to have a optimum capital structure.

Working capital management is a significant fact of financial management due to the fact that it keeps the wheels of a business enterprise running. Working Capital Management is concerned with short term financial decisions which have been totally neglected in the financial structure of a small scale units. Shortage of funds for working capital has caused many business to fail. Lack of efficient and effective utilisation of working capital leads to earn low rate of return on capital employed and compels to sustain losses so the need for working capital management in small scale enterprises is of great significance.

Another area of negligence in the SSI is the Profitability Analysis. Profitability has been considered as one of the important aspects of any commercial business. It is a basic need for the survival of a particular business. Profit is a signal for allocation of resources and a yard stick for judging managerial efficiency. No small scale units can survive without earning profit. It is measured by studying the profitability of investment in it. It is essential to know the return on owners equity, return on investment, net profit margin, gross profit margin, fixed asset to profit, sales turnover etc. Most of the small scale units are totally unfamiliar with this type of analysis which helps them to plan profit and control it.

## 1.6 REVIEW OF LITERATURE

The following is the review of literature:

G. S. Gupta & A. K. A. Rathi, had conducted an empirical study based on the primary data from a sample of 208 small scale chemical units in Gujarat for the year 1986 through 1990, the details on the various dimensions of the structure, conduct and performance are presented and the nexus among them is examined. The findings suggest no unique relationship among structure, conduct and performance. However, each of middle age, partnership form of organisation and location in Baroda, Ahmedabad districts has in general proved a beneficial structural features from the point of view of performance.

Chandra Poojary M., had presented a paper which considers the erstwhile policies of the central and state government, with regard to the promotion of Small Scale Industries. The failures of these promotional programmes had indeed given a fillip to the liberalisation slogan that all the more is the reason why we should go back on all that and see what was projected and what went wrong. It also outlines the quantitative and qualitative aspects of the plan for the promotion of small scale industries as it was taken up in the district of Dakshin Kannada in Karnataka.

S. Nanjundan, he commented that there seem to be several reasons for the government's inability to enunciate a policy towards Small Scale Industry and to reformulate its programme.

Dr. M. Selvam, Small Scale Industry sector has several strengths. These are flexibility, inexpensive labour, reduced overheads, closeness to market and owner management. Small Scale Industry units can easily absorb new technology, new design, new process and the like. But they must be prepared to continually upgrade their production process and design.

Suresh D. Tendulkar and T. A. Bhavani, they argued that the policy has been and continues to be supply driven and paternalistic leading to dependency. In addition the individual unit centered atomistic approach of policy is dominated by continuous protective and discretionary promotional measures with perverse incentives effects for the healthy growth and of this segment. They suggested shift in policy is necessary in order to flexibly adjust to fast changing circumstances so as to better serve the long standing and as yet unattained objective of developing a vibrant and self reliant modern small scale industry.

David Storey, Kevin Keasey, Robert Watson and Pooran Wynerezyk, the fundamental problem in accounting for the different performance of small and large firms is that many small firms exist only for a very short period. Failure rates are more than ten times as high as in new small firms and large well established firms. It is for this reason that the book is devoted to a study of failure which, in our view is the central characteristic of the small business sector.

Dan Steinhoff & John F. Burgess, the book brought out the most important aspects of small scale industries like personnel policies for small firm using computers in small business, international opportunities for small business. Accounting, taxes, day to day management and supporting cases with regard to each.

Geoffrey Knott, in an accessible style the book covered all aspects of financial management and made helpful comparisons among the management of personal corporate finances, social and ethical implications of decisions are considered, as are the latest development in the business sector such as takeovers and mergers.

Vasant Desai Small Scale Industry is widely recognised as a powerful instrument for socio-economic growth and balanced sectoral development, create broader employment opportunities, entrepreneurship and skill development, ensure better use of scarce financial resources and appropriate technology, short gestation period, helps/assists large scale industries.

R. V. Rao, in his study, considered the development of small scale industries which offers us untold opportunities for building a decentralized sector of our economy which will make a significant contribution to the process of self sustained growth. In his opinion, it is the input output ration that is very important and small scale industries can survive on their own.

Ashok K. Arora, the book covered the analysis of importance of small scale industries in the Indian context, but also the various

five years plans and industrial policies of the government of India. Moreover, the comparison of growth of small scale industries in India has also been made. The institutions providing assistance to small scale industries have also been examined. A detailed study regarding the institutional finance and its impact on the growth of small scale industries has been made.

T. N. Krishna Iyer, the growth of small scale industries during the last two decades have been phenomenal. They have carved out a special place in the industrial map of India. They accounted for 55 percent of the gross value of the output, 40 percent of the gross value of exports and over 60 percent of industrial employment. One of the factors which had helped in the accelerated growth of small scale industries in the country was the nationalization of major commercial banks.

V. Ramaiah, explained various promotional activities of APSSIDC followed by an analysis of its achievements in terms of various schemes and ROI of the corporation. It outlines the growth of small scale industries in Andhra Pradesh with a view to obtain an idea about the trends in number of units, capital invested, employment, production, sales and exports. It also points out various methods of management control employed by the corporation over the activities of the public sectors units. The effectiveness of budgetary control and the regulatory of preparations and submission of

periodical reports are proved and the results of such investigation are carefully presented.

N. T. Vedachalam, in his study, incidence of industrial sickness in small scale industries has highlighted the cause of sickness of small scale units and has given his suggestions for overcoming them. He also drew the attention of the policy makers, bureaucrats and financial institutions for paying greater attention to the viability of the units sought to be encouraged and the need for constant monitoring and timely help.

Januar R. S., the book highlights a fresh look at the problems and policies adopted by the Government of India to accelerate the development of Indian economy. Through the development of Small Scale and Cottage Industries. In this study, he also evaluates subject such as Industrial sickness, Technology and Quality up-gradation are carefully discussed.

Jalal R. S., this book highlights about the various aspects of Industrial Growth and programmes for rural upliftment, development of Small Scale Industries, Regional Profile and studies and entrepreneurial profile.

Natarajan R., this book examines the various trends in Institutional financing SSI in underdeveloped economies of the world with special reference to Andhra Pradesh State. Keeping in view the economies of developing countries it critically studied the share of various agencies in financial assistance rendered to SSI concerns.



The development of credit industry wise, organisation wise and type wise. The extent of post sanction control and supervision of the borrowed SSI units by financing agencies, the working capital advance to SSI sector by commercial banks and their attitude towards entrepreneur and degree of correlation between the advances and working capital of APSFC.

Jain. O. P., the book provides a wide ranging review of and a means of export market. On each major aspect of export expanding technique such as export market intelligence, improvement and control of production quality, incentives for export, export marking system and Institutional arrangements for export promotion.

Daqar Inderjeet, he presents the major aspects of personnel problems of SSI such as recruitment, selection, training, wages, welfare measures, absenteeism, labour turnover, unionisation, strikes and victimisation as well as employer-employee relationship.

## **1.7 OBJECTIVES OF THE STUDY**

The focal theme of the study is on accounting and financial system of small scale industry in Goa. To fulfill the focal theme, the following specific objectives are selected:

- 1.** To investigate the accounting system and practices in the selected units
- 2.** To study the capital structure and financing patterns in the selected units and
- 3.** To examine the working capital and profitability analysis in the selected units.

## **1.8 DATA AND METHODOLOGY**

### **1.8.1 Data Collection**

- (a) Collection of data on registered Small Scale Industries Units in Goa from Directorate of Industries and Mines, Udyog Bhawan, Panaji-Goa.
- (b) Information collected from (Sample Selection) :
- 1) List of Units registered with Directorate of Industries and Mines till 31st December 2000.
  - 2) Directory of Small Scale Industries Unit registered upto 31<sup>st</sup> December 2000 from Goa Chamber of Commerce & Industries.
  - 3) Directory on Small Scale Industries Units registered by Goa Small Scale Industries Association 1995.
  - 4) List of units financed by Economic Development Corporation (EDC).
  - 5) List of units registered under Registrar of Company, Goa.
  - 6) List of units financed by Maharashtra State Finance Corporation (MSFC).
  - 7) List of units operating in Goa Industrial Development Corporation's industrial estates only.

### **1.8.2 Preliminary Survey**

- Pilot study on 20 Small Scale Industries Units was done on the units located in different Talukas in Goa.

- *FIELD SURVEY* : personally visited nearly 50 Chartered Accountants of respective units and collected information through Questionnaire.
- Units selected are from the group of the following categories i.e. pharmaceuticals, electricals, electronics, chemicals, plastics, engineering and food and beverages.
- To physically locate and verify the status of as many units as possible.
- Data processing of the feed back and compilation in the form, working, closed, likely to close units.

### **1.8.3 Detailed Study**

- As per the Sample selected (i.e. 175 units).
- Small Scale Industries units located in the industrial estates of Goa are selected.
- preparing a comprehensive Questionnaire for the entrepreneurs, EDC, MSFC, C.A.'s and C.S. Sales Tax Commissioner were interviewed.
- Selecting all the seven categories of units, like pharmaceuticals, electrical, electronics, chemicals, plastics, engineering and food and beverages. Classifying them into manufacturing industries.

The sample is selected on the bases of two categories dividing the heterogeneous units into one group i.e. Stratified Simple Random Sampling Method. It is stratified into seven segments based upon the nature of the product. Secondly the sample

selected is atleast 5 percent of the total universe and they should have atleast five years of existence in order to represent it in the sample. All together 175 units are grouped together and stratified into the above seven categories for the purpose of our study. Each strata consists of 25 units and is divided equally among all.

The selection of the sample is done based upon the maximum number of units operating under a particular category.

The data collected for this study is classified into two primary source and secondary source. Primary data have been collected through Comprehensive Questionnaire and personal interview. It was based on the pilot study conducted earlier taking into account the various aspects of the units, entrepreneurs, accounting practices, financial structure and working capital management, profitability analysis, techniques like ratio analysis have been adopted for analysis of data.

Collection of data is a real challenge in case of Small Scale Industries because it is not compulsory for them to publish their accounts. They use to treat each and every detailed financial information as confidential. Most of the visits were not encouraging, They were not been very co-operative in providing the information needed. After so many frustrating visits to them again and again and after convincing them that it is for Academic nature they gave the information. The letter of introduction from my Research Guide, manager of Directorate of Industries and Mines, Sales Tax Commissioner, EDC, Chairman, General Manager of

GIDC and letter from each industrial estate manager (GIDC), local MLA's, through friends and relatives have helped greatly in overcoming their misunderstanding.

The Secondary data is collected from both published and unpublished sources, such as official documents, annual reports, hand books of statistics, booklets, pamphlets et cetera of the State and Central Government, CMIE, banks, corporations and private organisations. Central Government's five year plans, Industrial policy resolutions, Laghu Udyog Samachar, National Small Industries Corporation (NSIC), Statistical abstracts of Goa from Department of Statistics, commercial banks, MSFC, RBI bulletin, SBI Review and Report of ad-hoc committees and commissions, published annual reports.

#### **1.8.4 Ratios Used**

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debts}}{\text{Total Equity}}$$

$$\text{Value Added Analysis} = \text{Total Sales} - \text{Material Cost.}$$

$$\text{Operating Efficiency} = \frac{\text{Fixed Cost}}{\text{Total Cost}}$$

$$\text{Profit Volume (P/V) Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

$$\text{Contribution} = \text{Sales} - \text{Marginal Cost}$$

$$\text{Break-Even Point} = \frac{\text{Fixed Cost}}{\text{P/V Ratio}}$$

$$\text{Margin of Safety (MOS)} = \text{Total Sales} - \text{Breakeven Sales}$$

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}}$$

<i>Net Profit Margin</i>	=	$\frac{\text{Net Profit}}{\text{Sales}}$
<i>Return on Networth</i>	=	$\frac{\text{Net Profit after Tax}}{\text{Owners Equity}}$
<i>Return on Capital Employed</i>	=	$\frac{\text{Net Profit after Tax}}{\text{Total Capital Employed}}$
<i>Return on Fixed Asset</i>	=	$\frac{\text{Net Profit}}{\text{Fixed Assets}}$
<i>Fixed Assets Turnover Ratio</i>	=	$\frac{\text{Net Sales}}{\text{Fixed Assets}}$
<i>Cash Profit to Net Profit</i>	=	$\frac{\text{Net Profit}}{\text{Cash Profit}}$

### **1.9 LIMITATIONS OF THE STUDY**

The Study is not free from certain limitations due to the comprehensive coverage of Accounting and Financial practices in the selected units. The basic limitation is relating to the maintenance of books of accounts by the entrepreneurs. In a number of cases, the study relied upon the data provided by the Chartered Accountants and the Bankers of the units. Some of the specific limitation of the study are as follows :

- i) Sample selected are limited to its existence in the past 5 years.
- ii) Absence of separate accounting department in the SSI units.
- iii) Unscientific record keeping system.
- iv) Selection of units from 1995 to 2001.
- v) Earlier records / Books of Accounts are not available consistently.

- vi) The study is also depending upon the Annual Accounts provided by the Chartered Accounts of the respective units.
- vii) Most of the results are based on the survey conducted in the year 2000-2001.
- viii) The study has been restricted only to 175 units. The unregistered industrial units are totally excluded from the purview of the study. Units are chosen at random from the selected industrial estates. The study covers the seven groups i.e. pharmaceuticals, electricals, electronics, chemicals, plastics, engineering and food & beverages.

Despite these limitations, every effort has been taken to present the results in an organised manner.

## **1.10 CHAPTERISATION SCHEME**

### **1 Introduction**

An introduction is provided in the first chapter, covering definitions, growth pattern, review of literature used for the study, description of the problem, objectives of the study, research methodology and limitations of the study.

### **2 Profile of the Units and of Entrepreneurs**

In second chapter, the profile of the units and of the entrepreneurs is given, classification of units, gestation period, employee wise classification, capacity utilisation, area of marketing and finally the socio-economic background of entrepreneurs.

### **3 Accounting Practices**

The third chapter is on accounting practices, in SSI units in Goa, which covers financial accounting and cost accounting practices.

### **4 Capital Structure and Financing Patterns**

The Chapter deals with capital structure and financing patterns and the problems faced by the SSI unit.

### **5 Working Capital analysis**

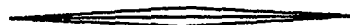
The Chapter covers mainly on Cash management, motives for credit sales, credit policy and inventory control methods in SSI units.

### **6 Profitability Analysis**

The detail profitability analysis has been done which covered P/V ratio, BEP analysis, Gross profit margin, net profit margin, return on net worth, on equity, fixed assets is been done and analysis of cash profit to net profit, receivable management, composition of inventory are been shown.

### **7 Summary of Findings and Policy Suggestions.**

This Chapter summarizes the findings of the entire study with suggestions offered.







**CHAPTER II**

***PROFILE OF THE UNITS  
AND OF  
ENTREPRENEURS***



## CHAPTER - II

### **PROFILE OF THE UNITS AND OF ENTREPRENEURS**

The objective of this Chapter is to provide details about the 175 Small Scale enterprises located in various parts of Goa and the Industrial Estates. Goa have an excellent infrastructure congenial for industrial development. The state have very high rate of saving and the per capita deposit in banks is over Rs. 50,000. However, the credit-deposit ratio being very low, there is a lot of potential for credit facilities to new industrial units. The State have a magnificent human development indicators, peaceful atmosphere, very good roads, highly reliable communication facilities, relatively better power and water supply, friendly, hospitable and hardworking people. It is pertinent to note that in a study commissioned by the confederation of Indian Industries, Goa have been placed at number two position in the overall composite ranking of 18 States of India. This indicates that Goa is the most favourable and natural destination for investment.

The profile of the units selected for the study are with reference to the Age of the Unit, gestation period, nature of organisation, employee wise classification, capacity utilisation, turnover, competition, area of marketing, location etc. is presented.

Efforts have also been made in this Chapter to present the profile of the entrepreneurs with reference to the establishment of the unit, classification of the entrepreneur on the basis of sex, religion, educational status, social status, nativity of the entrepreneurs, previous position of the entrepreneurs, experience and reason to take up the venture.

Small Scale Industries in Goa are mainly located in the various Industrial Estates of Goa. There are altogether eighteen Industrial Estates situated in the two districts of Goa namely North Goa and South Goa Districts. The various Industrial estates are Verna, Kakoda, Kundaim, Honda, Mapusa, Cancona, Pilerne, Colvale, Corlim, Tivim, Sancoale, Tuem, Cuncolim, Pissurlem, Bicholim, Bethora, Margao and Madkaim. An Industrial Estate is a tract of land which is well developed with all such facilities essentially required for the growth and development of the units. It provides facilities like water, transport, electricity, Steam, Bank, Post Offices, Canteens etc.

## **2.1 PROFILE OF THE UNITS**

Small Scale Industrial Unit develops, gains experience and maturity only after going through some years of experience. Long years of existence helps the units to understand the business environment and plan for the growth and expansion of the Unit. It helps to survive the unit based upon its past experiences. Keeping

this in view an efforts have been made to study and analyse the age of the Sample Units.

In Table 2.1, it shows the age-wise classification of the sample units. The units are of varied age groups, from five years to thirty years. There are maximum number of 54 units representing 30.86 percent of the total units from the age group of 5 years followed by the age group of 6-10 which represents 29.11 percent (52 units) of the total units. It is clear that below the age of five, units are struggling for survival and to establish whereas 62 units representing 35.43 percent of the total units are coming under the age group of 11 to 20 years of existence. Only seven units have got more than 20 years of existence. It is clear from the Table 2.1 that the units are well established and existing for a fairly long period of time.

The small scale units have to face a challenge during the initial period of existence, it is the period of Gestation. Survival is very tough during this period as there are higher amount of expenditure and spendings as the returns are very low. The Table 2.2 shows that the Gestation period varies from one month to 36 months and above. In 0 to 5 months category, there are maximum number of units 54 representing 30.86 percent of total units followed by 42 units representing 24 percent of total units from the 11 to 15 months time. In case of 6 to 10 months category, there are 36 units representing 20.57 of the total. In case of 15 to 20 months

**TABLE 2.1**  
**AGE-WISE CLASSIFICATION OF UNITS**

Age	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ring	F & B	Total
<b>From 5</b>	<b>6</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>12</b>	<b>10</b>	<b>10</b>	<b>54</b>
©%	24.00	32.00	8.00	24.00	48.00	40.00	40.00	30.86
@%	11.11	14.81	3.70	11.11	22.22	18.52	18.52	100
<b>6-10</b>	<b>4</b>	<b>10</b>	<b>5</b>	<b>9</b>	<b>9</b>	<b>7</b>	<b>8</b>	<b>20</b>
©%	16.00	40.00	20.00	36.00	36.00	28.00	32.00	29.71
@%	21.05	7.89	23.68	13.16	7.89	13.16	13.16	100
<b>11-15</b>	<b>8</b>	<b>3</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>38</b>
©%	32.00	12.00	36.00	20.00	12.00	20.00	20.00	21.71
@%	21.05	7.89	23.68	13.16	7.89	13.16	13.16	100
<b>16-20</b>	<b>5</b>	<b>3</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>24</b>
©%	20.00	12.00	32.00	12.00	4.00	8.00	8.00	12.71
@%	20.83	12.5	33.33	12.5		4.17	8.33	100
<b>20 above</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>07</b>
©%	8.00	4.00	4.00	8.00	0.00	4.00	0.00	4.00
@%	28.57	14.29	14.29	28.57	0.00	14.29	0.00	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      @% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.2**  
**Gestation Period in the Selected SSI Units in Goa**

Months	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ring	F & B	Total
<b>0-5</b>	<b>9</b>	<b>10</b>	<b>5</b>	<b>4</b>	<b>12</b>	<b>4</b>	<b>10</b>	<b>54</b>
©%	36.00	40.00	20.00	10.00	48.00	16.00	40.00	30.86
@%	16.67	18.52	9.26	7.41	22.22	7.41	18.52	100
<b>6-10</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>36</b>
©%	28.00	24.00	16.00	32.00	16.00	12.00	16.00	20.57
@%	19.44	16.67	11.11	22.22	11.11	8.33	11.11	100
<b>11-15</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>42</b>
©%	16.00	12.00	36.00	24.00	24.00	32.00	24.00	24.00
@%	9.52	7.14	21.43	14.29	14.29	19.05	14.29	100
<b>16-20</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>23</b>
©%	8.00	12.00	12.00	12.00	8.00	24.00	16.00	13.14
@%	8.70	13.04	13.04	13.04	8.70	26.09	17.39	100
<b>21-25</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>09</b>
©%	8.00	8.00	8.00	8.00	4.00	0.00	0.00	2.14
@%	22.22	22.22	22.22	22.22	11.11	0.00	0.00	100
<b>26-30</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>05</b>
©%	0.00	4.00	4.00	0.00	0.00	8.00	4.00	2.86
@%	0.00	20.00	20.00	0.00	0.00	40.00	20.00	100
<b>31-35</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>03</b>
©%	4.00	0.00	0.00	4.00	0.00	4.00	0.00	1.71
@%	33.33	0.00	0.00	33.33	0.00	33.33	0.00	100
<b>36 above</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>03</b>
©%	0.00	0.00	1.00	4.00	0.00	4.00	0.00	1.71
@%	0.00	0.00	33.33	33.33	0.00	33.33	0.00	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      @% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

Group, there are 23 units representing 13.14 percentage of the total. Where as nine units have got 21 to 25 months, 8 units have got a gestation period of 26 to 35 months while three units got a gestation period of above 36 months. Industry wise, from first month to 20<sup>th</sup> month, we have food & beverage and plastic have got the lowest (26 units each; 1 to 20) followed by pharmaceuticals, electrical, electronics(22 units each), where as in engineering and chemicals got the highest. In case of 21 to 36 months above, it is the plastic and food & beverage got the lowest where as rest of them got more units in that group. Over all the Gestation period is short for many of the industries units. Thus it is clear that the maximum number of sample units have a short gestation period.

The business of Small scale industry can be of various forms as long as they satisfy the definition of a small scale unit as per the law. They can take any form like sole trader, partnership concern, co-operative society, Joint family business or joint stock company. It is according to the taste of the entrepreneur that have taken the various form. Each one enjoys its own advantages and limitations, but the entrepreneurs know what is they like. Such as nature of product and business, financial requirement, return available in the similar enterprises, public relations and contract, man power available. Keeping this above in mind an attempt was made in this study to know the different forms of organisations that are present in the small scale business. The Table 2.3 shows that 66 units

representing 37.71 percent are in the form of partnership business, 27.43 percent (48 units) are in the form of sole trading. 43 units (25.57 percent) are in the form of joint stock company, 16 units (9.14 percent) are in the form of joint family, where as 2 units (1.14 percent) are in the form of cooperative society. Industry wise plastic company tops the sole trading concern (13 units) out of 48 representing 27.08 percent. Engineering is the highest in the partnership concern (14 of 21.21 percent). Joint stock company business is more popular among the electricals, 11 units (25.58 percent), where as in the joint family business it is the pharmaceutical company 4 units (25.00 percent).

Government promotes small scale enterprises due to it generates lots of employment opportunities for the local youths. Thus it tries to solve one of the biggest economic problem that is unemployment of the state. The Table 2.4 shows the details about the employment opportunities provided by various industries. Obviously it is a great boost for the economy. There are 40 units employing upto 10 workers each representing 22.86 of the total. Under the 11-20 category there are 65 units, 40 units employing upto 30 employees. It is further noticed that there are 19 units employing nearly 40 employees where as there are 7 units who employ upto 50 employees and 4 units employing above 50 employees. Further details study reveals that the highest number of employment generation is in engineering chemicals and

**TABLE 2.3**  
**Form/Pattern Of Organisation In SSI Units**

Months	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
Sole trader	2	6	5	4	13	7	11	48
©%	8.00	24.00	20.00	16.00	52.00	28.00	44.00	27.43
®%	4.17	12.50	10.41	8.33	27.08	14.58	22.92	100
Partnership concern	7	8	10	11	7	14	9	66
©%	28.00	32.00	40.00	44.00	28.00	56.00	36.00	37.71
®%	10.61	12.12	15.15	16.67	10.60	21.21	13.64	100
Joint Stock Company	10	11	8	8	2	2	2	43
©%	40.00	44.00	32.00	34.00	8.00	8.00	8.00	25.57
®%	23.26	25.58	18.60	18.60	4.65	4.65	4.65	100
Co-operative Society	2	0	0	0	0	0	0	02
©%	8.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14
®%	100	0.00	0.00	0.00	0.00	0.00	0.00	100
Joint Family	4	0	2	2	3	2	3	16
©%	16.00	0.00	8.00	8.00	12.00	8.00	12.00	9.14
®%	25.00	0.00	12.50	12.50	18.75	12.50	18.75	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      ®% - represents row percentage  
Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.4**  
**Employee Classification among the selected SSI units in Goa**

No. of Employees	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
0 - 10	4	6	4	1	12	3	10	40
©%	16.00	24.00	16.00	4.00	48.00	12.00	40.00	22.86
®%	10.00	15.00	10.00	2.50	30.00	9.50	25.10	100
11 - 20	10	12	10	11	8	4	10	65
©%	40.00	48.00	40.00	44.00	32.00	16.00	40.00	37.14
®%	15.38	18.46	15.38	16.92	12.31	6.15	15.38	100
21 - 30	6	3	6	8	5	10	2	40
©%	24.00	12.00	24.00	32.00	20.00	40.00	8.00	22.36
®%	15.00	7.50	15.00	20.00	12.50	25.00	5.00	100
31 - 40	2	3	2	2	0	8	2	19
©%	8.00	12.00	8.00	8.00	0.00	32.00	8.00	22.86
®%	10.52	15.79	10.52	10.52	0.00	42.11	10.52	100
41 - 50	1	1	2	2	0	0	1	07
©%	4.00	4.00	8.00	8.00	0.00	0.00	4.00	4.00
®%	14.29	14.29	28.57	28.57	0.00	0.00	14.29	100
Above 50	2	0	1	1	0	0	0	04
©%	8.00	0.00	4.00	4.00	0.00	0.00	0.00	2.29
®%	50.00	0.00	25.00	25.00	0.00	0.00	0.00	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      ®% - represents row percentage  
Source: Data Collected from Sample Industrial Units and Questionnaire.



pharmaceuticals followed by electricals and electronics. Food & beverages employs the lowest number of workers.

The success of an industry solely depends upon the utilisation of the installed capacity of the resources including machinery and tools. The Table 2.5 shows that the capacity utilisation of the various units. Six units operated within the 25 percent of the capacity, 52 units work under 26.50 percent capacity, 93 units work under 51 to 75 percent capacity where as only 24 units out of the total 175 work above 75 percent capacity. Under utilisation of the capacity is the major problem of the Goan industry. There is a huge unused capacity get wasted everytime. Thus, it reduces the overall productivity of a manufacturing unit. Among the industry wise, the maximum number of units whose capacity utilisation is above 75 percent are electronics, electricals followed by food & beverages, engineering, in case of chemicals and plastic it is the lowest capacity utilisation. It is found that the installed capacity is rarely utilised by SSI sectors. That is the major reason for failure of SSI in Goa. Unutilised capacity will increase the fixed cost per unit which will ultimately increase the cost of production. Against this back ground, an attempt is been made to identify the reasons for under utilisation of the installed capacity.

The reasons for under utilisation of capacity are many but the main reasons are: Lack of demand, raw material and power shortage, shortage of finance. Labour strikes and labour problems

and lack of maintenance. The Table 2.6 reveals details about the above reasons mentioned.

Lack of demand is a major cause of under utilisation of capacity in case of chemicals, pharmaceutical and electricals units, where as raw material shortage and power is the cause of under utilisation in case of food and beverage, plastic and electricals units. Shortage of finance is the cause of under utilisation in the case of pharmaceuticals, engineering, electronics and plastic units, except electricals units rest all have labour problem as a cause of under utilisation. Lack of maintenance is a problem for electronics, plastic, food & beverage units.

Table 2.7 depicts the turnover classification of the units. Industry wise the pharmaceutical, electricals, engineering and food & beverage units have done quite well. Where as electronics, chemicals and plastics have got less turnover compared to the other group. Turnover reveals the efficiency and productivity of various resources of the units. It is also clear from the table that in the category of one lakh to below five lakh turnover there are 54 units having a 30.86 percent of the total. 40 units representing 22.86 have a turnover, above five lakh and below ten lakhs, 36 units representing 20.57 per cent of the total have a turnover upto 20 lakh. In the category of 21 to 35 lakhs, there are 23 units representing 13.14 percent, 12 units representing 6.88 percent of the total have got a turnover upto 50 lakhs where as in the category

**TABLE 2.5**  
**Capacity Utilisation of the selected SSI units**

Capacity	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
0 - 25	1	1	0	2	0	1	1	6
@%	4.00	4.00	0.00	8.00	0.00	4.00	4.00	3.43
26 - 50	10	6	6	10	9	8	3	52
@%	40.00	24.00	24.00	40.00	36.00	32.00	12.00	29.71
51 - 75	12	14	14	12	15	13	13	93
@%	48.00	56.00	56.00	48.00	60.00	52.00	52.00	53.14
76 - 100	2	4	5	1	1	4	7	24
@%	8.00	16.00	20.00	4.00	4.00	16.00	28.00	13.71
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
@%	100	100	100	100	100	100	100	100

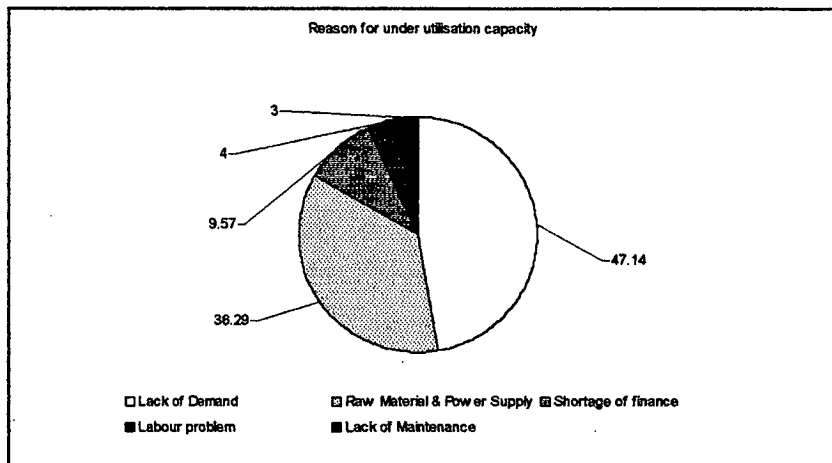
@% - represents column percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.6**  
**Reasons For Under Utilisation Of Capacity**

Reason	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average Mean
Lack of demand	50	55	45	60	35	45	40	47.14
Raw Material & Power Supply	24	40	35	35	40	35	45	36.29
Shortage of Finance	19	05	10	2	10	15	5	9.43
Labour Problem	5	0	5	3	5	5	5	4
Lack of Maintenance	2	0	5	0	10	0	5	3.14
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Data Collected from Sample Industrial Units and Questionnaire.



**Chart 2.1**

of above 50 lakhs turnover we have got 10 units representing 5.71 percent. Thus it was found that the overall turnover wise the units are doing well inspite of many problems.

Small scale units in Goa are facing the biggest challenge ever so far due to the competition factor. They face competition not only from local manufacturers, but also from national and international large scale and Multinational Companies. The Table 2.8 reveals the competition in the line of activity with reference to two main factors, that is local market and outside market. In case of pharmaceutical units, the competition from local market is the highest, 0.75 percent and from outside market 25 percent. Electricals, it is 80 percent local market and 20 percent outside market, electronics it is 58 percent local and 42 percent outside market. In case of chemicals it is almost equal from local and outside market. In case of plastics, it is the local market which dominated with 82 percent and outside 18 percent. But the engineering units have a different story all together. They have got 42 percent local and 58 percent outside market competition. In food & beverages, it is again more or less equal with 51 percent local and 49 percent outside market. Although the picture shows local market dominated over the outside market but still the severity of outside market is very strong and it is going to take up the place of local market very soon if the efforts are not made to retain its market share.

**TABLE 2.7**  
**Turnover Wise Classification of the selected SSI units in Goa (Rs. in Lakhs)**

Lakhs (Rs.)	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
0 – 5	2	1	14	12	18	2	5	54
©%	8.00	4.00	56.00	48.00	72.00	8.00	20.00	30.86
6 – 10	4	8	6	10	4	4	4	40
©%	16.00	32.00	24.00	40.00	16.00	16.00	16.00	22.86
11 – 20	6	7	4	3	3	8	5	36
©%	24.00	28.00	16.00	12.00	12.00	32.00	20.00	20.57
21 – 35	7	6	1	0	0	2	7	23
©%	28.00	24.00	4.00	0.00	0.00	4.00	28.00	13.14
36 – 50	4	2	0	0	0	3	3	12
©%	16.00	8.00	0.00	0.00	0.00	12.00	12.00	6.88
50 above	2	1	0	0	0	6	1	10
©%	8.00	4.00	0.00	0.00	0.00	24.00	4.00	5.71
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100

©% - represents column percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.8**  
**The Competition In The Line Of Activity In The Selected SSI Units In Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B
Local Market	75	80	58	55	82	42	51
Outside Market	25	20	42	45	18	58	49
<b>TOTAL</b>	100	100	100	100	100	100	100

Source: Data Collected from Sample Industrial Units and Questionnaire.

The place is very important function of marketing. The business units have to study the whole heterogeneous market and segment if accordingly. Table 2.9 depicts, the area of marketing in the percentage form with reference to various sectors. It is found that the maximum number of units are catering the needs of local area (62 percent), district market (10.57 percent) and in case of region wise, it is 9.86 percent. Overall state wise is 6.14 percent and other states is 11.43 percent. The export market is not yet gained momentum among the selected sample units. It is mainly due to the risk involved in it and the competition from the large scale units that have mainly discouraged the units. But still their efforts are on to explore foreign markets.

## **2.2 LOCATION OF A BUSINESS UNIT**

Location refers to the area or exact place where the business unit is actually established for the conduct of manufacturing activities. An ideal location of a unit ensures stability and prosperity while unscientific location creates many difficulties and problems. Government also takes keen interest in location of industries due to the balanced industrial development. Location decision is to be taken after considering the factors like scope for expansion and development, business diversification, cost of the land and lease land available, Government policies, availability of basic facilities and some economic factors. The location of unit is classified based upon city, municipality/town and rural/village in

Goa. It found that most of the places are well connected to rail and road transport, that is why it doesn't make much of the difference. From the Table 2.10, it was found that 88 units representing 50.29 percent are located in the urban/municipality area followed by 75 units representing 42.86 percent in rural or village area and only 12 units representing 6.86 are located in the city. The definition of city, town and village is considered based upon the census report. Industry wise units which are located in cities are engineering (12), food & beverages (4), electronics (3) and electricals (2). Where as the maximum units representing from all the seven category are located in municipality, in which the engineering and food & beverages are the highest followed by the others. In case of rural village area it was the second highest location of units in which plastics (16) and pharmaceuticals (14) dominated over the rest.

The Table 2.11 reveals the various reasons which influenced the location decision. While ascertaining the value, a five point scale was designed and the various factors were evaluated by taking their mean value only. The various factors are studied separately and their final results are shown in the Table 2.11. Accordingly, Government subsidies is one of the most important reasons for location having the highest percentage i.e. 4.68 followed by site cost (4.33). Scope for expansion is another factor gets the highest percentage (4.08). Access to a customer is also very important. Accordingly, SSI units (3.81) as far as infrastructure is concerned

Area	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total Mean
Local	70	68	48	32	65	71	80	62.00
District	8	10	12	15	20	5	4	10.57
Other Region	10	12	10	16	8	7	6	9.86
State wise	5	2	12	12	8	6	3	6.14
Other States	7	8	18	25	4	11	7	11.43
Exports	0	0	0	0	0	0	0	0.00
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.10**  
**Location Of The Sample Units**

Location	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
City	0	2	3	0	1	2	4	12
©%	0.00	8.00	4.00	0.00	4.00	8.00	16.00	6.86
®%	0.00	16.67	25.00	33.33	41.67	50.00	58.33	100
Town	11	10	13	16	08	15	15	88
©%	44.00	40.00	52.00	64.00	32.00	60.00	60.00	50.29
®%	12.50	11.36	14.77	18.18	9.09	17.05	17.06	100
Village	14	13	9	9	16	8	6	75
©%	56.00	52.00	36.00	36.00	64.00	32.00	24.00	12.86
®%	18.67	17.33	12.00	12.00	21.33	10.67	8.00	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      ®% - represents row percentage .

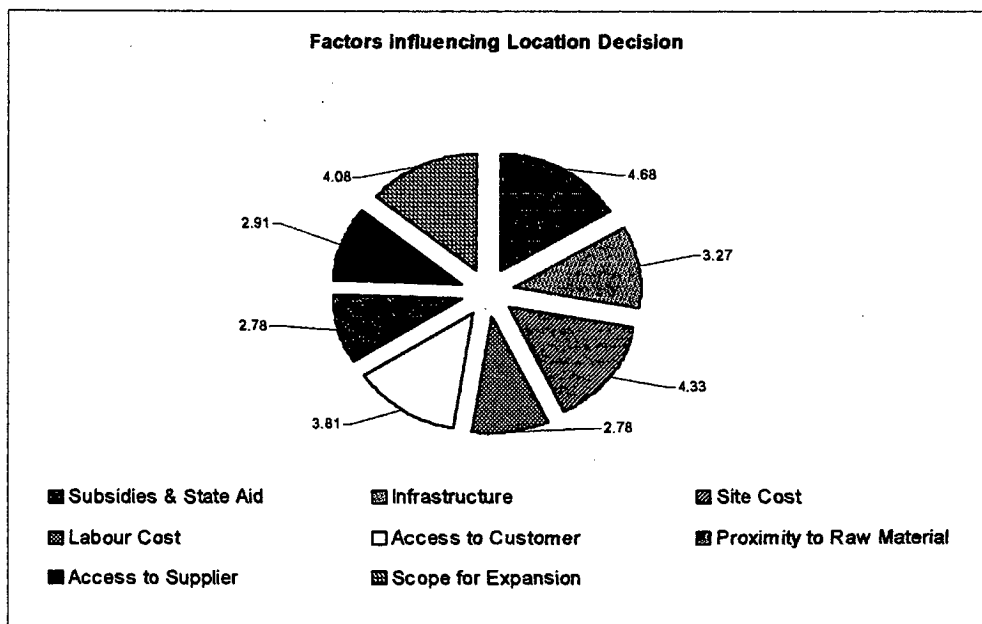
Source: Data Collected from Sample Industrial Units and Questionnaire.



**TABLE 2.11**  
**Factors Influencing Location Decision In The Selected Ssi Units In Goa**

Factors	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total Average Mean Value
Subsidies/ State aid	4.56	4.68	4.76	4.60	4.72	4.84	4.60	4.68
Infrastructure	3.44	3.08	3.24	3.36	3.56	2.92	3.28	3.27
Site Cost	4.44	4.40	4.16	4.24	4.56	4.32	4.16	4.33
Labour Cost	2.20	2.64	3.00	2.00	2.60	3.28	3.32	2.78
Access to Customer	3.72	3.76	3.52	3.04	4.12	3.96	4.20	3.81
Proximity to Raw Material	3.08	2.52	2.68	2.36	2.88	2.56	3.60	2.78
Access to Supplier	2.92	3.20	2.96	2.52	3.00	2.45	3.64	2.91
Scope for Expansion	4.16	4.12	3.92	4.24	3.92	4.36	3.84	4.08

Source: Data Collected from Sample Industrial Units and Questionnaire.



**Chart 2.2**

almost all the industrial estates have got the same facilities except one (Verna Industrial Estate) which have got almost all the factors favourable to it. Where as the rest of the factors have got the moderate weightage.

Industry wise study of infrastructure factor shows that it have got a good response. The Table 2.11(A) which shows response of the sample units on a five points scale from the lowest to the highest states that the maximum number of units (99) comes under the third category i.e. moderate among them the food & beverage have got the highest number of units (17) followed by engineering (16), chemicals (16) and electricals (15). On the fifth point on the scale i.e. very high, it was found that 15 units representing 8.57 percent and pharmaceutical (4), plastic (3) were at the top. On the fourth point on the scale i.e. high, there are 41 units which is topped by the plastics. Infrastructure basically includes, transport, marketing, power and fuel or electricity, financial services, water and good sufficient place for expansion and development. Infrastructural factor is the most important factor for the growth, expansion and development of any industry.

Location of an industry is influenced by the availability of an adequate and suitable labour force. Labour cost is based upon availability of adequate and suitable labour force. Availability of cheap labour is particularly important in the case of labour intensive industries. In the Table 2.11(B) which shows the location

**TABLE 2.11(A)**  
**Analysis Of The Location Decision-The Impact Of Quality Of Infrastructure**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	0	0	1	0	0	2	0	3
©%	0.00	0.00	4.00	0.00	0.00	8.00	0.00	1.71
2	3	5	2	1	2	3	1	17
©%	12.00	20.00	8.00	8.00	8.00	12.00	4.00	9.71
3	12	15	13	16	10	16	17	99
©%	48.00	60.00	52.00	64.00	40.00	64.00	68.00	56.57
4	6	3	8	6	10	3	5	41
©%	24.00	12.00	32.00	24.00	40.00	12.00	20.00	23.43
5	4	2	1	2	3	1	2	15
©%	16.00	8.00	4.00	8.00	12.00	4.00	8.00	8.57
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>3.44</b>	<b>3.08</b>	<b>3.24</b>	<b>3.36</b>	<b>3.56</b>	<b>2.92</b>	<b>3.28</b>	<b>3.27</b>

©% - represents column percentage

Scale : 1 – Very Low; 2 – Low; 3 – Moderate; 4 – High; 5 – Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.11(B)**  
**LOCATION DECISION-THE IMPACT OF LEVEL OF WAGE COSTS**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	5	3	2	3	4	1	1	19
©%	20.00	12.00	8.00	12.00	16.00	4.00	4.00	10.86
2	13	7	6	9	7	4	2	48
©%	52.00	28.00	24.00	36.00	28.00	16.00	8.00	27.43
3	5	12	10	8	10	11	13	69
©%	20.00	48.00	40.00	32.00	40.00	44.00	52.00	39.43
4	1	2	4	2	3	5	6	21
©%	4.00	8.00	16.00	8.00	12.00	20.00	24.00	12.00
5	1	1	3	3	1	4	3	16
©%	4.00	4.00	12.00	12.00	4.00	16.00	12.00	9.14
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>2.20</b>	<b>2.64</b>	<b>3.00</b>	<b>2.00</b>	<b>2.60</b>	<b>3.28</b>	<b>3.32</b>	<b>2.78</b>

©% - represents column percentage

Scale : 1 – Very Low; 2 – Low; 3 – Moderate; 4 – High; 5 – Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

decision and impact of it on the wage costs. It have been put in a five point scale from lower to higher. Its mean value is 2.78 shows that the impact is moderate. It also reveals that 69 units (39.43 percent) are moderate category and 48 units (27.43 percent) are low category. Wage costs are also based upon casual, unskilled, skilled and supervisory staff. It is costly to bring labour force from outside.

Another location decision is based on the level of rent/lease or site cost. The rent or site cost is high in Goa except in some industrial estate where the price of land is controlled by the State. Otherwise the site cost is high. It is mainly, Goa is considered as a tourist destination and there is heavy migration of population from the neighbouring states to Goa. So heavy demand for land have increased the cost of land. Table 2.11(C) shows that 101 units (57.71 percent) say that the influence of rent or site cost is very high where as 45 units (25.71 percent) says that the impact of site cost is high, while the rest 29 units have a moderate or low cost of site. Industry wise the picture shows that plastics units(4.56) have got the highest impact of site cost followed by pharmaceuticals (4.44 percent), electricals (4.40), engineering (4.32), chemicals (4.24), electronics and food & beverage (4.16) where as the overall average shows 4.33.

Entrepreneurs are anxious to locate themselves close to the customers. Customers can be an individual/ household or an industrialist. This will help them for easy and quick sale and to

reduce the working capital requirement. It can also reduce the transport cost drastically. In the Table 2.11(D) shows the impact of access to customer. The overall result shows 3.81 average which is moderately high. The impact of this factor is more, according to industry wise the food & beverage units have got the greatest impact (4.20 average) followed by plastic (4.12) where as the lowest among them is chemicals units (3.04).

Location decision is not influenced much by the factor called proximity to supplier. This can be seen clearly from the Table 2.11(E), which shows 2.91 average as its impact. Thus, it reveals that the impact is very low, only food & beverages (3.64), electricals (3.20) and plastics (3.00) shows some moderate influence where as the rest of them are below moderate rate. It shows that the impact of this factor on location is very low.

The regular supply of raw materials in adequate quantities over a long period is the basic requirement of every business unit. Like impact of proximity to suppliers, impact of proximity to raw material is also very low is evidenced from the above Table 2.11(F), which shows the overall mean value of the location, decision factor, proximity to raw material (2.78 mean value). The Table shows that the industry wise food & beverage got the highest mean value to raw material factor for location decision (3.60) followed by (3.08) by pharmaceuticals. Overall in the moderate and low category have

**TABLE 2.11(C)**  
**Analysis Of The Location Decision-The Impact Of Level Of Rent/Lease Or Site Cost**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
1	0	0	1	0	0	1	1	3
©%	0	0	4.00	0	0	4.00	4.00	1.71
2	1	1	3	1	1	1	1	9
©%	4.00	4.00	12.00	4.00	4.00	4.00	4.00	5.14
3	2	1	2	4	1	3	4	17
©%	8.00	4.00	8.00	16.00	4.00	12.00	16.00	9.71
4	7	10	4	8	6	4	6	45
©%	28.00	41.00	16.00	32.00	24.00	16.00	24.00	25.71
5	15	13	15	12	17	16	13	101
©%	60.00	52.00	60.00	48.00	65.00	60.00	52.00	57.71
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>4.44</b>	<b>4.40</b>	<b>4.16</b>	<b>4.24</b>	<b>4.56</b>	<b>4.32</b>	<b>4.16</b>	<b>4.33</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.11(D)**  
**Analysis Of The Location Decision-The Impact Of Access To Customer (Proximity)**

Scale	Pharmac eutica	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
1	0	0	1	3	0	0	0	4
©%	0	0	4.00	12.00	0	0	0	2.29
2	2	1	4	3	1	2	1	14
©%	8.00	4.00	16.00	12.00	4.00	8.00	4.00	8.00
3	8	10	5	6	5	6	5	45
©%	32.00	40.00	20.00	24.00	20.00	24.00	20.00	25.71
4	10	8	11	8	9	8	7	61
©%	40.00	32.00	44.00	32.00	36.00	32.00	28.00	34.86
5	5	6	4	5	10	9	12	51
©%	20.00	24.00	16.00	20.00	40.00	36.00	48.00	29.17
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>3.72</b>	<b>3.73</b>	<b>3.52</b>	<b>3.04</b>	<b>4.12</b>	<b>3.96</b>	<b>4.20</b>	<b>3.81</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**Table 2.11(E)**  
**Analysis Of The Location Decision-The Impact Of Access To Supplier**  
**(Proximity)**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
1	4	3	3	5	2	4	2	23
©%	16.00	12.00	12.00	20.00	8.00	16.00	8.00	13.14
2	6	5	6	9	6	10	3	45
©%	24.00	20.00	24.00	36.00	24.00	40.00	12.00	25.71
3	9	7	8	6	9	7	5	51
©%	36.00	28.00	32.00	24.00	36.00	28.00	20.00	29.14
4	5	4	5	3	6	3	7	33
©%	20.00	16.00	20.00	12.00	24.00	12.00	28.00	18.38
5	1	6	3	2	2	1	8	23
©%	4.00	24.00	12.00	8.00	8.00	4.00	32.00	13.14
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>2.92</b>	<b>3.20</b>	<b>2.96</b>	<b>2.52</b>	<b>3.00</b>	<b>2.48</b>	<b>3.64</b>	<b>2.91</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.11(F)**  
**Analysis Of The Location Decision-The Impact Of Proximity To Raw**  
**Material**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
1	2	5	3	6	3	3	2	24
©%	8.00	20.00	12.00	24.00	12.00	12.00	8.00	13.71
2	6	9	8	9	7	9	3	51
©%	24.00	36.00	52.00	36.00	28.00	36.00	12.00	29.14
3	8	6	9	6	8	10	5	52
©%	32.00	24.00	36.00	24.00	32.00	40.00	20.00	29.71
4	6	3	4	3	4	2	8	30
©%	24.00	12.00	16.00	12.00	16.00	8.00	16.00	17.14
5	3	2	1	1	3	1	7	18
©%	12.00	8.00	4.00	4.00	12.00	4.00	28.00	9.71
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>3.08</b>	<b>2.52</b>	<b>2.68</b>	<b>2.36</b>	<b>2.88</b>	<b>2.56</b>	<b>3.60</b>	<b>2.78</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

got the largest number of units i.e. 52 (29.71) and 51 (29.14) respectively. Overall it shows a moderate to low mean value.

State aid may be in the form of tax exemption, tax holidays, concessions and subsidies, financial aid, easy availability of bank loan, availability of land at low price and provision of water, electricity on priority basis. State aid is usually provided to units established in backward/rural areas. Table 2.11(G) shows the location decision due to state and it is clear from the Table that the maximum number of units are very much favourable towards this decision. The overall mean value showed a very healthy picture 4.68. Industry wise almost all the industries have got a higher impact and among them engineering have got the 4.84 mean value followed by electronics 4.76, plastic 4.72, electricals 4.68, chemicals and food & beverage 4.60 each and pharmaceuticals 4.56.

Scope for future expansion is also another location decision. Attention should be given while selecting a region or site regarding future availability of proper water supply, sufficient land, raw materials, electricity, labour and so on. The Table 2.11(H) depicts the location decision. The impact of scope for future expansion it is evidenced from the fact that almost all the sample units have shown a high consideration for this factor. Thus the overall mean value shows 4.08. Industry wise engineering have got the highest priority (4.36) followed by chemicals (4.24), pharmaceuticals (4.16),



**TABLE 2.11(G)**  
**Analysis Of The Location Decision-State Aid**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
©%	0	0	0	0	0	0	0	0
3	3	2	1	2	1	0	2	11
©%	12.00	8.00	4.00	8.00	4.00	0	8.00	6.29
4	5	4	4	6	5	4	6	34
©%	20.00	16.00	16.00	24.00	20.00	16.00	24.00	19.43
5	17	19	20	17	19	21	17	130
©%	68.00	16.00	80.00	68.00	16.00	84.00	68.00	74.29
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>4.56</b>	<b>4.68</b>	<b>4.76</b>	<b>4.60</b>	<b>4.72</b>	<b>4.84</b>	<b>4.60</b>	<b>4.68</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.11(H)**  
**Analysis Of The Location Decision-The Impact Of Scope For Future  
Expansion**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0	0	0	0	0	0	0	0
2	0	1	1	0	3	2	2	9
©%	4.00	4.00	4.00	0	12.00	8.00	8.00	5.14
3	6	4	7	5	5	2	8	37
©%	24.00	16.00	28.00	20.00	20.00	8.00	32.00	21.14
4	9	11	10	9	8	6	7	60
©%	36.00	44.00	40.00	36.00	32.00	24.00	28.00	34.29
5	10	9	7	11	9	15	8	69
©%	40.00	36.00	28.00	44.00	36.00	60.00	32.00	39.43
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>4.56</b>	<b>4.68</b>	<b>4.76</b>	<b>4.60</b>	<b>4.72</b>	<b>4.84</b>	<b>4.60</b>	<b>4.68</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

electricals (4.12). Thus, almost all the units have shown a greater consideration to this decision.

Table 2.12 depicts the generation of the unit. Generation is classified into three first venture generation - Unit started by the entrepreneur himself, inherited one and taken from others. The Table shows that there are as many as 130 units representing 74.29 percent one first generation venture followed by 24 units (13.7) are taken over from someone and 21 units (12.00) are inherited one. Industry wise first venture category, chemical industry tops it with 22 units representing 88.00 percent of the total chemical units followed by pharmaceuticals and electricals with 20 each (80 percent) in the inherited one. The food & beverage is the highest with 6 units (24 percent) followed by engineering 85 units (20.00 percent). Taken from other again electronics got the highest 6 (25 percent), food & beverage 6 (20.00 percent) where as incase taken from others, chemical units it only one that is taken over and inherited one it is electronics units (1) single inherited one.

### **2.3 SOCIO-ECONOMIC BACKGROUND OF ENTREPRENEURS**

Entrepreneurship is an attitude of mind which can take risks but calculated ones. He is a person who act as a catalyst fostering initiative, promoting and maintaining economic activities for the production and distribution of wealth. The need for the broad based entrepreneurial class arises in order to activate the factors of

production leading to a higher rate of economic growth, dispersal of economic activities, development of backward and tribal areas, creation of employment opportunities, improvement of the standard of living of the weaker section of the society. Several factors go into the making of an entrepreneur. The socio political and economic conditions, the availability of industrial technology and know how, state of art and culture of business and trading, existence of markets for products and services and the incentives and facilities available for starting an industry all have a bearing on the growth of entrepreneurship. Keeping this function in view, an attempt was made in this study to know the Socio-economic background of the entrepreneurs.

Business world is mostly dominated by males and SSI in Goa are not different from the rest of the world. The Table 2.13 reflects the entrepreneurs classification according to gender. It is clear from the sample study that out of the total 175 units it was found that 134 units representing 76.57 percent are run and managed by male person. Where as 41 units representing 23.43 percent by female. It have also come to the light that although it is the name of a female but the business is actually run and managed by the male. According to the industry wise classification, it states that in electronics industry it is 22 units (88 percent) are run by men followed by pharmaceuticals (21) and engineering (20) among the women category. It is the food & beverage dominated 10

**TABLE 2.12**  
**Generation Wise Classification Of The Units**

	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
First Venture	20	20	18	22	19	17	14	130
©%	80.00	80.00	72.00	88.00	16.00	68.00	56.00	74.29
®%	15.38	15.38	13.85	16.92	14.61	13.08	10.77	100
Inherited One	3	2	1	2	2	5	6	21
©%	12.00	8.00	4.00	8.00	8.00	20.00	24.00	12.00
®%	14.29	9.52	4.76	9.52	9.52	23.81	28.57	100
Taken from others	2	3	6	1	4	3	5	24
©%	8.00	12.00	24.00	4.00	16.00	12.00	20.00	13.91
®%	8.33	12.5	25.00	4.17	16.67	12.50	20.83	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      ®% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.13**  
**GENDER CLASSIFICATION OF THE ENTREPRENEURS**

	Pharmac eutical	Electri- cals	Electro- nics	Chemi- ca	Plastic	Engine ering	F & B	Total
Male	21	19	22	18	19	20	15	134
©%	84.00	96.00	88.00	72.00	76.00	80.00	60.00	76.57
®%	15.67	14.18	16.42	13.43	14.18	14.93	11.19	100
Female	4	6	3	7	6	5	10	41
©%	16.00	24.00	12.00	28.00	24.00	20.00	40.00	23.43
®%	9.76	14.63	7.32	17.07	14.63	12.20	24.39	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      ®% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

representing 40 percent of the total followed by chemicals with seven units and electricals and plastics six units each. The growth of women entrepreneurs is rather fast in Goa as compared to other states. Women are now coming up to undertake various challenges and government also gives them good support in various fields so the women entrepreneurship is on the verge of growth.

Entrepreneurs religion also have a great role to play in the development of entrepreneurship. The Table 2.14, it was found in Goa the entrepreneurs are of various religious background. The majority of small scale units are owned by Hindu religion 75 units (42.86 percent). The Christian it is 51 units representing 29.14 percent, where as Muslims are at the lowest level 4 units (2.29 percent) and other religion like Jains, Parsis, Marwadis, Sikhs are also enjoying quite a big share 45 units (25.71 percent). Hindu religion entrepreneurs is the highest due to family business inherited and partnership wherein the others are giving a tough competition for the rest of them.

Education gives a person an insight to think rationally and develop his innovative, creative skills and knowledge about the various aspects of organising and administrating the issues. Keeping this in view an attempt is been made in this study to know the educational background of the entrepreneurs is given in the Table 2.15. It shows that the maximum number of entrepreneurs are with post graduate qualification 64 units (36.57 percent).

**TABLE 2.14**  
**RELIGION BACKGROUND OF THE ENTREPRENEURS**

Religion	Entrepreneurs
Hindu	75
©%	42.86
Muslims	4
©%	2.29
Christians	51
©%	29.14
Others	45
©%	25.71
<b>Total</b>	<b>175</b>
©%	100

©% represents column percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.15**  
**Educational Background Of Entrepreneurs**

	Pharmaceuticals	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
Illiterate	0	0	0	0	0	0	0	0
©%	0	0	0	0	0	0	0	0
®%	0	0	0	0	0	0	0	0
Primary	0	0	0	0	0	0	0	0
©%	0	0	0	0	0	0	0	0
®%	0	0	0	0	0	0	0	0
Secondary	0	1	0	0	0	0	2	3
©%	0	4.00	0	0	0	0	8.00	1.71
®%	0	33.33	0	0	0	0	66.67	100
S.S.C.E	0	4	3	0	1	1	5	14
©%	0	16.00	12.00	0	4.00	4.00	2.00	8.00
®%	0	28.57	21.43	0	7.14	7.14	35.71	100
Technical	0	10	8	0	6	13	2	39
©%	0	40.00	8.00	0	24.00	52.00	8.00	22.22
®%	0	25.64	20.51	0	15.38	33.33	5.13	100
Graduate	6	7	7	11	8	5	11	55
©%	24.00	28.00	28.00	44.00	32.00	20.00	44.00	31.43
®%	10.91	12.73	12.73	20.00	14.55	9.09	20.00	100
Post graduate & above	19	3	7	14	10	6	5	64
©%	76.00	12.00	28.00	56.00	40.00	24.00	20.00	36.57
®%	29.69	4.69	10.94	21.88	15.63	9.38	7.81	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage

®% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

followed by graduates 31.43 percent (55 units) with technical education 22.29 percent (39 units) and with S.S.C.E. 8 percent (14 units), secondary level 1.71 percent (3 units). The sample shows that there was no one with educational qualification of an entrepreneurs below secondary level. In the industry wise, the pharmaceuticals were found with 19 post graduates, and six graduates, electricals with the maximum entrepreneurs are technical education/skill 10 units (25.64 percent). Electronics it is technical education and graduation representing 8 units (20.51 percent) and 7 units (12.73 percent). Chemical industry it is 14 units (21.88 percent) entrepreneurs with P.G., plastic units 10 P.G. followed by graduates and technical, engineering 13 units (33.33 percent) technical and food & beverage 11 graduates (20.00 percent) overall the entrepreneurs have got good educational status.

Our society consists of various classes or castes and casteism again another factor that have influenced the business to a larger extent. We have various communities like Brahmins, Sudhras, Vanni's (business class) and other Backward Classes, but for the purpose of our understanding they have been grouped into forward class (FC), backward class (BC), schedule caste (SC) and schedule tribes (ST). The Brahmins and Sudhras are grouped under forward class/caste. Vanni's in the BC. The Table 2.16 depicts the overall picture of the entrepreneur community status. It is clear that the 49.71 percent (66 units), schedule caste 12 percent

(21 units) and one unit owned by schedule tribes. According to industry wise comparison it shows that 20 units of chemical industry (80.00 percent) have got the highest number of forward class entrepreneurs followed by pharmaceuticals 16 (64.00 percent) and electricals 12 (48 percent), engineering 12 (48 percent) in the backward class it is food & beverages 14 (56.00 percent) is the highest followed by plastics 11 units (44.00 percent) and electrical and electronics 10 units each (40.00 percent). Schedule caste it is plastic industry 6 units (24.00 percent) and schedule tribes one unit is from electricals. The government have given lots of incentives to encourage backward, schedule caste and schedule tribes communities in Goa as a result this community is coming up now to take up the venture.

Goa is a tourist destination of the world and trade and commerce is concerned have got a little scope. Most of the industries who are doing well are the service oriented industries. Agriculture is the old traditional occupation of Goan people. There was a little hesitation for manufacturing industries to come to Goa earlier but now with the new industrial policy and promotion of small scale sector it have gained more and more importance. It have attracted many entrepreneurs not only from Goa and India but also from the world over. The industrialist from Goa are mainly from various states of India where in majority of them are from Maharashtra. There are quite a large number of entrepreneurs



from Gujarat, Karnataka, Kerala, Tamil Nadu, Rajasthan and Andhra Pradesh. The Table 2.17 shows the native state of the entrepreneurs. There are as many as 91 entrepreneurs are from Goa and representing 52 percent of the total sample and 84 entrepreneurs are from other states (48.00 percent). Industry wise, pharmaceuticals 19 (76.00 percent) are from other states, electricals 11 (44.00 percent), electronics 13 (52.00 percent), chemicals 15 (60.00 percent), plastics 12 (48.00 percent), engineering 8 (32.00 percent) and food & beverage 6 (24.00 percent) are from the outside Goa.

District of location of the entrepreneurs is shown in the Table 2.18. Goa have got only two districts namely North Goa and South Goa. The division of industries are more or less evenly distributed. The Table shows that 90 units (51.43 percent) are located in the South and 85 units (43.57) are located in the North. Industry wise, pharmaceuticals 18 units (72.00 percent), plastics 16 units (64 percent), chemicals 13 units (52 percent), engineering 12 units (80 percent), food & beverages 14 units (56 percent), engineering 13 units (52 percent). Where as in the South electronics 12 units (48 percent), food & beverages 14 units (56 percent), engineering 13 units (52 percent), electricals 15 units (60 percent). Many entrepreneurs are attracted towards Goa from other states mainly due to the various tax holidays, tax concessions, subsidies of various kind, sales tax exemption and other facilities.

**TABLE 2.16**  
**Community Background Of Entrepreneurs**

	Pharmac eutical	Electri- cals	Electro- nics	Chem- ical	Plastic	Engine ering	F & B	Total
F.C.	16	12	11	20	8	12	8	87
©%	64.00	48.00	94.00	80.00	32.00	48.00	32.00	49.71
®%	18.39	13.79	12.64	22.99	9.20	13.79	9.20	100
B.C.	6	10	10	5	11	10	14	66
©%	24.00	40.00	40.00	20.00	44.00	40.00	56.00	37.71
®%	9.09	15.15	15.15	7.58	16.67	15.15	21.21	100
S.C.	3	2	4	0	6	3	3	21
©%	12.00	8.00	16.00	0	24.00	12.00	12.00	12.00
®%	14.29	9.52	19.05	0	28.57	14.29	14.29	100
S.T.	0	1	0	0	0	0	0	1
©%	0	4.00	0	0	0	0	0	0.57
®%	0	100	0	0	0	0	0	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage

®% - represents row percentage

F.C. - Forward Class; B.C. - Backward Class; S.C. - Schedule Caste; S.T. - Scheduled Tribes;

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.17**  
**Native State Of Entrepreneurs**

	Pharmac eutical	Electri- cals	Electro- nics	Chem- ical	Plastic	Engine ering	F & B	Total
Goa	6	14	12	10	13	17	19	91
©%	24.00	56.00	48.00	40.00	52.00	68.00	76.00	52.00
®%	6.59	15.38	13.19	10.99	14.29	18.68	20.88	100
Other States	19	11	13	15	12	8	6	84
©%	76.00	44.00	52.00	60.00	48.00	32.00	24.00	48.00
®%	22.62	13.10	15.48	17.86	14.29	9.52	7.14	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage

®% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

The professional background of the entrepreneur is also a very important factor for choosing this present venture. Table 2.19 states the occupational background of the entrepreneur. For the purpose of our study, we have designed the following pattern. Employee of the same type of industry, unemployment, retired employee, artisan/traders, partner of the unit. Occupational background gives the line of activity in which he is good in. It gives the person an experience in the line of activity to handle and to administer. It also builds up his confidence to face the new challenges.

From the above Table it is clear that maximum number of the entrepreneurs were the employee of the same type of business. Somewhere before it is 48 entrepreneurs representing 27.42 percent. It have encouraged them to take up the same business because of their confidence, great interest. 24 percent (42 entrepreneurs) were unemployed who took up this profession. It is also due to the encouragement given by the Central and the state government in the form of easy loan, lots of subsidies and concessions. In the same way 42 artisans/traders (24 percent) who had taken over this occupation because of their technical knowledge and skills, 35 entrepreneurs had taken up the occupation due to their experience in the some type of job in the firm of partner of the unit and 8 entrepreneurs (4.57 percent) who carry on the business are the retired employee of the private or

**TABLE 2.18**  
**District Wise Location of Units**

	Pharm aceutic al	Electri- cals	Electro- -nics	Chemi- -cal	Plasti c	Engin eering	F & B	Total
North Goa	18	10	5	13	16	12	11	85
©%	72.00	40.00	20.00	52.00	64.00	48.00	44.00	43.57
@%	21.18	11.76	5.88	15.29	18.82	14.12	12.94	100
South Goa	7	15	20	12	9	13	14	90
©%	28.00	60.00	80.00	48.00	36.00	52.00	56.00	51.43
@%	7.78	16.67	22.22	13.33	10.00	14.44	15.56	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      @% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.19**  
**Occupational Background Of The Entrepreneurs**

	Pharm aceutic al	Electri- cals	Electro- -nics	Chemi- -cal	Plasti c	Engin eering	F & B	Total
Employee	2	5	8	4	9	2	18	48
©%	8.00	20.00	32.00	16.00	36.00	8.00	72.00	27.42
@%	4.17	10.42	16.67	8.33	18.75	4.17	37.50	100
Unemployed	8	4	10	8	6	6	0	42
©%	32.00	16.00	40.00	32.00	24.00	24.00	0	24.00
@%	19.05	9.52	23.81	19.05	14.29	14.29	0	100
Retired employee	0	0	2	1	0	3	2	8
©%	0	0	8.00	4.00	0	12.00	8.00	4.57
@%	0	0	25.00	12.5	0	37.5	25	100
Artisan/Trader	9	9	4	5	8	5	2	42
©%	36.00	36.00	16.00	20.00	32.00	20.00	8.00	24.00
@%	21.43	21.43	9.52	11.90	19.05	11.90	4.76	100
Partner of Unit	6	7	1	7	2	9	3	35
©%	24.00	28.00	4.00	28.00	8.00	36.00	12.00	20.00
@%	17.14	20.00	2.86	20.00	5.71	25.71	8.57	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      @% - represents row percentage

Source: Data Collected from Sample Industrial Units and Questionnaire.

public sector enterprises. Maximum number of employees who take up food & beverages is 18 (72 percent), unemployed 10 (48 percent) from electronics, retired employees engineering 2 (12 percent), artisans and traders were pharmaceuticals and electricals 9 each(36 percent) and among partners in the unit were engineering 9(25.71 percent) were the highest i.e. their respective field.

Thus, the previous position of the entrepreneur influences the entrepreneurs to choose the type of industrial activity which is more profitable and long lasting.

Entrepreneurs experience in the line of activity is very important. Only through experience one can know the detail aspects involved with the job. He can become more creative and innovative in handling the resources of the organisation. Table 2.20 reflects the managerial or technical experience possessed by the entrepreneurs, it was found that 163 entrepreneurs representing 93.14 percent have got the technical/managerial experience. Industry wise all have got the full experience except electricals 5 entrepreneurs (20 percent), electronics 4 entrepreneurs (16 percent) and chemicals 2(12 percent) did not have any experience. Experience helps a person to do the right thing at the right time and the right manner. It can reduce wastage and spoilage of all kinds and increase the productivity of the unit to the highest level.

Experience possessed by the entrepreneurs is of different kinds. The broad classification is done i.e. on the job experience and off the job experience. The Table 2.21 depicts the nature of experience measured in terms of mean value. It shows that the entrepreneur is having more on the experience 4.04 mean value compared to off the job experience which is 3.65 mean value. Further, an indepth study revealed in the form of the Table 2.21A regarding off the job experience and Table 2.21B regarding on the job experience. In Table 2.21A - off the job experience, 44 entrepreneurs (25.19 percent) got high and 40 entrepreneurs (22.86 percent) got moderate off job experience on an average most of the entrepreneur according to industry wise got moderated experience In Table 2.21B exhibits on job experience, where as 61 entrepreneurs representing 34.86 percent) got the very high experience and 38 entrepreneurs representing 21.71 have got the moderate on the job experience. Overall it shows that the on the job experience was slightly higher than the off the job experience. The mean value distribution also in Table 2.21 shows in all the industry on the job experience is higher except electronics where off the job experience (3.84 percent) is higher than the on the job experience (3.68 percent).

Small Scale Industry creates an opportunity for entrepreneurship development with initiative to rise on their own ability and through hard work. The factors which go into the

**TABLE 2.20  
Managerial/Technical Experience Of Entrepreneurs**

	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
<b>Yes</b>	<b>25</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>163</b>
©%	100	80.00	84.00	88.00	100	100	100	93.14
@%	15.34	12.70	12.89	13.50	15.34	15.34	15.34	100
<b>No</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>
©%	0	20.00	16.00	12.00	0	0	0	6.86
@%	0	41.67	33.33	25.00	0	0	0	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      @% - represents row percentage  
Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.21 NATURE OF EXPERIENCE (Mean Value)**

	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
<b>On Job</b>	<b>4.24</b>	<b>4.16</b>	<b>3.68</b>	<b>4.16</b>	<b>3.80</b>	<b>4.16</b>	<b>4.08</b>	<b>4.04</b>
<b>Off Job</b>	<b>3.48</b>	<b>3.76</b>	<b>3.84</b>	<b>3.72</b>	<b>3.60</b>	<b>3.16</b>	<b>3.96</b>	<b>3.65</b>

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.21A**  
**Nature Of Experience – Off The Job Of The Entrepreneurs**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	4	2	1	1	2	3	1	14
©%	16.00	8.00	4.00	4.00	8.00	12.00	4.00	8.00
@%	28.57	14.29	7.14	7.14	14.29	21.42	7.14	100
2	2	2	3	3	3	4	2	19
©%	8.00	8.00	12.00	12.00	12.00	16.00	8.00	10.88
@%	10.52	10.52	15.79	15.79	15.79	21.05	10.52	100
3	4	5	5	6	6	9	5	40
©%	16.00	20.00	20.00	24.00	24.00	36.00	20.00	22.86
@%	10.00	12.50	12.50	15.00	15.00	22.50	12.50	100
4	8	7	6	7	6	4	6	44
©%	32.00	28.00	24.00	28.00	24.00	16.00	24.00	25.14
@%	18.18	15.91	13.64	15.91	13.64	9.09	13.64	100
5	7	9	10	8	8	5	11	58
©%	28.00	36.00	40.00	32.00	32.00	20.00	44.00	33.14
@%	12.07	15.51	17.24	13.79	13.79	8.62	18.97	100
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100
<b>MEAN</b>	<b>3.48</b>	<b>3.76</b>	<b>3.84</b>	<b>3.72</b>	<b>3.60</b>	<b>3.16</b>	<b>3.96</b>	<b>3.65</b>

©% - represents column percentage

@% - represents row percentage

Scale : 1 – Very Low; 2 – Low; 3 – Moderate; 4 – High; 5 – Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.21B**  
**NATURE OF EXPERIENCE – ON THE JOB OF THE ENTREPRENEURS**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	0	0	1	0	1	0	0	2
©%	0	0	4.00	0	4.00	0	0	1.14
2	0	1	2	0	1	0	1	5
©%	0	4.00	8.00	0	4.00	0	4.00	2.86
3	2	4	8	6	7	5	6	38
©%	8.00	16.00	32.00	24.00	28.00	20.00	24.00	21.71
4	15	10	7	9	9	11	8	69
©%	60.00	40.00	28.00	36.00	36.00	44.00	32.00	39.43
5	8	10	7	10	7	9	10	61
©%	32.00	40.00	28.00	40.00	25.00	36.00	40.00	34.86
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>4.24</b>	<b>4.16</b>	<b>3.68</b>	<b>4.16</b>	<b>3.80</b>	<b>4.16</b>	<b>4.08</b>	<b>4.04</b>

©% - represents column percentage

Scale : 1 – Very Low; 2 – Low; 3 – Moderate; 4 – High; 5 – Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.



making of an entrepreneur includes the individual who take initiative, establish, maintain and expand new enterprises. In short Small Scale Industries is the beehive of entrepreneurship innovation and development.

#### **2.4 MOTIVATIONAL FACTORS ANALYSIS**

Motivational factors are the encouraging factors that drive an entrepreneur to take up the venture one may get attracted due to flexibility involved in it. Subsidies and incentives, high demand, profitability, cheap labour and raw material etc. It have attracted all kinds of entrepreneurs, literate, illiterates, highly educated from the state, from other states and from other countries also. A study is done by identifying certain factors and studying them in details reveals the following conclusions.

In the Table 2.22(A) shows the motivation due to self employment. There is a general notion that self employment is the best employment. Everybody like to be the boss of oneself and enjoy lots of freedom and that is why there is a heavy rush for self employment. In the above Table, the entrepreneurs are put on a five point scale of measurement from very low to very high. It is clear that as many as 93 entrepreneurs (53.4 percent) rated this factor as very high value where as 44 entrepreneurs representing 25.14 percent rated in high category where as 26 entrepreneurs rated as moderate value.

Table 2.22(B) depicts the motivation due to a better prospects. 85 entrepreneurs predict that there is very high prospect in the business, 73 entrepreneurs (48.57 percent) representing (41.71 percent) predict high prospect and 17 entrepreneurs predict moderate prospects.

Encouragement through friends and relatives is another reason for motivation. Table 2.22(C) reveals that 63 entrepreneur (36 percent) say that they were very highly encouraged by this factor, where as 53 entrepreneurs representing 30.29 percent were highly motivated, 37 entrepreneurs 21.14 percent were moderately encouraged. The encouragement through friends and relatives have got a very high impact on the entrepreneur.

Another motivational factor is due to support and incentives offered. Table 2.22(D) shows the standing of various entrepreneurs due to support and incentives. 98 entrepreneurs representing 56 percent were very highly motivated, 37 entrepreneurs 21.14 percent highly motivated and 24 entrepreneurs 13.71 percent moderately motivated. This motivational factor have a direct impact on the entrepreneurs.

Still another reason for motivation is due to past experience of the entrepreneur. Table 2.22(E) reflects that past experience have moderate impact on the entrepreneur motivation. 48

**TABLE 2.22(A)**  
**Motivation To Take Up This Line Of Activity in the selected SSI Units -**  
**Self Employment**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	1	1	0	2	0	4
©%	0	0	4.00	4.00	0	8.00	0	2.29
2	1	2	1	2	1	1	0	8
©%	4.00	8.00	4.00	8.00	4.00	4.00	0	4.57
3	3	5	6	4	3	3	2	26
©%	12.00	20.00	24.00	16.00	12.00	12.00	8.00	4.86
4	6	5	7	6	7	8	5	44
©%	24.00	20.00	28.00	24.00	28.00	32.00	20.00	25.14
5	15	13	10	12	14	11	18	93
©%	60.00	52.00	40.00	48.00	56.00	44.00	72.00	53.14
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>4.40</b>	<b>4.16</b>	<b>3.96</b>	<b>4.04</b>	<b>4.36</b>	<b>4.00</b>	<b>4.64</b>	<b>4.22</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.22(B)**

<b>Motivation To Take Up This Line of Activity in the Selected SSI Units - Better Prospects</b>								
Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>17</b>
©%	4.00	8.00	4.00	12.00	0.00	16.00	24.00	9.71
®%	5.88	11.76	5.88	17.65	0.00	23.53	35.29	100.00
<b>4</b>	<b>9</b>	<b>7</b>	<b>10</b>	<b>9</b>	<b>16</b>	<b>13</b>	<b>9</b>	<b>73</b>
©%	36.00	28.00	40.00	36.00	64.00	52.00	36.00	41.71
®%	12.33	9.59	13.70	12.33	21.92	17.81	12.33	100.00
<b>5</b>	<b>15</b>	<b>16</b>	<b>14</b>	<b>13</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>85</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	17.65	18.82	16.47	15.29	10.59	9.41	11.76	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>Mean</b>	<b>4.56</b>	<b>4.56</b>	<b>4.52</b>	<b>4.40</b>	<b>4.36</b>	<b>4.16</b>	<b>4.16</b>	<b>4.39</b>

©%- represents column percentage      ®%- represents row percentage

Scale: 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.22(C)**

**Motivation To Take Up This Line of Activity in the Selected SSI Units - Friends Encouragement**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>
©%	8.00	4.00	8.00	4.00	0.00	0.00	4.00	4.00
@%	28.57	14.29	28.57	14.29	0.00	0.00	14.29	100.00
<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>15</b>
©%	12.00	8.00	8.00	8.00	12.00	8.00	4.00	8.57
@%	20.00	13.33	13.33	13.33	20.00	13.33	6.67	100.00
<b>3</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>37</b>
©%	28.00	20.00	24.00	20.00	16.00	20.00	20.00	21.14
@%	18.92	13.51	16.22	13.51	10.81	13.51	13.51	100.00
<b>4</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>6</b>	<b>8</b>	<b>53</b>
©%	24.00	28.00	32.00	36.00	36.00	24.00	32.00	30.29
@%	11.32	13.21	15.09	16.98	16.98	11.32	15.09	100.00
<b>5</b>	<b>7</b>	<b>10</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>12</b>	<b>10</b>	<b>63</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
@%	11.11	15.87	11.11	12.70	14.29	19.05	15.87	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>Mean</b>	<b>3.52</b>	<b>3.92</b>	<b>3.64</b>	<b>3.84</b>	<b>3.96</b>	<b>4.12</b>	<b>4.00</b>	<b>3.86</b>

©% - represents column percentage      @% - represents row percentage

Scale: 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.22(D)**

**Motivation To Take Up This Line Of Activity in the Selected SSI Units- Support And Incentives**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
	1	2	3	4	5	6	7	
<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>7</b>
©%	0	0	0	8.00	8.00	8.00	4.00	4.00
<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>9</b>
©%	0	0	4.00	4.00	12.00	4.00	12.00	5.14
<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>24</b>
©%	4.00	8.00	12.00	8.00	16.00	20.00	28.00	13.71
<b>4</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>37</b>
©%	16.00	8.00	20.00	32.00	20.00	28.00	24.00	21.14
<b>5</b>	<b>20</b>	<b>21</b>	<b>16</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>8</b>	<b>98</b>
©%	8.00	84.00	64.00	48.00	44.00	40.00	32.00	56.00
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<b>MEAN</b>	<b>4.76</b>	<b>4.76</b>	<b>4.44</b>	<b>4.08</b>	<b>3.80</b>	<b>3.88</b>	<b>3.68</b>	<b>4.20</b>

©% - represents column percentage

Scale : 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

entrepreneurs (27.43 percent) have got very high rating, 61 entrepreneurs 34.86 percent rates is as moderately motivating.

Infrastructural facilities is another motivating factor for entrepreneurs. Table 2.22(F) shows the rating for the various entrepreneurs. It states that only 25 entrepreneurs representing 14.29 percent are very highly motivated, 47 entrepreneurs 26.86 percent are highly motivated and most of them are moderately or low motivational rating.

The analysis of all the motivational factors displayed in the Table 2.22(G) showed the mean value of various motivational factors. Among them all the highly rated factor is due to better prospects (4.39 mean value), then followed by self-employment (4.22), subsidies (4.20) and the lowest is infrastructure (3.28). Infrastructural factors become the lowest because everybody knows the fact that the Goa state is fully dependent on other neighbouring states for their necessities like power & fuel, supply of raw material, labour, etc.

Industry wise analysis shows that in pharmaceuticals the subsidies got the highest mean value (4.76) and infrastructure got the lowest (3.04). In case of electricals the subsidies got the highest (4.76) and infrastructure is the lowest (3.28), electronics it is subsidies (4.44) is the highest and infrastructure is the lowest (3.12). Chemicals, better prospects is the highest (4.40) and past

**TABLE 2.22(E)**  
**Motivation To Take Up This Line Of Activity in the Selected SSI Units - Past Experience**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	0	2	0	2	1	1	1	7
©%	0	8.00	0	8.00	4.00	4.00	4.00	4.00
2	2	4	3	5	6	2	4	26
©%	8.00	16.00	12.00	20.00	24.00	8.00	16.00	14.86
3	6	7	6	4	5	2	3	33
©%	24.00	28.00	24.00	16.00	20.00	8.00	12.00	18.86
4	9	8	10	6	7	12	9	61
©%	36.00	32.00	42.00	24.00	28.00	48.00	36.00	34.86
5	8	4	6	8	6	8	8	48
©%	32.00	16.00	24.00	32.00	24.00	32.00	32.00	27.43
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<i>MEAN</i>	3.92	3.32	3.76	3.52	3.44	3.96	3.76	3.67

©% - represents column percentage

Scale : 1 – Very Low; 2 – Low; 3 – Moderate; 4 – High; 5 – Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**Table 2.22(F)**  
**Motivation To Take Up This Line Of Activity in the Selected SSI Units - Infrastructure Facilities**

Scale	Pharmac eutical	Electri- cals	Electro- nics	Chemical	Plastic	Engine ering	F & B	Total
1	3	2	1	2	1	2	1	12
©%	12.00	8.00	4.00	8.00	4.00	8.00	4.00	6.86
2	4	3	5	1	5	3	2	23
©%	16.00	12.00	20.00	4.00	50.00	12.00	8.00	13.14
3	10	8	11	7	12	11	9	68
©%	40.00	32.00	44.00	28.00	48.00	44.00	56.00	38.80
4	5	10	6	10	4	5	7	47
©%	20.00	40.00	24.00	40.00	16.00	20.00	28.00	26.86
5	3	2	2	5	3	4	6	25
©%	12.00	8.00	8.00	20.00	12.00	16.00	24.00	14.29
<b>TOTAL</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
<i>MEAN</i>	3.04	3.28	3.12	3.60	3.12	3.24	3.60	3.28

©% - represents column percentage

Scale : 1 – Very Low; 2 – Low; 3 – Moderate; 4 – High; 5 – Very High.

Source: Data Collected from Sample Industrial Units and Questionnaire.

**TABLE 2.22(G)**  
**Analysis Of Motivational Factors (Mean)**

Factors	Pharmac eutical	Electri- cals	Electro- nics	Chemi- cal	Plastic	Engine ering	F & B	Total
Self Employment	4.40	4.16	3.96	4.04	4.36	4.00	4.64	4.22
Subsidies	4.76	4.76	4.44	4.08	3.80	3.88	3.68	4.20
Better Prospects	4.56	4.56	4.52	4.40	4.36	4.16	4.16	4.39
Friends Support	3.52	3.92	3.64	3.84	3.96	4.12	4.00	3.86
Infrastructure	3.04	3.28	3.12	3.60	3.12	3.24	3.60	3.28
Experience	3.92	3.32	3.76	3.52	3.44	3.96	3.76	3.67

Source: Data Collected from Sample Industrial Units and Questionnaire.

experience is the lowest (3.52), plastics, self employment and better prospects is the highest (4.36) and infrastructure is rated as the lowest (3.12). In engineering, better prospects is rated the highest (4.16) and subsidies is rated the lowest (3.88) and finally in food & beverage, self employment is rated at the highest mean value (4.64) and infrastructure is rated the lowest (3.60). Therefore, it is clear from the above analysis that entrepreneurs enter in small scale business due to better prospects, self employment and subsidies.



**CHAPTER III**

***ACCOUNTING  
PRACTICES***





## CHAPTER - III

### ACCOUNTING PRACTICES

The basic function of Accounting is to serve as a means of communication. It communicates the results of business operations to various parties who have some stake in the business, since it is a language of business. All companies, firms and small scale enterprises even non profit making enterprises in particular are required to keep certain Accounting records that will show and explain the companies transactions. The need for accounting is all the more great mainly to know, what he owns? What he owes? Whether he have earned a profit or suffered a loss on account of running a business? What is his financial position i.e. whether he will be in a position to meet all his commitments in the near future or he is in the process of becoming a bankrupt.

Companies Act 1956, have made it compulsory for all the companies registered under its Act to prepare complete books of accounts as per its guidelines, where as for sole traders and partnerships firms the Act is not applicable. Many of the sole trading concerns and partnership firms are coming under the preview of small scale business enterprises and for them the Act is relaxed. Business enterprises have to communicate with the internal and external parties and maintaining cost and financial records becomes the part and parcel of their routine activities. The

Internal management requires the books of Account to take the decisions that will improve the efficiency and profitability, external parties may demand it due to their interest in it.

Like any other business operations, small scale industry also have to maintain two types of records, costing and financial. Financial records involves the financial statement (i.e. profit and Loss Account and Balance Sheet). For any legal entity, it is mandatory for them to prepare at the end of the year the financial statement. Whether they like it or not, all small enterprises, partnership and joint stock companies are required to maintain the financial statement compulsorily. It may be due to request/demand from income tax, sales tax, banks, lenders, creditors, suppliers or from the financial institutions who give long/short term loans to the units or general investors they have to prepare the financial statement from time to time. In small scale enterprises, it is due to government which gives various incentives and subsidies, creditors who supplies on credit to SSI, financial institutions which gives the various types of short term and long term finances, Banks which give loan to small scale industries will evaluate the financial statements first before granting any credit and finances to SSI. It becomes necessary for the unit to get its accounts audited by a qualified accountant or Chartered Accountant from time to time and give his comments on the financial standing of the units. He have to prepare a statement to know from where the funds have come and for what purpose expenses it have incurred. Sometimes

it have to give the ratio analysis and trends analysis, fund flow statement, common size statements analysis.

Thus, financial statement act as a guarantor of financial health of the company, without this statement it will be extremely difficult for any outside party to lend or give credit to small scale enterprises.

Keeping the importance of Accounting in mind an attempt is made to study the accounting practices followed by small scale industry in Goa.

### **3.1 FINANCIAL ACCOUNTING**

Accounting have a significant role to play in any Business organisation whether it is sole proprietorship or a big joint stock company. It is very important to have a separate accounting department that maintains the various books of Accounts and reports it to management from time to time. In small scale industry it is mainly the owner who prepared the books of Accounts that to as per his own whims and fancies. In Table 3.1 it is clear from the sample of 175 units only 89 units representing 50.86 percent are maintaining a separate accounting department where as 86 units representing 40.14 percent do not maintain a separate accounting department. Industry wise it is the chemicals representing 60 percent of the total units electricals, plastics, food & beverages

recorded the lowest percentage below (50 percent) who maintain a separate accounting department.

It is clear from the analysis that Accounting neglected area in Small Scale Industries. Accounting is done by the owner that too as per his own wish.

Basically, there are two main systems of Accounting or keeping the records of the business transactions in a regular and systematic manners. It may be in the form of single entry or double entry system of Accounting. This system can be maintained by any business organisation whether it is a joint stock company, partnership firm or sole trading concern whether it is small scale business or large business houses, it is a must. Table 3.2 shows single entry or double entry system of accounting. It is found that 171 units representing 97.71 percent of the total units followed double entry system of accounting while only 4 units (2.29 percent) followed the single entry system. In plastics and food & beverages, it is 2 units each representing just 8 percent. Most of the units have found the double entry system to be the most suitable for the purpose of recording the transaction. Out of 175 units only 2 units each from plastics and food & beverages are carrying out single entry system of book keeping.

**TABLE 3.1**  
**Maintenance of Accounting Department by SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>15</b>	<b>11</b>	<b>13</b>	<b>16</b>	<b>8</b>	<b>15</b>	<b>11</b>	<b>89</b>
©%	60.00	44.00	52.00	64.00	32.00	60.00	44.00	50.86
®%	16.85	12.36	14.61	17.98	8.99	16.85	12.36	100.00
<b>No</b>	<b>10</b>	<b>14</b>	<b>12</b>	<b>9</b>	<b>17</b>	<b>10</b>	<b>14</b>	<b>86</b>
©%	40.00	56.00	48.00	36.00	68.00	40.00	56.00	49.14
®%	11.63	16.28	13.95	10.47	19.77	11.63	16.28	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.2**  
**System of Accounting followed by the Sample SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Single Entry</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>
©%	0.00	0.00	0.00	0.00	8.00	0.00	8.00	2.29
®%	0.00	0.00	0.00	0.00	50.00	0.00	50.00	100.00
<b>Double Entry</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>23</b>	<b>25</b>	<b>23</b>	<b>171</b>
©%	100.00	100.00	100.00	100.00	92.00	100.00	92.00	97.71
®%	14.62	14.62	14.62	14.62	13.45	14.62	13.45	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

### **3.1.1 VOUCHER**

Auditor checks the books of account on the basis of vouchers. It is a document of the office that gives authentication to the book-keeper to pass the necessary entries. Any activity of accounts starts first with the maintenance of voucher register. Whether large scale business or small scale business, one cannot avoid voucher register. On the basis of voucher an accountant gives treatment to a transaction. In other words, Vouchers are necessary to pass a transaction. In Table 3.3, it is revealed that almost all the small scale units, maintain the Voucher Register. It only implies that SSI are aware of the importance of voucher in the business. It helps to cross check the accounts and its reliability. It mainly classifies into two debit voucher and credit voucher.

Generally vouchers are maintained in two different ways i.e. date-wise and transaction-wise. Most of the vouchers are maintained according to data-wise but in case of contract work or job works and some other cases vouchers are maintained according to separate transaction-wise. Most of the small scale units follow data-wise classification of voucher. In Table 3.4 shows the basis for Voucher Register, 121 units representing 69.14 percent of the total followed the date-wise voucher whereas 54 units representing 30.86 percent followed job/contract wise i.e. transaction-wise Voucher Register. Industry wise maximum electronics units maintains date wise voucher 20 units 80 percent followed by engineering 19 units

**TABLE 3.3**  
**Preparation of Voucher Register by the Sample SSI Units.**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>No</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage  
Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.4**  
**Basis for Voucher Register**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Date-wise</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>17</b>	<b>14</b>	<b>19</b>	<b>17</b>	<b>121</b>
©%	64.00	72.00	80.00	68.00	56.00	76.00	68.00	69.14
®%	13.22	14.88	16.53	14.05	11.57	15.70	14.05	100.00
<b>Transaction-wise</b>	<b>9</b>	<b>7</b>	<b>5</b>	<b>8</b>	<b>11</b>	<b>6</b>	<b>8</b>	<b>54</b>
©%	36.00	28.00	20.00	32.00	44.00	24.00	32.00	30.86
®%	16.67	12.96	9.26	14.81	20.37	11.11	14.81	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage  
Source: Data collected from Sample Industrial Units and Questionnaire.

(76 percent), electricals 18 units (72 percent) and chemicals and food & beverages 17 units each represents 68 percent each. Job wise register were mainly common among plastics 4 units (44 percent) followed by pharmaceuticals 9 units (36 percent). It is understood from the above Table most of the units followed date-wise Voucher Register whereas only few cases they maintained transaction wise voucher.

### **3.1.2 JOURNALS**

Journal is prepared after the voucher register. Journal keeps all the records of the business transactions in an orderly manner. Journal is a book of original entry. It is a book of daily record. All the Transactions are subsequently posted and transferred to respective ledgers which ultimately helps to prepare the Trial balance and the financial statements. Various Journals are prepared based upon the transactions and size of the business. Small business enterprises prepare sometimes one journal while others prepare various others journals. To have a systematic book keeping, one must know first how to journalise the transactions.

The overall Journal is also known as the General Journal in case of small scale units in which all the business activities are recorded accordingly. When the transactions become numerous, special journals are used. Thus, in modern times a journal is divided into various books known as "*Subsidiary Books*". Many Small Scale units feel it is convenient and time saving in



maintaining one Journal. Table 3.5 reveals the type of Journals maintained by SSI. 74 units out of 175 sample units representing 42.29 percent of the total have maintained one General Journal to record all the transactions, wherein plastics industries with 18 units representing 72 percent stand first followed by food & beverages 13 units ( 52 percent), electricals with 11 units with 44 percent and engineering with 10 units (40 percent) and engineering with 10 units (40 percent) while pharmaceuticals 5 units with 20 percent is reported lowest among them all.

The two journal sets are maintained basically for the (i) Sales and Receipts, and (ii) Purchases and disbursements. These are maintained by those units whose transaction are slightly higher than the usual. The Table 3.5 showed that out of 175 units, 21 units representing 12 percent of the total were found to have prepared two sets of journals in which pharmaceuticals with 7 units representing 28 percent, engineering with 5 units representing 20 percent and electricals with 3 units (12 percent) were on the top of the Table while units like chemicals and plastics with one units each were at the bottom of the Table.

A set of three journals maintained when the business transaction are varied in number and various types too. The three sets of journals consists of (i) General Journal, (ii) Cash disbursement, and (iii) cash receipts journals. This Journal is used where the business buys on cash basis and sells on cash

basis. It can be seen from the Table 3.5 that 53 units out of the sample size of 175 units representing 30.29 percent have maintained three sets of journals. Industry wise it showed that chemicals with 13 units representing 52 percent, electricals with 9 units representing 36 percent and pharmaceuticals with 8 units (32 percent) are mostly favouring three journals sets while units like engineering with 3 units representing 12 percent and plastic 4 units with 16 percent are reported to be the least followers of this type of Journals.

A set of five journals are maintained by business units where the transactions are numerous and the size of the business is also big. The five type of journals consists of (i) General Journal, (ii) Purchase Journal, (iii) Sales Journal, (iv) Cash receipts Journal, and (v) cash disbursements Journal. This type of Journals maintenance system is less popular among the small scale units. The Table 3.5 shows that 27 units representing 15.43 percent in which engineering with 7 units, 28 percent and pharmaceuticals and electronics with 5 units each are at the top while electricals, chemicals and plastics with 2 units each representing 8 percent are reported to be the lowest users of the system. Overall the small scale units in Goa are using predominantly General Journal and three sets of Journal while two sets of Journals and five sets are less popular among the small scale units in Goa.

### **3.1.3 LEDGERS**

A ledger contains a group of Accounts. All the entries made in the Journal must be posted into the ledger. It is a book of final entry. After the transaction have been posted into its debit and credit elements in a Journal, each such debit or credit element must be transferred to the respective Ledger Accounts. Many small scale units maintained the General Ledger. Sometimes two other ledgers like account payable and account receivable ledger are separated from the General Ledger and prepared separately. Still if the transactions are more then in addition to this two ledgers, General Ledger is also prepared. Table 3.6 shows the type of Ledger maintained by the small scale units. It is noted that out of 175 sample units, 131 units representing 74.86 percent followed only. General Ledger where in electronics with 20 units (80 percent), plastics 22 units with 88 percent and chemicals and food & beverages 19 units each with 76 percent are one of the top users of this system while 44 units representing 25.14 percent followed General Ledgers and other in which pharmaceuticals 9 units representing 36 percent, engineering with 8 units representing 32 percent and electricals with 7 units representing 28 units are the main followers of this type of Ledgers. It only reveals that nearly one fourth of the total units are particularly maintaining General Ledgers and others to keep the upto date record of the customers and suppliers from time to time.

**TABLE 3.5**  
**Type of Journal Maintained by the SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>One Journal</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>9</b>	<b>18</b>	<b>10</b>	<b>13</b>	<b>74</b>
©%	20.00	44.00	32.00	36.00	72.00	40.00	52.00	42.29
®%	6.76	14.86	10.81	12.16	24.32	13.51	17.57	100.00
<b>Two Journal</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>21</b>
©%	28.00	12.00	8.00	4.00	4.00	20.00	8.00	12.00
®%	33.33	14.29	9.52	4.76	4.76	23.81	9.52	100.00
<b>Three Journal</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>13</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>53</b>
©%	32.00	36.00	40.00	52.00	16.00	12.00	24.00	30.29
®%	15.09	16.98	18.87	24.53	7.55	5.66	11.32	100.00
<b>Five and above</b>	<b>5</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>27</b>
©%	20.00	8.00	20.00	8.00	8.00	28.00	16.00	15.43
®%	18.52	7.41	18.52	7.41	7.41	25.93	14.81	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row per Source: Data collected from Sample Industrial Units and Questionnai

**TABLE 3.6**  
**Types of Ledgers followed by the SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>General Ldg</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>19</b>	<b>22</b>	<b>17</b>	<b>19</b>	<b>131</b>
©%	64.00	72.00	80.00	76.00	88.00	68.00	76.00	74.86
®%	12.21	13.74	15.27	14.50	16.79	12.98	14.50	100.00
<b>General</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>21</b>
©%	28.00	12.00	8.00	4.00	4.00	20.00	8.00	12.00
®%	33.33	14.29	9.52	4.76	4.76	23.81	9.52	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row pr Source: Data collected from Sample Industrial Units and Questionnai

### **3.1.4 CASH BOOK**

Cash Transactions are recorded in a book called Cash Book or Cash Journal. Cash book is both of prime entry and a book of final entry. It serves the two main purposes

- ➔ to record transactions pertaining cash as we write in any other subsidiary book of original entry and
- ➔ to give us the balance of cash on hand as given by any other Ledger Account.

Cash Book can be any of the followed types. Simple cash book or single column cash book in which all the cash and bank transactions are passed through the same column, it have two sides. Receipt side and Payment side. Double column cash book have column and discount column, cash column is to record cash receipts and payments while discount column is meant for recording discount received (Credit Side) and discount allowed (Debit side). Triple column cash book contains the three column i.e. cash, discount and Bank column and multiple column cash book is maintained when a entrepreneur maintains more then one bank account. This cash book can be used to record transactions with each individual bank separately, thus there can be as many columns on either side of the cash book as per the number of Bank Account operated by an entrepreneur. Table 3.7 shows maintenance of cash book by the units and it is very interesting to see that all the 175 units maintained the cash book. It only shows

how important is the cash book for the small scale industry. It also depicts the importance of Accounting system for the business.

### **3.1.5 PETTY CASH BOOK**

The Petty Cash Book as its very name suggests is a cash book in which are recorded cash payments of small amounts for which it is generally not possible to issue a cheque. Small business expenses are required to be properly recorded into cash book and it is done through petty cash book. It is usually maintained on the basis of imprest system. Here a fixed amount is advanced to the petty cashier at the beginning of the period by the chief cashier. He submits his accounts at the end of the period and fresh advance is given after examining the accounts by the Chief cashier. It is very important for small scale enterprises to have a petty cash book to record correctly and come to a correct picture of profit or loss at the end. Table 3.8 depicts the maintenance of petty cash book by SSI. It is clear from the Table that 152 units representing 86.86 percent does not maintain petty cash book only 23 units representing 13.14 percent maintains it. It can be inferred from the Table that petty cash system is not popular among the SSI units in Goa. Entrepreneurs mainly don't know the system and its usefulness to the business. And those who know the system fail to implement because they think it is a waste of time to prepare petty cash book. Industry wise it is food & beverages 6 units representing 24 percent of the total in it and engineering 5 units representing 20 percent of

**TABLE 3.7**  
**Cash Book Maintenance by the SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>No</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.8**  
**Petty Cash Book Maintenance by the Sample SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>23</b>
©%	8	16	8	12	4	20	24	13.14
®%	8.7	17.39	8.7	13.04	4.35	21.74	26.09	100
<b>No</b>	<b>23</b>	<b>21</b>	<b>23</b>	<b>22</b>	<b>24</b>	<b>20</b>	<b>19</b>	<b>152</b>
©%	92	84	92	88	96	80	76	86.86
®%	15.13	13.82	15.13	14.47	15.79	13.16	12.5	100
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100	100	100	100	100	100	100	100
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

it maintained the petty cash book, it is also popular to some extent among the electricals units representing 16 percent and chemicals 12 percent of their respective total.

### **3.1.6 BANK RECONCILIATION STATEMENT**

A Bank Reconciliation Statement is a statement reconciling the balance as shown by the Bank Pass book and the balance as shown by the cash book. The main idea behind preparing such a statement is to know the causes of difference between the two balances and pass necessary correcting or adjusting entries in the books of the firm. It is very much essential before finalising the books of Accounts. Thus, Bank Reconciliation is a statement which shows the closing balances as per cash book and as per pass book on a particular date and the various items of differences which are adjusted to reconcile these two balances. In the study an attempt is made to know whether small scale industries prepare Bank Reconciliation. Table 3.9 shows that 119 units representing 68 percent prepare Bank Reconciliation statement while 56 units representing 32 percent have not prepared it. Further insight into the Table showed that electronics with 21 units (84 percent), electricals 19 units(76 percent) and chemicals 18 units (72 percent), pharmaceuticals 17 (68 percent) were at the top of the list in Bank Reconciliation. Whereas food & beverages, engineering and plastics units. The Bank Reconciliation system is not popular. It is neglected mainly due to lack of expertness in the units.



### **3.1.7 DEPRECIATION**

Every entrepreneur wants to know the profit earned by him. In order to calculate profit, depreciation on fixed assets have to be charged against the revenue that is earned. Depreciation is the allocated cost on a fixed assets. In other words, depreciation is the diminution in the value of a fixed asset due to a constant use of the asset concerned. It is also explained as the loss in the productive capacity of an asset, measured and expressed in monetary terms.

Depreciation is closely related to profit or loss determination for the period. Unless depreciation is charged against the revenue, one cannot ascertain the income properly. It is necessary to charge the depreciation mainly to ascertain the true profits, present the true financial position or replacement of assets. Previously provision of depreciation was left to the discretion of the management whether to provide or not but the Companies Act 1956 makes it clear that it is necessary and more so when the company declares the dividends. In all these are the necessary conditions for providing depreciation. The Table 3.10 reveals the position of the units providing for depreciation and it is clear that almost all the small scale units have provided for depreciation irrespective of their type of business. It was observed that direct tax benefit reduces the outflow of cash and helps in tax planning.

Computation of depreciation is revealed in the Table 3.11. Although most of the small scale entrepreneurs are aware of the

**TABLE 3.9**  
**Preparation of Bank Reconciliation Statement by the Sample SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>17</b>	<b>19</b>	<b>21</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>13</b>	<b>119</b>
©%	68.00	76.00	84.00	72.00	64.00	60.00	52.00	68.00
®%	14.29	15.97	17.65	15.13	13.45	12.61	10.92	100.00
<b>No</b>	<b>8</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>12</b>	<b>56</b>
©%	32.00	24.00	16.00	28.00	36.00	40.00	48.00	32.00
®%	14.29	10.71	7.14	12.50	16.07	17.86	21.43	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.10**  
**Depreciation Provision Allowed**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>No</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

provision of depreciation but many of them do not know how to compute the depreciation. It is seen in the Table that 156 units representing 89.14 percent got their depreciation computed by a private auditor. Whereas 19 units representing 10.86 percent did it through their own accounting department. Industry wise, only electricals 5 units (20 percent), chemicals 4 units (16 percent), engineering and pharmaceuticals 3 units each representing 12 percent have shown some sort of awareness, but overall they are ignorant about it. It is due to the lack of qualified person who can handle the accounts. Here persons are told to do any type of work and there is no fixed duty as such for the employees specially non-technical and experts.

### **3.1.8 METHOD OF DEPRECIATION**

There are various methods of allocating depreciation, such as fixed installment method, depletion, diminishing balance method, machine hour rate method, annuity method, insurance policy method, sinking fund method, sum of years of digits method, group depreciation method, double declining method etc. The fixation of depreciation amount is based upon the cost of the asset, estimated scrap value and estimated useful life of the asset and it depends upon the enterprise to enterprise. The most widely used methods were straight line method or diminishing balance method. In case of straight line method the depreciation charges goes maximum upto 95 percent of the original cost of the asset over a specified

**TABLE 3.11**  
**Sources of Calculation of Depreciation**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Accounting D</b>	<b>3</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>19</b>
©%	12.00	20.00	8.00	16.00	4.00	12.00	4.00	10.86
@%	15.79	26.32	10.53	21.05	5.26	15.79	5.26	100.00
<b>Private</b>	<b>22</b>	<b>20</b>	<b>23</b>	<b>21</b>	<b>24</b>	<b>22</b>	<b>24</b>	<b>156</b>
©%	88.00	80.00	92.00	84.00	96.00	88.00	96.00	89.14
@%	14.10	12.82	14.74	13.46	15.38	14.10	15.38	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      @% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.12**  
**Method of Depreciation Followed by the Sample SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Dimishing</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>23</b>	<b>169</b>
©%	96.00	100.00	100.00	92.00	96.00	100.00	92.00	96.57
@%	14.20	14.79	14.79	13.61	14.20	14.79	13.61	100.00
<b>Straight Line</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>6</b>
©%	4.00	0.00	0.00	8.00	4.00	0.00	8.00	3.43
@%	16.67	0.00	0.00	33.33	16.67	0.00	33.33	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      @% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

period. As far as companies are concerned it is governed and decided by the Companies Act 1956, the rate of depreciation and the method to be followed.

Table 3.12 shows that most of the business units followed the diminishing balance method of depreciation 169 units representing 96.57 percent, whereas 6 units representing (3.43 percent) followed straight line method of depreciation. Industry wise food & beverage 2 units, chemicals 2 units, pharmaceuticals and plastics one unit each followed the straight line method while rest of all followed diminishing balance method.

Awareness about depreciation method followed is shown in Table 3.13, it is clear that 147 entrepreneurs representing 84 percent are aware about the depreciation method. While 28 entrepreneurs representing 16 percent are not aware of it. Industry wise, it shows that maximum entrepreneurs were aware of the depreciation methods except few like chemicals 7 units, electronics and food & beverages 5 units each, pharmaceuticals and plastics 4 units each, engineering 2 units and one electricals were not aware of the depreciation policy to be followed. They simply followed the advise given by the Chartered Accountant or an Auditor.

**3.1.9 Purpose of providing a certain amount of depreciation or choosing a particular method of depreciation** is due to some specific reasons such as to enjoy the maximum tax benefit, creating fund for the replacement of the asset or to maintain the uniform

capacity intact from the beginning. The study reveals that the purpose of providing depreciation varies from enterprise to enterprise as it can be seen from the Table 3.14. Out of the total 101 entrepreneurs representing 57.71 percent were providing depreciation for tax planning. Where as 52 entrepreneurs said it is due to all the above reasons and 13 units said due to maintaining its capacity intact, while 9 units expressed due to replacement of the old assets. According to industry wise, engineering (18 units), food & beverages (16 units), chemicals (16 units) and plastics 15 units were found to have gone above 60 percent of their respective size was for tax planning purpose while pharmaceutical 10 units and electricals 9 units were due to other reasons.

### **3.1.10 FINANCIAL REPORTING**

Reporting is a formal technique of communication of all the data to those who need to take the business decisions. It is a process providing information to all internal as well as external parties. Internal is for its own improvement and development where as external is due to their interest in the business, it included, shareholders, bankers, financial institutions, customers, creditors, suppliers and the government.

The primary object of reporting is of two types: first appraising the management with the actual performance and secondly to enable the management to make scientific and sound decisions. The main basic form of financial reporting is the Balance

**TABLE 3.13**  
**Awareness about Depreciation Method Followed**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>21</b>	<b>24</b>	<b>20</b>	<b>18</b>	<b>21</b>	<b>23</b>	<b>20</b>	<b>147</b>
©%	84.00	96.00	80.00	72.00	84.00	92.00	80.00	84.00
®%	14.29	16.33	13.61	12.24	14.29	15.65	13.61	100.00
<b>No</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>28</b>
©%	16.00	4.00	20.00	28.00	16.00	8.00	20.00	16.00
®%	14.29	3.57	17.86	25.00	14.29	7.14	17.86	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.14**  
**Purpose/Motive of Providing Depreciation**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Tax Planning</b>	<b>12</b>	<b>10</b>	<b>14</b>	<b>16</b>	<b>15</b>	<b>18</b>	<b>16</b>	<b>101</b>
©%	48.00	40.00	56.00	64.00	60.00	72.00	64.00	57.71
®%	11.88	9.90	13.86	15.84	14.85	17.82	15.84	100.00
<b>To Replace</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>9</b>
©%	4.00	8.00	4.00	4.00	8.00	4.00	4.00	5.14
®%	11.11	22.22	11.11	11.11	22.22	11.11	11.11	100.00
<b>Maintaining</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>13</b>
©%	8.00	16.00	8.00	4.00	4.00	4.00	8.00	7.43
®%	15.38	30.77	15.38	7.69	7.69	7.69	15.38	100.00
<b>All of the</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>52</b>
©%	40.00	36.00	32.00	28.00	28.00	20.00	24.00	29.71
®%	19.23	17.31	15.38	13.46	13.46	9.62	11.54	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage Source: Data collected from Sample Industrial Units and Questionnaire.

Sheet and Profit and Loss Account. In case of small scale industries, it is the most widely used method of reporting. In association with Profit and Loss Account and Balance Sheet number of other reports are also sent to the interested parties.

**3.1.10.1** Table 3.15 depicts the financial reporting practices of small scale units. Directors report are prepared and presented in 15 units representing 8.57 percent of the total units, where as large number of units, 160 units representing 91.43 percent have not prepared and presented directors report. It is mainly prepared in case of medium scale units, most of the units were found not having directors. The entrepreneurs is the whole and sole of it and under such circumstances directors reports are sidelined. This can be seen from the Table 3.15.

**3.1.10.2** Profit and loss A/c and Balance Sheet, are also known by many entrepreneurs as financial statements. It is one of the common methods of reporting practice followed by all the units irrespective of their size. It may be vertical form or horizontal form, there is no hard and fast rule now. There is no prescribed format given by the Companies Act, it is entirely left to an entrepreneur. From the Table 3.15 it is clear that all the 175 units used this practice of financial reporting. This report gives the actual financial standing of the company. All the external parties like shareholders, creditors, banks, financial institutions & Government Agencies demand for financial statement along with other statements. Small



scale units are fully aware of the importance of these statement as can be seen from the Table 3.15.

**3.1.10.3** Auditors Report and Notes on Profit & Loss Account are other financial Reports. From the Table 3.15 again it is clear that all the units prepared the Auditors reports. It is mainly due to the fact that all the small scale units got their accounts audited by a Chartered Accountant and it is a proof of Authentication of the financial statement. Notes on Profit & Loss Account is given by only 26 units (14.86 percent) of the total where as large number of units were found either not having known or not having prepared it. Notes on Profit & Loss Account makes the Profit & Loss Account more transparent. It helps to understand the profitability of the units very well.

**3.1.10.4** Most of the small scale units have not followed the schedules to Balance Sheet which can be seen from the Table 3.15, only 45.71 percent units prepared the Balance Sheet as per the Schedules provided by the Companies Act 1956. While 54.29 percent units did not follow the schedules to Balance Sheet. Five years results were given by only 12 units representing 6.86 percent where as 93.14 percent units did not bother about five year Report presentation. Ratio play an important role and it helps to analyse the financial statements to understand well. Financial Ratios give quick and ready picture of the financial standing of the units. The Table 3.15 states that 68 units (38.86 percent) of the total were

**TABLE 3.15**  
**Financial Reporting Practices by the Sample SSI Units**

	<b>Yes</b>	<b>No</b>	<b>Total</b>
<b>Directors Report</b>	<b>15</b>	<b>160</b>	<b>175</b>
®%	8.57	91.43	100.00
<b>Profit &amp; Loss a/c</b>	<b>175</b>	<b>0</b>	<b>175</b>
®%	100.00	0.00	100.00
<b>Balance Sheet</b>	<b>175</b>	<b>0</b>	<b>175</b>
®%	100.00	0.00	100.00
<b>Auditors Report</b>	<b>175</b>	<b>0</b>	<b>175</b>
®%	100.00	0.00	100.00
<b>Notes on P &amp; L A/c</b>	<b>26</b>	<b>149</b>	<b>175</b>
®%	14.86	85.14	100.00
<b>Schedule to Balance Sheet</b>	<b>80</b>	<b>95</b>	<b>175</b>
®%	45.71	54.29	100.00
<b>Five Year Result</b>	<b>12</b>	<b>163</b>	<b>175</b>
®%	6.86	93.14	100.00
<b>Financial Ratio's</b>	<b>68</b>	<b>107</b>	<b>175</b>
®%	38.86	61.14	100.00
<b>Accounting Policies</b>	<b>14</b>	<b>161</b>	<b>175</b>
®%	8.00	92.00	100.00
<b>Fund flow Statements</b>	<b>55</b>	<b>120</b>	<b>175</b>
®%	31.43	68.57	100.00
<b>Value Added</b>	<b>2</b>	<b>173</b>	<b>175</b>
®%	1.14	98.86	100.00
<b>Inflation Account Statements</b>	<b>0</b>	<b>175</b>	<b>175</b>
®%	0.00	100.00	100.00
<b>Human Resource</b>	<b>0</b>	<b>175</b>	<b>175</b>
®%	0.00	100.00	100.00
<b>Social Accounting</b>	<b>0</b>	<b>175</b>	<b>175</b>
®%	0.00	100.00	100.00
<b>Segment Reporting</b>	<b>45</b>	<b>130</b>	<b>175</b>
®%	25.71	74.29	100.00

®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

**TABLE 3.16**  
**Presentation of P & L A/c and Balance Sheet**

	<b>Yes</b>	<b>No</b>
<b>Traditional Form</b>	<b>155</b>	<b>115</b>
©%	88.57	65.71
<b>Tabular Form</b>	<b>20</b>	<b>60</b>
©%	11.43	34.29
<b>Total</b>	<b>175</b>	<b>175</b>
©%	100.00	100.00

©% - represents Column percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

found to have presented financial ratios along with the financial statement i.e. Balance Sheet and Profit & Loss Account while 61.14 percent were found to have not observed the practice of financial reporting.

**3.1.10.5** Accounting policies followed or change in the Accounting policies are to be communicated through the financial statements and it is surprising to know that only 14 units representing 8 percent of the total have reported about the accounting policies while 92 percent units have not followed this policy. It can be seen from the same Table 3.15 above. Fund flow statement gives the detail information about how the funds are raised and utilised. It is very important statement required for the decision makers to improve the efficiency of the fund. Table 3.15 shows that 55 units representing 31.43 percent issued the fund flow statement along with other statements while still 68.57 percent have not followed this statement of reporting.

Other statements of reporting like value added statement, inflation accounting statement, human resource accounting statement, social accounting statement are generally not prepared by any one of those units except value added statement by just 2 units. It shows that small scale units are not well versed with the latest reporting system which can be seen from the above Table 3.15.

**3.1.10.6** Segment reporting is a very effective system of reporting now a days to understand the financial position of the company or units. Consolidated accounting statement may lead to misleading the stakeholders sometimes so segment reporting is come to their rescue. It helps to understand the each and every segment of the units and to initiate necessary action against it. Out of the total 175 units, 45 units representing 25.71 percent followed segment reporting technique. Whereas for 130 units representing 74.29 percent it is still unknown statement.

**3.1.10.7** Form of presentation of Profit and Loss Account and Balance Sheet which can be seen from the Table 3.16. It is stated that 155 units representing 88.57 percent of the total units followed the traditional form of presentation while 20 units representing 11.43 percent units use tabular form of presentation of Profit and Loss Account.

While 115 units representing 65.71 percent used traditional form of presentation of Balance Sheet while 60 units representing 34.29 percent used tabular form of presentation. This variation is possible because there is no strict format to be followed compulsorily by all the small scale units.

Financial reporting have a long way to go for the small scale units to come to the modern sophisticated methods of reporting. It is only then possible for the small scale units to understand their weaknesses. Reporting is now reached to such an extent that some

units required the information and performance on day to day basis. It is more acting as a traditional method of Annual reporting. One important fact is to be noted here is adopting segment reporting technique is gaining more and more importance and popular among small scale units in Goa. Still some units thought other financial statement reporting are time consuming and costly process.

With the computers in Accounting the financial reporting system could have been improved but that have not happened in case of SSI because very few of them were using the new Accounting packages that makes the job of record keeping and reporting much more easier.

### **3.2 COST ACCOUNTING**

Cost Accounting primarily deals with collection, analysis of relevant cost data for interpretation and presentation for various problems of management. Cost Accounting is the process of ascertaining cost from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost centres and cost units. It measures the operating efficiency of an enterprise.

Cost Accounting is the application of Accounting and Costing Principles, methods and techniques in the ascertainment of costs and the analysis of saving or excess as compared with standards. It helps the management to ascertain cost of product, of a job, or a

contract and to develop cost standard. In small scale industries pricing is very crucial decision and cost accounting helps in determining the selling price for a product. Profit maximisation is one of small scale units and minimizing the cost of manufacturing by company actual cost with standard. It controls cost by providing various information on cost. Although cost Accounting is internal aspect of an organisation, still it have an indispensable effect on determining the profitability.

Cost records are the base for the management information system. It generated regular performance statements which management needs for control purposes.

Cost accounts starts with maintenance of costing department or cost centre where cost is ascertained and used for the purpose of cost control and evaluation of the various responsibility centres. In the Table 3.17 shows that only 21 units representing (12 percent) of the total units were found to have a separate costing department while most of them 154 units representing (88 percent) did not have a separate costing department. As costing department is a separate department headed by a separate Cost Accountant, small scale units considered it as an additional cost. Among the units having a separate costing department are pharmaceuticals and food & beverages 6 units each representing 24 percent each, engineering 5 units representing (20 percent) and chemicals 3 units (12 percent) and electricals one unit (4 percent). It is clear from the Table that

**TABLE 3.17**  
**Maintenance of Costing Department**

	<b>Pharmaceutical</b>	<b>Electricals</b>	<b>Electronics</b>	<b>Chemical</b>	<b>Plastic</b>	<b>Engineering</b>	<b>F &amp; B</b>	<b>Total</b>
<b>Yes</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>21</b>
©%	24.00	4.00	0.00	12.00	0.00	20.00	24.00	12.00
®%	28.57	4.76	0.00	14.29	0.00	23.81	28.57	100.00
<b>No</b>	<b>19</b>	<b>24</b>	<b>25</b>	<b>22</b>	<b>25</b>	<b>20</b>	<b>19</b>	<b>154</b>
©%	76.00	96.00	100.00	88.00	100.00	80.00	76.00	88.00
®%	12.34	15.58	16.23	14.29	16.23	12.99	12.34	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage

®% - represents row percentage

Source: Data collected from Sample Industrial Units and Questionnaire.

in small scale units costing is neglected area and whatever cost records are done by the owners himself as per his own wisdom which are mostly unscientific.

### **3.2.1 METHOD OF COSTING**

The techniques and process of ascertaining costs are different. The principles in every method of costing are the same but the methods of analysing and presenting the costs differ with the nature of business. There are various methods of costing such as job costing, contract costing, process costing, operation costing, batch costing, unit costing, department costing, cost plus costing and multiple costing etc.

**3.2.1.1** *Job costing* is common in commercial foundries and drop forging shops and plants making specialised industrial equipments. It is adopted where production is not highly repetitive and consists of jobs or lots so that material and labour costs can be identified by order number. Table 3.18 depicts that 47 units representing 26.86 percent of the total units followed job costing and most prominent among them are engineering 15 units out of 25(60 percent), plastics 14 units \*56 percent), electronics 8 units (32 percent), pharmaceuticals 6 units representing 24 percent, while it is further noticed that no units from chemical and food & beverages were found to have employed job costing.

**3.2.1.2** *Process costing* is used when a product passes through different stages, each distinct and well defined under such



**TABLE 3.18**  
**Method of Costing Adopted**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Job Costing</b>	<b>6</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>14</b>	<b>15</b>	<b>0</b>	<b>47</b>
©%	24.00	16.00	32.00	0.00	56.00	60.00	0.00	26.86
®%	12.77	8.51	17.02	0.00	29.79	31.91	0.00	100.00
<b>Process Costing</b>	<b>2</b>	<b>17</b>	<b>13</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>64</b>
©%	8.00	68.00	52.00	60.00	0.00	4.00	64.00	36.57
®%	3.13	26.56	20.31	23.44	0.00	1.56	25.00	100.00
<b>Contract Costing</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>20</b>
©%	0.00	4.00	0.00	4.00	40.00	16.00	16.00	11.43
®%	0.00	5.00	0.00	5.00	50.00	20.00	20.00	100.00
<b>Operating Costing</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>16</b>
©%	8.00	4.00	4.00	20.00	0.00	12.00	16.00	9.14
®%	12.50	6.25	6.25	31.25	0.00	18.75	25.00	100.00
<b>Batch Costing</b>	<b>15</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>28</b>
©%	60.00	8.00	12.00	16.00	4.00	8.00	4.00	16.00
®%	53.57	7.14	10.71	14.29	3.57	7.14	3.57	100.00
<b>All</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire.

circumstances it is desired to know the cost of production at each stage. In order to ascertain the cost of it, process costing is employed. In the Table 3.18 it is clear that 64 units representing 36.57 percent of the total units used process costing method. Industry wise, electricals with 17 units representing 68 percent of the respective product units followed by food & beverage 16 units representing 64 percent, chemicals 15 units representing 60 percent of the units and electronics 13 units representing 52 percent of the product used process costing where as only two from pharmaceuticals and one from engineering and not a single unit from plastics are used process costing method.

**3.2.1.3** *Contract costing* and Job costing are not differing much, a contract is a big job while a job is a small contract. It is called as Terminal costing. Contract costing method is used by 20 units representing 11.43 percent of the total units and it is mainly used by plastics units. 10 units (40 percent of the particular industry) while in engineering and food & beverages, it is used by 4 units (16 percent) while in electricals and chemicals it is used by one unit each. None of the pharmaceuticals and electronics units used Contract costing method.

**3.2.1.4** *Operating Costing method* is used where expenses are incurred for provision of services. Here the total expenses regarding operation are divided by the units as may be appropriate and cost per unit of service is calculated. This method is used by 15 units

representing 8.57 percent of the total and industry wise, chemicals 5 units and food & beverages 4 units, engineering 3 units, pharmaceuticals 2 units while electricals and electronics one unit each and non from plastics used Operating Costing.

**3.2.1.5** *Batch Costing* is used where orders or jobs are arranged in different batches after taking into account the convenience of producing articles. The unit of cost is a batch or Group of identical products, instead of a single job order or contract. In the Table 3.18 showed that 28 units representing 16 percent of the total units used batch costing and industry wise, pharmaceuticals industry with 15 units representing 60 percent are the highest users while 4 units of chemicals (16 percent), 3 units of electronics representing 12 percent, two units each in electricals and engineering and one unit each in plastics and food & beverages used Batch Costing.

It is clear that process costing is the most widely used method followed by Job costing and Batch costing. No Industry is found with multiple or composite costing methods.

Besides the above methods of costing, the techniques like marginal costing, direct costing, absorption or full costing and uniform costing are employed by various units. It may be direct cost or indirect costing as per the nature of business and its operations.

### **3.2.2 MATERIAL ISSUE PRICING**

Costs which can be identified easily and indisputably with a unit of operation or cost centre are direct material cost. The cost incurred on materials used to further the manufacturing process which cannot be traced into the end product and the material required in the production process but not necessarily built into the product are called indirect materials. There are various methods of pricing material issues. They include, Actual cost method, LIFO (Last in first out method), FIFO (First in first out method), simple average method, weighted average cost method.

In the Table 3.19 shows the material issue pricing. It is noticed that 70 units representing (40 percent) followed First in First Out Method. This method is suitable more where the size of the raw materials is large and bulky and its price is high and can be easily identified in the stores separately. Industry wise, it is engineering 12 units (48 percent), chemical 13 units (52 percent), electronics 11 units (44 percent) and pharmaceuticals 10 units (40 percent) are the main followers of FIFO.

While 42 units representing 24 percent overall followed the Last in First Out method. Industry wise pharmaceuticals and plastics with 8 units each (32 percent each) one at the top followed by chemicals 7 units (28 percent), electronics 6 units (24 percent) and engineering 5 units (20 percent). Here the Issues are priced out at the most recent batch received and continued to be charged

until a batch is arrived into stock which can be seen in the Table 3.19. Further the Table shows that 63 units representing 36 percent followed Average method – Simple Average Cost method and industry wise, it is food & beverages with 13 units (52 percent) followed by electricals 12 units (48 percent), plastics with 10 units (40 percent) are the major industries followed average method. This method is calculated without any regard to the quantities involved. The Simple Average Cost is arrived at by adding the different prices paid during the period for the batches purchased by dividing the number of batches.

### **3.2.3 TYPES OF WAGES**

The labour cost is incurred on the employees who are employed directly or indirectly in making the product are called total labour cost. The labour cost is classified into three category, Time wages, piece wage and contract wage, which are used widely by many business units and specially by small scale units. From the Table 3.20 it is clear that 52 units representing 29.71 percent used time wage i.e. the number of hours spent by an employee in doing a job and in industry wise, it is very much common among food & beverage 17 units (68 percent) followed by electronics 9 units (36 percent), electricals and chemicals 7 units each (28 percent) each.

55 units representing 31.43 percent followed piece wage system which can be seen from the Table 3.20. Industry wise, it

**TABLE 3.19**  
**Analysis of the Material Issue Pricing**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>LIFO</b>	<b>8</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>42</b>
©%	32.00	16.00	24.00	28.00	32.00	20.00	16.00	24.00
®%	19.05	9.52	14.29	16.67	19.05	11.90	9.52	100.00
<b>FIFO</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>13</b>	<b>7</b>	<b>12</b>	<b>8</b>	<b>70</b>
©%	40.00	36.00	44.00	52.00	28.00	48.00	32.00	40.00
®%	14.29	12.86	15.71	18.57	10.00	17.14	11.43	100.00
<b>Average Meth</b>	<b>7</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>10</b>	<b>8</b>	<b>13</b>	<b>63</b>
©%	28.00	48.00	32.00	20.00	40.00	32.00	52.00	36.00
®%	11.11	19.05	12.70	7.94	15.87	12.70	20.63	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage

®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 3.20**  
**Type of Wages Paid by the SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Time Wages</b>	<b>4</b>	<b>7</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>17</b>	<b>52</b>
©%	16.00	28.00	36.00	28.00	24.00	8.00	68.00	29.71
®%	7.69	13.46	17.31	13.46	11.54	3.85	32.69	100.00
<b>Piece Wage</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>7</b>	<b>12</b>	<b>3</b>	<b>55</b>
©%	24.00	32.00	40.00	36.00	28.00	48.00	12.00	31.43
®%	10.91	14.55	18.18	16.36	12.73	21.82	5.45	100.00
<b>Contract Wage</b>	<b>15</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>12</b>	<b>11</b>	<b>5</b>	<b>68</b>
©%	60.00	40.00	24.00	36.00	48.00	44.00	20.00	38.86
®%	22.06	14.71	8.82	13.24	17.65	16.18	7.35	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire

reveals that engineering 12 units (48 percent), electronics 10 units (40 percent), chemicals 9 units (36 percent) are the major followers of this system. Here the wages are paid as per the number of units manufactured or produced by an employee.

Contract wages was followed by 68 units representing (38.86 percent) and industry wise, it showed that pharmaceutical 150 units (60 percent), plastics 12 units (48 percent), engineering 11 units (44 percent), electricals 10 units with 40 percent and chemicals with 9 units (36 percent) were on the top of the Table followed by electronics, food & beverages, see Table 3.20.

Overall the entrepreneurs were found to have favoured contract wages or piece wage system in small scale units in Goa. It is mainly because they like to identify the cost directly to the activity or a job.

#### **3.2.4 OVERHEADS**

Overheads are the indirect costs which cannot be allocated to any specific job process because they are not capable of being identified with any specific job or process. It involves estimating or budgeting overhead costs in advance as accurately as possible and apportioning them to production. Some costs cannot be identified as arising from the activities of one specific department or function. These non-allocable costs must be apportioned on some logical basis to be divided between the related cost centres. Apportionment is the division of costs among two or more cost centres in

proportion to the estimated benefits received. There are various methods of allocation of overheads can be seen from the Table 3.21.

Under material cost basis, overheads are calculated by dividing actual or budgeted overheads during the period by actual/budgeted material cost. From the Table it is clear that 9 units of food & beverages used this method of allocation of cost followed by pharmaceutical 3 units, electricals 2 units, electronics and plastics one unit each. There are as many as 16 units representing 9.14 followed material cost basis allocation.

Labour cost basis is followed in 39 units representing 22.29 percent. Industry wise, it is plastics 8 units (32 percent), electricals and food & beverage 7 units each, chemicals 6 units and electronics 5 units. It is calculated by dividing Budgeted/actual overhead cost by budgeted or actual labour cost. The most widely used method is the machine hour rate method. The Table shows there are 107 units representing 61.14 percent followed this method. Industry wise, the more prominent one are chemicals 19 units (76 percent), pharmaceuticals and engineering 18 units each (72 percent), electronics 17 units (68 percent), plastics 15 units (60 percent), electricals 14 units (56 percent). Thus, overhead is calculated by dividing Budgeted or actual overhead by Budgeted or actual machine hours during the period. Labour hour rate used by engineering 2 units and food & beverages one unit. It is calculated/computed by dividing budgeted/actual overhead by



**TABLE 3.21**  
**Method of Allocation of Overheads by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Material Cost</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>9</b>	<b>16</b>
©%	12.00	8.00	4.00	0.00	4.00	0.00	36.00	9.14
®%	18.75	12.50	6.25	0.00	6.25	0.00	56.25	100.00
<b>Labour Cost</b>	<b>4</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>2</b>	<b>7</b>	<b>39</b>
©%	16.00	28.00	20.00	24.00	32.00	8.00	28.00	22.29
®%	10.26	17.95	12.82	15.38	20.51	5.13	17.95	100.00
<b>Machine Hour Rate</b>	<b>18</b>	<b>14</b>	<b>17</b>	<b>19</b>	<b>15</b>	<b>18</b>	<b>6</b>	<b>107</b>
©%	72.00	56.00	68.00	76.00	60.00	72.00	24.00	61.14
®%	16.82	13.08	15.89	17.76	14.02	16.82	5.61	100.00
<b>Labour Hour Rate</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>
©%	0.00	0.00	0.00	0.00	0.00	8.00	4.00	1.71
®%	0.00	0.00	0.00	0.00	0.00	66.67	33.33	100.00
<b>Rate per Unit Output</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>10</b>
©%	0.00	8.00	8.00	0.00	4.00	12.00	8.00	5.71
®%	0.00	20.00	20.00	0.00	10.00	30.00	20.00	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire.

Budgeted or actual direct labour hours. Where the rate per unit method is followed by 10 units representing 5.71 percent. Among industry, engineering 3 units (12 percent), electricals, electronics and food & beverages 2 units each (8 percent) and one unit of plastic. It is computed by dividing Budgeted or actual overhead by number of units produced or budgeted. From the above analysis it is clear that machine hour rate method is widely used for allocation of overheads by Small Scale Industry.

### **3.2.5 ASCERTAINING PRODUCT COST**

There are two major methods of determination of product cost. They are average cost and marginal cost. These two costs determination helps the management to face the competition and to determine appropriate product cost. It helps to understand the profitability concept very well. In small scale units it is very important to determine the accurate product cost due to the existence of competitors.

#### **3.2.5.1 Average Unit Cost**

This method apportions total manufacturing costs to the various products by using an average unit cost obtained by dividing the total number of units produced into the total manufacturing cost of all units produced are measured in terms of the same unit and do not differ greatly. Then this method can be used without much disadvantage. It is computed by total manufacturing cost

divided by total number of units produced and when the finished products of various kinds are involved in that case weighted average cost method is used by multiplying by weight factor to apportion total costs to individual units. In the Table 3.22, it is clear that 132 units representing 75.43 percent used Average unit cost method of cost determination. Further insight into the Table shows that industry wise in case of plastics, almost all the units used average cost while chemicals it is 96 percent followed by engineering 88 percent, pharmaceuticals 72 percent, food & beverages 64 percent, electricals 60 percent and electronics 48 percent are used average unit cost.

**3.2.5.2 Marginal Cost Method** is another method of cost determination. It is the amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit. In this method, variable costs are charged to cost units and the fixed costs attributable to the relevant period is written off in full against the contributions for that period. It is a very important method of cost ascertainment from the Table 3.22 it shows that 43 units representing 24.57 percent followed marginal cost method in which electronics 13 units (52 percent), electricals 10 units (40 percent), food & beverages 9 units (36 percent and pharmaceuticals 7 units (28 percent) followed this method.

Finally it is clear that most of the small scale units followed average cost method in cost ascertainment.

### **3.2.6 INVENTORY VALUATION**

Inventories are unconsumed or unsold goods purchased or manufactured. Inventories are assets which includes stock of finished goods, work in progress, raw materials and components. Valuation of inventory is necessary for determining the true income earned by a business during a particular period. To ascertain the true Gross Profit, inventory valuation is a must. Excess of sales over cost of goods sold is Gross Profit. Cost of goods sold is ascertained by adding opening inventory and deducting closing inventory from purchases. The Balance Sheet does not disclose the correct financial position of the business if the inventories are not valued properly.

Inventory valuation will differ from system to system. In case of Cost Accounting, inventories are valued at cost, here cost includes the aggregate cost of purchase, cost of conversion, and other cost incurred in bringing the inventories to their present location. From the financial accounting point of view, it is valued at cost price or market price whichever is lower. Market price of valuation of inventory implies taking the current prevailing price while valuating the inventory. Table 3.23 shows the valuation of inventory is done by the small scale units. It is interesting to note that 53 units representing 30.29 percent followed market price. 13

**TABLE 3.22**  
**Determination of Product Cost by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Average Cost</b>	<b>18</b>	<b>15</b>	<b>12</b>	<b>24</b>	<b>25</b>	<b>22</b>	<b>16</b>	<b>132</b>
©%	72.00	60.00	48.00	96.00	100.00	88.00	64.00	75.43
®%	13.64	11.36	9.09	18.18	18.94	16.67	12.12	100.00
<b>Marginal cost</b>	<b>7</b>	<b>10</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>9</b>	<b>43</b>
©%	28.00	40.00	52.00	4.00	0.00	12.00	36.00	24.57
®%	16.28	23.26	30.23	2.33	0.00	6.98	20.93	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage

®% - represents row Source : Data collected from Sample Industrial Units and Questionn

**TABLE 3.23**  
**Inventory Valuation by the SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Market Value</b>	<b>7</b>	<b>10</b>	<b>13</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>6</b>	<b>53</b>
©%	28.00	40.00	52.00	24.00	16.00	28.00	24.00	30.29
®%	13.21	18.87	24.53	11.32	7.55	13.21	11.32	100.00
<b>Cost Value</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>7</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>61</b>
©%	40.00	44.00	40.00	28.00	24.00	32.00	36.00	34.86
®%	16.39	18.03	16.39	11.48	9.84	13.11	14.75	100.00
<b>Whichever is</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>12</b>	<b>15</b>	<b>10</b>	<b>10</b>	<b>61</b>
©%	32.00	16.00	8.00	48.00	60.00	40.00	40.00	34.86
®%	13.11	6.56	3.28	19.67	24.59	16.39	16.39	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percent Source : Data collected from Sample Industrial Units and Questionn

units of electronics (52 percent), electricals 10 units (40 percent), engineering and pharmaceuticals 7 units each (28 percent each), plastics and food & beverages 6 units each (24 percent each) followed market value method. 61 units representing 34.86 percent followed cost price as inventory valuation. This is done where units have got its cost centre. Industry wise, it shows that 11 units of electricals (44 percent), 10 units each of pharmaceuticals, electronics (40 percent each), 9 units of food & beverage, 8 units representing 32 percent in engineering followed cost value method. Where as equal number of units representing same 34.86 percent of the total units followed cost or market price whichever is less method. Industry wise, 15 units representing 60 percent of plastics, 12 units (48 percent) of chemicals, 10 units each in engineering and food & beverage followed cost or market price whichever is less method.

### **3.2.7 COST EVALUATION AND CONTROL**

Cost evaluation is mainly for cost control. Historical costing or actual costing is a system where costs are ascertained after they are incurred. It is a post mortem of the costs. Thus it have failed in finding mistakes and inefficiencies which all lead to variation in profit. Cost control is simply the prevention of waste within the existing environment. This environment is made up of the agreed operating methods for which standards have been developed. These

standards may be expressed in a variety of ways from budgetary control to standard costing and variance analysis.

Cost can be controlled by a company with its actual results against the standards set so that waste can be measured and appropriate action can be taken to correct the activity. It is the process of utilising the available resources economically. Thus, it regulates the action so as to keep the elements of cost within the set parameters. Costs control starts from established cost standards and attempts to keep the costs of operation of a process in line with those standards. The process of cost control starts with establishing standards. Then appraising with the actual performance and finally taking corrective measures.

The tools of cost evaluation and control are numerous such as Budgetary control, Standard costing and Variance analysis.

One of the important cost evaluations and Control is the *Standard Costing*. Standard Costing is a technique which uses standards for costs and revenues for the purpose of control through variance analysis. Standard costing ascertains the costs whereby it gives information about the standard costs, the actual cost and the difference between these costs, popularly known as Variance. Thus the technique of standard cost study consists of ascertainment of standard, measuring the variance by comparing the actual costs with standard costs, controlling costs by the variance analysis and finally reporting to the management for taking proper action to

maximise the efficiency. The first step in development of standard cost is by studying and setting standard to labour, material and overheads. Small Scale Industry sets standards in different ways in this study. An analysis is done with respect to material standard setting, labour standard setting and overheads standard setting to understand the effect of cost control measure and to reduce or eliminate the irrelevant costs incurred. In the Table 3.24 reveals the material fixing standard and the study shows that 128 units representing 73.14 percent used material standards. While 26.86 percent units have not followed it. The industry wise, above 60 percent of the units in each category followed material standard except food & beverages where there are 14 units 56 percent. The respective total used material standard. With the help of material standards, small scale units study the material price variance and material usage variance. It is good to know that maximum units used cost standards for materials.

### **3.2.8 LABOUR COST STANDARD**

It is the planned average cost of direct labour for a specified amount of direct labour effort to be used at standard performance over a specified period. It is usually expressed as a cost per unit of time. Setting of standard cost of direct labour involved a) Fixation of standard time, b) Fixation of standard rate. Labour cost standards helps to study labour variances. It plays a crucial role as in small scale units most of them are labour intensive as a result



**TABLE 3.24**  
**Fixing Material Standard by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>6</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>6</b>	<b>11</b>	<b>47</b>
©%	24.00	36.00	20.00	12.00	28.00	24.00	44.00	26.86
®%	12.77	19.15	10.64	6.38	14.89	12.77	23.40	100.00
<b>No</b>	<b>19</b>	<b>16</b>	<b>20</b>	<b>22</b>	<b>18</b>	<b>19</b>	<b>14</b>	<b>128</b>
©%	76.00	64.00	80.00	88.00	72.00	76.00	56.00	73.14
®%	14.84	12.50	15.63	17.19	14.06	14.84	10.94	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 3.25**  
**Setting Labour Cost Standard by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>7</b>	<b>10</b>	<b>8</b>	<b>9</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>49</b>
©%	28.00	40.00	32.00	36.00	20.00	24.00	16.00	28.00
®%	14.29	20.41	16.33	18.37	10.20	12.24	8.16	100.00
<b>No</b>	<b>18</b>	<b>15</b>	<b>17</b>	<b>16</b>	<b>20</b>	<b>19</b>	<b>21</b>	<b>126</b>
©%	72.00	60.00	68.00	64.00	80.00	76.00	84.00	72.00
®%	14.29	11.90	13.49	12.70	15.87	15.08	16.67	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

setting proper labour policy is a must for the improvement and development of labour. Labour variance consists of labour cost variance, labour rate variance and labour efficiency variance. In the Table 3.25 shows the setting of cost standards for labour. In small scale units, this method is not so popular which can be seen from the above Table. 126 units representing 72 percent were found to have not set any labour standards while only 49 units representing 28 percent are aware of labour cost standards. The industry wise, electricals 10 units (40 percent), chemicals 9 units (36 percent), electronics 8 units (32 percent) are the main utilisers of this standard.

### **3.2.9 OVERHEAD STANDARDS**

Overhead cost Standards are partly variable . Setting standard overhead costs requires the determination of 1) Standard capacity and 2) Standard Overhead costs for other capacity. The Standard overhead costs can be computed using theoretical ideal capacity, normal, capacity or expected actual capacity.

Table 3.26 depicts the Overhead Standards. Only 24 units representing 13.71 are using overhead cost standard while 151 units (86.29 percent) did not follow overhead standard. Small scale units found it difficult and complex to divide between variable and semi-variable cost as a result this method is used by very few units which knows the importance of overhead standards.

**TABLE 3.26**  
**Fixing Overhead Standards**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>8</b>	<b>3</b>	<b>10</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>
©%	32.00	12.00	40.00	12.00	0.00	0.00	0.00	13.71
®%	33.33	12.50	41.67	12.50	0.00	0.00	0.00	100.00
<b>No</b>	<b>17</b>	<b>22</b>	<b>15</b>	<b>22</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>151</b>
©%	68.00	88.00	60.00	88.00	100.00	100.00	100.00	86.29
®%	11.26	14.57	9.93	14.57	16.56	16.56	16.56	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percent Source : Data collected from Sample Industrial Units and Questionnaires

**TABLE 3.27**  
**Cost Centre Maintenance Analysis of selected SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>38</b>
©%	16.00	24.00	20.00	36.00	16.00	32.00	8.00	21.71
®%	10.53	15.79	13.16	23.68	10.53	21.05	5.26	100.00
<b>No</b>	<b>21</b>	<b>19</b>	<b>20</b>	<b>16</b>	<b>21</b>	<b>17</b>	<b>23</b>	<b>137</b>
©%	84.00	76.00	80.00	64.00	84.00	68.00	92.00	78.29
®%	15.33	13.87	14.60	11.68	15.33	12.41	16.79	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percent Source : Data collected from Sample Industrial Units and Questionnaires

**3.2.10 COST CENTRE** is a location, person or item of equipment for which cost may be ascertained and used for the purpose of cost control. Having a cost centre is of paramount importance as it deals with various areas like personal and impersonal cost centres, production and service cost centres, process cost centre, profit centre. In small scale industry, cost centres are absent due to the cost involved in establishment of cost centre. Small Scale Industrial units think it as an additional cost which can be seen from the Table 3.27. Only 38 units representing 31.71 percent are found to have had a separate cost centres which equip the management to control and reduce the unnecessary cost by reporting/informing them from time to time. Large number of units 137 units with 78.29 percent have not maintained any cost centre. Industry wise, it shows that 9 units from chemicals (36 percent), engineering 8 units (32 percent) and electricals 6 units (24 percent) were on the top among those which have maintained separate cost centre.

### **3.2.11 VARIANCE ANALYSIS**

Variance analysis is the process of analysing variances by sub-dividing the total variance in such a way that management can assign responsibility for standard performance. After the standard costs have been fixed the next stage in the operation of standard costing is to ascertain the actual cost of each element and compare them with the standard already set. Computation and analysis of

variance is the main objective of standard costing. The deviation of actual from the standard is called variance.

Variance may be favourable or unfavourable depending upon whether the actual resulting cost is less or more than the standard cost. Small scale industry have to study the variances and should take corrective action against such factors which lead to decline in efficiency and productivity of the unit. Table 3.28 reveals the first variance analysis i.e. material cost variance and it can be seen clearly in the Table that 137 units representing 78.26 percent not practiced material cost variance while only 38 units representing 21.71 percent carried out material cost variance. Industry wise, only chemicals with 10 units (40 percent) and electricals 8 units (32 percent) were at the top while pharmaceuticals and engineering were the lowest user of this variance. It is clear that variance (material) is not popular among them.

**3.2.12 LABOUR COST VARIANCE :** Labour variances arise due to difference in actual rates and standard rates of labour. The variation in actual time taken by workers and the standard time allotted to them for performing a job. The labour variance can be analysed as follows. Labour cost variance, labour rate variance, and labour time or efficiency variance, labour idle time variance, and labour mix variance. The Table 3.29 shows labour cost variance. It is cleared that only 33 units representing 18.86 percent followed labour cost variance while 142 units (81.14 percent) have

**TABLE 3.28**  
**Variance Analysis - Material Cost by the Sample Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>2</b>	<b>8</b>	<b>6</b>	<b>10</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>38</b>
©%	8.00	32.00	24.00	40.00	16.00	8.00	24.00	21.71
®%	5.26	21.05	15.79	26.32	10.53	5.26	15.79	100.00
<b>No</b>	<b>23</b>	<b>17</b>	<b>19</b>	<b>15</b>	<b>21</b>	<b>23</b>	<b>19</b>	<b>137</b>
©%	92.00	68.00	76.00	60.00	84.00	92.00	76.00	78.29
®%	16.79	12.41	13.87	10.95	15.33	16.79	13.87	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 3.29**  
**Variance Analysis - Labour Cost by the Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>33</b>
©%	8.00	24.00	16.00	12.00	20.00	28.00	24.00	18.86
®%	6.06	18.18	12.12	9.09	15.15	21.21	18.18	100.00
<b>No</b>	<b>23</b>	<b>19</b>	<b>21</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>19</b>	<b>142</b>
©%	92.00	76.00	84.00	88.00	80.00	72.00	76.00	81.14
®%	16.20	13.38	14.79	15.49	14.08	12.68	13.38	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

not followed labour variances. Industry wise, it is found common among engineering 7 units (21.21 percent), electricals and food & beverage 6 units each followed by plastics 5 units. There is a poor response again for labour variance also due to their inability to undertake such study. Small scale units have to come out from such type of attitude if they want to become more competitive and challenging.

**3.2.13 OVERHEAD VARIANCE :** It is the difference between Standard overheads for Actual output i.e. Recovered overhead and Actual overheads. It is the total of both fixed and variable overhead variances. In small scale units, overhead variance is used by very few units can be evidenced from the Table 3.30. It is only 13 units (7.43 percent) used overhead cost variance while large number of units 162 representing 92.57 percent have not followed overhead cost variance. Industry wise, it is chemicals 4 units, electronics 3 units and pharmaceuticals and engineering 2 units each are some of the units used overhead cost variance. It may be the computation of variances that keeps the small scale units away from using the various variances.

**3.2.14 STANDARD COSTING TECHNIQUE :** is most widely used technique but in case of Small Scale Industry, it was found there is a poor response to this system. It is mainly due to the cited by the entrepreneurs. It requires technical skill person to set standards which is a costly affair for Small Scale Industrial units. It requires

frequent revision of standard and the office staff to compute accurately. Maintenance of the cost data base is expensive for Small Scale Industry. It shows that the cost consciousness habits are still not come to the Small Scale entrepreneurs, alternately it affects the decision making process in a large way.

### **3.2.15 BUDGET**

A budget is a detailed plan of operation for some specific future period. It is an estimate prepared in advance of the period to which it applies. It is a tool both planning and control. Budgetary control is a control measure in which the actual state of affairs is compared with the budget so that appropriate action may be taken with regard to any deviations. It provides detailed plan of action for a business over a definite period of time. It also coordinates all the activities of various departments of a business. It supplies information on the basis of which some corrective action can be taken. Budgetary control is an essential tool of management for controlling costs and maximising profits. It helps to identify the areas of efficiency and inefficiency. It provides a yardstick against which the performance of the firm can be evaluated. Preparing a Budget is a prime necessity of any business organisation whether small scale or large business houses. In Small Scale Industry it is of special importance as it helps to know the inefficiencies and target the future goal by eliminating the waste and misuse of resources.



**TABLE 3.30**  
**Variance Analysis - Overheads by the Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>13</b>
©%	8.00	4.00	12.00	16.00	0.00	8.00	4.00	7.43
®%	15.38	7.69	23.08	30.77	0.00	15.38	7.69	100.00
<b>No</b>	<b>23</b>	<b>24</b>	<b>22</b>	<b>21</b>	<b>25</b>	<b>23</b>	<b>24</b>	<b>162</b>
©%	92.00	96.00	88.00	84.00	100.00	92.00	96.00	92.57
®%	14.20	14.81	13.58	12.96	15.43	14.20	14.81	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaires

**TABLE 3.31**  
**Budgetary Practices followed by Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>No</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaires

**3.2.15.1** Preparing Budget compels and motivates management to make an early and timely study of its problems. It generates a sense of caution and care. It helps them to direct capital and other resources into the most profitable channels. In Table 3.31 the small scale units prepared budget ever year. It shows that small scale units have really understood the importance of budget and budgetary control which helps them to plan and control. They have realised that they can control the expenses and make the best use of the capital and resources with the help of budget.

Preparing budget is a job of an expert or experienced and skilled person. It is not possible for any clerk or officer to prepare an effective budget which plans, coordinates, communicates and controls the performance of a business. That is why in Table 3.32 a study is done to know who prepares the budget. In 13 units representing 7.43 percent, budget is prepared by the Accounting department while 38 units (21.71 percent), budget is prepared by private auditor. It is mainly due to some of those units don't have a separate accounts department and secondly, the owners are also not so educated to understand it. So they have the services of private auditor to prepare the budget. While in 124 units representing 70 percent of the total units budget is prepared by the owner himself. Most of the units where owners prepare the budget are chemicals 20 units (80 percent), plastics 21 units (84 percent), engineering and pharmaceuticals 18 units (72 percent) and electricals 17 units (68 percent), electronics 16 units (64 percent)

and food & beverage 14 units (56 percent). Here the owner prepared the budget by himself and sometimes in consultation with the Accounting department. It is good to know that most of the owners are aware of preparing the budget.

**3.2.15.2 Budget Manual:** It is necessary to define the responsibilities of persons engaged in a budgetary programme and sets out the routine, the forms and records required under budgeting. It specifies the procedure to be followed in developing the budget and report of the budget information and actual operating data to be used. It is the document of policies and procedures involved in implementation of budgetary control system. It is very important in a budget to know who is responsible, Fixation of responsibility, Specifying the procedure of reporting and all other details to be communicated properly. In Table 3.33 which depicts the budget manual, it shows that only 14 units representing (18 percent) prepared the Budget Manual, while large number of small scale units have not prepared budget manual i.e. 161 units representing 92 percent of the total. 40 units in electricals, engineering and food & beverage followed budget manual.

**3.2.15.3 Budget Period :** It is an important factor in developing a comprehensive budgeting programme. It is a period for which the budget is prepared. A budget can be a long-term budget or short term budget. A short term budget is generally prepared for one year or lesser period may be for quarterly. Monthly or weekly. It will not

**TABLE 3.32**  
**Source of Budget Preparation among the Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Accounting De</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>13</b>
©%	8.00	8.00	16.00	4.00	4.00	0.00	12.00	7.43
®%	15.38	15.38	30.77	7.69	7.69	0.00	23.08	100.00
<b>Private Audito</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>7</b>	<b>8</b>	<b>38</b>
©%	20.00	24.00	20.00	16.00	12.00	28.00	32.00	21.71
®%	13.16	15.79	13.16	10.53	7.89	18.42	21.05	100.00
<b>Owners</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>20</b>	<b>21</b>	<b>18</b>	<b>14</b>	<b>124</b>
©%	72.00	68.00	64.00	80.00	84.00	72.00	56.00	70.86
®%	14.52	13.71	12.90	16.13	16.94	14.52	11.29	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaires

**TABLE 3.33**  
**Budget Manual maintained by Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>14</b>
©%	24.00	0.00	4.00	24.00	4.00	0.00	0.00	8.00
®%	42.86	0.00	7.14	42.86	7.14	0.00	0.00	100.00
<b>No</b>	<b>19</b>	<b>25</b>	<b>24</b>	<b>19</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>161</b>
©%	76.00	100.00	96.00	76.00	96.00	100.00	100.00	92.00
®%	11.80	15.53	14.91	11.80	14.91	15.53	15.53	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaires

exceed the full accounting year. The long term budget which extends to five or even more years is used for implementation of long range plans, activities, objectives and for control purpose. The Table 3.34 depicts the Budget Period followed by small scale units. It is clear that 120 units representing (31.43 percent) prepared long and short run budget for planning and control. Industry wise, mainly chemical 11 units (44 percent), pharmaceuticals 10 units (40 percent) and engineering 9 units (36 percent) followed long term budgeting where as majority of the small scale units followed short run budget.

**3.2.15.4 Master Budget :** It is prepared from the summaries of functional Budgets. It is the summary budget that incorporates the key figures and totals of all other budgets. It is sometimes called as Comprehensive Budget. It is a tool for coordinating all the individual budgets of an organisation into an acceptable effective plan. If incorporates plans and budgetary goals for a small segment of a business enterprises. It is truly an integrative tool that cuts across divisional boundaries in order to coordinate the firm's diverse activities. A comprehensive budget normally contains an income statement, a balance sheet, a statement of cash receipts and disbursement and schedules of production, purchases and fixed assets acquisitions. It checks and controls all the other sub-budgets on the basis of this budget, the management generally takes the major decisions. Table 3.35 shows the preparation of master budget by the small scale units. It is clear from the Table

**TABLE 3.34**  
**Budget Period followed by the Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Short Run</b>	<b>15</b>	<b>20</b>	<b>19</b>	<b>14</b>	<b>18</b>	<b>16</b>	<b>18</b>	<b>120</b>
©%	60.00	80.00	76.00	56.00	72.00	64.00	72.00	68.57
®%	12.50	16.67	15.83	11.67	15.00	13.33	15.00	100.00
<b>Long Run</b>	<b>10</b>	<b>5</b>	<b>6</b>	<b>11</b>	<b>7</b>	<b>9</b>	<b>7</b>	<b>55</b>
©%	40.00	20.00	24.00	44.00	28.00	36.00	28.00	31.43
®%	18.18	9.09	10.91	20.00	12.73	16.36	12.73	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaires

**TABLE 3.35**  
**Preparation of Master Budget by the Sample SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Yes</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>10</b>
©%	12.00	4.00	0.00	20.00	0.00	4.00	0.00	5.71
®%	30.00	10.00	0.00	50.00	0.00	10.00	0.00	100.00
<b>No</b>	<b>22</b>	<b>24</b>	<b>25</b>	<b>20</b>	<b>25</b>	<b>24</b>	<b>25</b>	<b>165</b>
©%	88.00	96.00	100.00	80.00	100.00	96.00	100.00	94.29
®%	13.33	14.55	15.15	12.12	15.15	14.55	15.15	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

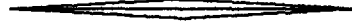
©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaires

that only 10 units representing 5.71 percent prepared master budget while 165 units representing 94.29 percent have not prepared master budget. Only 5 units (20 percent) of chemicals, 3 units of pharmaceuticals, electricals and engineering one unit each prepared the comprehensive Master Budget to coordinate and control all the other functional budget, while rest of them preferred preparing only functional budgets.

It is clear from the above analysis that Accounting practices are classified into two financial and cost Accounting. Financial Accounting practices are mainly followed by majority of the small scale units, either it is due to their own interest or may be forced by the Banks, financial institutions, various government agencies etc. It is a good move from the small scale units but the quality of maintaining these accounts have to be improved a lot and it's a long way to go for SSI units.

While Cost Accounting practices are concerned it is pretty miserable situation among small scale units. They have not yet realised the importance of cost consciousness and cost control to improve their profitability. One can improve the profitability by reducing cost or by improving the productivity of a concern. Cost accounting techniques really gives the entrepreneur the awareness about the mounting cost and necessity to control it. It also gives the various controlling tolls but the small scale units entrepreneur are still not convinced by those tools. They always consider it as

unnecessary increase in cost to have a Costing Department and should be able to take more a risk to face the new challenges coming up in their day to day life.







**CHAPTER IV**

***CAPITAL STRUCTURE  
AND  
FINANCING PATTERN***



## **CHAPTER - IV**

### **CAPITAL STRUCTURE AND FINANCING PATTERN**

Finance is the main pre-requisite for every productive operation. For many of the business problems, solutions are found on financial strength of the unit. The functions of raising funds, investing them in assets and distributing returns earned from assets to shareholders are known as Financial Management. While performing these functions, a firm attempts to balance cash inflow's and out flows. Finance requires skillful planning, control and execution of a firm's activities.

Finance is one of the constant problem, and if Small Scale Industries require finance then they must have adequate credit. Credit is available on the basis of the credit worthiness of the entrepreneur. Finance is called the science of money. It is the basic requirement for starting and running every human activity in a purposeful manner for expansion, diversification and development of business activities finance is a must. The importance of finance function in Small Scale Industry have increased considerably mainly due to the use of capital intensive technology and difficulty in raising finance from different sources. Finance is needed for a business for promotional activities, to invest in fixed capital

requirement, working capital requirement and for developmental purpose.

**4.1 CAPITAL PLAN** - It is primarily a statement estimating the amount of capital and determining its composition. Financial plan requires a great deal of foresight and imagination while preparing it. It is a plan that gives the blueprint of the financial structure of a company. It is a statement which tells, how much capital will be required, how it will be collected and utilised. It tells about the total capital requirement of a unit and what are the ways and means of raising it and most productive, rational and scientific way of using it. It helps in the total capitalisation of the unit. Thus, it helps to estimate the financial needs of the enterprise and ensure adequate supply of capital to the units, minimise the cost of raising funds and provide flexibility to the financial structure of an enterprise.

Before preparing a capital plan the enterprise should decide the short term and long term needs and formulate the policies to raise the required finance. It have to decide the forms of securities to be issued for capital collection and the proportion of various kinds of securities to be issued. Administration of financial / capital plan is very important. It have to see the timely payment of interest and return of the capital raised and if possible try to renew the plan if it is not working as per it's requirement. Financial

capital plan brings financial discipline and ensures orderly functioning of an enterprise.

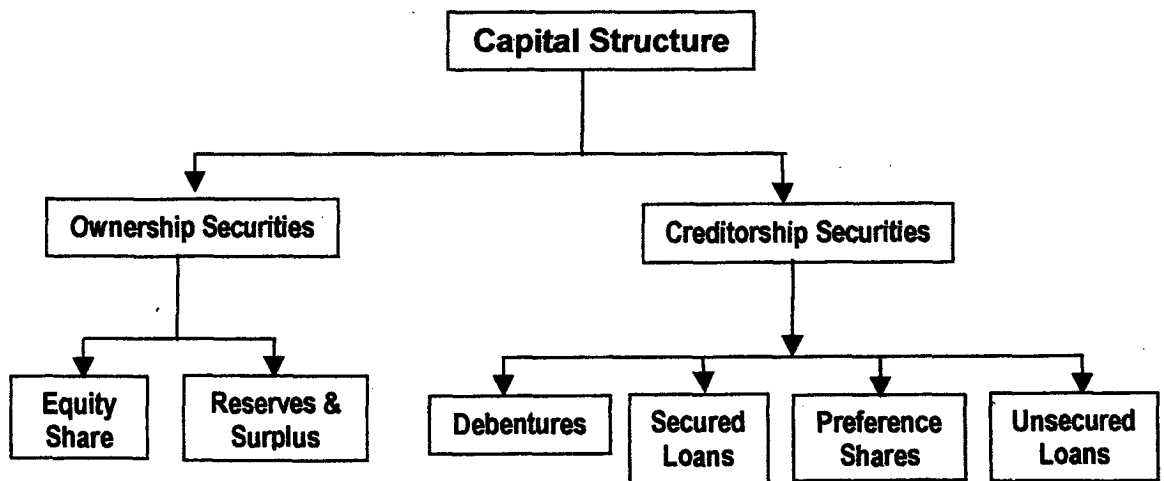
**4.2 CAPITAL GEARING** - A unit collects capital through two ways i.e. ownership securities and creditorship securities. The proportion of each type of securities, the ratio between the various types of securities is to be raised in the total capitalisation of unit is done by Capital Gearing. High Gearing is a situation when an unit have agreed to pay fixed rate of interest or dividend on a very large portion of its funds. So, here the creditorship securities are more than the ownership securities where as low geared unit is one where it is not bound to pay large amount of fixed return on the Capital employed. Capital Gearing is an important tool of financial management it brings about proper compromise between liquidity and profitability. It helps to acquire capital at a cheaper interest rate. Initially, for a new unit the larger proportion of capitalisation is through equity capital so it is low geared. Thus the well being and success of an enterprise depends to a larger extent on the application of proper capital gears as warranted by the situation in which the enterprise is operating. Small scale units have to utilise this technique like Capital Gearing to improve the profitability and give liquidity to the total capital structure.

**4.3 TRADING ON EQUITY** - When an unit uses borrowed capital as well as owned capital in a regular conduct of its business it is said to be trading on equity. It means taking the advantage of equity share capital over borrowed fund on reasonable basis. It also suggests additional profits that equity shares earn because of issuing other forms of securities. It represents the arrangement under which an enterprise uses borrowed funds carrying a fixed rate of interest in such a way so as to increase the rate of return on equity shares. By issuing creditorship securities with fixed return, the dividend rate can be substantially raised with reference to equity shareholders. The main objective of trading on equity is to ensure maximum possible return on investment to the equity shareholders and also to influence adequate management control.

Trading on equity can be classified into two, Trading on thin equity and Trading on thick equity. It ultimately helps the equity shareholders to get attractive return on their investment. It thus develops their loyalty towards the firm. It helps to the enterprise for expansion and growth. It helps to develop an optimal capital structure which involves minimum cost and maximum return and control to equity shareholders. Such tool is also important when we decide about capital structure. Satisfying the owners/equity holders by maximum or decent return on investment is the prime necessity of any business unit to keep their financial structure strong and stable.

**4.4 CAPITAL STRUCTURE** - Capital Structure refers to the mix of long term sources of funds such as debentures, long term debt, preference shares, capital and equity share capital including reserves and surpluses. Firms with unplanned Capital Structure can prosper in short run but face difficulties in raising funds and economising the use of their funds in the long run.

A small scale units capital structure can be planned with an objective of maximising shareholders wealth. It suggests the ratio between owned capital and borrowed capital. Capital structure of a company involves a decision regarding the ratio of ownership capital to borrowed capital, between short term and long term capital and the ratio among different sources of finance for capital which includes loans, bonds, share issues and reserves.



Determination of an optimum capital structure is a formidable task. There are significant variations among industries and among individual companies within an industry in terms of

capital structure. The chief financial officer of a company should develop an appropriate capital structure which is most advantageous to the company. This can be done only when all these factors which are relevant to the company's capital structure decision are properly analysed and balanced. The Capital Structure should be planned generally keeping in view the interest of the equity shareholders and the financial requirements of the company in order to know what would be the proposition of equity and debt in a capital structure of a unit, There is a need to understand the relationship between financial leverage and cost of capital. The Capital structure decision is a continuous one and have to be taken whenever a firm needs additional finances while planning for capital structure every company should develop an appropriate capital structure which is most advantageous to the company and the owners. Obviously, there cannot be a uniform capital structure which suits the requirement of all companies. In other words the Capital structure have to be tailored in such a way so as to suit the needs of a particular company.

This proper mix of debt and equity minimises overall cost of capital and maximises the market value of the firm. Incursion of debt into the total capital have an effect of pulling down the firms cost of capital. The cost of capital tends to reach its lowest point at a certain stage with continuous increase in debt equity ratio and it takes sometimes for the investors to realise the increasing financial risk of the firm that is inherent in a continuous increase in the Debt

equity ratio. In Small Scale Industry, capital structure is quite simple. A large number of units starts production with the capital contributed by the entrepreneurs or by money borrowed from relatives, friends and shown as capital while only among the bigger small scale units capital is raised from the public.

**4.5 FINANCIAL LEVERAGE** - To understand the capital structure it is very important to know the financial leverage. Leverage is the employment of fixed assets or funds for which a firm have to meet fixed costs/fixed rate of interest obligation irrespective of the level of activities attained/ level of operating profit earned. The higher the leverage, higher the profit and vice versa. But a higher leverage obviously implies higher outside borrowing and hence riskier. There are two types of leverages operating and financial. The leverage associated with Investment activities is called as operating leverage. We are more concerned about financial leverage for the purpose of financing decision of the firm. Leverage associated with financing activities is called Financial Leverage.

Financial leverage represents the relationship between the firms earnings before interest and taxed and the earnings available for ordinary shareholders. It is concerned with the effect of changes in EBIT on the earnings available to equity holders. It is the ability of a firm to use fixed financial changes to magnify the effects of changes in EBIT on the firms earning per share. It involve the use



of funds obtained at a fixed costs in the hope of increasing the return to the shareholders. Favourable or positive leverage occurs when the firm earns more on the assets purchased with the funds, then the fixed cost of their use. Unfavourable leverage occurs when the firm does not earn as much as the funds cost. The degree of financial leverage can be measured with the help of the following formula

$$DFL = \frac{\text{Percentage change in EPS}}{\text{Percentage change in EBIT}}$$

DFL= Degree of financial leverage  
 EPS = Earning per Share  
 EBIT = Earning before interest & Tax

When the percentage change in EPS, resulting from a given percentage change in EBIT, is greater than the percentage change in EBIT, the financial leverage exists it means that if DFL is greater than one shows that there is a financial leverage.

The determination of Capital Structure in practice involves additional considerations in addition to the concerns about EPS, value and cash flow. Attitude of managers with regards to financing decisions are quite often influenced by their desire not to lose control to maintain operating flexibility and to have convenient and cheaper means of raising funds.

**4.6 CONCERN FOR DILUTION OF CONTROL** - In designing the capital structure sometimes the existing management is governed by its desire to continue control over the company. The existing management team not only wants control and ownership but also

to manage the company without any outside interference. This is needed in case of widely held company and closely held company.

Desire to maintain operating flexibility is one of the most serious considerations in setting up the capital structure. Flexibility means the firm's ability to adapt its capital structure to the needs of the changing conditions. The company should be able to raise funds without undue delay and cost, whenever needed to finance the profitable investments. It should also be in a position to redeem its preference capital or debt whenever warranted by the future conditions. The financial plan should be flexible enough to change the composition of the capital structure as warranted by the company's operating strategy and needs.

**4.7 EASE OF RAISING CAPITAL INEXPENSIVELY** - There should be investors to purchase a security in a given period of time and to demand reasonable return. Marketability does not influence the initial capital structure, but is an important consideration to decide about the appropriate timing of security issues. The Company has to see the market condition whether it is a boom period or depression and floating costs also.

**4.8 CAPACITY FOR ECONOMIES OF SCALE** - The size of a company may influence the availability of funds from different sources. A small firm finds great difficulties in raising long-term loans. To obtain long term loan it will be available at higher rate of

interest and in convenient terms. In case of small firms to make their financial structures very flexible management finds it very difficult. Small firms depend on share capital and retained earnings for their long term funds. It is quite difficult for them to raise share capital in the capital markets. Also, the capital base of small firm is so small that they are not allowed to be registered in the stock exchanges.

**4.9 EBIT – EPS ANALYSIS** - It is one of the basic objectives of financial management to design an appropriate capital structure which can provide the highest Earning Per Share (EPS) over the firm's expected range of Earning Before Interest & Tax (EBIT). EPS is a yard stick to evaluate the firms performance for the investors. The level of EBIT varies from year to year shows how successful the firms operation are. EBIT – EPS approach is an important tool for designing the optimal capital structure framework of the firms.

Keeping in view all the above aspects of finance, an attempt was made in this study to know the financial structure, its ratio's and measure the degree of financial leverage in the selected small scale units.

**4.10 DEBT-EQUITY** - The debt-equity Ratio determined to ascertain the soundness of the long term financial policies of the company. It shows the relationship between borrowed funds and owner's capital is a popular measure of the long term financial

solvency of the firm. This ratio indicates the relative proportions of debts and equity in financing the assets of a firm. It is computed by using the following formula

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Debt} + \text{Net Worth}}$$

In the Table 4.1 shows the total debt equity analysis. It is clear from the Table that debt capital is more than the equity capital in all the cases. The overall figure showed 62.05 percent was the debt capital in the total capitalisation of the units and 37.95 percent is equity capital. This indicated that the firms have lots of chance to go for trading on equity but as far as external parties are concerned they visualise that there is more risk involved in it. But it all depends upon firm to firm, unit to unit and person to person. The overall ratio showed 1.64 and food & beverage showed 2.10 higher than the overall average, it means in food & beverage debts are more than the equity which is also very clear from the above Table. Where as in case of chemicals the debts are the lowest among all it is 58.58 percent which showed a debt equity ratio of 1.41. Small scale units are more depended on external debts and assistance given by the outsiders. It is costly but they don't mind it.

Again in the Table 4.2 shows the number of units under total debt-equity ratio in the various categories . Here the debt equity ratio is divided into three category: Below one, one and upto two

**TABLE 4.1**  
**Total Debt - Equity Ratio followed by the Sample SSI Units**

Capital Structure	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Equity Capital	39.15	40.00	35.58	41.42	38.10	39.41	32.20	37.95
Debt Capital	60.85	60.00	64.42	58.58	61.90	60.59	67.80	62.05
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Ratio	1.55	1.50	1.82	1.41	1.62	1.54	2.10	1.65

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 4.2**  
**Total debt - Equity Ratio (Number of Units)**

Debit Equity Ratio	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Below 1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>16</b>
©%	8.00	12.00	16.00	4.00	12.00	8.00	4.00	9.14
®%	12.50	18.75	25.00	6.25	18.75	12.50	6.25	100.00
<b>Between 1 &amp; 2</b>	<b>15</b>	<b>18</b>	<b>15</b>	<b>21</b>	<b>17</b>	<b>19</b>	<b>22</b>	<b>127</b>
©%	60.00	72.00	60.00	84.00	68.00	76.00	88.00	72.57
®%	11.81	14.17	11.81	16.54	13.39	14.96	17.32	100.00
<b>Above 2</b>	<b>8</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>32</b>
©%	32.00	16.00	24.00	12.00	20.00	16.00	8.00	18.29
®%	25.00	12.50	18.75	9.38	15.63	12.50	6.25	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire

and above two. It further revealed that 127 units representing 72.57 percent were found to have had one and below two debt equity while 16 units representing 9.14 percent registered a debt-equity ratio below one where as 32 units representing 18.29 percent units recorded debt-equity ratio above two. It also revealed that 16 units whose ratio was below one were very conservative and did not like to take any risk mainly electronics, electricals and plastics units. Their capital structure showed very rigid and fixed. It lacks in the quality of flexibility in the capital structure but they enjoyed good public confidence. 127 units were found on an average as per the standard debt equity ratio 2:1. They are not high and not low also, and they maintained a good balance debts and equity capital to enjoy the investors support. While in case of 32 units the debt equity ratio was above 2 which only means they are having a very aggressive type of capital structure. Their maximum capital in the capital structure consisted of debt capital. They enjoyed lots of flexibility and control in the capital structure. Most of the pharmaceuticals units (8 units), electronics 6 units, plastics 5 units and engineering and electricals 4 units each are the main units whose debt-equity ratio was above two i.e. above the standard ratio. It is a risky structure and needs to be constant appraisal, checks and control on all the resources from time to time. They enjoyed lots of flexibility but at the same time it involves risk too. It is good to see that some of the units are ready to take risk in the business.

**4.11 LONG TERM DEBT-EQUITY RATIO** - can be seen from the Table 4.3. It indicated that on an average long term debt is 0.96 paise of each rupee of net worth. Equity shareholders are therefore relatively more than the interest of the creditors. Obviously capital structure is neither so conservative nor so lenient also, it is on an average equal. The practice of employing relatively lower proportion of long term borrowed capital is desirable in case of small scale units in view of instability and unpredictably of profits. The financial strength of these units is strong and the financial risk is low.

The highest average ratio of long term debt to shareholders equity is recorded in engineering (1.23) followed by electricals (1.06) and chemicals (0.96). The lowest ratio is recorded in pharmaceuticals (0.82) times followed by plastics 0.85 times. It is noted that higher debt equity ratio means higher dependence on debts and lower means lower dependence on debts.

In the Table 4.4 shows long term debt-equity in terms of number of units. Again here the long term debt-equity ratio is classified into three categories i.e. below one, one and upto two and above two. 146 units (83.43 percent) posted a long term debt-equity ratio below one and in the category of one and below 2, there are 46 units representing 14.86 percent while above 2 there are just 3 units (1.71 percent). The industry wise, in category of below one food & beverage 25 units (100 percent) have the highest followed by

TABLE 4.3

## Long Term debt - Equity Ratio

Components of Capital	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Equity Capital	45.16	51.42	48.18	49.02	45.82	55.16	48.21	49.00
Long Term debt	54.84	48.58	51.82	50.98	54.18	44.84	51.79	51.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Ratio	0.82	1.06	0.93	0.96	0.85	1.23	0.93	0.96

Source : Data collected from Sample Industrial Units and Questionnaire

TABLE 4.4

## Long Term Debt to Equity - Number of Units

Debt Equity Ratio	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Below 1</b>	<b>16</b>	<b>24</b>	<b>20</b>	<b>18</b>	<b>23</b>	<b>20</b>	<b>25</b>	<b>146</b>
©%	64.00	96.00	80.00	72.00	92.00	80.00	100.00	83.43
®%	10.96	16.44	13.70	12.33	15.75	13.70	17.12	100.00
<b>Between 1 &amp; 2</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>26</b>
©%	32.00	4.00	20.00	24.00	8.00	16.00	0.00	14.86
®%	30.77	3.85	19.23	23.08	7.69	15.38	0.00	100.00
<b>Above 2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>
©%	4.00	0.00	0.00	4.00	0.00	4.00	0.00	1.71
®%	33.33	0.00	0.00	33.33	0.00	33.33	0.00	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire



the electricals 24 units (96 percent), electronics and engineering 20 units each (80 percent). In the category of one and below two the long term debt equity in terms of units wherein pharmaceuticals 8 units (32 percent), chemicals 6 units (24 percent), electronics 5 units (20 percent) and engineering 4 units (16 percent) were found in case of above two category. Thus, units consisted of pharmaceuticals, chemical and engineering, one unit each. Thus, it showed the extend to which debt financing have been used in the business. A high ratio shows that the claims of creditors are greater than those of owners. A very high ratio is unfavourable from the firms point of view. This introduces inflexibility in the firms operations due to the increasing interference and pressures from creditors. A high debt company also known as highly leveraged or geared is able to borrow funds on very restrictive terms and conditions. A low debt-equity ratio implies a greater claim of owners than creditors.

**4.12 COVERAGE RATIOS** - These ratios are computed from information available in the Profit and Loss Account. For a normal firm, in the ordinary course of business, the claims of creditors are not met out of the sale proceeds of the permanent assets of the firms. The obligations of a firm are normally met out of the earnings or operating profit. These claims consists of i) Interest on loans ii) preference dividend and iii) amortisation of principal or repayment of the instalment of loans or redemption of preference

capital on maturity. The ability of the firm to service its claims is called coverage ratios. It reassures the relationship between what is normally available from operations of the firms and the claims of the outsiders. It also measures the debt servicing capacity of a firm. The interest coverage ratio or the times-interest earned is one of the most conventional coverage ratios used to test the firm's debt servicing capacity. A higher ratio is desirable but too high ratio indicates that the firm is very conservative in using debt and it is not using credit to the best advantage of shareholders. A lower ratio indicates excessive use of debt or inefficient operation. The firm should make efforts to improve the operating efficiency or to retire debt to have a comfortable coverage ratio. The three important factors that determine the value are i) the operating profit; ii) the total amount borrowed; and iii) the effective rate of interest. Coverage Ratio can be applied to interest coverage, dividend coverage and equity shareholders coverage.

**4.13 INTEREST COVERAGE RATIO** - Interest coverage ratio determines the debt servicing capacity of a business enterprise keeping in view fixed interest long-term debt. It shows the relationship between earnings before interest and tax (EBIT) and fixed interest charges. It is expressed in percentage or number of times. The format for computation is

$$\text{Interest Coverage} = \frac{\text{Earnings Before Interest \& Taxes(EBIT)}}{\text{Interest}}$$

This ratio shows how many times the interest charges are covered by EBIT out of which they will be paid. If the business enterprise is able to earn a return on the assets higher than the rate of interest on long-term debt, the enterprise makes an overall profit. However, if the enterprise runs the risk of not earning a return on asset equal to the interest cost of the long-term loan, the enterprise makes an overall loss. The interest coverage ratio measure the degree of protection to creditors from default on the payment of interest by the company. Table 4.5 showed the position of the small scale units with reference to the interest coverage. It is clear that the overall 39.45 percent of the profit is going for interest payment of the small scale units and the industry wise, it is electronics which paid the highest 42.18 percent followed by engineering 41.42 percent and electricals 40.81 percent while the lowest interest is paid by chemicals 35.71 percent, plastics 38.12 percent and pharmaceuticals 39.10 percent. The overall interest coverage ratio interest coverage rate shows 1.53 and industry wise chemicals got the highest 1.80 followed by plastics 1.62 and pharmaceuticals 1.56. While the lowest ratio is noticed in case of electronics 1.37, engineering 1.41, electricals 1.45 and food & beverage 1.51.

It can be concluded from the above analysis that units like chemicals, plastics, pharmaceuticals have got a higher debt servicing capacity compared to the others. They have got the interest coverage ratio more than the overall ratio of 1.53 where as rest of the industrial units have got interest coverage ratio below the

overall ratio. It reflects also how best the funds specially the debts are utilised to maintain reasonable interest coverage.

The interest coverage ratio is also studied from the number of units coming under the different category of interest coverage ratio can be seen from the Table 4.6. It is clear that 69 units were found in the category of 2.1 to 3.00 ratio of interest coverage and the units which had the highest were electronics (15 units), plastics 14 units and pharmaceuticals and chemicals 10 units each. While 67 units were noticed under the category of 1.1 to 2.00 ratio. Wherein chemical (14 units), electricals (13 units) and food & beverage (12 units) were on the top of the list. In Group 3.1 to 4.00 category, there are 24 units and was dominated by engineering (10 units) followed by pharmaceuticals 6 units. In 4.1 to 5.00 ratio there are 8 units where in electronics, engineering and food & beverage have got 2 units and plastics one unit. In 6.1 to 7.00 ratio again there are three units two from food & beverage and one from engineering. While in 7.1 to 8.0 category there is one unit which from food & beverages. There are no units whose interest coverage ratio is below one and above eight.

**4.14 SOURCES OF FINANCE** - One of the major characteristic feature of small scale units is that the personal funds of the entrepreneur form a substantial proportion of the total assets. Most of the units are not corporate entities. The owner of small

**TABLE 4.5**  
**Interest Coverage Ratio**

Components	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
EBIT	60.90	59.19	57.82	64.29	61.88	58.58	61.18	60.55
Interest	39.10	40.81	42.18	35.71	38.12	41.42	39.80	39.45
Ratio	1.56	1.45	1.37	1.80	1.62	1.41	1.51	1.53

Source: Data collected from Sample Industrial Units and Questionnaire

**TABLE 4.6**  
**Coverage Ratio - Number of Units**

Ratio	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
0.0 - 1.0	0	0	0	0	0	0	0	0
1.1 - 2.00	7	13	7	14	8	6	12	67
2.1 - 3.00	10	8	15	10	14	6	6	69
3.1 - 4.00	6	3	1	0	2	10	2	24
4.1 - 5.00	0	1	2	1	0	2	2	8
5.1 - 6.00	2	0	0	0	1	0	0	3
6.1 - 7.00	0	0	0	0	0	1	2	3
7.1 - 8.00	0	0	0	0	0	0	1	1
8.1 - 9.00	0	0	0	0	0	0	0	0
9.1 - 10.00	0	0	0	0	0	0	0	0
Total	25	25	25	25	25	25	25	175

Source: Data collected from Sample Industrial Units and Questionnaire

scale units have to undertake a considerable amount of higher risk than those of corporate units.

The sources that provide the working capital requirements are commercial banks, co-operative banks, money lenders, Maharashtra State Finance Corporation. Where as fixed capital needs are usually met by the State Government, State Financial Corporation, National Small Scale Industries Corporation, Commercial Banks, State Industrial Development Corporation.

Fixed and working capital are the two important needs of a business finance. Fixed capital is needed to buy the long term capital requirement while working capital is needed for the business to buy the short term capital needs. In the Table 4.7 showed fixed and working capital ratio in the small scale units. As it is clear from the Table that the overall fixed and working capital ratio is 1.28 where in 56.14 percent of the total capital in small scale units consists of fixed capital while 43.86 percent of capital is working capital. Industry wise analysis showed that fixed capital to working capital ratio was more in case of engineering 2.40, it was more than the overall average ratio of 1.28. Where in 70.61 percent of the capital consists of fixed capital and only 29.39 percent capital is working capital. Engineering units are coming up now and initially for any unit fixed capital will be high. Pharmaceuticals units were next to engineering with a ratio of 1.50 and it is also more than the overall ratio. In pharmaceutical it was 60 percent capital is fixed

and 40 percent working capital. In food and beverage, total fixed capital needs were 59.47 percent and working capital was 40.53 percent and the overall ratio showed 1.47 times more than the overall average. Chemicals with 1.46 in the fourth in the above category of industries, it showed that 59.42 percent capital is fixed capital and 40.75 percent is working capital. In case plastics units the ratio was the lowest i.e. 0.71 followed by electricals 1.00 and electronics 1.08. In the case of plastics the fixed capital requirement was 41.50 percent and working capital requirement was 58.50, in electronics it was 50.07 percent in fixed capital and 49.93 working capital. It showed that fixed and working capital requirement was more or less is same in case of electronics. In electricals it was 51.81 percent fixed capital and 48.19 percent was working capital.

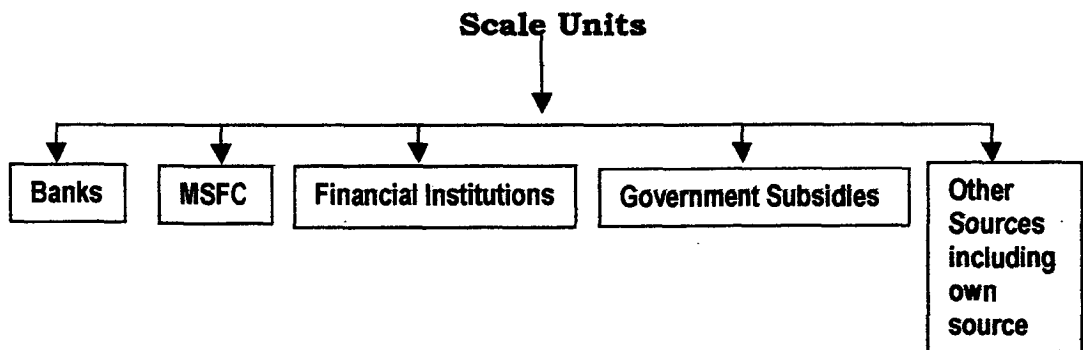
Overall it revealed comment that most of the units were at the initial stages so their fixed capital/long term capital requirement was more except in case of plastic and rest were found to have had the higher percentage of fixed capital requirement.

#### **4.15 SOURCES OF FIXED CAPITAL/LONG TERM FUNDS**

Fixed capital is required in the business to buy the fixed assets for the business. It is a capital that is needed to meet the permanent or long term needs of the business. Fixed capital determines the smooth and efficient working of the business. This capital is required most at the time of establishment of a new unit

and also for expansion, diversification and maintenance of the existing enterprise. Fixed capital remains invested in the business as long as the units or enterprise operates. The amount of fixed capital required varies from unit to unit but this amount is quite large as fixed assets are very costly. The fixed capital is collected as per the estimate made in the capital plan. It provides strength for the survival and stability to a unit specially manufacturing. The amount of fixed capital is based upon the nature of business, the size of the unit and method of manufacturing the product. Fixed capital is the back bone of the business.

**Sources of Fixed Capital Borrowed (External) in case of Small**



In this study an attempt is made to know the various long term sources (external) which financed the small scale units in Goa. As far as internal are concerned they include paid up capital of ordinary Equity Shares, Preference Shares, Deferred Shares and Forfeited Shares. In the Table 4.8 showed the sources of fixed / long term capital (external) borrowed by the small scale units. It showed that 45.80 percent of the fixed capital came from the



**TABLE 4.7**  
**Fixed and Working Capital Ratio**

Component & Ratio	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Fixed Capital	60.00	51.81	50.07	59.52	41.50	70.61	59.47	56.14
Working Capital	40.00	48.19	49.93	40.75	58.50	29.39	40.53	43.90
Ratio	1.50	1.08	1.00	1.46	0.71	2.40	1.47	1.28

Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 4.8**  
**Source of Fixed Capital Borrowed**

Source of Finance	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Banks	30.15	40.32	46.71	42.51	52.17	48.51	60.21	45.80
MSFC	10.26	12.14	15.10	10.26	11.81	15.18	5.15	11.41
Financial Institution	18.12	15.91	10.72	35.21	10.11	14.81	10.17	16.44
Govt. Subsidies	24.52	20.10	22.84	6.27	5.18	18.15	10.11	15.31
Other Source	16.95	11.53	4.63	5.75	20.73	3.35	14.36	11.04
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Data collected from Sample Industrial Units and Questionnaire

commercial banks and the highest among them was food & beverages sector which have got 60.21 percent of their total fixed capital through commercial banks followed by plastics and engineering 52.17percent and 48.51 percent respectively. The lowest among them were the pharmaceuticals 30.15 percent and electricals 40.32 percent. Commercial banks provided a wide ranging financial assistance to small scale units in the form of equity support and term loans which can be used for long term establishment, expansion, modernisation and renovation. Another important source of fixed capital is the Maharashtra State Financial corporation which represented 11.41 percent of the overall fixed capital. It is mainly utilised by engineerings 15.18 percent followed by electronics 15.10 percent, electricals 12.14 percent and engineering 11.81 percent. Financial institution played a very important role in the financing of small scale units they proved 16.44 percent of the total fixed capital finance to small scale units. In chemicals units with 35.21 percent, pharmaceuticals with 18.12 percent, electricals (15.19 percent) and food & beverages with (10.17 percent) of their respective total capitalisation of the units.

In Goa, the major attraction for small scale units is the government subsidy. The subsidies are many and their rates are also very high in Goa. It can be seen from the above Table 4.8 that overall Government subsidies consisted of 15.31 percent of the total fixed capital borrowed and the industries which are on the top of the Table are pharmaceuticals (24.52 percent), electronics (22.84

percent), electricals (20.10 percent) and engineering (18.15 percent). Another important source of fixed capital finance is from other sources i.e. money lenders, friends and relatives. The Table showed that in case of plastics 20.73 percent came from other sources followed by pharmaceuticals and electricals (16.95 percent).

It is clear that maximum fixed capital finance was provided by commercial banks followed by other sources while Maharashtra State Finance Corporation have relatively reduced its role in case of financing fixed capital needs.

#### **4.16 SOURCES OF WORKING CAPITAL BORROWED**

Working capital requirement is the amount of funds which the small scale industry must have to finance its day to day activities. An adequate working capital ensures a regular and orderly working of a business unit. Working capital is that part of total capital which is required for purchasing current assets, to meet regular recurring needs of a business unit. Table 4.9 showed the sources of working capital borrowed. It showed that 71.91 percent of the total working capital is from commercial Banks. It is the highest in all the types of Industry but among them engineering with 80.11 percent was the highest followed by chemicals 76.24 percent, plastics 75.82 percent and pharmaceuticals 72.82 percent. 9.06 percent of the overall working capital was from own source and among the own source, electronics was with 15.12 percent, food & beverage with 10.18 percent, electricals 10 percent, were on

the top of the list while 19.04 percent of the total working capital requirement was from other source. Other source included fund borrowed from money lenders, suppliers credit, friends and relatives etc. Electricals with 24.76 percent is on the top of the list followed by electronics 24.07 percent, pharmaceuticals 19.08 percent, chemicals 18.20 percent.

It can be inferred from the above analysis that Banks played a crucial role in working capital requirement of a business. The own source of capital is not yet developed. While other source is again a crucial source for small scale industry although they have to pay slightly higher interest rate on some of the funds borrowed through these source still small scale industrial units prefer that mainly there are less formalities and procedures involved. For a small scale unit, working capital management is particularly important mainly small scale units may decrease its investments in fixed assets by renting or leasing plant and equipment. However, there is no way of avoiding an investment in working capital requirements.

#### **4.17 SOURCES OF OWNED FUND (EQUITY BASE)**

Owned source is one where the entrepreneurs did not have to fall back up on the outside costly source. This is the source which build up the strength of the enterprise. It included equity share, retained earning and subsidies received from the Government. Every business organisation whether partnership,

sole trading or joint stock company are allowed to issue equity shares. But due to their small size of the issue they cannot be traded in the stock exchange and as a result the moveability of such shares is very slow. In the Table 4.10 showed the sources of owned fund and it is clear from the Table that 86.61 percent of the owned fund was funded by the equity shares and the industry wise, engineering was with 90 percent of the total equity base followed by chemicals 89 percent, plastics 88 percent were on the top of the Table. It is revealed further that 8.86 percent of the total equity base was funded by retained earning and prominent industries among them were electronics 12 percent of the total equity base followed by food & beverage and pharmaceuticals 10 percent each and chemical with 9 percent were on the top of the list. Subsidies are another source of equity base which consists of 5 percent of the total equity. Industry wise, it is pharmaceutical with 8 percent, electricals and food & beverage 6 percent each and plastics with 5 percent were on the top among the industries.

It is clear from the above analysis that maximum portion of the own fund/equity base was from equity capital which was financed by the owner himself or by some of the financial institution. It is very interesting to note that retained earning is also playing a very important role in funding equity base most of the units have realised the importance of retained earning in financing its own business while subsidies are also assisting the owner to build up the equity base of the unit to some extent.

**TABLE 4.9**  
**Sources of Working Capital Borrowed**

Source of Working Capital	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
<b>Banks</b>	72.82	65.24	60.81	76.24	75.82	80.11	72.31	71.91
<b>Own Source</b>	8.10	10.00	15.12	5.56	9.15	5.28	10.18	9.06
<b>Other Sources</b>	19.08	24.76	24.07	18.20	15.03	14.61	17.51	19.04
<b>Total</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Source : Data collected from Sample Industrial Units and Questionnaire								

**TABLE 4.10**  
**Source of Own Fund (equity base) Analysis**

Source of Equity	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
<b>Equity Share</b>	82.00	86.00	84.00	89.00	88.00	90.00	84.00	86.14
<b>Retained Earning</b>	10.00	8.00	12.00	9.00	7.00	6.00	10.00	8.86
<b>Subsidies</b>	8.00	6.00	4.00	2.00	5.00	4.00	6.00	5.00
<b>Total</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Source : Data collected from Sample Industrial Units and Questionnaire								

**4.18 TYPES OF LOAN USED** - Table 4.11 showed the type of loan used by the small scale units. Term loan is a long term type of loan. Small scale industries find it difficult to secure adequate finance from institutional sources even for their working capital requirements because of their own inherent limitations on the one hand and the generally high standard applied by the lending institutions to borrowers on the other. Banks and other lending institutions find it difficult to assess their credit worthiness. Long term and short term loan is required for the business to finance their fixed and current assets of the business unit. Long term loans are given in the form of term loans to small scale units is given generally for more than one year. The only problem the small scale industries face, is that they are not regarded as sufficiently credit worthy because they are not able to satisfy the criteria laid down by lenders. The Table 4.11 shows that except three units of plastics rest of all the units used term loan as one of to finance their business.

**4.19 CASH CREDIT AND BILL FINANCING FACILITY** - are considered to be the short term loan facilities. To small scale units, cash credit limit is sanctioned after completing necessary formalities by the borrower. The bank opens a cash credit account in the name of the borrower and the cash credit limit sanctioned is credited to this cash credit account. Generally cash credit facility is given against goods "hypothecated" or pledged with the bank. Cash

TABLE 4.11

Type of Loan used by the units

Types of Loans	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Units
Term Loan	25	25	25	25	22	25	25	172
Cash Credit	20	25	21	23	25	25	22	161
Bills Facility	2	0	0	0	3	2	3	10

Source : Data collected from Sample Industrial Units and Questionnaire



credit facility is useful for meeting working capital needs of business. In the above Table shows the cash credit standing of small scale units out of 175 units 161 units were found to have utilised this facility. Industry wise, all the units of electricals, plastics and engineering used cash credit facility while incase of pharmaceutical 20 units used, electronics 21 units, chemicals 23 units and food & beverage 22 units used cash credit.

Bills facility is another type of loan (short term) used by small scale units. Commercial banks provide short term finance to business enterprise by discounting their bills of exchange, promissory notes. Business enterprises get ready cash against bills and this provides additional liquidity to them for business purposes along with discounting of bills bank issue letter of credit in favour of their customers. Bills facility is not so popular among small scale units in Goa, as it can be seen from the Table, only 7 units out of 175 used this facility and the units which used this are pharmaceuticals 2 units, plastics 3 units, food & beverages 3 units and engineering 2 units only.

The analysis revealed that most of the small scale units utilised Term Loan and Cash Credit as a means of financing. Bills facility have not been understood by many of the small scale units, so it is less popular means of financing.

As it was learnt that most of the small scale units have got higher creditorship fund in the form of loans credits and borrowing

as a result it makes the units highly geared. The interest burden on small scale units goes on increasing as some of the funds were borrowed with a high interest rate, that ultimately reduces the profitability of the unit. At times they find it so much overburdening that they stop producing. Manufacturing and this is one of the reasons the sickness in small scale business units. It can be evident from the Table 4.12 which showed the rate of interest on term loan. In 0-10 percent interest rate it was observed only three units which acquired their finance at that rate of interest. They included pharmaceuticals two units and electricals one unit. In the interest range of 11-15 percent, there were 66 units representing 37.71 percent of the total units. The top most units which have acquired loans at this rate of interest were chemicals and engineering 12 units each followed by plastics 10 units, electricals 9 units and the lowest in this Group were pharmaceuticals 6 units followed by electronics 8 units and electricals and food & beverage 9 units each. In the interest range of 16-18 percent there are 70 units representing 40 percent of the total. The top three sectors are plastics 14 units, pharmaceuticals 12 units and food & beverage 11 units. The lowest in this Group were electricals 6 units followed by electronics 7 units and chemicals and engineering 10 units each. In the interest range of 19-21 percent there are total 28 units which borrowed their funds represented 16 percent of the total units. The major units which have borrowed at this interest rate is electrical & electronics 8 units each, food & beverage and pharmaceuticals 4

**TABLE 4.12**  
**Rate of Interest on Term Loans**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>0 - 10</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
@%	8.00	4.00	0.00	0.00	0.00	0.00	0.00	1.71
@%	66.67	33.33	0.00	0.00	0.00	0.00	0.00	100.00
<b>11 - 15</b>	<b>6</b>	<b>9</b>	<b>8</b>	<b>12</b>	<b>10</b>	<b>12</b>	<b>9</b>	<b>66</b>
@%	24.00	36.00	32.00	48.00	40.00	48.00	36.00	37.71
@%	9.09	13.64	12.12	18.18	15.15	18.18	13.64	100.00
<b>16 - 18</b>	<b>12</b>	<b>6</b>	<b>7</b>	<b>10</b>	<b>14</b>	<b>10</b>	<b>11</b>	<b>70</b>
@%	48.00	24.00	28.00	40.00	56.00	40.00	44.00	40.00
@%	17.14	8.57	10.00	14.29	20.00	14.29	15.71	100.00
<b>19 - 21</b>	<b>4</b>	<b>8</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>28</b>
@%	16.00	32.00	32.00	8.00	0.00	8.00	16.00	16.00
@%	14.29	28.57	28.57	7.14	0.00	7.14	14.29	100.00
<b>22 - 24</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>8</b>
@%	4.00	4.00	8.00	4.00	4.00	4.00	4.00	4.57
@%	12.50	12.50	25.00	12.50	12.50	12.50	12.50	100.00
<b>Above 24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
@%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
@%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
@%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

@% - represents column percentage      @% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire

units each and chemicals and engineering 2 units each while there was no unit from plastics which have borrowed from this range. In interest range of 22-24 percent there were 8 units representing 4.57 percent and the major units are electronics two units and one unit each from the rest six segments. At above 24 percent interest, there was no unit noticed.

It is clear from the above analysis that most of the units were found under the range of 11 to 21 percent range. It was noticed majority of the units have borrowed funds at high interest rate mainly because of their low credit worthiness in the market and as a result they had to find some one who can lend finance to them and it was fulfilled only at the cost of high interest rate.

Small scale units acquire creditorship securities in the form of long term and short term financing. In the case of long term loans, the interest rates are slightly lower as the entrepreneurs have the option of choosing. They are not in a hurry it gives him reasonable time to think. In the case of short term loans the time to think is very short and the needs are very urgent, entrepreneurs cannot postpone the needs. They have to keep the production process working smooth, so, they will acquire the loan at higher interest rate with less formalities and complexities. In the Table 4.13 showed the rate of interest on short term loans. It is clear that in the interest range of 0-10 percent there were 9 units representing 5.14 percent wherein chemicals 3 units, pharmaceuticals and

**TABLE 4.13**  
**Rate of Interest on Short-term Loans**

Interest Rates	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>0 - 10</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>9</b>
©%	8.00	4.00	8.00	12.00	4.00	0.00	0.00	5.14
®%	22.22	11.11	22.22	33.33	11.11	0.00	0.00	100.00
<b>11 - 15</b>	<b>10</b>	<b>12</b>	<b>7</b>	<b>12</b>	<b>8</b>	<b>11</b>	<b>10</b>	<b>70</b>
©%	40.00	48.00	28.00	48.00	32.00	44.00	40.00	40.00
®%	14.29	17.14	10.00	17.14	11.43	15.71	14.29	100.00
<b>16 - 18</b>	<b>12</b>	<b>8</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>64</b>
©%	48.00	32.00	40.00	32.00	28.00	32.00	44.00	36.57
®%	18.75	12.50	15.63	12.50	10.94	12.50	17.19	100.00
<b>19 - 21</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>16</b>
©%	4.00	4.00	16.00	4.00	16.00	8.00	12.00	9.14
®%	6.25	6.25	25.00	6.25	25.00	12.50	18.75	100.00
<b>22 - 24</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>10</b>
©%	0.00	4.00	8.00	4.00	8.00	12.00	4.00	5.71
®%	0.00	10.00	20.00	10.00	20.00	30.00	10.00	100.00
<b>Above 24</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>6</b>
©%	0.00	8.00	0.00	0.00	12.00	4.00	0.00	3.43
®%	0.00	33.33	0.00	0.00	50.00	16.67	0.00	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire

electronics 3 units each. In 11-15 percent range of interest, there were 70 units representing 40 percent and the most prominent among them were electrical and chemicals 12 units each followed by engineering 11 units and food & beverage and pharmaceuticals 10 units each.

In the range of 16-18 percent interest, there were 64 units representing 36.57 percent and the top most among them were pharmaceuticals 12 units, food & beverage 11 units, electronics 10 units and electricals, chemicals and engineering 8 units each respectively. In the range of 19-21 percent interest there were 16 units where in 4 units each in case of electronics and plastics, 3 units in the case of food & beverage and two units in engineering. In the range of 22-24 percent there were 10 units where in engineering with 3 units, electronics and plastics 2 units each while in the case of above 24 percent interest range there were 6 units representing 8.43 percent. Industry wise, it was electricals two units, plastics 3 units and engineering one unit.

It is clear that the short term loans are acquired at much more costly rate than the long term loan. It is interesting to note that even in the interest bracket of above 24 percent interest 6 units were found. The number of units in the higher interest rates were more mainly due to the urgency of the funds and secondly their poor credit worthiness.

**4.20 PROBLEM IN OBTAINING FINANCE** - Small scale industries are generally not regarded as sufficiently credit worthy because they are not able to satisfy the criteria laid down by lenders. While granting medium and long term loans the lending agency not only assesses credit worthiness of borrowers and the security offered by them but also an observance of rules and regulations governing such advances. The unit should show the prospects of improving its earning capacity and profit, if financial assistance is granted to them and various other expectations are laid down by the lenders. Strict requirements of security and rigid prescription of acceptable collateral. Delay involved in the sanction of loans are some of the problems faced by small scale units in Goa. It can be evident from the Table 4.14 which showed the problems in obtaining finance. Out of 175 units 135 units representing 77.14 percent of the total have expressed their concern in obtaining finance while 40 units representing 22.86 percent have not found any problem in obtaining finance. Industry wise 22 units from engineering expressed their concern while 3 units did not face any problem in obtaining finance. In electronics it was 21 units which have problem while 4 units did not have any such problem in obtaining finance. In electronics 21 units which raised their concern over obtaining finance.

The maximum number of units in a particular segment expressed happiness as they did not face any problem in obtaining finance were plastics 8 units, followed by electricals and food &

**TABLE 4.14**  
**Problems in obtaining Finance**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & IB	Total
<b>Yes</b>	20	18	21	19	17	22	18	135
©%	80.00	72.00	84.00	76.00	68.00	88.00	72.00	77.14
®%	14.81	13.33	15.56	14.07	12.59	16.30	13.33	100.00
<b>No</b>	5	7	4	6	8	3	7	40
©%	20.00	28.00	16.00	24.00	32.00	12.00	28.00	22.86
®%	12.50	17.50	10.00	15.00	20.00	7.50	17.50	100.00
<b>Total</b>	25	25	25	25	25	25	25	175
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
©% - represents column percentage      ®% - represents row percentage								
Source : Data collected from Sample Industrial Units and Questionnaire								



beverage 7 units each. Chemicals 6 units, pharmaceuticals 5 units, electronics 4 units and engineering 3 units.

The forgoing analysis showed that most of the Small Scale Industries have a problem in obtaining finance. It is due to the various reasons which were discussed in the above topic. In addition to that some typical problems faced by small scale units were identified. One of such problem is due to credit squeeze. The Table 4.15 showed the details regarding the credit squeeze problems created by the lenders and financial institutions, and how it affected the small scale units in Goa. The severity of the problem is measured by a 5 point scaling technique and presented it in terms of the mean value. It is clear that 77 units with 44 percent of the total have faced a very severe problem due to the policy of the lending institution. While 61 units 34.86 percent one have faced a high problem, 25 units (14.29 percent) faced moderated problems regarding credit squeeze, 9 units were on low level and 3 units with 1.71 percent were at the very low level. Higher the point on the scale more severe is the problem. The overall mean showed 4.14 which ultimately falls under the very high degree category. While industry wise the plastics units with 4.44 average mean value was on the top followed by engineering 4.32 and the lowest among them was pharmaceuticals with 3.56 mean value which fell under moderate category followed by electricals and food & beverage 4.00 mean value each representing high degree of credit squeeze. It is

**TABLE 4.15**  
**Problems in obtaining Finance - Credit Squeeze**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
©%	8.00	0.00	0.00	4.00	0.00	0.00	0.00	1.71
®%	66.67	0.00	0.00	33.33	0.00	0.00	0.00	100.00
<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>9</b>
©%	12.00	4.00	4.00	4.00	0.00	4.00	8.00	5.14
®%	33.33	11.11	11.11	11.11	0.00	11.11	22.22	100.00
<b>3</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>6</b>	<b>25</b>
©%	20.00	16.00	12.00	8.00	8.00	12.00	24.00	14.29
®%	20.00	16.00	12.00	8.00	8.00	12.00	24.00	100.00
<b>4</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>61</b>
©%	36.00	32.00	40.00	36.00	40.00	32.00	28.00	34.86
®%	14.75	13.11	16.39	14.75	16.39	13.11	11.48	100.00
<b>5</b>	<b>6</b>	<b>12</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>13</b>	<b>10</b>	<b>77</b>
©%	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
®%	7.79	15.58	14.29	15.58	16.88	16.88	12.99	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>Mean</b>	<b>3.56</b>	<b>4.00</b>	<b>4.24</b>	<b>4.20</b>	<b>4.44</b>	<b>4.32</b>	<b>4.00</b>	<b>4.14</b>

©% - represents column percentage; ®% - represents row percentage. Scale: 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.  
Source : Data collected from Sample Industrial Units and Questionnaire

also interesting to note that 12 units were noticed under the category of low to very low degree.

**4.20.1 PROBLEM OF SECURITY** - Not having enough security to provide as a pledge or hypothecation is the another problem of Small Scale Industry in Goa. With out security, it is rare that small scale units can raise finance from the financial institution and money lenders. It is mainly due to low credit worthiness of the entrepreneurs that demands high security against the finance. In the Table 4.16 showed the problem in obtaining finance among the small scale units due to the security. It can be seen that 86 units (49.14 percent) were found to have faced very severe problem in raising funds due to poor security, while 63 units (36 percent) faced high degree of such problem, 17 units (9.71 percent) faced moderate problem, 8 units have faced low problem and one unit have faced very low problem. The overall average mean showed 4.29 which means overall very severe problem faced by SSI units. Industry wise, the average mean value again showed very high degree of problem for the types of industries. The highest among them was the food & beverages (4.52) and the lowest among them was engineering with 4.04 mean value.

**4.20.2 DELAY IN SANCTIONING LOAN** - There are two stages involved in granting of loan i.e. sanctioning and disbursement. There is a General complaint by the entrepreneur that it takes a lot of time in getting the loan sanctioned and also lot of time is wasted

**TABLE 4.16**  
**Problems in obtaining Finance - Security Problem**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>
©%	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.57
®%	0.00	0.00	0.00	0.00	0.00	100.00	0.00	100.00
<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>8</b>
©%	4.00	8.00	8.00	4.00	4.00	4.00	0.00	4.57
®%	12.50	25.00	25.00	12.50	12.50	12.50	0.00	100.00
<b>3</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>17</b>
©%	8.00	4.00	12.00	16.00	8.00	16.00	4.00	9.71
®%	11.76	5.88	17.65	23.53	11.76	23.53	5.88	100.00
<b>4</b>	<b>12</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>63</b>
©%	48.00	40.00	36.00	24.00	28.00	36.00	40.00	36.00
®%	19.05	15.87	14.29	9.52	11.11	14.29	15.87	100.00
<b>5</b>	<b>10</b>	<b>12</b>	<b>11</b>	<b>14</b>	<b>15</b>	<b>10</b>	<b>14</b>	<b>86</b>
©%	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
®%	11.63	13.95	12.79	16.28	17.44	11.63	16.28	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>Mean</b>	<b>4.24</b>	<b>4.28</b>	<b>4.16</b>	<b>4.32</b>	<b>4.44</b>	<b>4.04</b>	<b>4.52</b>	<b>4.29</b>

©% - represents column percentage, ®% - represents row percentage. Scale: 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.  
Source : Data collected from Sample Industrial Units and Questionnaire

in disbursement of loans. Table 4.17 showed the problem faced by small scale entrepreneur in obtaining finance due to delay in sanctioning and disbursement. 84 units representing 48 percent of the total said there was a high degree of delay in sanctioning the loan, 41 units representing 23.43 percent of the total complained that there was very high degree of delay in sanctioning the loan, 40 units complained that there was moderate delay in sanctioning loan while 10 units said there was low or very low degree of delay in sanctioning. The overall average mean value showed 3.87 which means high degree of delay. Industry wise, it showed electronics and chemicals have got 4.04 mean value for each category which is higher than the overall average mean and it is coming under very high category. While engineering with 3.64 mean and pharmaceuticals and electricals with 3.80 each are at the least affected among all.

In Table 4.19 an attempt is been made to show the comparative analysis of mean value regarding the problems faced by small scale entrepreneurs in obtaining finance. All the problem i.e. Credit squeeze, security, delay in sanction and disbursement and corruption are shown with their average mean value are shown in the above Table. It revealed that almost all the problems have a very high degree of effect on small scale industries except delay in sanctioning and disbursement which recorded 3.87 degree means high degree. Among all security was the most severe problem as it can be seen with the highest degree of average mean value 4.29

TABLE 4.17

## Problems in obtaining Finance - Delay in Sanction

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>
©%	4.00	0.00	4.00	0.00	0.00	4.00	0.00	1.71
®%	33.33	0.00	33.33	0.00	0.00	33.33	0.00	100.00
<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>7</b>
©%	8.00	4.00	4.00	0.00	0.00	8.00	4.00	4.00
®%	28.57	14.29	14.29	0.00	0.00	28.57	14.29	100.00
<b>3</b>	<b>5</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>40</b>
©%	20.00	28.00	20.00	24.00	20.00	24.00	24.00	22.86
®%	12.50	17.50	12.50	15.00	12.50	15.00	15.00	100.00
<b>4</b>	<b>10</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>84</b>
©%	40.00	52.00	48.00	48.00	56.00	48.00	44.00	48.00
®%	11.90	15.48	14.29	14.29	16.67	14.29	13.10	100.00
<b>5</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>41</b>
©%	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00
®%	17.07	9.76	14.63	17.07	14.63	9.76	17.07	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
<b>Mean</b>	<b>3.80</b>	<b>3.80</b>	<b>3.84</b>	<b>4.04</b>	<b>4.04</b>	<b>3.64</b>	<b>3.96</b>	<b>3.87</b>

©% - represents column percentage; ®% - represents row percentage. Scale: 1 - Very Low; 2 - Low; 3 - Moderate; 4 - High; 5 - Very High.

Source : Data collected from Sample Industrial Units and Questionnaire

It is understood from the entrepreneurs that although it have got the second place but its involvement is in almost all the problems faced by small scale entrepreneurs. Among the pharmaceuticals, security is the major problem. Credit squeeze is the major problem of electronics units followed by security 4.16. It is very interesting to note that credit squeeze and security have the same degree of mean value 4.44 in case of plastics industry followed by delay in sanctioning and disbursement 4.04 mean value. In engineering industry, it was credit squeeze 4.32 is the major drawback followed by food & beverages it is security the major problem due to their low asset backing.

**4.21 REPAYMENT PERIOD** - Repayment of loans is suppose to be the main financial difficulty for many entrepreneurs. Repayment period starts much before they could utilise this fund in the business and starts earning proper rate of return. Once the loans granted and disbursed, whether it is a short term or long term loan the interest starts mounting up, but it doesn't go at the same rate in the earnings of the business. So the entrepreneurs always expect the lender of funds should be little bit lenient during this term. To understand this main problem of the entrepreneurs the

**TABLE 4.19**  
**Problems in obtaining Finance - Comparative Analysis (Mean Value)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Credit Squeeze</b>	3.56	4.00	4.24	4.20	4.44	4.32	4.00	4.14
<b>Delay in Sanction &amp; Disbursement</b>	3.80	3.80	3.84	4.04	4.04	3.64	3.96	3.87

Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 4.20**  
**Repayment period of Term Loan**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>First Month onward</b>	0	0	0	1	1	1	2	5
©%	0.00	0.00	0.00	4.00	4.00	4.00	8.00	2.86
®%	0.00	0.00	0.00	20.00	20.00	20.00	40.00	100.00
<b>After Gestation Period</b>	7	4	3	3	4	5	8	34
©%	28.00	16.00	12.00	12.00	16.00	20.00	32.00	19.43
®%	20.59	11.76	8.82	8.82	11.76	14.71	23.53	100.00
<b>After definite period</b>	18	21	22	21	20	19	15	136
©%	72.00	84.00	88.00	84.00	80.00	76.00	60.00	77.71
®%	13.24	15.44	16.18	15.44	14.71	13.97	11.03	100.00
<b>Total</b>	25	25	25	25	25	25	25	175
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire



repayment period is divided into three categories i.e. Repayment period of term loan soon after first month onward, after the Gestation period and after a definite period.

The Table 4.20 represented the repayment period of term loans – long term in nature. It is clear from the Table that 136 units representing 77.71 percent have got a repayment period after a definite period. The definite period may start from one years to two years or more. Industry wise, electronics 22 units representing 88 percent followed this period of repayment while food & beverage with 15 units (60 percent) were at the lowest among this category. The Table showed that there were 34 units (19.43 percent) which repayment period was after the Gestation period. It's a great relief to the units which faced major problem of establishment and market capturisation. Initially it was the food & beverage industry 8 units (32 percent) was top on the list followed by pharmaceuticals 7 units (28 percent) and least among them was electronics and chemicals with 3 units each. There are still 5 units representing 2.86 percent of the total one had a repayment period soon after the first month onwards and it's a big challenge for them to make the payment within the time limit.

Overall it showed that the maximum units have got a definite repayment period in case of term loan. It is because the fund lenders realised that it is very difficult for them to make the payment of instalment amount of loan and interest when they have

not started earning it, where as those five units representing two from food & beverage and one each from chemicals, plastics and engineering were not given any such concession.

Position of repayment of short term loans of small scale entrepreneurs from Goa are shown in the Table 4.21 again having the same criteria. Repayment after first month onwards, after Gestation period and after definite period. It can be seen from the Table that 146 units representing (83.43 percent) came under the first category which repayment period started soon after the first month. Industry wise, all the units representing 80 percent fell in these category except pharmaceuticals 18 units (72 percent), electricals 19 units (76 percent) while plastics with 24 units (96 percent) were on the top of the list. Total of 8 units repayment was after the Gestation period and 21 units after the definite period.

Here 146 units fell under first category i.e. Repayment soon after one month because it is a short term loan and short term loans are to be repaid mainly within one years period of time. This loan is taken only when the investment in the long term Assets are already made.

#### **4.22 FAIL TO REPAY LOAN INSTALMENTS**

For some units the sickness comes initially from the beginning due to their failure to make the timely payment of loan instalment when the unit becomes the defaulter, and the situation continues for a long period, then such units are considered as

**TABLE 4.21**  
**Policy of Repayment period of Short-term Loans**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>First Month onward</b>	18	19	21	22	24	20	22	146
⊙%	72.00	76.00	84.00	88.00	96.00	80.00	88.00	83.43
⊙%	12.33	13.01	14.38	15.07	16.44	13.70	15.07	100.00
<b>After Gestation Period</b>	2	1	1	1	0	2	1	8
⊙%	8.00	4.00	4.00	4.00	0.00	8.00	4.00	4.57
⊙%	25.00	12.50	12.50	12.50	0.00	25.00	12.50	100.00
<b>After definite period</b>	5	5	3	2	1	3	2	21
⊙%	20.00	20.00	12.00	8.00	4.00	12.00	8.00	12.00
⊙%	23.81	23.81	14.29	9.52	4.76	14.29	9.52	100.00
<b>Total</b>	25	25	25	25	25	25	25	175
⊙%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
⊙%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

⊙% - represents column percentage ⊙% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

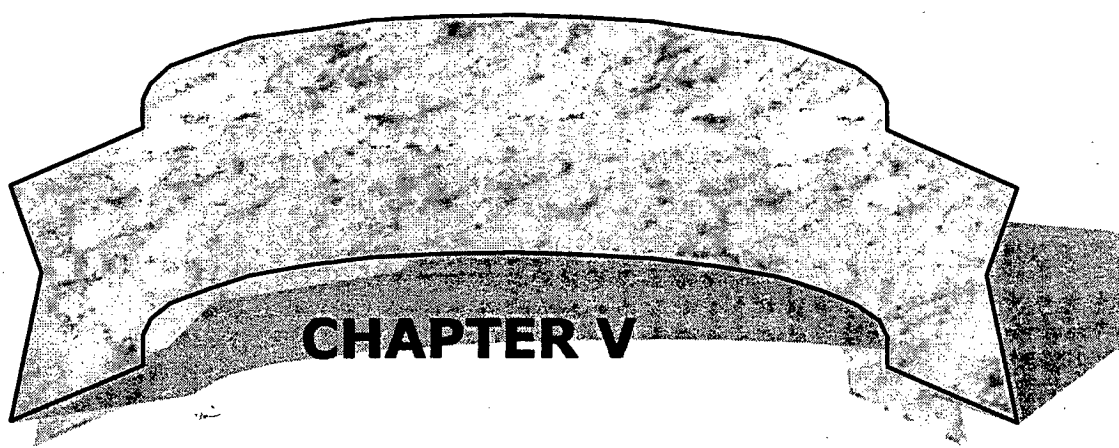
**TABLE 4.22**  
**Analysis of Loan Repayment Regularity**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>No Response</b>	3	5	4	0	4	2	1	19
⊙%	12.00	20.00	16.00	0.00	16.00	8.00	4.00	10.86
⊙%	15.79	26.32	21.05	0.00	21.05	10.53	5.26	100.00
<b>Yes</b>	2	1	2	8	3	6	8	30
⊙%	8.00	4.00	8.00	32.00	12.00	24.00	32.00	17.14
⊙%	6.67	3.33	6.67	26.67	10.00	20.00	26.67	100.00
<b>No</b>	20	19	19	17	18	17	16	126
⊙%	80.00	76.00	76.00	68.00	72.00	68.00	64.00	72.00
⊙%	15.87	15.08	15.08	13.49	14.29	13.49	12.70	100.00
<b>Total</b>	25	25	25	25	25	25	25	175
⊙%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
⊙%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

⊙% - represents column percentage ⊙% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

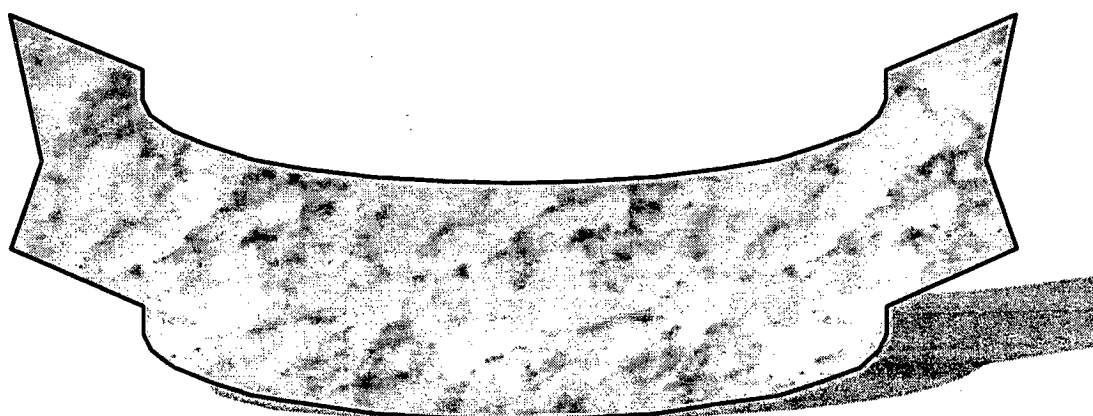
insolvent and action is taken against them to repay the instalment amount and the penal interest due to non-payment. Table 4.22 revealed the position of the small scale units in terms of repayment of loan instalments. It is clear that 126 units representing 72 percent have answered saying that they never failed in repayment of loan instalment on time. While 30 units representing 17.14 percent have failed in repayment of loan instalment and 19 units representing 10.86 gave no response to this question. They were worried about the reputation of the units if the answer is negative. The units which failed to repay loan instalments most are food & beverages and chemicals 8 units each while electricals were the least with just one unit which failed to repay the loan instalment on time. Many of the entrepreneurs revealed after deep discussion that they took second loan to repay the first loan and third to repay second and that is how short term loans goes not circulating from time to time.

It is clear that the major problem of repayment is the long term loan as it involves huge amount and huge interest repayment also. Therefore, Small Scale Industry fallback mostly on owned fund rather than borrowed fund. This will help the small scale units atleast in the initial period to build up and grow well and as far as possible small scale units have to see how to minimise the cost of financing and interest there on the loans. Last movement makes the units to borrow the funds from the costliest source which will ultimately make them defaulters.



**CHAPTER V**

***WORKING CAPITAL  
ANALYSIS***



## CHAPTER - V

### **WORKING CAPITAL ANALYSIS**

A study of working capital is important to internal and external analysis of an organisation because of its close relationship to day-to-day operations of a business. Inadequate management of working capital is one of the leading causes of business failures. The term working capital refers to short term funds required for financial operating cycle in the business. These funds are used for carrying out the routine activities consists of purchase of raw materials, payment of direct or indirect expenses, investment in stock and stores, credit granted to customers and to maintain required amount of cash. Shortage of funds for working capital have caused many businesses to fail. Lack of efficient and effective utilisation of working capital leads to earn low rate of return on capital employed.

Working capital refers to total of all the current assets which is referred as Gross working capital. It also refers to the excess of current asset over current liabilities which is net working capital. The gross working capital is defined as the current asset of the firm notably cash and marketable securities, accounts receivable and inventory

The investment in current asset should always be adequate. Excessive and inadequate investment in current asset is

dangerous and should be avoided as they destroy the firm's liquidity as well as profitability. Another alternative definition of net working capital is that portion of firm's current asset financed with long term funds. In other words the level of net working capital in the firm is a measure of liquidity and also suggests the extent in which working capital needs may be financed by the permanent sources of funds. The basic objective of working capital management is to manage the firm's current asset and current liabilities in such a way that the satisfactory level of working capital is maintained.

From the point of view of time, working capital may be divided into two categories viz. Permanent and temporary capital. Permanent working capital represents the assets required on continuing basis over the entire year. It is that part of current asset which represents the very minimum level of raw materials, goods in process, finished goods, stores, receivables and cash that is required at all times to carry out a minimum level of business activities. Basically it is financed out of long term source of funds. Where as temporary working capital represents additional assets required at different times during the operation of the year. This is also known as variable working capital. On the bases of changes in business activity, the volume of temporary working capital fluctuates. A firm will finance its seasonal and current fluctuations in business operations through short-term debt financing.

The success of a small scale industry depends on the availability of adequate working capital which ensures the purchase of raw material at competitive prices and payment for labour. The need of working capital arises because there is a time gap between purchases and production, production and sale and sale and realisation of cash. During these period the company should have ready cash to keep business running. Adequate working capital enables a firm to avail cash discount facilities offered to it by the suppliers. Cash discount – reduces the cost of purchases. An adequate working capital enables a firm to make prompt payment and it is a base to create and maintain Goodwill. It facilitates to meet situation of crisis and emergencies. Again goodwill can be maintained by regular production and discharging the orders on time. A small scale unit can avail easy loans from the banks due to their high credit worthiness. Thus, it helps the unit to operate its business more efficiently. Working capital can assist in building the investors confidence by paying regular dividends to its investors. For small concerns efficient working capital management is still more essential to ensure purchase of inputs at competitive prices and timely payment to factors of production.

In short, need for working capital arises in specially Small Scale Industry in order to buy and stock necessary quantities of raw materials and stores, to meet all the expenses relating to production, o carry the necessary quantities of finished goods till



they are sold, to carry the receivables when the sales are on credit basis and to make advance payments for goods and services. Through effective control over the investment in current assets consisting of inventories, bill receivables, short term investments, cash and bank balance and prepaid expenses.

## **5.1 CASH MANAGEMENT**

Cash Management is one of the key area of working capital management. Cash is also the most important current asset for the operations of the business. Every activity in an enterprise revolved round the cash because cash is limited in an enterprise. It is, therefore, desirable that available cash must be managed properly. A small scale unit should keep sufficient cash. Cash shortage will disrupt the concerns manufacturing operation while excessive cash will simply remain idle, without contributing anything towards the firm's profitability. There are two basic objectives of cash management which include to meet the cash disbursement needs as per the payment schedule and to minimise the amount covered up as cash balances.

Small scale units have a very challenging task in front of them regarding cash management. In order to manage cash smoothly and efficiently, they should understand motives of holding cash. Table 5.1 showed the standing of small scale units, motive behind holding cash. Overall 83.81 percent of the total cash was kept by all the units mainly due to transaction purpose.

The transaction motive requires a small concern to hold the cash to meet routine cash requirements to finance the transactions in the ordinary course of business. It needs cash to make payments for purchases, wages & salaries and other operating expenses, taxes, dividends etc. Thus, the transaction motive refers to the holding of cash to meet anticipated obligations whose timing is not perfectly synchronised with cash receipts. Food & beverage units have kept the highest percent i.e. 89.10 followed by plastics, while electronics was the lowest among them with 78.71 percent.

Precautionary motive is the need to hold cash to meet contingencies in future. The precautionary amount of cash depends upon the predictability of cash flows. If cash flows can be predicted with accuracy, less cash will be maintained for an emergency. A small concern keeps cash balance to meet unexpected cash needs arising out of unexpected contingencies such as floods, strikes, presenting of bills for payment earlier than the expected date, sharp increase in prices of raw materials etc. It is seen that 14.62 percent of the cash is kept due to precautionary motive. The industry which predicts the precautionary nature of holding cash the most was electronics with 21.20 percent followed by engineering 16.09 percent while the units which predicts least about this motive were food & beverage 8.90 percent, electricals 12.88 percent. Speculative motive is the motive of a concern to take advantage of opportunities which present themselves at unexpected moment and which are typically outside the normal

course of business. It is passive and aggressive for example, an opportunity to purchase raw materials at a reduced price on payment of immediate cash. A chance to buy securities, a firms ability to borrow at short notice in the event of any emergency, to make purchases at favourable prices. Among the small scale units, 7 was clear that overall 1.57 percent cash of the total is kept for speculative purpose and the industry wise it is pharmaceuticals 4 percent, chemicals 3 percent and electricals and food & beverage 2 percent each.

Yet another motive to hold cash balances is to compensate banks for providing certain services and loans. Banks provide certain services to their clients free of charge and they expect the clients to keep a minimum cash balance with them, which help them to earn interest and thus compensate them for the free service provided. But this motive is not popular among the small scale units as evidenced above that there was not a single unit provided cash to counteract compensating motive.

It is interesting to note that the major motives of providing cash among small scale units are transactions and precautionary, in order to meet their short term borrowings.

**5.1.1 CASH PLANNING AND CONTROL** - Cash Planning helps to anticipate future cash flows and needs of the firm and reduces the possibility of idle cash balances which lowers firms profitability and cash deficits which can cause the firm's failure.

Cash planning is a technique to plan and control the use of cash. It projects the financial conditions of the firm by developing a projected cash statement from a forecast of expected cash inflows and outflows for a given period. Cash plans are very crucial in developing the overall operating plans of the firm. Cash planning may be done on daily, weekly, monthly or job wise basis. The period of frequency of cash planning depends upon the philosophy of the firm and its size. Table 5.2 showed the cash planning basis of small scale units. It is interesting to note that 92 enterprise representing 52.57 percent followed cash planning on monthly basis. Most of the units which followed monthly cash planning were plastics 20 units (80 percent), chemicals 18 units (72 percent) and pharmaceuticals 15 units (60 percent) while the least among them were engineering 6 units (24 percent), weekly basis cash planning was been done by 34 units (19.43 percent of the total). These units were basically medium scale units. The top among them in the list are electricals 9 units (36 percent) followed by engineering 8 units (32 percent) while the lowest among them were pharmaceuticals, electronics & plastics with 2 units each. 27 units representing 15.43 percent of the total followed daily basis of preparation of cash planning and the prominent among them were electronics and food & beverage 8 units each followed by electricals 4 units, while job-wise or project-wise, cash planning is done by 22 units (12.57 percent) with engineering 10 units (40 percent) is the highest, followed by pharmaceuticals 5 units (20

**TABLE 5.1**  
**Motives of Holding Cash by the Sample Units (percentage)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
<b>Transaction Motive</b>	80.50	85.12	78.71	81.23	88.11	83.91	89.10	83.81
<b>Precautionary</b>	15.50	12.88	21.29	15.77	11.89	16.09	8.90	14.62
<b>Speculative</b>	4.00	2.00	0.00	3.00	0.00	0.00	2.00	1.57
<b>Compensating</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.2**  
**Cash Planning - Time Factor by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Daily</b>	3	4	8	1	2	1	8	27
©%	12.00	16.00	32.00	4.00	8.00	4.00	32.00	15.43
®%	11.11	14.81	29.63	3.70	7.41	3.70	29.63	100.00
<b>Weekly</b>	2	9	2	5	2	8	6	34
©%	8.00	36.00	8.00	20.00	8.00	32.00	24.00	19.43
®%	5.88	26.47	5.88	14.71	5.88	23.53	17.65	100.00
<b>Monthly</b>	15	10	13	18	20	6	10	92
©%	60.00	40.00	52.00	72.00	80.00	24.00	40.00	52.57
®%	16.30	10.87	14.13	19.57	21.74	6.52	10.87	100.00
<b>Job/Project wise</b>	5	2	2	1	1	10	1	22
©%	20.00	8.00	8.00	4.00	4.00	40.00	4.00	12.57
®%	22.73	9.09	9.09	4.55	4.55	45.45	4.55	100.00
<b>Total</b>	25	25	25	25	25	25	25	175
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage  
Source : Data collected from Sample Industrial Units and Questionnaire.

percent). It is very interesting to note that there are quite a number of small scale units who followed daily, weekly and job-wise cash planning.

**5.1.2 TOOLS OF CASH PLANNING** - Cash planning is done on the basis of net cash forecast by preparing cash Budget, forecasting the overall working capital position with the previous experience of planning. In the Table 5.3 showed the Basis of cash planning. It is interesting to note that 84 units representing 48 percent of the total followed cash planning based upon their previous experience, while 44 units (25.14 percent) used the cash flow statement as cash planning tool and 47 units (26.86 percent) used cash budget to plan their cash requirement. Industry wise analysis showed that 64 percent (16 units) of pharmaceuticals used previous experience as a basis for cash planning followed by 60 percent (15 units) of chemicals. Cash budget is a means of forecasting. Cash is the highest among food & beverages 10 units (40 percent) and plastic 9 units (36 percent) while cash flow statement as a basis of cash planning is the highest among engineering 11 units (44 percent) followed by electricals 7 units (28 percent). It is understood from the above analysis that the small scale units have to improve cash planning by using more and more scientific tools to plan their cash as accurately as possible.

**5.1.3 SHORTAGE OF CASH** - The small scale units should decide about the appropriate level of cash balances. The cost of excess cash and the danger of cash deficiency should be matched to determine the optimum level of cash balances. Minimum or shortage of cash is the real problem for the financial management to solve. In the Table 5.4 showed the problem of cash shortage faced by the various units. There is not a single unit when interviewed expressed that they have not faced any problem of cash shortage so far. Further the Table showed that 91 units representing 52 percent of the total had the severe problem of cash shortage frequently. The industry which claimed the highest were food & beverage 19 units (76 percent) followed by electricals 18 units (72 percent), electronics 16 units (64 percent) and the least among them were engineering 9 units 48 percent of the total had the severe problem of cash shortage occasionally and the highest among them were chemicals 17 units (68 percent) followed by engineering 16 units (64 percent).

The above analysis showed that the unsystematic cash planning is the main cause of severe cash shortage to small scale units. To overcome this problem the SSI should fall back on tools like cash budgeting and cash flow statement analysis more and more rather than depending more on past experience. Shortage of cash is the major factor for effecting the smooth functioning and productivity of the small scale units. Precautions must be taken

**TABLE 5.3**  
**Cash Planning Basis among the SSI Units in Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total	
<b>Cash Budget</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>4</b>	<b>9</b>	<b>6</b>	<b>10</b>	<b>47</b>	
©%	16.00	24.00	32.00	16.00	36.00	24.00	40.00	26.86	
®%	8.51	12.77	17.02	8.51	19.15	12.77	21.28	100.00	
<b>Cash Flow Statement</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>11</b>	<b>5</b>	<b>44</b>	
©%	20.00	28.00	16.00	24.00	24.00	44.00	20.00	25.14	
®%	11.36	15.91	9.09	13.64	13.64	25.00	11.36	100.00	
<b>Previous experience</b>	<b>16</b>	<b>12</b>	<b>13</b>	<b>15</b>	<b>10</b>	<b>8</b>	<b>10</b>	<b>84</b>	
©%	64.00	48.00	52.00	60.00	40.00	32.00	40.00	48.00	
®%	19.05	14.29	15.48	17.86	11.90	9.52	11.90	100.00	
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>	
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00	
©% - represents column percentage				®% - represents row percentage				Source : Data collected from Sample Industrial Units and Questionnaire.	

**TABLE 5.4**  
**The Severity of Cash Shortage among the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total	
<b>Frequently</b>	<b>10</b>	<b>18</b>	<b>16</b>	<b>8</b>	<b>11</b>	<b>9</b>	<b>19</b>	<b>91</b>	
©%	40.00	72.00	64.00	32.00	44.00	36.00	76.00	52.00	
®%	10.99	19.78	17.58	8.79	12.09	9.89	20.88	100.00	
<b>Occasionally</b>	<b>15</b>	<b>7</b>	<b>9</b>	<b>17</b>	<b>14</b>	<b>16</b>	<b>6</b>	<b>84</b>	
©%	60.00	28.00	36.00	68.00	56.00	64.00	24.00	48.00	
®%	17.86	8.33	10.71	20.24	16.67	19.05	7.14	100.00	
<b>Never</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
®%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>	
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00	
©% - represents column percentage				®% - represents row percentage				Source : Data collected from Sample Industrial Units and Questionnaire.	



to predict cash planning as accurately as possible. The various reasons for severe cash shortage among small scale units were :

**5.1.3.1 Delay in Realisation of Book Debts :** In the Table 5.5 showed severity of cash shortage due to delay in realisation of book debts. The problem is put on a five point scale. To measure the severity of the problem it is clear from the Table that 70 units representing 40 percent of the total were found to have had a very high degree of severity of this problem and the major units that suffered this problem were engineering 18 units (72 percent), pharmaceuticals 10 units (40 percent) and chemicals 12 units (48 percent). 66 units representing 37.71 percent were found to have had high degree of such problem with plastic 12 units (48 percent) were the highest. 32 units representing (18.29 percent) fell under the moderate category and top most among them were food & beverage 7 units (28 percent) followed by pharmaceuticals 6 units. The 7 units which fell under low or lower degree or very lower degree where in they did not face any problem and there were not much book debts. It was also shown by calculating average and mean value while all the units got average mean value above the overall mean value and the lowest among them was food & beverage (3.52). The highest among all was engineering with 4.64 mean value.

Another reason for severe cash shortage was due to **stock holding**. Table 5.6 depicted the picture of all the sample units and also showed how severe is the problem. Again the problem is

**TABLE 5.5**  
Reasons for Cash Shortage - Delay in Realisation among the Sample Units

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total	
1	0	0	0	0	0	0	2	2	
©%	0.00	0.00	0.00	0.00	0.00	0.00	8.00	1.14	
2	0	0	1	0	1	0	3	5	
©%	0.00	0.00	4.00	0.00	4.00	0.00	12.00	2.86	
3	6	5	5	3	4	2	7	32	
©%	24.00	20.00	20.00	12.00	16.00	8.00	28.00	18.29	
4	9	13	11	10	12	5	6	66	
©%	36.00	52.00	44.00	40.00	48.00	20.00	24.00	37.71	
5	10	7	8	12	8	18	7	70	
©%	40.00	28.00	32.00	48.00	32.00	72.00	28.00	40.00	
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>	
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
<b>Mean</b>	<b>4.16</b>	<b>4.08</b>	<b>4.04</b>	<b>4.36</b>	<b>4.08</b>	<b>4.64</b>	<b>3.52</b>	<b>4.13</b>	
©% - represents column percentage		Source : Data collected from Sample Industrial Units and Questionnaire.							

**TABLE 5.6** Reasons for Cash Shortage - Stock Holdings

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total	
1	0	0	0	0	0	0	2	2	
©%	0.00	0.00	0.00	0.00	0.00	0.00	8.00	1.14	
2	2	1	1	1	3	1	2	11	
©%	8.00	4.00	4.00	4.00	12.00	4.00	8.00	6.29	
3	9	6	5	4	7	4	5	40	
©%	36.00	24.00	20.00	16.00	28.00	16.00	20.00	22.86	
4	8	10	9	12	9	7	9	64	
©%	32.00	40.00	36.00	48.00	36.00	28.00	36.00	36.57	
5	6	8	10	8	6	13	7	58	
©%	24.00	32.00	40.00	32.00	24.00	52.00	28.00	33.14	
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>	
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
<b>Mean</b>	<b>3.72</b>	<b>4.00</b>	<b>4.12</b>	<b>4.08</b>	<b>3.72</b>	<b>4.28</b>	<b>3.68</b>	<b>3.94</b>	
©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High.		Source : Data collected from Sample Industrial Units and Questionnaire.							

measured on a five point scale. Starts with very low to very high. The overall average mean value showed 3.94 which means high degree. 58 units representing (33.14 percent) fell under very high degree of cash shortage while 64 units (36.57 percent) were high degree of cash shortage, 40 units fell under moderate and 13 units were under low to very low category. The mean value showed engineering have the very high level of cash shortage (4.28 mean) followed by electronics 4.12 mean while the lowest was among food & beverages 3.68 mean value. The 3.94 overall mean value stated that the small scale units have high degree of cash shortage due to stock holding. The small concerns have to find out ways and means to reduce stock holding position and convert the stock into cash at the earliest.

**5.1.3.2 Credit squeeze by the commercial banks** have a dual effect i.e. one on the working capital and secondly the cash shortage. Credit squeeze by the banks due to low performance of the small scale units and irregular payments of credit granted. It can be seen from the Table 5.7 which showed severe cash shortage due to credit squeeze. There were as many as 60 units were under the category of very high severe cash shortage due to credit squeeze while 56 units have high category, 37 units were under moderate category, 18 units under low and 4 units under very low category. The overall mean value showed 3.86 i.e. above moderate and industry wise severe cases were plastics 4.44 mean, electronics 4.16 while pharmaceuticals have got the lowest 2.36

mean value. Low profit, low public trust and low credit worthiness and ultimately low credit given or at a high interest rate. Small scale units have to improve its performance and make regular payments of installments of credit granted. It equally affects the working capital finance.

**5.1.3.3 Diversification of funds** is another cause of cash shortage among small scale units. Funds are granted for one purpose but utilised for some other purpose leads to misappropriation by diversifying the funds creates a cash shortage which is shown in the Table 5.8. It showed that 12 units have severely misappropriated the funds and have a very high degree of diversification of funds for which it was sanctioned. 13 units were under high degree, 69 units were under moderately diversified while 81 units have a low level of diversification. The overall mean value showed 2.56 but industry wise, food & beverage have got 3.08 mean, electronic 2.88 mean value and rest of them got less than the overall mean, while electricals got 2.36 mean value. Overall they were found least diversified the funds other than for which it was actually given but still there were some units who had diversified the fund and severe shortage of cash have occurred.

**5.1.3.4 Lack of proper planning** is yet another reason for severe cash shortage. Faulty or wrong estimate of cash will become wrong and ultimately will create cash shortage as we have noted earlier that many of the entrepreneurs are planning their finance

**TABLE 5.7**  
**Reasons for Cash Shortage - Cash Squeeze among the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	1	0	2	1	4
©%	0.00	0.00	0.00	4.00	0.00	8.00	4.00	2.29
2	4	2	1	3	1	3	4	18
©%	16.00	8.00	4.00	12.00	4.00	12.00	16.00	10.29
3	7	4	5	7	4	5	5	37
©%	28.00	16.00	20.00	28.00	16.00	20.00	20.00	21.14
4	10	8	8	8	6	9	7	56
©%	40.00	32.00	32.00	32.00	24.00	36.00	28.00	32.00
5	4	11	11	6	14	6	8	60
©%	16.00	44.00	44.00	24.00	56.00	24.00	32.00	34.29
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>2.36</b>	<b>4.12</b>	<b>4.16</b>	<b>3.60</b>	<b>4.44</b>	<b>3.60</b>	<b>3.68</b>	<b>3.86</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High.  
Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.8**  
**Reasons for Cash Shortage - Diversification of Funds among the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	5	6	2	6	7	5	2	33
©%	20.00	24.00	8.00	24.00	28.00	20.00	8.00	18.86
2	11	8	6	7	5	7	4	48
©%	44.00	32.00	24.00	28.00	20.00	28.00	16.00	27.43
3	7	8	12	8	10	11	13	69
©%	28.00	32.00	48.00	32.00	40.00	44.00	52.00	39.43
4	1	2	3	2	2	1	2	13
©%	4.00	8.00	12.00	8.00	8.00	4.00	8.00	7.43
5	1	1	2	2	1	1	4	12
©%	4.00	4.00	8.00	8.00	4.00	4.00	16.00	6.86
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>2.68</b>	<b>2.36</b>	<b>2.88</b>	<b>2.48</b>	<b>2.40</b>	<b>2.44</b>	<b>3.08</b>	<b>2.56</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire.

based upon past experience and not based on cash budgeting or cash flow statement which may mislead them many a times. Table 5.9 showed the cash shortage due to lack of proper planning. The shortage of cash have arrived due to lack of proper planning among the various units, 15 units have got very high problem, 36 units were found to have had problem at high level, 78 units have got moderate shortage of cash due to this issue while 46 units have got low or very low level of cash shortage. Overall it showed a mean value of 2.98 but plastic units with 3.64 mean, electricals 3.40 mean and electronics with 3.00 mean were above the average overall mean value. Higher the mean value indicates higher the cash shortage due to improper planning. Small scale industries should plan properly for the cash. It should be done only after cash budgeting and cash inflow and cash outflow analysis. Although it showed a moderate or low mean i.e. 2.98, still small scale units have to improve their planning quite a lot specially with reference to plastics, electricals and electronics units and others too.

In Table 5.10 showed the comparative analysis of mean value due to severity of cash shortage. It is clear from the Table that small scale industry faced severe cash shortage due to delay in the realisation of book debt which can be evident from the overall mean value of 4.13 highest among all. Stock holding is next to delay in realisation of book debts which shows a mean value of 3.94 while the least among them is the diversification of

**TABLE 5.9**  
**Reasons for Cash Shortage - Lack of Proper Planning among the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>23</b>
©%	12.00	8.00	16.00	12.00	4.00	32.00	8.00	13.14
<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>23</b>
©%	8.00	8.00	12.00	16.00	8.00	24.00	16.00	13.14
<b>3</b>	<b>12</b>	<b>9</b>	<b>10</b>	<b>14</b>	<b>8</b>	<b>10</b>	<b>15</b>	<b>78</b>
©%	48.00	36.00	40.00	56.00	32.00	40.00	60.00	44.57
<b>4</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>10</b>	<b>1</b>	<b>3</b>	<b>36</b>
©%	24.00	32.00	20.00	12.00	40.00	4.00	12.00	20.57
<b>5</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>15</b>
©%	8.00	16.00	12.00	4.00	16.00	0.00	4.00	8.57
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>2.76</b>	<b>3.40</b>	<b>3.00</b>	<b>2.80</b>	<b>3.64</b>	<b>2.16</b>	<b>2.88</b>	<b>2.98</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.10**  
**Reasons for Cash Shortage - A Comparative Analysis (mean value) among the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
<b>Delay in the Realisation of Book Debt</b>	<b>4.16</b>	<b>4.08</b>	<b>4.04</b>	<b>4.36</b>	<b>4.08</b>	<b>4.64</b>	<b>3.52</b>	<b>4.13</b>
<b>Stock Holdings</b>	<b>3.72</b>	<b>4.00</b>	<b>4.12</b>	<b>4.08</b>	<b>3.72</b>	<b>4.28</b>	<b>3.68</b>	<b>3.94</b>
<b>Credit Squeeze</b>	<b>2.36</b>	<b>4.12</b>	<b>4.16</b>	<b>3.60</b>	<b>4.44</b>	<b>3.60</b>	<b>3.68</b>	<b>3.86</b>
<b>Diversification of Funds</b>	<b>2.68</b>	<b>2.36</b>	<b>2.88</b>	<b>2.48</b>	<b>2.40</b>	<b>2.44</b>	<b>3.08</b>	<b>2.56</b>
<b>Lack of Proper Planning</b>	<b>2.76</b>	<b>3.40</b>	<b>3.00</b>	<b>2.80</b>	<b>3.64</b>	<b>2.16</b>	<b>2.88</b>	<b>2.98</b>

Source : Data collected from Sample Industrial Units and Questionnaire.

funds which have got a mean value of 2.56. Credit squeeze also have got 3.86 mean which is also high except diversification of funds and lack of proper planning, rest of them were found to have had severe effect of cash shortage on small scale units.

**3.1.3.5 Cash management** is necessary in order to avoid cash shortage. Cash shortage is the main cause of business downfall. Due to cash shortage, a unit may become insolvent or bankrupt. It affects the relationship with banks, creditors and suppliers of raw material as prompt payment is not possible. The firm may lose trade discount due to lack of cash. The advantages favourable to business opportunities may not be available to the firms and it will be difficult for the firm to meet unexpected contingencies and any emergencies. This situation may ultimately lead the firm or unit to sickness. Small scale units it is very difficult to come out from the downfall due to cash shortage.

**5.1.4** The Table 5.11 showed the **Impact of Cash Shortage** on outside borrowing. Due to cash shortage it is very difficult for the entrepreneur to grow and develop. As he cannot generate enough cash to meet his day to day requirement he have to fall back upon outside borrowing to build up his business. The borrowings are available at a high cost which will only reduce the profitability of the concern as there will be lots of cash outflow in the form of interests. The Table showed 63 units (36 percent of the total) were noticed having very high rate of borrowings due to shortage of cash, 81 units had to borrow at a high level while 27 units went



for outside borrowing at moderate level and 4 units at low level. It showed a overall average mean value of 4.16 which was found under the high level borrowing and among the industry wise plastic and engineering were at the top with each of them are 4.28 mean value followed by electricals 4.20 mean. It revealed that maximum units were falling back on outside borrowing with high interest rates.

Foregoing opportunities due to cash shortage is shown in the Table 5.12. It may be to avoid a trade discount or buying raw material at a lower rate or investing in some assets etc. It is clear from the Table that 24 units (13.71 percent) have lost great opportunities due to shortage of cash. 33 units claimed that they also lost some good opportunities to a large extent. While 83 units were affected moderately and 35 units said they were affected the least. The overall average mean value showed 3.21 which is above moderate. Industry wise plastic units 3.40 mean have claimed that they lost the maximum good opportunities followed by electronics 3.32 mean while the least among them is electricals with 2.27 mean value, engineering with 2.52 and pharmaceuticals with 2.92 mean claims they were least affected due to shortages of cash.

Another impact of cash shortage is curtailment of production. This will be the least expected step in any business organisation. Keeping the existing production capacity ideal and ultimately under utilising all the other productive resources. The

**TABLE 5.11**  
**Impact of Cash Shortage - Outside Borrowings among the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1	0	2	1	0	0	0	4
©%	4.00	0.00	8.00	4.00	0.00	0.00	0.00	2.29
3	5	4	4	6	3	2	3	27
©%	20.00	16.00	16.00	24.00	12.00	8.00	12.00	15.43
4	11	12	11	9	12	14	12	81
©%	44.00	48.00	44.00	36.00	48.00	56.00	48.00	46.29
5	8	9	8	9	10	9	10	63
©%	32.00	36.00	32.00	36.00	40.00	36.00	40.00	36.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>4.04</b>	<b>4.20</b>	<b>4.00</b>	<b>4.04</b>	<b>4.28</b>	<b>4.28</b>	<b>3.64</b>	<b>4.16</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High.  
 Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.12**  
**Impact of Cash Shortage - Foregoing Opportunity among the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	2	0	1	1	0	4	1	9
©%	8.00	0.00	4.00	4.00	0.00	16.00	4.00	5.14
2	4	2	3	2	3	8	4	26
©%	16.00	8.00	12.00	8.00	12.00	32.00	16.00	14.86
3	9	13	12	14	13	10	12	83
©%	36.00	52.00	48.00	56.00	52.00	40.00	48.00	47.43
4	6	7	5	5	5	2	3	33
©%	24.00	28.00	20.00	20.00	20.00	8.00	12.00	18.86
5	4	3	4	3	4	1	5	24
©%	16.00	12.00	16.00	12.00	16.00	4.00	20.00	13.71
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>2.92</b>	<b>2.27</b>	<b>3.32</b>	<b>3.28</b>	<b>3.40</b>	<b>2.52</b>	<b>3.28</b>	<b>3.21</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire.

result is obvious that there is sharp downfall of profit. Increase in unnecessary cost, wear and tear or obsolescence of time. The Table 5.13 depicts the curtailment of production due to shortage of cash. It showed further that 30 units (17.14 percent) were very highly involved in reducing the production capacity, 78 units were also involved in reducing the production due to shortage of enough cash. 43 entrepreneurs said they are moderately affected while 24 units were involved least. The overall average mean value showed 3.60 and industry wise plastic with 4.00 mean was on the top followed by chemicals 3.84 mean. Where as pharmaceutical was at the lowest with 3.04 mean. Exception of pharmaceuticals, electricals and engineering rest of them were having a mean value more. Then the average overall reduction of production is one of the most severest impact on small scale units due to cash shortage.

For small scale units payment of dues on time is very crucial. Payment of dues possible for the small scale units only when they make enough profits and profitability can be improved only when working capital in the form of cash is managed well. The Table 5.14 showed the impact of cash shortage as a result the small concern are unable to pay the dues. Out of the 175 units as many as 35 units were having a very great problem in payment of their dues and 58 units were also having high problem to pay the timely dues, 67 units were affected moderately while 15 units were affected the least. The mean value of this factor showed 3.63 and

**TABLE 5.13**  
**Impact of Cash Shortage on the Sample Units - Curtailment of Production**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	3	2	1	0	0	2	1	9
©%	12.00	8.00	4.00	0.00	0.00	8.00	4.00	5.14
2	4	1	2	2	1	3	2	15
©%	16.00	4.00	8.00	8.00	4.00	12.00	8.00	8.57
3	9	8	4	6	5	7	4	43
©%	36.00	32.00	16.00	24.00	20.00	28.00	16.00	24.57
4	7	12	13	11	12	9	14	78
©%	28.00	48.00	52.00	44.00	48.00	36.00	56.00	44.57
5	2	2	5	6	7	4	4	30
©%	8.00	8.00	20.00	24.00	28.00	16.00	16.00	17.14
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.04</b>	<b>3.44</b>	<b>3.76</b>	<b>3.84</b>	<b>4.00</b>	<b>3.40</b>	<b>3.72</b>	<b>3.60</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.14**  
**Impact of Cash Shortage on Sample Units - Unable to pay the dues**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	1	0	0	2	3
©%	0.00	0.00	0.00	4.00	0.00	0.00	8.00	1.71
2	2	4	2	1	0	1	2	12
©%	8.00	16.00	8.00	4.00	0.00	4.00	8.00	6.86
3	7	9	10	9	8	11	13	67
©%	28.00	36.00	40.00	36.00	32.00	44.00	52.00	38.29
4	9	8	7	8	10	11	5	58
©%	36.00	32.00	28.00	32.00	40.00	44.00	20.00	33.14
5	7	4	6	6	7	2	3	35
©%	28.00	16.00	24.00	24.00	28.00	8.00	12.00	20.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.84</b>	<b>3.48</b>	<b>3.68</b>	<b>3.68</b>	<b>3.96</b>	<b>3.56</b>	<b>3.20</b>	<b>3.63</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire.

among the industry wise plastic with 3.96 was the highly affected one followed by pharmaceuticals 3.84 and the lowest affected units were food & beverage 3.20 and electrical 3.48 mean value. Regular payment of dues, instalments and interest of the creditors, banks is very important otherwise it affects adversely its goodwill and creditworthiness.

The comparative analysis of mean value of various impact of cash shortages are shown in the Table 5.15. It revealed that outside borrowings with high interest rate (4.16) is the major problem of small scale industries during cash shortage followed by unable to pay the dues/loans (3.63 mean) while foregoing opportunity is the lowest with 3.21 mean value. Outside borrowing with high interest rate is the most severe affect of cash shortage on the units. So, it is very much essential to plan properly the cash and manage the cash inflow and outflows most accurately by following cash budgeting.

**5.2 CREDIT MANAGEMENT** - When a small scale units sell good or services on credit the payment are postponed to future dates and receivables are created. Receivables are assets representing amounts owed to the firm as a result of sale of goods/services in the ordinary course of business. Credit sales is resorted to by a firm to push up its sales which ultimately results in pushing up the profits earned by the firm. At the same time, selling goods on credit results in blocking of funds in Account

receivables. Account Receivable represent an extension of credit to customers, allowing them a reasonable period of time in which to pay for the goods which they have received. Extension of credit involves risk and cost. The management should weigh the benefits as well as cost to determine the goal of receivable management. Receivable constitutes a substantial portion of current asset of several firms. If a small concern sells goods on credit it will be in a position to sell more goods than if it insisted on immediate cash payment. Increase in sales results in higher profits for the unit. A firm may have to resort to granting of credit facilities to its customers because similar facilities being granted by the competing firms to avoid the loss of sale. Credit management is needed in order to determine the credit policy, to determine the credit terms, to determine collection policies and methods, and to control the receivable.

It is necessary to maintain the optimum level of size of receivables in case of small scale units. The optimum investment in receivable will be at a level where there is a trade off between costs and profitability of the firm. When the firm resorts to a liberal credit policy, the profitability of the firm increased on account of higher sales. However, such a policy result in increased investment in receivable, increased chances of bad debts and more collection costs. If the total investment in receivables increases then the problem of liquidity arises. On the other hand, a stringent credit policy reduces the profitability but

**TABLE 5.15**  
**Impact of Cash Shortage on the Sample Units - A Comparative Analysis (mean value)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Foregoing the	2.92	2.27	3.32	3.28	3.40	2.52	3.28	3.21
Borrowing at higher rate	4.04	4.20	4.00	4.04	4.28	4.28	3.64	4.16
Production	3.04	3.44	3.76	3.84	4.00	3.40	3.72	3.60
Unable to pay Loan	3.84	3.48	3.68	3.68	3.96	3.56	3.20	3.63

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.16**  
**Analysis of Credit Sales - The Composition of Sales**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Cash Sales	31.90	29.59	27.59	34.19	47.87	24.89	45.90	34.56
Credit Sales	68.10	70.41	72.41	65.81	52.13	75.11	54.10	65.44
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.17**  
**The Motives for Credit Sales**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
To Face Competition	68.44	69.67	70.96	58.15	50.21	69.71	75.61	66.11
As an Obligation	15.89	19.91	10.46	26.67	40.98	18.19	10.21	20.33
As a Tradition	15.67	10.42	18.58	15.18	8.81	12.10	14.18	13.56
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Data collected from Sample Industrial Units and Questionnaire.

increases the liquidity of the firm. Optimum credit policy occurs at a point where there is a trade-off between liquidity and profitability. The optimum credit policy should also be based upon the credit standard, credit terms and collection efforts.

Table 5.16 revealed the composition of Sales of Small Scale units. It is clear from the Table that 65.44 percent of the total Sales is credit sales while 34.56 percent is cash sales. Further insight in the Table, showed that cash sales is more in cash of plastic 47.87 percent followed by food & beverages 45.90 percent. It states that they have more stringent credit policies and they enjoy good amount of market share. So, their sales are on cash basis. In case of credit sales, it is engineering with 75.11 percent followed by electronics 72.41, electricals 70.41 percent were the highest. It is mainly due to the stiff competition, eagerness to increase the market share and profit leads to increase credit sales. While in case of food & beverage (54.10 percent) and plastic (52.13 percent) revealed that the credit policy is more stiff except food & beverage and plastics. Rest of them have got credit sales more than 65 percent.

**5.2.1 BASIS OF CREDIT POLICY** - A firm may follow a lenient or a stringent credit policy when a small concern is following a lenient credit policy it tends to sell on credit to customers on very liberal terms and standards. In contrast, a stringent credit policy sells on credit on a highly selective basis only to those customers



who have proven creditworthiness and who are financially strong. Small scale units in practice feel the necessity of granting credit due to the reasons mentioned in the Tables 5.17. 66.11 percent of sales are credit sales in order to face the competition, higher the degree of competition, the more the credit granted by a firm, competition is more in case of food and beverage 75.61 percent followed by electronics 70.96 percent. 20.33 percent of the total SSI units considered it as an obligation to grant credit in order to increase the sales and capture the wide share of the market. The Table showed that plastic units (40.98 percent) was the highest followed by chemicals 26.67 percent, while 13.56 percent of the total units considered it as a tradition of granting credit. The industries which followed this most were electronics 18.58 percent followed by pharmaceuticals 15.67 percent. So, most of the small scale units followed credit sales mainly to face competition. With the new trends of globalisation, it is very difficult for the small concern to sell their product on cash basis if they want to survive in the market. Internally they are not in favour of credit sales due to large amount of bad debts still they can't help it. As a tradition it becomes their policy from the beginning onwards but as an obligation small scale units are forced to give credit in spite of their trouble.

Evaluation of credit-worthiness of the individual desirous to obtain credit from the firm is based upon the credit policy and credit analysis. To a large extent credit policy of a small concern

is based on five important aspects i.e. (i) Character or the willingness of the customer to pay (ii) capacity or the ability to pay (iii) conditions or the prevailing economic conditions of the country (iv) capital or availability of funds to the firm and (v) collateral or the value and nature of security to be provided by the customers. The subjective judgement of the credit manager is an important input to such decision. Successful credit policy is based upon obtaining credit information. The sources of credit information may be internal or external.

Internal sources of information is collected by filling the various forms and documents giving details about financial operations, past record of the customer also can be availed to know his credit worthiness. While external sources may be employed the following information. Table 5.18 which showed the credit policy basis of the small scale units. The major credit is given based on the financial statement. 55.75 percent financial statement throw light on the applicant's financial stability, liquidity, profitability and debt capacity helpful in assessing the overall financial position and credit standing of the firm. The real difficulty arises in obtaining the financial statements of partnership and individual, particularly the audited accounts since they do not have legal obligations to audit their accounts. It can be seen from the Table that chemical units with 62.50 percent and electronics 61.18 percent followed this reference for their credit worthiness. 28.96 percent of the total credit is given being

the customer is the Government Agency or Government reference. Small scale units here in Goa give second position to Government due to the delay to get the quick payment. If the customer being the Government then it takes lots of time to recover the debt and the money is blocked which adversely effects the working capital standing too. The industries which give credit to government maximum are engineering 58.81 percent followed by pharmaceuticals 36.77 percent while food & beverage was the lowest to give credit to government.

A unit can ask the prospective customer to give trade references. It may insist to give the names of such persons or firm with whom the customer have current dealings. The trade references may be contacted personally to obtain all relevant information required by the unit. The honesty and seriousness of the reference should be examined. Thus, the small concern can insist on furnishing the references of the firms of repute. From the Table it is clear that 14.58 percent of the total credit is granted based upon trade references. Industry wise, it showed food and beverages was the highest followed by chemicals 19.81 percent and the least among them was engineering 5.51 percent. Bank reference is another basis of Granting Credit. But this source is not so popular among small scale units in Goa mainly because indifference of banks in providing information. The banker do not give clear answers to the enquiries made by the firm even bank provides the information which cannot be taken as a basis for

believing that the customer will be able to settle his dues in time. So bank reference is considered as the least important and used method of credit granting. It can be seen from the Table that only 0.71 percent of the credit is granted based on this policy and the units which used Bank reference to grant credit were food & beverage 2.10 percent, pharmaceuticals 1.95 percent, plastics 0.95 percent and engineering 0.50 percent. So, the small units prefer to grant credit to those customers who have the ability to make the payment on time.

**5.2.2 CREDIT TERMS** - The stipulations under which the firm sells on credit to customers are called credit terms. The stipulations included (a) the credit period and (b) the cash discount. Credit period is the length of time for which credit is extended to customers. It is generally stated in terms of a net data. A units credit period may be governed by the industry norms. But depending on its objectives the unit can lengthen the credit period. It can tighten its credit period if customers are defaulting too frequently and bad debt losses are building up.

Credit period sanctioned is shown in the Table 5.19, it can vary from one week to five weeks. There are 84 units who were given credit period more than five weeks. It is mainly due to competition and customers demand. Among them engineering and electronics with 18 units each are at the top position followed by electricals 15 units. 50 were given credit for three weeks to five

**TABLE 5.18**  
**Analysis of Credit Policy Basis (Credit Worthiness Customer)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
<b>Bank Reference</b>	1.95	0.00	0.00	0.00	0.95	0.50	2.10	0.71
<b>Trade Reference</b>	9.10	11.15	17.91	19.81	15.71	5.51	22.71	14.58
<b>Financial Status</b>	52.18	59.71	61.18	62.50	58.81	35.18	60.51	55.75
<b>Government Deptt.</b>	36.77	29.14	20.91	17.69	24.73	58.81	14.68	28.96
<b>Total</b>	100.00	100.00	100.00	100.00	100.20	100.00	100.00	100.00

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 5.19**  
**Credit Period Sanctioned**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Up to 1 week</b>	2	1	1	1	2	0	5	12
©%	8.00	4.00	4.00	4.00	8.00	0.00	20.00	6.86
<b>1 to 3 week</b>	6	3	1	2	6	1	10	29
©%	24.00	12.00	4.00	8.00	24.00	4.00	40.00	16.57
<b>3 to 5 weeks</b>	7	6	5	9	9	6	8	50
©%	28.00	24.00	20.00	36.00	36.00	24.00	32.00	28.57
<b>5 and above</b>	10	15	18	13	8	18	2	84
©%	40.00	60.00	72.00	52.00	32.00	72.00	8.00	48.00
<b>Total</b>	25	25	25	25	25	25	25	175
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

©% - represents column percentage. Source : Data collected from Sample Industrial Units and Questionnaire

weeks and the top most position are chemicals and plastic 9 units each followed by food & beverages 8 units. There are 29 units who were given credit for one week to three weeks where in food & beverage with 10 units is at the top followed by pharmaceuticals and plastics with 6 units each. While in the category of up to one week period credit granted we find 12 units with food & beverage 5 units is the top and pharmaceuticals and plastics again have got 2 units each.

Along with credit policy small scale units require a collection policy also. All the customers do not pay the bills in time. Some are delaying the payments while some become bad. In order to reduce this risk of becoming bad debts the small concern have to accelerate its efforts of collections. Prompt collection is needed for fast turnover of working capital and to reduce the amount of bad debts. Limited concern have to be very cautious in taking the steps in order to collect from the slow paying customers. If a unit is strict in its collection policy with the permanent customers who are temporarily slow payers due to the economic conditions, they will get offended and may shift to competitors.

In the Table 5.20 which showed the credit collection period of the small scale units. It showed the average collection period of the units. There are 31 units on an average whose collection period is upto one month where in food & beverage with 8 units followed by pharmaceuticals and plastics with 6 units each were on the top of the Table while electronics, engineering with 2 units

each were at the lowest. Credit collection period from one month to three month, there are 46 units with pharmaceuticals 12 units followed by plastics 8 units were on the top of the list while engineering with 3 units was at the lowest. From 3 months to 5 months credit collection period was taken by 58 units in which electronics with 11 units followed by chemicals 10 units were leading in that category while pharmaceuticals with 5 units were at the lowest. Five months and above for collection of credit is taken by 40 units, with engineering 11 units and electricals and chemicals with 8 units were on the top while three sectors: pharmaceuticals, plastics and food & beverage were found to have had 2 units each. The overall practice showed that the collection period is more for engineering units and less for food & beverage.

**5.2.3 CREDIT RECOVERY POLICY :** The policy adopted by the small scale units to recover the credit granted to the customers was displayed in the Table 5.21. The first step to recover the credit from customer is writing letter and reminding him through telephone etc. Writing letter to the customers may remind him about the debts to be payable by him. 80 entrepreneurs reported that they used this method i.e. chasing letters to customers to repay the debts at a very high level and the industry wise it is the electricals and chemicals with 13 units each were on the top of the list followed by electronics and engineering with 12 units each. At the higher level, it was found that 59 units where in chemicals 10

**TABLE 5.20**  
**Credit Collection Period followed by the Sample Units in Goa**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Upto 1 month</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>8</b>	<b>31</b>
©%	24.00	16.00	12.00	8.00	24.00	8.00	32.00	17.71
®%	19.35	12.90	9.68	6.45	19.35	6.45	25.81	100.00
<b>1 to 3 month</b>	<b>12</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>8</b>	<b>3</b>	<b>7</b>	<b>46</b>
©%	48.00	28.00	16.00	20.00	32.00	12.00	28.00	26.29
®%	26.09	15.22	8.70	10.87	17.39	6.52	15.22	100.00
<b>3 to 5 month</b>	<b>5</b>	<b>6</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>58</b>
©%	20.00	24.00	44.00	40.00	36.00	36.00	32.00	33.14
®%	8.62	10.34	18.97	17.24	15.52	15.52	13.79	100.00
<b>5 month and above</b>	<b>2</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>2</b>	<b>11</b>	<b>2</b>	<b>40</b>
©%	8.00	32.00	28.00	32.00	8.00	44.00	8.00	22.86
®%	5.00	20.00	17.50	20.00	5.00	27.50	5.00	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage      ®% - represents row percentage      Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.21**  
**Analysis of Credit Policy adopted for prompt payments - Chasing Letters by the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>
©%	4.00	0.00	0.00	0.00	0.00	0.00	4.00	1.14
<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>7</b>
©%	4.00	0.00	4.00	0.00	8.00	4.00	8.00	4.00
<b>3</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>27</b>
©%	20.00	12.00	16.00	8.00	16.00	20.00	16.00	15.43
<b>4</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>7</b>	<b>8</b>	<b>59</b>
©%	32.00	36.00	32.00	40.00	36.00	28.00	32.00	33.71
<b>5</b>	<b>10</b>	<b>13</b>	<b>12</b>	<b>13</b>	<b>10</b>	<b>12</b>	<b>10</b>	<b>80</b>
©%	40.00	52.00	48.00	52.00	40.00	48.00	40.00	45.71
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>4.00</b>	<b>4.40</b>	<b>4.24</b>	<b>4.44</b>	<b>4.08</b>	<b>4.20</b>	<b>3.96</b>	<b>4.19</b>

©% - represents column percentage.      Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High.      Source : Data collected from Sample Industrial Units and Questionnaire



units and electricals and plastics with 9 units each were on the top of the list. 27 units used this method at moderately while 9 units were either at low or very low level. The mean value showed overall 4.19 where in chemicals with 4.94 is the highest followed by electricals 4.40, while food & beverage with 3.96 is at the lowest.

In Table 5.22 showed the policy adopted by small scale units for prompt payments through personal contacts. It is interesting to note that 136 units representing (77.71 percent of the total) were very highly using this method, followed by 35 units (20 percent) at high level and four units (2.29 percent) at the moderate level. The overall mean showed 4.75 which is very high level of adopting personal contact for prompt payments of credits. Among the industry wise, it showed electricals, electronics and engineering having same 4.80 each as a mean value which is more than the overall average mean. While pharmaceuticals with 4.64 mean and food & beverage with 4.72 is at the lowest. Personal contact is one of the most direct way of recovering the credit granted. 77.71 percent of the units fully depended upon this method. They said it is most effective and quick instead of writing letters. The industries which relied on this most are electricals, electronics, engineering, chemicals and plastics.

In order to get the prompt payments it is also necessary to use some techniques like cash discount. It is an incentive for the customer to pay less than what is actual. The Table 5.23 showed

**TABLE 5.22**  
**Policy adopted for Prompt Payments - Personal Contacts**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0	0	0	0	0	0	0	0
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1	0	1	1	0	0	1	4
©%	4.00	0.00	4.00	4.00	0.00	0.00	4.00	2.29
4	7	5	3	4	6	5	5	35
©%	28.00	20.00	12.00	16.00	24.00	20.00	20.00	20.00
5	17	20	21	20	19	20	19	136
©%	68.00	80.00	84.00	80.00	76.00	80.00	76.00	77.71
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>4.64</b>	<b>4.80</b>	<b>4.80</b>	<b>4.76</b>	<b>4.76</b>	<b>4.80</b>	<b>4.72</b>	<b>4.75</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.23**  
**Credit Policy adopted for Prompt Payments - Cash Discounts by the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	2	1	1	3	1	4	2	14
©%	8.00	4.00	4.00	12.00	4.00	16.00	8.00	8.00
2	4	4	3	7	2	9	4	33
©%	16.00	16.00	12.00	28.00	8.00	36.00	16.00	18.86
3	8	13	6	8	4	8	6	53
©%	32.00	52.00	24.00	32.00	16.00	32.00	24.00	30.29
4	6	4	8	4	8	2	7	39
©%	24.00	16.00	32.00	16.00	32.00	8.00	28.00	22.29
5	5	3	7	3	10	2	6	36
©%	20.00	12.00	28.00	12.00	40.00	8.00	24.00	20.57
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.32</b>	<b>3.16</b>	<b>3.68</b>	<b>2.88</b>	<b>3.96</b>	<b>2.56</b>	<b>3.44</b>	<b>3.29</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

the policy adopted by small concerns for prompt payment through cash discount. It is noted that 75 units are involved in giving high or very high discount to customers for prompt payments while 53 units followed moderate approach. While 47 units were not so convinced about this technique of giving discount for prompt payment. The average mean showed a figure of 3.29 which is slightly more than moderate. Among the industry wise plastic 8 units showed some high respect for this method with 3.96 mean value followed by electronics with 3.68, food & beverage with 3.44 and pharmaceuticals 3.32 were some what higher than the overall average mean value. Since the customers, to take advantage of the discount would like to pay within the discount period which reduces the amount of bad debts of the units.

Another important technique used to get the prompt payments is the priority supply. The regular customer are to be taken care of even if they pay little late. But those customers who make the payment fast without much wastage of time are to be given some special treatment. They should be given first because of their prompt payments. The Table 2.24 showed the policy adopted for prompt payments in the form of priority supply. 54 units (30.86 percent) gave very high priority to their customers, while 60 units gave high priority. 47 units considered it moderately and 14 units gave low priority in supply. The industry wise, the food & beverage gave very high priority which can be seen from the Table with 4.20 mean value followed by engineering

with 4.00 mean value. The overall position is seen with the mean value given in the Table 3.88 while plastic with 3.64 mean value and chemicals with 3.72 are the lowest among them. They did not believe much in this technique of priority supply. It is right to give priority to customers who make prompt payment and who are regular in buying the product.

The Table 5.25 showed the comparative analysis of the various techniques used for the prompt payments of their dues. It is clear that small scale units gave high priority to personal contact (4.75 mean) to collect their credit dues. They have experienced that personal contact is very effective tool followed by chasing letters and reminders. To customers to make the payments it is also given high priority which can be noticed from the average mean value i.e. 4.19 mean. While priority in supply also become effective which can be seen from the Table with 3.88 and finally the cash discount which is slightly more effective than the moderate category. It is noted here that each industry gave importance to various techniques depending upon their confidence, nature and size of the unit as seen. Cash discount is given the lowest priority among all small scale units have more trust on personal contact to collect their credit dues and it have become effective tool of credit recovery.

**5.3 MANAGEMENT OF INVENTORY :** Inventory constitutes the most significant part of current asset. Inventory are the stocks of

**TABLE 5.24**  
**Credit Policy adopted for Prompt Payments - Priority in Supply by the Sample Units**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1	2	4	2	3	1	1	14
©%	4.00	8.00	16.00	8.00	12.00	4.00	4.00	8.00
3	7	8	6	9	8	6	3	47
©%	28.00	32.00	24.00	36.00	32.00	24.00	12.00	26.86
4	10	7	5	8	9	10	11	60
©%	40.00	28.00	20.00	32.00	36.00	40.00	44.00	34.29
5	7	8	10	6	5	8	10	54
©%	28.00	32.00	40.00	24.00	20.00	32.00	40.00	30.86
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.92</b>	<b>3.84</b>	<b>3.84</b>	<b>3.72</b>	<b>3.64</b>	<b>4.00</b>	<b>4.20</b>	<b>3.88</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.25**  
**Credit Policy adopted for prompt Payments - Comparative Analysis (mean value)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
<b>Chasing Letters</b>	<b>4.00</b>	<b>4.40</b>	<b>4.24</b>	<b>4.44</b>	<b>4.08</b>	<b>4.20</b>	<b>3.96</b>	<b>4.19</b>
<b>Personal contact</b>	<b>4.64</b>	<b>4.80</b>	<b>4.80</b>	<b>4.76</b>	<b>4.76</b>	<b>4.80</b>	<b>4.72</b>	<b>4.75</b>
<b>Cash Discount</b>	<b>3.32</b>	<b>3.16</b>	<b>3.68</b>	<b>2.88</b>	<b>3.96</b>	<b>2.56</b>	<b>3.44</b>	<b>3.29</b>
<b>Priority in Supply</b>	<b>3.92</b>	<b>3.84</b>	<b>3.84</b>	<b>3.72</b>	<b>3.64</b>	<b>4.00</b>	<b>4.20</b>	<b>3.88</b>

Source : Data collected from Sample Industrial Units and Questionnaire

the product that a unit is manufacturing for sale and the components that make up the product. It consists of assets that will be sold off in the future in the normal course of business operation. Proper inventory management is important to the financial health of the small concern. If the goods are out of stock it may force the customer to turn to its competitors which will result in a loss of sale and profit. Excessive level of inventory will result in large inventory carrying costs. The various forms in which inventories exist in a manufacturing concern are raw material and units which have been purchased and stored for future productions.

Work-in-progress Inventories are semi-manufactured products and finished goods inventories which are completely manufactured products and are ready for sale. Small scale manufacturing concerns will have high levels of all three kinds of inventories.

The need for holding inventories comes due to the three most general motives. Such as transaction motive which emphasises need to maintain inventory to facilitate smooth production and sale operations as there is always a time lag between demand and supply.

The precautionary motive necessitates holding of inventories to guard against the risk of sudden unpredictable changes in demand and supply forces and other factors such as labour strike,

transport strike etc. While the speculative motive influences the decision to increase or decrease inventory levels to take advantage of price fluctuations or to take discount on bulk purchases.

A small scale unit should maintain adequate stock of raw materials for a continuous supply to the factory for an uninterrupted production. A proper stock of finished goods have to be held as the small scale unit cannot produce goods immediately when goods are demanded by the customers. Therefore stock of finished goods have to be maintained for sudden demand from customers. Substantial finished good of inventories should also be kept to meet the peak demand.

The basic objective of efficient inventory management is to maximise the wealth of business organisation and its owners. While attaining this simple objective, a small concern have to face with the problem of meeting two conflicting needs (1) to maintain a large size of inventory for efficient and smooth production and sales operation and (2) maintain a minimum investment in inventories to maximise profitability. The objective of investment management should be to determine and maintain the optimum level of inventory investment. As both excessive and inadequate inventories are not desirable. Thus, the efficient and smooth management of inventories is a challenging task as inventory constitute the majority portion of the current asset which in turn determine the working capital of the small scale units.

The major components of inventory i.e. raw materials, work-in-progress and finished goods have to be tackled well to avoid any inadequacy or excess of inventory maintenance. Keeping this in view, a study is conducted to know the position of composition of inventory. Among the small scale units which were shown in the Table 5.26. The Table showed that 29.38 percent of the total inventory consists of raw materials, 13.74 percent of the total inventory consists of work-in-progress and 56.88 percent consists of finished goods. According to industry wise analysis, it showed that the maximum amount of raw material stock is maintained by electricals 37.01 percent followed by chemicals 32.27 percent. Industry like plastics 20.74 percent and engineering 25.44 percent maintained the lowest position of raw materials stock. In work-in-progress, electronics with 19.16 percent, engineering with 16.81 percent were the maximum maintenance of this type of stock while food & beverage 8.72 percent and chemicals 9.11 percent maintained the lowest level of stock. Finished goods constitute nearly 60 percent of the total stock and the maximum amount of finished goods is maintained by plastics with 65.07 percent followed by food and beverages with 60.08 percent while electronics with 49.71 percent and pharmaceuticals 56.11 percent were reported to be keeping the lowest position of finished goods. It is understood that the larger the amount of inventory in small scale units, the lesser and lesser amount of liquidity. It will block the major position of working capital plus it will increase the



warehouse cost of the goods. So, it is important to market the goods as early as possible and keep the production cycle moving continuously.

### **5.3.1 INVENTORY MANAGEMENT TECHNIQUE**

Inventory management leads to wealth maximisation. To achieve this, a small concern should determine the optimum level of inventory. Determining the optimum inventory level involves two types of costs: Ordering Costs and Carrying Costs.

Ordering Cost is used in case of raw material and includes the entire costs of acquiring raw materials. The ordering costs increase in proportion to the number of orders placed. Where there is a large inventory level maintained there will be few orders and the ordering cost will be relatively small. In case of small scale units the ordering cost is increasing any time.

Carrying cost incurred for holding a given level of inventory. It includes opportunity cost of funds invested in inventories. Carrying cost moves in direct proportion to inventory size, higher the inventory size, higher the carrying costs and lower the inventory size, lower the inventory costs. In Table 5.27 showed the system of order followed by small scale units. It showed that 14 units (8 percent) acquired inventory at single order and the units which give more importance for this technique were plastics 5 units followed by electronics 3 units. 101 units representing 57.71 percent of the total were found to have ordered accurately to

**TABLE 5.26**  
Statement showing the Composition of Inventory (percentage)

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Raw Material	27.87	37.01	31.13	32.27	20.74	25.44	31.20	29.38
Work in Progress	16.02	12.18	19.16	9.11	14.19	16.81	8.72	13.74
Finished Goods	56.11	50.81	49.71	58.62	65.07	57.75	60.08	56.88
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.27**  
Statement showing the order system followed

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
Single Order	0	2	3	2	5	2	0	14
©%	0.00	8.00	12.00	8.00	20.00	8.00	0.00	8.00
@%	0.00	14.29	21.43	14.29	35.71	14.29	0.00	100.00
According to need	18	15	16	5	15	17	15	101
©%	72.00	60.00	64.00	20.00	60.00	68.00	60.00	57.71
@%	17.82	14.85	15.84	4.95	14.85	16.83	14.85	100.00
E.O.Q. is determined	3	1	0	2	0	2	0	8
©%	12.00	4.00	0.00	8.00	0.00	8.00	0.00	4.57
@%	37.50	12.50	0.00	25.00	0.00	25.00	0.00	100.00
Fixed Qty. system	4	7	6	16	5	4	10	52
©%	16.00	28.00	24.00	64.00	20.00	16.00	40.00	29.71
@%	7.69	13.46	11.54	30.77	9.62	7.69	19.23	100.00
Total	25	25	25	25	25	25	25	175
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage @% - represents row percentage

Source : Data collected from Sample Industrial Units and Questionnaire

their needs. They did not keep large amount of stock but ordered as and when the need arose. The ordering cost was higher in this case. All the units followed this technique but top most among them were pharmaceuticals 18 units, engineering 17 units, while the chemicals 5 units were the least following this system. There are 8 units representing 4.57 percent followed economic order quantity and the main users were pharmaceuticals 3 units followed by chemicals and engineering 2 units each. Ordering fixed quantity system was followed by 52 units (29.71 percent) and this system is the best used by chemicals 16 units followed by food and beverages 10 units.

It is clear that most of the small scale units followed need based system of ordering inventory and fixed quantity system while single order system and economic order quantity (E.O.Q.) it seems not so popular among the small scale units.

**5.3.2 INVENTORY CONTROL TECHNIQUES :** The financial manager should aim at an optimum level on the basis of the trade off between cost and benefit to maximise the owner's wealth. Efficiently controlled inventories make the firm flexible. Inefficient control lead the small scale units out of stock and sometimes pile up unnecessary stocks which increase the level of investment and makes the unit unprofitable. The various techniques used to efficiently control inventory were ABC analysis, Economic Order Quantity (E.O.Q.), Minimum Level Stock and Maximum Level

Stock maintenance and control of stock. To understand these methods and what extent they are used to control inventory by the small scale units, an attempt is made.

### **5.3.3 ABC ANALYSIS**

Where there are many items in the inventory it becomes essential to have a value item analysis in which attempts to relate how the inventory value is concentrated among the individual items. This method divides inventory into three classes. A, B and C. Items in class 'A' constitute the most important class of inventories as far as the total values of inventory is concerned. Items in 'B' constitute an intermediate position while those in item 'C' are quite negligible. The classification is based on value, usage rate and criticality of the item. It is an analytical approach that provides the most control for very important item. This analysis classifies inventories according to the importance of each component. This analysis helps to give more importance and control to most important inventory and less important to less important components. This technique is used in all types of businesses and specifically among SSI. The Table 5.28 shows the ABC analysis of inventory valuation among small scale units in Goa. It showed that 84 units (48 percent) did not prepare any ABC analysis of valuation of inventory. While 91 units representing (52 percent) followed ABC analysis in inventory control. Industry wise it showed that this technique was used by

chemicals (19 units) and pharmaceuticals 10 units. The technique of ABC analysis of inventory control is not known to some of the small scale units while rest of them did not have a confidence in the system. It is a very important technique of inventory control and all the SSI units must follow this techniques.

**5.3.4 ECONOMIC ORDER QUANTITY** is a Quantity of material to be ordered which takes into account the optimum combination of Bulk discounts from high volume purchases, usage rate, stock holding cost, storage capacity, order delivery time and cost of processing the order. It is an optimum size of either a normal outside purchase order or an internal production order that minimises total annual holding and ordering costs of inventory. It is mainly to discover the optimum level of inventory management. The optimum level will be that quantity which minimises the total costs associated with inventory. The Economic Order Quantity (EOQ) Technique is not popular among the small scale units in Goa. As it can be seen from the Table 5.29 which showed that only 8 units followed EOQ and they were mainly pharmaceuticals 3 units, engineering and chemicals 2 units each and electricals one unit where as 167 units representing 95.43 percent of the total were found not familiar with the system/technique. It was observed, for in our foregoing analysis that most of the small scale units order or but the raw material according to their needs. To

**TABLE 5.28**  
**ABC Analysis among the Sample SSI Units In Goa**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>No</b>	<b>15</b>	<b>8</b>	<b>9</b>	<b>6</b>	<b>20</b>	<b>10</b>	<b>16</b>	<b>84</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	17.86	9.52	10.71	7.14	23.81	11.90	19.05	100.00
<b>Yes</b>	<b>10</b>	<b>17</b>	<b>16</b>	<b>19</b>	<b>5</b>	<b>15</b>	<b>9</b>	<b>91</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	10.99	18.68	17.58	20.88	5.49	16.48	9.89	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
©% - represents column percentage    ®% - represents row percentage				Source : Data collected from Sample Industrial Units and Questionnaire				

**TABLE 5.29**  
**Economic Order Quantity followed by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>No</b>	<b>22</b>	<b>24</b>	<b>25</b>	<b>23</b>	<b>25</b>	<b>23</b>	<b>25</b>	<b>167</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	13.17	14.37	14.97	13.77	14.97	13.77	14.97	100.00
<b>Yes</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>8</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	37.50	12.50	0.00	25.00	0.00	25.00	0.00	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
©% - represents column percentage    ®% - represents row percentage				Source : Data collected from Sample Industrial Units and Questionnaire				

purchase inventory at EOQ sometimes it require large amount of money which the SSI are lacking in. So, EOQ technique is not acceptable among small scale units although it is much more profitable and economical.

Manager might choose to maintain a suitable level of safety or buffer stock according to the maximum probability of being out of stock or a minimum probability of not being able to meet all demands from customers. When there is no demand and the item is out of stock there are no stock out cost and no foregone contribution to profit. When the customers are unsatisfied as a result there is a loss of present and future business due to dissatisfaction. The stock out costs will prove substantial. Therefore, most inventory control techniques concentrate on minimum stock level, rather than on minimising stock outs. To understand this case an attempt is made to know whether small scale units were able to maintain this level, and to what extent it maintains it.

Base stock or minimum level of stock is the lower limit below which the inventory of any stock items should not normally be allowed to fall. Their level is also called safety stock or buffer stock level. The main object of establishing this level is to protect against stock out of a particular stock item and in fixation of which average rate of consumption and the time required for replenishment lead time are very important consideration. Lead time is the anticipated time lag between the dates of issuing orders

and receipt of materials. It is necessary to know the consumption pattern of small scale units to know this to what extent the small units maintain base stock. It can be understood from the study conducted which is shown in the Table 5.30. It showed that only 13 units out of 175 units did not maintain minimum level of stock/base stock and the units which did not maintain it were food & beverage 6 units, electronics 4 units and electricals 3 units. While the large number of units representing 162 units (92.57 percent) followed inventory base stock or minimum level of stock. It is clear that maintaining base or minimum level of stock is very much essential for all types of industries. While the objective of the financial manager will be to keep the lowest total cost i.e. carrying cost and stock-out cost.

The decision regarding the maintenance of the minimum level of inventory is based upon the consumption pattern and the lead time. Consumption pattern is known based on the past experience. It showed how much stock of inventory is required at the end of the week or month to be kept as a base stock to carry on the production and distribution work smoothly. In case of lead time procurement, a small concern may carry very small stock of an item in raw material inventory if its supplier is nearby. If a key component is made available on a made-to-order basis from far off, manufacturer who have heavy backing of orders, larger inventory of this item is essential. To understand this a study is conducted from the small scale units which can be seen



**TABLE 5.30**  
**Maintenance of Base Stock by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>No</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>13</b>
Ⓒ%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ⓓ%	0.00	23.08	30.77	0.00	0.00	0.00	46.15	100.00
<b>Yrs</b>	<b>25</b>	<b>22</b>	<b>21</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>19</b>	<b>162</b>
Ⓒ%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ⓓ%	15.43	13.58	12.96	15.43	15.43	15.43	11.73	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
Ⓒ%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ⓓ%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
Ⓒ% - represents column percentage		Ⓓ% - represents row percentage		Source : Data collected from Sample Industrial Units and Questionnaire				

**TABLE 5.31**  
**Basis for the minimum level of Stock by the Sample SSI Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Consumption Basis</b>	<b>17</b>	<b>20</b>	<b>21</b>	<b>7</b>	<b>19</b>	<b>23</b>	<b>17</b>	<b>124</b>
Ⓒ%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ⓓ%	13.71	16.13	16.94	5.65	15.32	18.55	13.71	100.00
<b>Lead Time</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>18</b>	<b>6</b>	<b>2</b>	<b>8</b>	<b>51</b>
Ⓒ%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ⓓ%	15.69	9.80	7.84	35.29	11.76	3.92	15.69	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
Ⓒ%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ⓓ%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00
Ⓒ% - represents column percentage		Ⓓ% - represents row percentage		Source : Data collected from Sample Industrial Units and Questionnaire				

from the Table 5.31 reflecting the basis for minimum level of inventory maintenance. It showed that 124 units representing 70.85 percent of the total kept the minimum level of inventory based upon the consumption pattern and the industries which followed most were the engineering 23 units, followed by electronics 21 units, electricals 20 units. While 51 units representing 29.14 percent maintained the minimum level based on lead time or replenishment time wherein chemical units with 18 units was the follower of this technique followed by pharmaceuticals and food & beverage 8 units each. It can be seen from the above analysis that small scale mainly prefer to follow consumption basis of keeping minimum level of inventory due to their past experience while in lead time there are high level of fluctuations in anticipated and actual usage are responsible for much of the change in inventory investment.

A small scale units should always avoid a situation of over investment or under investment in inventories. As over investment may lead to unnecessary blocking of the funds of business and therefore loss of profit, excessive carrying costs and risk of liquidity. The excessive level of inventories consumes funds of the small units which cannot be used for any other purpose. The carrying costs, such as the costs of storage handling, insurance, recording and inspection also increased in proportion to the volume of inventory. Excessive inventory carrying also leads to deterioration of inventories while in storage. Therefore,

the main objective of inventory management should be to determine and maintain optimum level of inventory investment. The optimum level of inventory will be between the two danger points of excessive and inadequate inventories. The various factor selected which help to determine and maintain optimum level of inventories among small scale units are as availability of funds, credit facility, future plans, supply conditions, price fluctuations and storage facilities.

It was found that the availability of funds was one of the foremost factor which restricts the small scale units to maintain the optimum level of inventory. It is evident from the Table 5.32 the gravity of the need of this factors is measured on a five point scale from one to five. It have reported that 70 entrepreneurs representing 40 percent of the total who considered non availability of funds is the major limiting factor to maintain optimum inventory level where as 89 units representing 50.86 percent of the total entrepreneurs were reported shortage of funds as moderate or more than moderate problem. While 16 units representing 9.14 percent, one have not at all considered it as a serious constraint to maintain optimum level of inventory. The overall average mean value is 4.02 which showed there is very high degree of impact on small scale units due to non availability of funds. Industry wise, analysis showed that electronics have the high impact of this factor which can be seen from the mean value shown 4.36 followed by electricals 4.32 while plastics 3.28 and

chemicals 3.92 are reported to be not serious about this factor, to maintain the optimum level of inventory.

Optimum level of inventory maintenance is also based upon the credit facility granted to the small scale units. It was noted earlier that credit availability is based on the credit worthiness of the units and its past performance. The impact of this factor is studied with the help of the Table 5.33 which provided the details about the position of small scale units with regards to cash shortage. The Table showed that 131 units representing 74.86 percent of the total were reported that the credit facilities granted by the suppliers is the most important factor to maintain the optimum level of inventory due to their cash shortage. They depend more on the credit facility granted.

While 30 units representing 17.14 percent were moderately affected and 14 (8 percent) units were least affected due to not giving credit by the supplier. They have enough cash to pay and get the required quantity inventory. The average overall mean value showed 3.91 while the units like chemicals (4.44 percent) food & beverage 4.28 and plastics 4.20 are highly effected due to non granting the credit by the suppliers, where as units like engineering 3.76, electronics 3.84 and electricals 3.92 are effected the least due to the non granting of credit by the suppliers.

Demand for the product or turnover is another important criteria to maintain optimum level of inventory by small scale

**TABLE 5.32**  
**Basis for Optimum Level - Availability of Funds**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	1	0	0	2	3	0	0	6
©%	4.00	0.00	0.00	8.00	12.00	0.00	0.00	3.43
2	2	0	0	1	4	1	2	10
©%	8.00	0.00	0.00	4.00	16.00	4.00	8.00	5.71
3	4	2	1	5	7	5	4	28
©%	16.00	8.00	4.00	20.00	28.00	20.00	16.00	16.00
4	7	13	14	6	5	7	9	61
©%	28.00	52.00	56.00	24.00	20.00	28.00	36.00	34.86
5	11	10	10	11	6	12	10	70
©%	44.00	40.00	40.00	44.00	24.00	48.00	40.00	40.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>4.00</b>	<b>4.32</b>	<b>4.36</b>	<b>3.92</b>	<b>3.28</b>	<b>4.20</b>	<b>4.08</b>	<b>4.02</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.33**  
**Basis for Optimum Level - Credit facility**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1	2	5	1	1	3	1	14
©%	4.00	8.00	20.00	4.00	4.00	12.00	4.00	8.00
3	6	5	4	2	4	6	3	30
©%	24.00	20.00	16.00	8.00	16.00	24.00	12.00	17.14
4	10	11	6	7	9	10	9	62
©%	40.00	44.00	24.00	28.00	36.00	40.00	36.00	35.43
5	8	7	10	15	11	6	12	69
©%	32.00	28.00	40.00	60.00	44.00	24.00	48.00	39.43
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>4.00</b>	<b>3.92</b>	<b>3.84</b>	<b>4.44</b>	<b>4.20</b>	<b>3.76</b>	<b>4.28</b>	<b>3.91</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

units. The argument of the entrepreneur is that, "there is no point in keeping maximum level of inventory when the demand for the product is very low". The Table 5.34 showed the demand factor effecting the optimum level of inventory maintenance for small scale units demand for the product play a crucial role as it affect the working capital position of goods are simply stocked in the godown. It is clear from the Table that 145 units representing 82.86 percent of the total maintained high to very high level of inventory based upon the market demand forecast while 23 units (13.14 percent) considered demand factor moderately and 7 units were not at all bother about the demand factor. The overall position can be analysed with the help of overall average mean value which showed 4.43 where in engineering with 4.68, pharmaceuticals and electronics with 4.64 each are giving the highest importance to this factor while chemicals 3.92 and plastics 4.32 are somewhat below the overall average mean value.

Regular supply of raw material is another factor that determines to maintain the optimum level of Inventory. Many small scale entrepreneurs are of the opinion that uncertain and irregular supply of raw material is the important factor to maintain the optimum level of inventory. This can be seen from the Table 5.35 which showed that 81 units representing 46.29 percent of the total are affected highly to very highly due to irregular supply of raw material, 59 units (33.71 percent) were moderately affected and 35 units (20 percent) were least affected.

**TABLE 5.34**  
**Basis for Maximum Level - Future Plans**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	0	0	0	0	0	0	0	0
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0	0	0	3	2	0	2	7
©%	0.00	0.00	0.00	12.00	8.00	0.00	8.00	4.00
3	2	4	3	7	3	1	3	23
©%	8.00	16.00	12.00	28.00	12.00	4.00	12.00	13.14
4	5	6	3	4	5	6	3	32
©%	20.00	24.00	12.00	16.00	20.00	24.00	12.00	18.29
5	18	15	19	11	15	18	17	113
©%	72.00	60.00	76.00	44.00	60.00	72.00	68.00	64.57
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>4.64</b>	<b>4.44</b>	<b>4.64</b>	<b>3.92</b>	<b>4.32</b>	<b>4.68</b>	<b>4.40</b>	<b>4.43</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.35**  
**The Basis for Optimum Level - Supply Conditions**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
1	2	1	2	0	0	5	4	14
©%	8.00	4.00	8.00	0.00	0.00	20.00	16.00	8.00
2	3	2	4	1	2	4	5	21
©%	12.00	8.00	16.00	4.00	8.00	16.00	20.00	12.00
3	8	9	8	3	10	12	9	59
©%	32.00	36.00	32.00	12.00	40.00	48.00	36.00	33.71
4	7	8	5	9	5	2	4	40
©%	28.00	32.00	20.00	36.00	20.00	8.00	16.00	22.86
5	5	5	6	12	8	2	3	41
©%	20.00	20.00	24.00	48.00	32.00	8.00	12.00	23.43
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.40</b>	<b>3.56</b>	<b>3.36</b>	<b>4.28</b>	<b>3.76</b>	<b>2.68</b>	<b>2.88</b>	<b>3.42</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

The overall average mean value shows 3.42 where in chemicals 4.28, plastics 3.76 and electricals 3.56 one had greater impact. Irregular supply and engineering units with 2.68 mean, food & beverage with 2.88 mean were less affected.

Price fluctuation is another reason to maintain the optimum level of inventory. The Table 5.36 showed the effect of price fluctuation on inventory of small scale units. It is reported that 90 units representing 51.43 percent of the total were affected highly to very highly due to price fluctuations. While 55 units representing 31.43 percent were affected moderately, 30 units representing 17.15 percent were affected least. Overall the average mean value shows 3.46 where as electricals with 3.80 mean value, electronics 3.76 mean is the highest and above the overall mean, while food & beverage 2.88, pharmaceuticals with 3.40 mean was the lowest affected due to price fluctuation.

Storage of inventory is an addition carrying cost. The storage costs comprise of storage space, stores handling costs and clerical and staff service cost incurred in recording and providing special facilities. The Table 5.37 reflects the storage facility affecting the optimum level of inventory maintenance in small units. 49 units representing 28 percent of the total faced with severe to very severe storage problem, 63 units representing 36 percent faced moderate storage facilities while 63 units representing 36 percent faced ample storage facility. The overall analysis showed that the average mean value is 2.94 where in



**TABLE 5.36**  
**The Basis for Optimum Level - Price Fluctuations**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>12</b>
©%	8.00	4.00	4.00	8.00	4.00	0.00	20.00	6.86
<b>2</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>18</b>
©%	16.00	8.00	4.00	8.00	12.00	8.00	16.00	10.29
<b>3</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>13</b>	<b>8</b>	<b>55</b>
©%	24.00	20.00	24.00	32.00	36.00	52.00	32.00	31.43
<b>4</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>57</b>
©%	32.00	40.00	48.00	28.00	32.00	28.00	20.00	32.57
<b>5</b>	<b>5</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>33</b>
©%	20.00	28.00	20.00	24.00	16.00	12.00	12.00	18.86
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.40</b>	<b>3.80</b>	<b>3.76</b>	<b>3.52</b>	<b>3.44</b>	<b>3.44</b>	<b>2.88</b>	<b>3.46</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.37**  
**The Basis for Optimum Level - Storage**

Scale	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>18</b>
©%	8.00	8.00	16.00	8.00	12.00	4.00	16.00	10.29
<b>2</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>5</b>	<b>6</b>	<b>45</b>
©%	24.00	32.00	20.00	28.00	32.00	20.00	24.00	25.71
<b>3</b>	<b>3</b>	<b>12</b>	<b>10</b>	<b>6</b>	<b>10</b>	<b>14</b>	<b>8</b>	<b>63</b>
©%	12.00	48.00	40.00	24.00	40.00	56.00	32.00	36.00
<b>4</b>	<b>8</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>27</b>
©%	32.00	8.00	16.00	16.00	12.00	12.00	12.00	15.43
<b>5</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>22</b>
©%	24.00	4.00	8.00	24.00	4.00	8.00	16.00	12.57
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Mean</b>	<b>3.40</b>	<b>2.68</b>	<b>2.80</b>	<b>3.20</b>	<b>2.64</b>	<b>3.00</b>	<b>2.88</b>	<b>2.94</b>

©% - represents column percentage. Scale : 1 - Very Low, 2 - Low, 3 - Moderate, 4 - High, 5 - Very High. Source : Data collected from Sample Industrial Units and Questionnaire

pharmaceuticals with 3.40 mean, chemicals 3.20 mean is most affected among them while plastics 2.64, electricals 2.68 were the least affected units to maintain the optimum level of inventory due to storage facilities.

Overall basis for optimum level of inventory is shown in the Table 5.38. The comparative analysis of the above factors showed that future demand with 4.43 mean value, availability of funds with 4.02 mean and credit facility with 3.91 mean value have given the highest importance among them while storage space with 2.94 mean and supply condition with 3.42 were given the lowest importance. Among them which means the small units have enough of such factors to take care of their inventory positions. Industry wise pharmaceuticals gave more importance to future demand, fund position and credit facility, electricals units emphasised on future demand, fund position more than the others. Electronics, it is again the same factors, chemicals it is the credit facility that affected the most, plastic it is future demand position and engineering it is future demand again.

It is very important to have an optimum level inventory position for the efficient smooth functioning of small scale units.

**5.3.5 MAINTENANCE OF BIN CARD** - A bin card is a system used in Inventory control. It is system which keeps the quantitative record of receipts, issues and closing balances of items of stores. The main characteristic of bin card is that after

posting a transaction, whether relating to receipt or issue, the balance quantity is calculated and recorded. The various levels indicated in a bin card enable the storekeeper to keep watch on the balance and to place requisitions for replenishment as and when necessary. In case of small scale units the bin card system is totally unknown to many units. They are unaware and don't have any knowledge about it. The Table 5.39 reflects the position of the small scale units maintaining the bin card. It is reported that 118 units representing 67.43 percent of the total were absolutely unaware of this system. They never come across this term called bin card in their inventory management ever since formed. But 57 units representing 32.57 percent said they did maintain the bin card. To check and control the stocks. The most prominent users were pharmaceuticals 18 units (72 percent) followed by chemicals 17 units (68 percent) while food & beverage 2 units and plastics 3 units were the least users. Bin Card System is very useful for efficient control, verification and maintenance of inventory. It have not yet gained momentum among the small scale units.

### **5.3.6 INVENTORY SYSTEM**

Record pertaining to Quantity and value of inventory-in-hand to control of materials while in storage can be maintained in the two different ways i.e. periodic inventory system and perpetual inventory system.

**TABLE 5.38**  
**Basis for Optimum Level of Inventory (mean value)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total Average
Storage Space	3.40	2.68	2.80	3.20	2.64	3.00	2.88	2.94
Price changes	3.40	3.80	3.76	3.52	3.44	3.44	2.88	3.46
Fuel position	4.00	4.32	4.36	3.92	3.28	4.20	4.08	4.02
Credit facility	4.00	3.92	3.84	4.44	4.20	3.76	4.28	3.91
Supply condition	3.40	3.56	3.36	4.28	3.76	2.68	2.88	3.42
Future Demand	4.64	4.44	4.64	3.92	4.32	4.68	4.40	4.43

Source : Data collected from Sample Industrial Units and Questionnaire

**TABLE 5.39**  
**Analysis of the Maintenance of Bin Card by the Sample Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>No</b>	<b>7</b>	<b>19</b>	<b>20</b>	<b>8</b>	<b>22</b>	<b>19</b>	<b>23</b>	<b>118</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	5.93	16.10	16.95	6.78	18.64	16.10	19.49	100.00
<b>Yes</b>	<b>18</b>	<b>6</b>	<b>5</b>	<b>17</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>57</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	31.58	10.53	8.77	29.82	5.26	10.53	3.51	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
®%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage ®% - represents row percentage Source : Data collected from Sample Industrial Units and Questionnaire

In periodic inventory system the quantity and value of inventory was found out only at the end of the accounting period after the physical verification of the actual units from the store. The cost of material used is obtained by adding the total value of goods purchased during the period of the value of inventory in hand in the beginning of the period. While perpetual inventory system is also called automatic controlling department which reflects the physical movement of stock and their current balances. It provides a rigid control over stock of materials as physical stock can regularly be verified with the stock records kept in the stores and the office.

In the Table 5.40 which showed the inventory system maintained by small scale units. It is clear from the Table that 116 units representing 66.29 percent are maintaining periodic inventory system and the Industry wise most were engineering 23 units (94 percent) and plastics 20 units (80 percent) while the chemical units with 9 units (36 percent) was the poorest user of the system. Perpetual Inventory System was followed in 59 units (33.71 percent) of the total and the top users/followers of this system are chemicals 16 units (64 percent), food & beverage 12 units (48 percent). It can be concluded from the above analysis that more than 65 percent of the total units followed periodic inventory system. That is found out only at the end of the accounting period. While 33.71 percent of the small scale units

TABLE 5.40

## Analysis of the Inventory Systems followed by the Sample Units in Goa

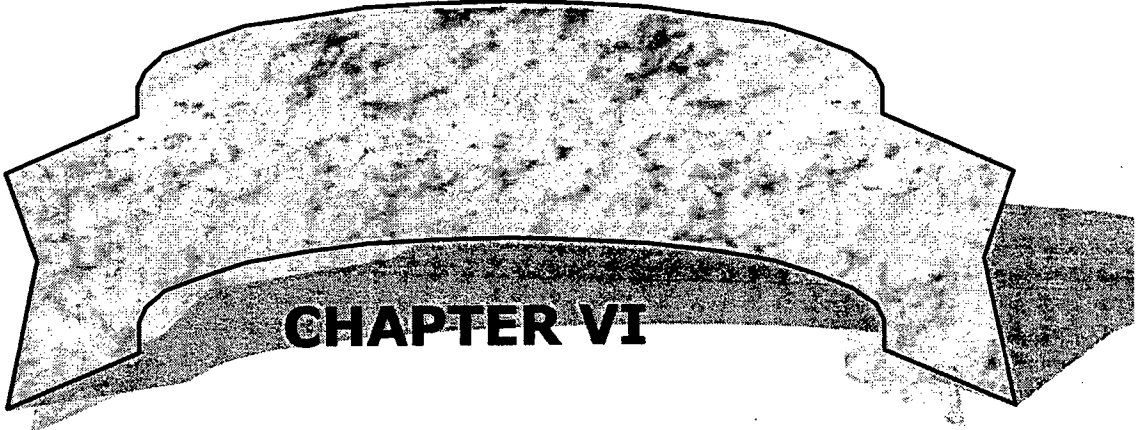
	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Periodic Inventory</b>	<b>17</b>	<b>19</b>	<b>15</b>	<b>9</b>	<b>20</b>	<b>23</b>	<b>13</b>	<b>116</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
@%	14.66	16.38	12.93	7.76	17.24	19.83	11.21	100.00
<b>Perpetual Inventory</b>	<b>8</b>	<b>6</b>	<b>10</b>	<b>16</b>	<b>5</b>	<b>2</b>	<b>12</b>	<b>59</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
@%	13.56	10.17	16.95	27.12	8.47	3.39	20.34	100.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
@%	14.29	14.29	14.29	14.29	14.29	14.29	14.29	100.00

©% - represents column percentage    @% - represents row percentage. Source : Data collected from Sample Industrial Units and Questionnaire

followed the perpetual inventory system, which records continuously about the inventory position.

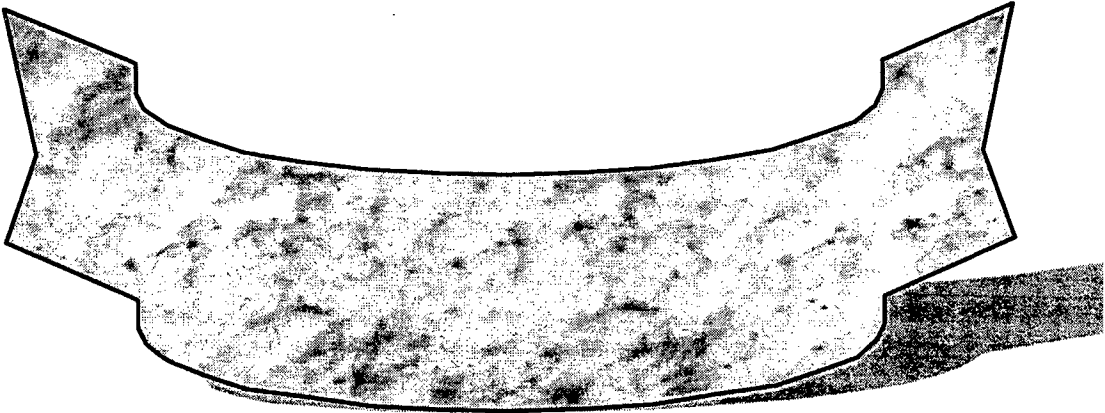
The above analysis showed that working capital management is most important need for small scale units. They have to plan their cash systematically. Cash management and inventory control are the other tools lie with the small scale entrepreneurs to improve their performance, shortage of cash and impact of cash shortage have to be analysed properly to control the cash. Deciding about proper credit policy and policy to be adopted for prompt payment of receivables is very important among the small scale units to reduce the unnecessary financial burdens and to reduce the bad debts. It is necessary for the small units to build the confidence and trust of the institutions which finances them by properly managing the total working capital and earning a decent rate of return on the total investment. It is necessary to plan and control the activities systematically to get better results for small scale units.





**CHAPTER VI**

***PROFITABILITY  
ANALYSIS***





## CHAPTER - VI

### PROFITABILITY ANALYSIS

Profit making is considered to be one of the important objectives of any commercial business. It is one of the principle motivating force behind conducting a business. Small Scale Industrial units are no exception to this principle. The financial accounts provide the means of measuring the progress of the business and to test its efficiency so as to take a timely remedial action. The profit of business may be measured by studying the profitability of investment in it. It is the ability of a given investment to earn a return from its use. Profitability analysis helps to identify the strength and weaknesses of the small scale units. The profitability analysis is also understood with the help of cost volume profit analysis which shows the relationship of cost and revenues to output. It helps the financial manager to study the general effect of the level of output upon income and expenses. Profit is affected by the interplay of costs volume and selling prices. Therefore it is necessary for the management to have accurate presentation of the effect of change in any one of these factors which have effect on the profit performance.

To analyse the profitability, it is necessary to understand financial analysis. It is the responsibility of the small scale entrepreneurs to do the financial analysis. The analysis of

financial statements is a process of evaluating relationship between component parts of financial statement to obtain better understanding of the units position and performance. The small entrepreneurs must balance their goals in ensuring their venture's performance. It have to maintain a balance between the most meaningful goal is to earn a satisfactory return on the money invested consistent with maintaining its financial health. The best yardstick for estimating the return is the return on investment. Along with ROI, other yardsticks like Return on Total Assets, Return on Owner's Equity, Return on permanent Capital are also important. Profitability have been considered as one of the main criteria to judge to what extent management have been successfully in maximising its profits or minimising its losses. Some managerial decisions like further expansion, raising of additional finance and problems of bonus and dividend payments rest upon this particular measurement. To measure the profitability, it requires the calculation of several inter connected ratios which vary according to the purpose of analysis. An analysis of the profitability reveals as to how the position of profits stand as a result of total transactions made during the year. It need not be stressed that profitability is analysed through the computation of profit ratios. The profitability can be measured and analysed from the main three distinct stand points of view.

## **6.1 VALUE ADDED ANALYSIS**

Value Added is the market price of the output of an enterprise minus the price of goods and services acquired by transfer from other units. It is the simplest and most immediate way of putting profit into proper perspective vis-à-vis the whole enterprise as a collective effort by capital, management and employees in presentation of a statement of value added. Profit is only a part of value added. It helps to measure the performance of small enterprise as profit based reporting is likely to be more subjective while product based reports are more objective. It helps the employees to know the wealth created by their company during the year. It can be a basis for productivity incentive scheme, value added per employee may also be the basis for bonus and other incentive scheme. It helps the other users besides the shareholders, financial analysis, vendors, employees and the general public. It helps to build the team spirit of the employees. Thus, the value added statement shows the wealth (value) created and attributed to all stakeholders rather than just the shareholders.

The Table 6.1 shows the value addition done by the small scale units in Goa. It shows that the relationship between sales minus the cost of the raw material. The overall percentage shows 50.05 percent as value addition by the small scale units to the original raw material they purchased. Industry wise, it shows that food and beverages have done the maximum amount of value

addition resulting in 66.17 percent followed by the plastic units with 63.57 percent, chemicals 60.43 percent while the engineering industry have been reported to be the lowest with 32.21 percent followed by pharmaceuticals with 44.98 percent, electricals 46.41 percent and electronics with 48.06 percent value addition. It is found that service oriented industries are reported to be the highest value adder but in case of engineering units it is not so due to high raw material cost which is 67.98 percent of the total. The value added statement report on the income earned by a large group of stakeholders. There are two ways to compute value added. In additive approach, all items that create value are added thus wages and salaries, interest, depreciation, rent, rates and insurance, employee benefits other overhead expenses and profit before tax are all added to give the sum of value added. In subtractive approach, all the items like raw material bought in components, processing, stores, loose tools, repairs and maintenance of the plant and equipment and other bought in services are deducted from the sale revenue.

## **6.2 CLASSIFICATION OF COSTS AND MARGIN**

The study of the behaviour of costs in relation to changes in volume of output reveals that there are some items of cost which tend to vary directly with the volume of output whereas there are others which remain unaffected by variations in the volume of output. The former class of costs represents the variable costs and

the latter fixed cost. The fixed cost are also referred to as period costs or stand by costs. They remain constant in total amount whether there is any increase or decrease in level of activity or output. It is observed that fixed cost remains the same in total when the volume of output changes. Fixed cost per unit of production decreases with an increase in volume of output. While decrease in the volume of output, the fixed cost per unit increases. Thus, there is an inverse relationship between volume of output and fixed cost per unit. On the other hand, variable cost are the main component of the total cost in case of small scale industry. Variable cost are those costs which fluctuate in direct proportion to the volume of output. Variable costs thus changes in the same directions and in direct proportion to changes in production activity, sales activity or some other measure of volume but tend to remain constant per unit of production. The Table 6.2 showed the classification of costs and their margin in percentage form of the small scale units surveyed. It showed that 80.10 percent of the cost in case of small scale units in Goa are variable cost while 19.90 percent cost are fixed cost. It only reflects that there is huge variable costs. It is mainly the small scale units are following labour intensive technique wherein the variable cost is more and fixed cost is less. Secondly, the investment in the capital goods. So, financial constraint is another reason for the small scale units to fall back upon the labour intensive techniques of production which amounts to huge variable cost. According to industry wise

**TABLE 6.1**  
**Value Added Analysis in selected SSI Units (Rs. In 000)**

Component	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Sales</b>	<b>112578</b>	<b>77581</b>	<b>81210</b>	<b>55260</b>	<b>43241</b>	<b>118242</b>	<b>121835</b>	<b>609947</b>
®%	18.46	12.72	13.31	9.06	7.09	19.39	19.97	100.00
<b>Material Cost</b>	<b>61942</b>	<b>41572</b>	<b>42180</b>	<b>21865</b>	<b>15751</b>	<b>80154</b>	<b>41217</b>	<b>304681</b>
®%	20.33	13.64	13.84	7.18	5.17	26.31	13.53	100.00
<b>Value Added</b>	<b>50636</b>	<b>36009</b>	<b>39030</b>	<b>33395</b>	<b>27490</b>	<b>38088</b>	<b>80618</b>	<b>305266</b>
®%	16.59	11.80	12.79	10.94	9.01	12.48	26.41	100.00
®% - represents row percentage								
Source : Data collected from Sample Industrial Units and Questionnaire.								

**TABLE 6.2**  
**Classification of Cost and their Margin among the Sample Units (percentage)**

Cost Component	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Fixed Cost</b>	<b>21.71</b>	<b>26.1</b>	<b>28.53</b>	<b>16.41</b>	<b>12.11</b>	<b>15.25</b>	<b>19.21</b>	<b>19.90</b>
<b>Variable Cost</b>	<b>78.29</b>	<b>73.9</b>	<b>71.47</b>	<b>83.59</b>	<b>87.89</b>	<b>84.75</b>	<b>80.79</b>	<b>80.10</b>
<b>Total Cost</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Source : Data collected from Sample Industrial Units and Questionnaire.								

analysis, shows that the maximum fixed cost is reported in case of electronics industry 28.53 percent followed by electricals 26.10 percent, pharmaceuticals 21.71 percent and food & beverage 19.21 percent while highest variable cost is reported in case of plastics 87.89 percent followed by engineering 84.75 percent, chemicals 83.59 percent. Overall, the small scale industries in Goa are following more of a traditional method of manufacturing rather than the latest automatic which is more capital intensive. In case of electronics, electricals and pharmaceuticals units, the break even point will be higher due to higher fixed costs compared to plastics, engineering and chemicals got lower break-even point. The small scale unit first have to absorb the fixed cost fully to reach at break even and lower the break even point more quicker and higher is the profit of the unit. Classifying the cost according to their behaviour into fixed and variable elements is very essential for profit planning, effective cost control, fixation of selling prices, framing of budgets and in the management decision making.

Table 6.3 revealed the fixed cost structure of small scale units. Fixed cost included rent and taxes of building, insurance charges, depreciation of plant, machinery and building, salaries of foremen, works manager, permanent staff and executive staff etc. for the purpose of the study. The two major fixed cost components incurred by the small scale units i.e. interest on borrowed capital and depreciation. While rest all other fixed costs are included in others. The Table showed that the total fixed cost (interest)

incurred by the small enterprise is 30.73 percent and depreciation is 20.02 percent while rest all other fixed costs are 49.31 percent. Industry wise it is reported that the highest amount in the form of interest on loans is paid by electricals 40.38 followed by electronics (32.01 percent), while the lowest is paid by engineering and food & beverage. Amount paid in the form of depreciation was the highest among electronics 25.00 percent followed by food & beverages 24.99 percent, electricals 21.01 percent where as in case of others, it is engineering with 54.89 percent is the highest followed by pharmaceuticals 53.50 percent, plastics 51.97 percent. In case of electricals, the maximum amount in the form of fixed cost have gone in interest and depreciation followed by electronics and food & beverages while rest all have got less than 50 percent amount in it. Most of the small scale units incurred more fixed cost in the form of rents, taxes, salaries and administrative expenses, while expenditure in the form of interest and depreciation is less than 50 percent of the total in some of the small enterprises.

Marginal Cost is the variable cost of one unit of a product or a service, a cost which could be avoided if that unit was not produced or provided. It divides the costs into fixed and variable and the concept is mainly based on the behaviour of costs with volume of output. This approach helps the small scale units to identify the amount of contribution per product towards fixed overheads and profits. The contribution is the difference between the sales volume and the variable cost. Here it is not possible to determine the profit



per unit of product because fixed cost are charged in total to profit and loss account rather than recover it from product cost. Contribution is the excess of sales over variable cost. Contribution helps the management in the fixation of selling prices and selection of a suitable product mix for profit. It helps the small enterprises to determine the break-even point.

Cost volume profit analysis studies the relationship between expenses revenue and net income. The aim is to establish the implications of levels of changes in costs, volume of sales or prices on profit. It is the study of the inter-relationships of cost behaviour patterns, levels of activity and the profit that results from each alternative combination. In small scale units the product mix decision, effect of change in the volume of output on the cost of production and profit. All these problems are solved with the help of cost volume profit analysis. To know the cost volume profit relationship it is essential to know break-even point, profit volume ratio (P/V Ratio) and contribution.

Break-even point is a point of sales volume at which total revenue is equal to total cost. It is a point of no profit nor loss. It refers to that level of output which evenly breaks the costs and revenues. If production or sales is increased beyond this level there shall be a profit to the units and if it is decreased from this level there shall be a loss to the small scale unit.

Profit-volume Ratio, known popularly as P/V Ratio. It expresses the relationship of contribution to sales. It is also called contribution Ratio. It reveals the rate of contribution per product as a percentage of turnover. It indicates the relationship of contribution to turnover. The profit of the small scale units can be increased by improving P/V Ratio. A higher ratio means a greater profitability and vice versa. It is an index of sound financial health of a small scale unit. It can be improved if contribution is improved and contribution can be improved by increasing the sales price and reducing marginal cost-efficient utilisation of resources by more concentrating on the sale of products.

The Table 6.4 indicated the analysis of contribution ratio. The overall P/V Ratio showed an average of 20.26 percent. In case of electronics units, the P/V Ratio is the highest with 28.53 percent followed by electronics 26.10 percent, pharmaceuticals 21.71 percent. All the sectors/units have got a P/V Ratio which is more than the average overall P/V Ratio. Where as in units like plastics 12.11 percent, engineering 15.25 percent, chemicals 16.41 percent and food & beverages with 19.21 percent were found to have had P/V Ratio below the overall average P/V Ratio.

In order to understand more about the Contribution Ratio, an attempt is made to know the contribution margin in terms of units. The Table 6.5 showed the various contribution margin earned by the different units. It is clear that 73 units representing 41.71

**TABLE 6.3**  
**Analysis of Fixed Cost Structure in the selected SSI Units (Rs. 000)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Interest</b>	<b>7925</b>	<b>4192</b>	<b>2958</b>	<b>2725</b>	<b>2182</b>	<b>1058</b>	<b>2664</b>	<b>23704</b>
©%	29.49	40.38	32.01	30.04	29.00	25.08	27.00	30.71
<b>Depreciation</b>	<b>4572</b>	<b>2180</b>	<b>2310</b>	<b>1633</b>	<b>1432</b>	<b>845</b>	<b>2466</b>	<b>15438</b>
©%	17.01	21.00	25.00	18.00	19.03	20.03	24.99	20.00
<b>Others</b>	<b>14377</b>	<b>4010</b>	<b>3973</b>	<b>4714</b>	<b>3910</b>	<b>2316</b>	<b>4737</b>	<b>38037</b>
©%	53.50	38.62	42.99	51.96	51.97	54.89	48.01	49.28
<b>Total</b>	<b>26874</b>	<b>10382</b>	<b>9241</b>	<b>9072</b>	<b>7524</b>	<b>4219</b>	<b>9867</b>	<b>77179</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
©% - represents column percentage Source : Data collected from Sample Industrial Units and Questionnaire.								

**TABLE 6.4**  
**Analysis of Contribution Ratio (CVP Analysis) (Rs. In 000)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Contribution</b>	<b>24440</b>	<b>20249</b>	<b>23169</b>	<b>9068</b>	<b>5236</b>	<b>18032</b>	<b>23405</b>	<b>123599</b>
<b>Sales</b>	<b>112578</b>	<b>77581</b>	<b>81210</b>	<b>55260</b>	<b>43241</b>	<b>118242</b>	<b>121835</b>	<b>609947</b>
<b>Fixed Cost</b>	<b>20377</b>	<b>18627</b>	<b>20335</b>	<b>7963</b>	<b>4328</b>	<b>14248</b>	<b>19640</b>	<b>105518</b>
<b>P/V Ratio</b>	<b>21.71</b>	<b>26.10</b>	<b>28.53</b>	<b>16.41</b>	<b>12.11</b>	<b>15.25</b>	<b>19.21</b>	<b>20.26</b>
<b>BEP Sales</b>	<b>93860</b>	<b>71368</b>	<b>71276</b>	<b>48525</b>	<b>35739</b>	<b>93430</b>	<b>102238</b>	<b>516436</b>

Source : Data collected from Sample Industrial Units and Questionnaire.

percent were found under the contribution margin of 21.30 percent, 43 units representing 24.57 percent were found in the contribution margin of 11.20 percent. In the contribution margin Group of 31-40 percent there were 29 units representing 16.57 percent. In the highest Group of above 40 percent there were 26 units while in the lowest Group of below 10 percent there were 4 units i.e. two each from food & beverage and plastics. Industry wise, analysis showed that the maximum number of units in almost all the segments were found under the category of 21-30 percent margin followed by 11-20 percent margin while it is interesting to note that there were 26 units that were coming under the maximum margin level they include chemicals 6 units, engineering 5 units, electronics and plastics 4 units each, pharmaceuticals 3 units and food & beverages and electricals 2 units each.

### **6.3 MARGIN OF SAFETY**

Break-even analysis is the main determinants of margin of safety. Break-even analysis is employed to ascertain the level of operations where total revenue equals to total costs. It is an analysis used to determine the probable profit or loss at any level of operations. It is a method of studying the relationship among sales revenue, variable cost and fixed cost to determine the level of operation at which all the costs are equal to its sales revenue and there is no profit no loss situation for the small scale units, Break-even analysis plays a very crucial role. It helps to determine the

break-even quantity of output by studying the relationship among the firm's cost structure, volume of output and profit. It is a critical point or equilibrium point. Every small scale entrepreneurs have to always strive hard to reach at the break-even at the shortest possible time. Any results comes above the break-even will result in profit to the unit, while anything below break even point implied that the unit is incurring losses. The study of Break-even is incomplete without studying the Break-even chart which shows graphically the position of the unit and the Break-even point. Break even point can be computed with the help of the formula. To know the Break-even point in units it is computed as fixed cost divided by contribution per unit while to compute break even point in amount (Rupees)(value) it is computed as Fixed cost divided by P/V Ratio.

Break even point analysis acts as a basis for computing the Margin of Safety (MOS) is an important concept in marginal costing approach. It refers excess of sales over Break-even volume sales. It represents the difference between sales at a given activity level and sales at Break even point. It is important to have a reasonable margin of safety to run the operations of a small scale unit into a profitable position. A low margin of safety indicates high fixed overheads and profit comes into the business only when the activity absorb the fixed costs. It provides the strength and stability to the concern. The higher the margin of safety the better is the profitability of the unit. It can be computed by using the formulae

**TABLE 6.5**  
**Analysis of Contribution Margin - Number of Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>0 - 10%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>
©%	0.00	0.00	0.00	0.00	8.00	0.00	8.00	2.29
<b>11 - 20%</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>43</b>
©%	24.00	32.00	20.00	24.00	20.00	24.00	28.00	24.57
<b>21 - 30%</b>	<b>12</b>	<b>10</b>	<b>13</b>	<b>8</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>73</b>
©%	48.00	40.00	52.00	32.00	36.00	44.00	40.00	41.71
<b>31 - 40%</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>29</b>
©%	16.00	20.00	12.00	20.00	20.00	12.00	16.00	16.57
<b>above 40%</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>26</b>
©%	12.00	8.00	16.00	24.00	16.00	20.00	8.00	14.86
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

©% - represents column percentage

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 6.6**  
**Margin of Safety among the selected units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Sales</b>	<b>112578</b>	<b>77581</b>	<b>81210</b>	<b>55260</b>	<b>43241</b>	<b>118242</b>	<b>121835</b>	<b>609947</b>
<b>Fixed cost</b>	<b>20377</b>	<b>18627</b>	<b>20335</b>	<b>7963</b>	<b>4328</b>	<b>14248</b>	<b>19640</b>	<b>105518</b>
<b>P/V Ratio</b>	<b>21.71</b>	<b>26.1</b>	<b>28.53</b>	<b>16.41</b>	<b>12.11</b>	<b>15.25</b>	<b>19.21</b>	<b>20.26</b>
<b>BEP Sales (Rs)</b>	<b>93860</b>	<b>71368</b>	<b>71276</b>	<b>48525</b>	<b>35739</b>	<b>93430</b>	<b>102238</b>	<b>520819</b>
<b>Margin of Safety (%)</b>	<b>16.62</b>	<b>8</b>	<b>12.23</b>	<b>12.19</b>	<b>17.35</b>	<b>20.98</b>	<b>16.08</b>	<b>14.61</b>

Source : Data collected from Sample Industrial Units and Questionnaire.

i.e. Actual Sales minus the sales at break-even point. If the margin of safety is large, it is a sign of soundness of business and vice versa. It serves as a guide and a reliable indicator of the business strength and soundness. Margin of safety can be increased by decreasing the fixed cost, decreasing the variable cost, increasing the selling price, increasing the output and sales, changing to the product mix that improves P/V Ratio. The large margin of safety indicates that the business is sound and even if there is a substantial fall in sales, there will be still some profit on the other hand small margin of safety indicates that position of the business is comparatively weak and even a small decline in the sale would adversely affect the profit of the business and may result into losses from the Table 6.6 which reflects the position of margin of safety percentage and Break-even point for the various segments of small scale units. The margin of safety percentage overall showed 14.61 percent which indicated that margin of safety is very low among the small scale units. Further, it showed that engineering units with 20.98 percent have the highest margin of safety among them followed by plastics 17.35 percent, pharmaceuticals 16.63 percent, food & beverages 16.08 percent, while units like electricals 8 percent, electronics 12.23 percent and chemicals 12.19 percent were found to have had a very low percentage of margin of safety which is below the overall average margin of safety percentage.

In the Table 6.7 showed the margin of safety according to the number of units and the category/segment of percentage under

which it comes. There are 113 units representing 64.57 percent of the total were found under the percentage of below 20 percent, while 42 units representing 24 percent were found under 21-40 percent category and 20 units representing 11.43 percent were found under 41-60 percent category. There were no units found in the category of above 60 percent of margin of safety. Industry wise, the analysis showed that maximum number of units except in the segment of engineering were found under 20 percent category while in below 40 percent category, it was found that engineering with 12 units (48 percent) followed by plastics 8 units (32 percent), food & beverages 7 units (28 percent). In the category of below 60 percent margin of safety it was found that again engineering with 8 units are the maximum followed by pharmaceuticals, electronics and food & beverages 3 units each and there was no unit of electricals found in the category of below 60 percent margin of safety. Most of the small scale units have got large amount in fixed cost and they have to absorb the fixed cost first to achieve safer margin of safety.

#### **6.4 OPERATIONAL PERFORMANCE / PROFITABILITY ANALYSIS**

Profitability is an indication of the efficiency with which the operations of the business are carried on. The main objective of every small scale unit is to earn maximum profit not only in absolute terms but also in relative terms. Profit is the absolute measure of earning capacity. Poor operational performance results in poor sales and therefore low profits. Low profitability may be due



to lack of control over expenses resulting in low profits. Profitability is the main base for liquidity and solvency. A lower profitability may arise due to the lack of control over the expenses. The creditors, bankers and financial institutions are interested in profitability ratio since it indicates liquidity or capacity of the business to meet interest obligations, and regular and improved profits, enhances the long term solvency position of the small enterprise. Owners are interested in profitability as it indicates the growth and the rate of return on their investments. Profitability reflects the final result of a business operation. Profitability analysis comprises the study of sales, analysis of cost of goods sold, analysis of Gross margin on sales, analysis of operating expenses, analysis of operating profit and analysis of profit in relation to sales and capital.

A business enterprise can discharge its obligation to the various segments of the society only through earning of profits. It is a useful measure of overall efficiency of a business. Profit to the management is the test of efficiency and measurement of control, to owners, a measure of worth of their investment, to the creditors the margin of safety, to employees, a source of fringe benefits to the government, a measure of tax paying capacity and the basis of legislative action, to customers, a hint to demand for better quality and price cuts, to an enterprise less cumbersome source of finance for growth and existence and finally to the country, profits are the

index of economic progress. Thus, profitability ratios are calculated to measure the overall efficiency of the business.

**6.4.1 GROSS PROFIT MARGIN :** Gross profit margin reflects the efficiency with which a firm produces its products. It is calculated as Gross profit as percentage of total sales.

The ratio measures the excess of sales proceeds during the period before taking into account Administration/Selling and distribution and financing charges. Gross Profit ratio indicates the extent to which selling prices of goods per unit may decline without resulting in losses on operations of a firm. A low gross profit ratio indicates high cost of goods sold due to unfavourable purchasing policies, lesser sales, lower selling prices, excessive competition over investment in plant & machinery. Gross profit margin should be thoroughly calculated because increase in Gross profit ratio occurs not only by increasing the selling price without any corresponding proportionate increase in cost or decrease in costs without any decrease in selling prices but also due to certain misleading factors like overvaluation of the closing inventories or under valuation of the opening inventories etc. The Table 6.8 depicts the Gross profit margin among the small scale units. The overall Gross Profit margin is 20.26 percent. It further revealed that Gross profit margin is the highest among electronic units 28.53 percent, it is due to their higher selling price and controlled costs. In electricals units, the Gross profit margin is 26.10 percent, pharmaceuticals

**TABLE 6.7**  
**Analysis of Margin of Safety - Number of Units among the selected units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>0 - 20%</b>	<b>18</b>	<b>23</b>	<b>17</b>	<b>20</b>	<b>15</b>	<b>5</b>	<b>15</b>	<b>113</b>
©%	72.00	92.00	68.00	80.00	60.00	20.00	60.00	64.57
<b>21 - 40%</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>12</b>	<b>7</b>	<b>42</b>
©%	16.00	8.00	20.00	16.00	32.00	48.00	28.00	24.00
<b>41 - 60%</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>8</b>	<b>3</b>	<b>20</b>
©%	12.00	0.00	12.00	4.00	8.00	32.00	12.00	11.43
<b>above 61%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
©%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

©% - represents column percentage

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 6.8**  
**Gross Profit Margin among the selected Units (Rs. 000)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Sales</b>	<b>112578</b>	<b>77581</b>	<b>81210</b>	<b>55260</b>	<b>43241</b>	<b>118242</b>	<b>121835</b>	<b>609947</b>
<b>Gross Profit</b>	<b>24440</b>	<b>20249</b>	<b>23169</b>	<b>9068</b>	<b>5236</b>	<b>18032</b>	<b>23405</b>	<b>123599</b>
<b>Margin</b>	<b>21.71</b>	<b>26.10</b>	<b>28.53</b>	<b>16.41</b>	<b>12.11</b>	<b>15.25</b>	<b>19.21</b>	<b>20.26</b>

Source : Data collected from Sample Industrial Units and Questionnaire.

21.71 percent. These units, have got Gross profit margin more than the average overall Gross profit margin while in the case of plastics units it is 12.11 percent, engineering 15.25 percent, chemicals 16.41 per cent which is below the overall average Gross profit margin. In case of food & beverage, it is slightly below the average Gross profit margin i.e. 19.21 percent. There is no standard norm for Gross profit as such as it varies from industry to industry. Higher or lower Gross profit margin is due to increase or decrease in the selling price of the goods sold without any corresponding increase/decrease in the cost of goods sold. The low Gross profit margin is noticed in plastics units, chemicals and engineering mainly due to high cost of goods sold and unfavourable purchasing policies and inability of management to improve the sales volume.

The Gross profit margin according to Industry wise shows a different picture as it can be seen from the Table 6.9. There are 45 units representing 25.71 per cent whose Gross profit margin is below 20 percent and major units which were under this category are plastics 10 units (40 percent) followed by chemicals and engineering 8 units each, food & beverage 7 units (28 percent) while vast majority of the small scale units i.e. 119 units representing (68 percent) were found under the segment of below 30 percent margin and the top of the list among this category were electronics 20 units (80 percent) followed by electricals 19 units (76 percent), pharmaceuticals 18 units (72 percent) and the least among them is engineering 15 units (60 percent). In the above 30 percent segment

there were 11 units representing (6.29 percent) and the main one which topped the list were pharmaceuticals 3 units (12 percent) followed by electronics, engineering and food & beverages 2 units each while electricals and plastics with one unit each.

**6.4.2 NET PROFIT RATIO/MARGIN :** This ratio is widely used as a measure of overall profitability and is very useful to the proprietors. The ratio is designed to focus attention on the net profit margin arising from business operations before interest and tax is deducted. It is obtained by dividing profit after tax by sales. It establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, administering and selling the products/services. If net margin is inadequate, the enterprise will fail to achieve satisfactory return on shareholder funds. This ratio also indicates the enterprises capacity to withstand adverse economic conditions.

A low net profit margin have the opposite implications. However a unit with a low profit margin can earn a high rate of return on investment if it have a higher inventory turnover. Among the small scale units this ratio helps in determining the efficiency with which the affairs of the business are being managed. An increase in the ratio indicates improvement in the operational efficiency of the business. It is an effective measure to check the profitability of business. It is necessary for the investors to judge the adequacy of this ratio. There is no norms laid down for this

TABLE 6.9

## Analysis of Gross Profit Margin - Number of Units among the selected Units

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Below 20%</b>	4	5	3	8	10	8	7	45
©%	16.00	20.00	12.00	32.00	40.00	32.00	28.00	25.71
<b>20 - 30%</b>	18	19	20	17	14	15	16	119
©%	72.00	76.00	80.00	68.00	56.00	60.00	64.00	68.00
<b>above 30%</b>	3	1	2	0	1	2	2	11
©%	12.00	4.00	8.00	0.00	4.00	8.00	8.00	6.29
<b>Total</b>	25	25	25	25	25	25	25	175
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
©% - represents column percentage		Source : Data collected from Sample Industrial Units and Questionnaire.						

TABLE 6.10

## Net Profit Margin (Rs. 000)

Items	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Sales</b>	112578	77581	81210	55260	43241	118242	121835	609947
<b>Net Profit</b>	4063	1622	2834	1105	908	3784	3765	18081
<b>Margin</b>	3.60	2.09	3.48	2.00	2.09	3.20	3.09	2.96
Source : Data collected from Sample Industrial Units and Questionnaire.								

ratio. The Table 6.10 showed the position of the net profit margin among the small scale units. The overall average net profit margin showed 2.96 percent. Further insight into the Table showed that net profit margin was the highest among the pharmaceuticals with 3.61 percent followed by electronics 3.48 percent, engineering 3.20 percent, food & beverage 3.09 percent which were found to have had the net profit margin above the average overall figure. While Industry like chemicals 2 percent, electricals and plastics 2.09 percent each were found with the lowest and below the overall average Net profit margin.

Net profit margin with regards to number of units and their position with reference to the Net profit rates were shown in the Table 6.11. This ratio helps to measure the profitability of the small scale units. It also reflects the management ability to use a firm's assets to generated earnings on its invested capital. It helps to measure the productivity of the units and also helps in investment evaluation. It is found from the Table that 83 units representing 47.43 percent earned a net profit below 5 percent. The top of the list were chemicals 18 units (72 percent), plastics 17 units (68 percent) while electricals 16 units with 64 percent. Below 10 percent Net Profit Margin it was found that 67 units representing 38.29 percent with pharmaceuticals with 15 units (60 percent), electronics and food & beverage 12 units were on the top of the Table. In the segment of 16 to 15 percent, Net profit margin there were 17 units which included engineering with 4 units (16 percent),

electronics and food & beverages with 3 units each with 12 percent and electrical, chemicals and plastics with 2 units each while one unit was found from pharmaceuticals. Where as in the highest Net profit margin category, there were 8 units representing 4.57 percent which included pharmaceutical, electronics, engineering and food & beverage with 2 units each. Small scale units with high net profit margin would be in an advantageous position to survive in the rising cost of productivity, falling sale prices and declining demand for the product. While for a low net profit margin units to withstand these adversities would be really difficult.

**6.4.3 RETURN ON CAPITAL EMPLOYED :** The primary objective of making investments in any small scale business is to obtain satisfactory return on capital invested. It indicates the percentage of return on the capital employed in the business and it can be used to show the efficiency of the business as a whole. The return on capital employed indicates how well the management have used the funds supplied by the creditors and owners. It measures productivity as well as profitability. It is the key indicator of overall profitability of an enterprise. Shareholders measure the success or failure of a small enterprise in terms of profit related to capital employed. The return on capital employed can be used to show the efficiency of the business as a whole. Capital employed means the value of assets which are effectively used by a concern and which contribute to earning of that concern during a year. Return on capital employed is calculated by dividing the figure of net profit



before interest and taxed by the figure of capital employed. The higher the ratio the more efficient is the unit in using funds entrusted to it and the better is the economic conditions of the unit. The efficiency of management for utilising funds at their disposal depends upon the turnover of capital employed and the profit margin. The higher the turnover of capital employed and higher the profit margin, the higher will be the efficiency of management in utilising funds at their disposal. It is a prime test of the efficiency of business. It measures not only the overall efficiency of business but also helps in evaluating the performance of various department. The owners are interested in knowing the profitability of the business in relation to amount invested in it. A higher percentage of return on capital employed will satisfy the owners that their money is profitably utilised. The borrowing policy of the enterprise may be properly formulated. The rate of interest on borrowing should be less than the return on capital employed. Return on Capital employed may help in devising future business policies for expansion or diversification etc. Keeping this in view, an attempt is made to study the return on capital employed. The Table 6.12 depicts the overall average return on capital employed showed 5.59 percent. Industry wise, the food & beverages showed the highest return of capital employed of 9.12 percent followed by plastics 7.41 per cent, electricals 6.68 percent and chemicals 5.82 which is more than the overall average return of capital employed. In case of engineering 4.36 percent, electronics 4.70 percent,

TABLE 6.11

## Analysis of Net Profit Margin - Number of Units

G/P Ratio	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
0 - 5	7	16	8	18	17	9	8	83
©%	28.00	64.00	32.00	72.00	68.00	36.00	32.00	47.43
6 - 10	15	7	12	5	6	10	12	67
©%	60.00	28.00	48.00	20.00	24.00	40.00	48.00	38.29
11 - 15	1	2	3	2	2	4	3	17
©%	4.00	8.00	12.00	8.00	8.00	16.00	12.00	9.71
16 - 20	2	0	2	0	0	2	2	8
©%	8.00	0.00	8.00	0.00	0.00	8.00	8.00	4.57
<b>Total</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>175</b>
©%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

©% - represents column percentage

Source : Data collected from Sample Industrial Units and Questionnaire.

TABLE 6.12

## Analysis of Return on Capital Employed (Rs. 000)

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Capital Employed</b>	<b>79667</b>	<b>24281</b>	<b>60298</b>	<b>18986</b>	<b>12254</b>	<b>86789</b>	<b>41283</b>	<b>323558</b>
<b>Net Profit</b>	<b>4063</b>	<b>1622</b>	<b>2834</b>	<b>1105</b>	<b>908</b>	<b>3784</b>	<b>3765</b>	<b>18081</b>
<b>Ratio</b>	<b>5.10</b>	<b>6.68</b>	<b>4.70</b>	<b>5.82</b>	<b>7.41</b>	<b>4.36</b>	<b>9.12</b>	<b>5.59</b>

Source : Data collected from Sample Industrial Units and Questionnaire.

pharmaceuticals 5.1 percent were reported to be the lowest percentage even below the overall average Return on capital employed. The low return indicates the inefficiency of the management to earn return on capital employed and control the activities. The capital employed refers to long term funds supplied by the creditors and owners of the units. It is equivalent to net working capital plus fixed assets. Thus capital employed basis provides a test of profitability related to the source of long term funds. The higher the ratio, the more efficient use of the capital employed.

**6.4.4 RETURN ON EQUITY :** The profitability of a unit from the owners point of view should be assessed in terms of the return to the ordinary shareholders. According to this ratio profitability is measured by dividing the net profit after taxes but before preference dividend by the average total shareholders equity. The term equity shareholders includes, equity share capital, share premium, reserves and surplus less accumulated losses. Shareholders are the residual owners in the real sense. They assume maximum risk and have the highest stake in the enterprise. The earning of a satisfactory return is the most desirable objective of a firm. This ratio is thus of great interest to present as well as prospective shareholders. This ratio establishes the profitability from the shareholders point of view. Return on equity indicates how well the enterprise have used the resources of owners. The earning of a satisfactory return is the most desirable objective of a business.

They assume maximum risk and have the highest stake in the company. The earning enabling a satisfactory return on their funds is the most desirable objective of a business. The Table 6.13 exhibits the return on equity share capital. The overall average return on equity share capital showed 21.37 percent wherein food & beverages earned the maximum return on equity capital i.e. 35.42 followed by plastics 22.50 percent, electronics 21.86 percent. They have got return on equity more then the average overall return on equity while in case of chemicals with 16.60 percent, pharmaceuticals 17.82 percent, engineering 19.45 percent and electricals 20.12 percent were at the lowest and also below the overall average return on equity share capital.

#### **6.4.5. NET PROFIT TO FIXED ASSETS**

This is another measure of profitability of a small enterprise. It measures the profitability of all the investments in fixed asset of a unit. It shows the relationship of the earnings of a business to its total income is an important indication of the effectiveness of management in influencing a return to surplus of capital as well as a method of predicting future earnings. It is calculated by dividing net income by the fixed assets of the units after depreciation. A more efficient enterprise will generate a higher level of sales with a given level of total asset than it is less efficient competitor. In the Table 6.14 showed the net profit to fixed assets. The net profit before tax taken as numerator and fixed assets after depreciation

**TABLE 6.13**  
**Analysis of Return on Equity (Rs. 000)**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Equity</b>	<b>22800</b>	<b>8062</b>	<b>12964</b>	<b>6657</b>	<b>4035</b>	<b>19455</b>	<b>10629</b>	<b>84602</b>
<b>Net Profit</b>	<b>4063</b>	<b>1622</b>	<b>2834</b>	<b>1105</b>	<b>908</b>	<b>3784</b>	<b>3765</b>	<b>18081</b>
<b>Ratio</b>	<b>17.82</b>	<b>20.12</b>	<b>21.86</b>	<b>16.60</b>	<b>22.50</b>	<b>19.45</b>	<b>35.42</b>	<b>21.37</b>
Source : Data collected from Sample Industrial Units and Questionnaire.								

**TABLE 6.14**  
**Net Profit to Fixed Assets**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Fixed Assets</b>	<b>48717</b>	<b>29599</b>	<b>30871</b>	<b>6105</b>	<b>3819</b>	<b>22605</b>	<b>12916</b>	<b>154632</b>
<b>Net Profit</b>	<b>4063</b>	<b>1622</b>	<b>2834</b>	<b>1105</b>	<b>908</b>	<b>3784</b>	<b>3765</b>	<b>18081</b>
<b>Ratio</b>	<b>8.34</b>	<b>5.48</b>	<b>9.18</b>	<b>18.10</b>	<b>23.82</b>	<b>16.74</b>	<b>29.15</b>	<b>11.69</b>
Source : Data collected from Sample Industrial Units and Questionnaire.								

taken as denominator. It is clear from the Table that the overall average return on fixed asset is 11.69 percent whereas industry wise, it showed food & beverage 29.15 percent, followed by plastics 23.82 percent, chemicals 18.10 percent have got the highest and above the overall average fixed asset and units like electricals 5.48 percent, pharmaceuticals 8.34 percent were reported to be the lowest compared to the overall average return to fixed assets. It can be analysed further that only food & beverages were reported to have done well, while plastic units were reported to be also doing well.

**6.4.6 FIXED ASSETS TURNOVER RATIO :** This ratio indicates the extent to which the investments in fixed assets contribute towards sales. It indicates whether the investment in fixed asset have been judicious or not. This ratio measures the efficiency and profit earning capacity of the firm. Higher the ratio greater is the intensive utilisation of fixed asset. Lower ratio means under utilisation of fixed assets.

The fixed asset turnover ratio indicates the effectiveness with which different assets are utilised in a firm. Turnover means the number of times an asset flows through a firm's operations and into sales. The high ratio indicates a high degree of efficiency in assets utilisation and low ratio indicates a low degree of efficiency in assets utilisation. The ratio is ascertained by dividing sales with fixed assets. The fixed asset turnover ratio is presented in Table 6.15.

The average fixed asset turnover ratio of all the small scale units was 3.94 times. The industry wise analysis showed that the plastics units have registered the highest average fixed asset turnover ratio of 11.32 times followed by food & beverages 9.43 times, chemicals 9.05 times, engineering with 5.23 times. In all these units the fixed asset turnover ratio is higher than the average overall ratio. This showed that these small scale units have utilised the fixed assets efficiently while in the case of pharmaceuticals the fixed asset turnover ratio was the lowest 2.31 times followed by electricals 2.62 times and electronics 2.63 times which was lower than the average overall ratio. This may be a sign of the fact that the funds were not being employed fully or that they were not being used optimally.

#### **6.4.7 NET PROFIT TO CASH PROFIT ANALYSIS**

Net profit is obtained in small scale units after deducting income tax and depreciation and generally, non-operating incomes and expenses are excluded from the net profits. Thus incomes such as interest on investment, profit on sale of fixed assets are excluded while cash profit considers the efficiency of operation in terms of cash generation and is not affected by the method of depreciation charged or any such treatment. It considers the total cash inflow irrespective of the nature of the item. It is ascertained by dividing the net profit with cash profit. The ratio reflects the extent of cash funds available for internal financing.

**TABLE 6.15**  
**Fixed Assets Turnover Ratio in the Selected Units**

	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Fixed Assets</b>	48717	29599	30871	6105	3819	22605	12916	154632
<b>Net Sales</b>	112578	77581	81210	55260	43241	118242	121835	609947
<b>Ratio</b>	2.31	2.62	2.63	9.05	11.32	5.23	9.43	3.94

Source : Data collected from Sample Industrial Units and Questionnaire.

**TABLE 6.16**  
**Analysis of Cash Profit to Net Profit (Rs. 000)**

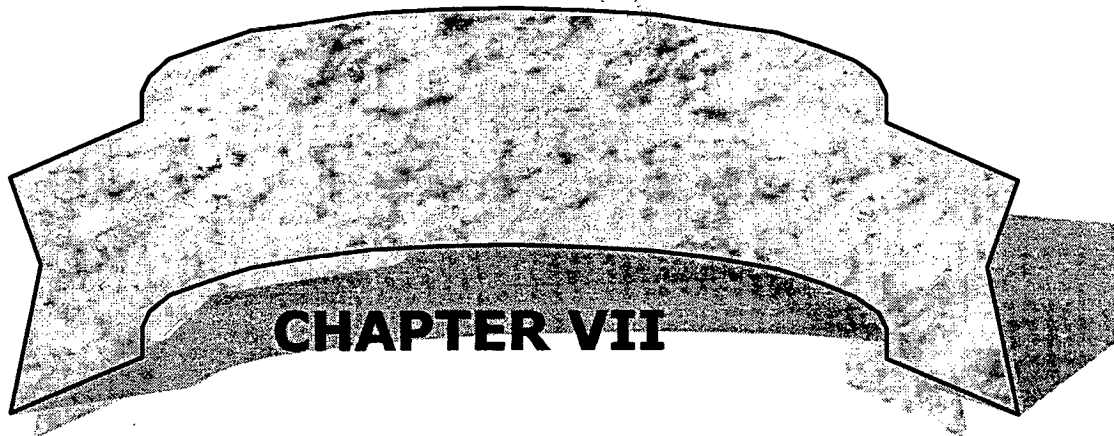
	Pharmaceutical	Electricals	Electronics	Chemical	Plastic	Engineering	F & B	Total
<b>Cash Profit</b>	7387	2797	4803	1700	1335	6757	5457	30236
<b>Net Profit</b>	4063	1622	2834	1105	908	3784	3765	18081
<b>Percentage</b>	55%	58%	59%	65%	68%	56%	69%	59.78%

Source : Data collected from Sample Industrial Units and Questionnaire.



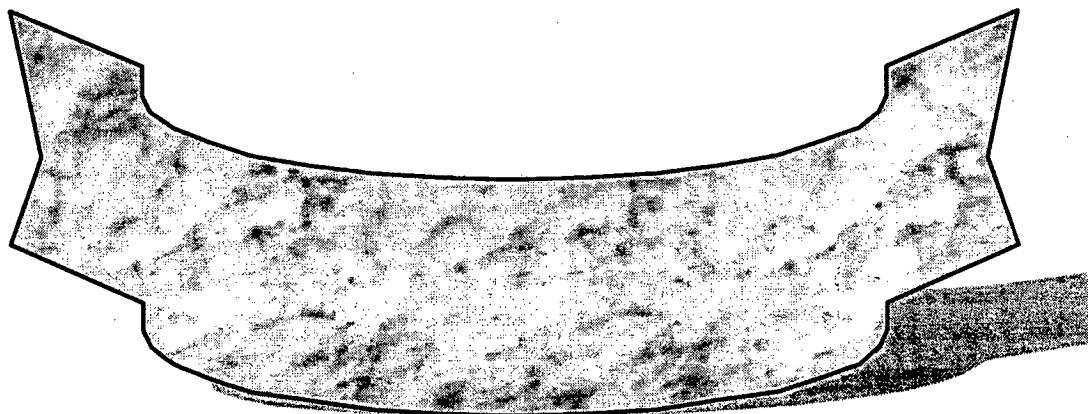
In the Table 6.16 showed the cash profit to net profit analysis. The average overall percentage showed 59.78 which showed the position of cash to meet the depreciation, interest and taxed of the small enterprise. Further insight into the Table exhibited that the percentage is higher in case of food & beverages 69 percent followed by plastics 68 percent, chemicals 65 percent while the units like pharmaceuticals the percentage of cash profit to net profit is the lowest i.e. 55 percent, engineering 56 percent, electricals 58 percent and electronics 59 percent which were also reported below the average overall percentage of 59.78 percent. Overall it showed a healthy percentage of cash profit to net profit, it also reflects the strong position of the small scale units for internal financing.





**CHAPTER VII**

***SUMMARY OF FINDINGS  
AND POLICY  
SUGGESTIONS***



## **CHAPTER - VII**

### **SUMMARY OF FINDINGS AND POLICY SUGGESTIONS**

#### **7.1 INTRODUCTION**

The rapid growth of the Small Scale Industry in India took place only after the Independence. In the Industrial policy resolutions of 1948 the small scale sector was given special role for creating additional employment with low investment. The sector offer a method of ensuring a more equitable distribution of the national income and facilitate an effective mobilisation of resources of capital and skill which might otherwise remain unutilised. Some of the problems like unplanned urbanisation is avoided by the establishment of Small Scale Industries all over the country.

Small Scale Industry in India have emerged as a dynamic and vibrant partner in the process of development by consistently recording higher levels of growth as compared to overall industrial growth. It also takes pride in development of entrepreneurial talent and enabling the small scale units to graduate into medium and large scale units. The functional vibrancy of the sector is visible from its contribution of 40 percent in the Industrial production, 35 percent in country's total export and providing employment to 167 lakhs persons in over 30 lakh small scale units. The sector produces a wide range of more than 7500

products had grown phenomenally during the past four and a half decade. The emerging World Trade Organisation regime and the process of liberalisation have thrown open new challenges and threats particularly for the small scale sector. In order to turn threats into opportunities and achieve self-generating expansion, the policies need to be growth oriented enabling Small Scale Industries to face the competition.

Inspite of the fact that a package of incentives and concessional finance, cost benefits, marketing support, reservation of items for purchase of products, machinery on hire purchase, technical and financial consultancy services, testing facilities, common facility services, provision of industrial accommodation and other infrastructure facilities. The of Small Scale Industries can be seen with various problems like inadequate and often delayed finance due to their inability to offer acceptable securities and also to work within the properly maintained accounts so as to enable financial institution to assist them promptly.

Accounting plays a key role in providing certain basic informational inputs for the good administrative system in the form of various financial reports giving details about the total financial position of the units and the return that is earned on the total investment of the business including profits. For the success of a business enterprise, it should have good executives to take the right decision and at the right time.

Cost Accounting is also an important element of Accounting information bearing on the problems of internal management control. Lack of proper and adequate cost base and planning leads to lack of cost control.

Many Small Scale Industries were unable to take a good decision and were troubled with hasty judgements without paying due attention to key areas and thereby more prone to develop sickness in due course of time.

Working capital needs and profitability analysis were very crucial factors in small scale units. Due to lack of proper working capital and lack of proper profitability analysis the capacity and the resources were underutilised and resulted into low profit.

In view of this an attempt had been made to study the accounting and the financial practices of the selected Small Scale Industrial units in the State of Goa.

## **7.2 SPECIFIC OBJECTIVES OF THE STUDY**

The specific objectives of the Study were as under :

- (1) To investigate the Accounting Systems and Practices in the selected units;
- (2) To study the Capital Structure and Financing Patterns in the selected units;
- (3) To examine the working capital and Profitability Analysis in the selected units.

### **7.3 DATA AND METHODOLOGY**

The sample was selected on the bases of two categories dividing the heterogeneous units into one group i.e. Stratified Simple Random Sampling Method. It is stratified into seven segments based upon the nature of the product. Secondly the sample selected is atleast 5 percent of the total universe and they should have atleast five years of existence in order to represent it in the study. All together 175 units were grouped together and stratified into the above seven categories for the purpose of our study. Each strata consisted of 25 units and is divided equally among all. Each strata consists of 25 units and classified into seven categories of units namely, pharmaceuticals, electricals, electronics, chemicals, plastics, engineering and food & beverages.

The selection of the sample was done based upon the maximum number of units operating under a particular category.

The data collected for this study is classified into two primary source and secondary source. Primary data were collected through Comprehensive Questionnaire and personal interview. It was based on the pilot study conducted earlier taking into account the various aspects of the units, entrepreneurs, accounting practices, financial structure and working capital management, profitability analysis. Ratio analysis analytical technique was employed to analyse the data.

Collection of data was a real challenge in case of Small Scale Industries because it is not compulsory for them to publish their

accounts. They used to treat each and every detailed financial information as confidential. Most of the visits were not encouraging, They were not very co-operative in providing the information needed. After so many frustrating visits to them again and again and after convincing them that it is for Academic nature they gave the information. The letter of introduction from my research guide, manager of Directorate of Industries and Mines, Sales Tax Commissioner, EDC, Chairman, General Manager of GIDC and letter from each industrial estate manager (GIDC), local MLA's, through friends and relatives have helped greatly in overcoming their misunderstanding.

The Secondary data was collected from both published and unpublished sources, such as official documents, annual reports, hand books of statistics, booklets, pamphlets et cetera of the State and Central Government, CMIE, banks, corporations and private organisations. Central Government's five year plans, Industrial policy resolutions, Laghu Udyog Samachar, National Small Industries Corporation (NSIC), Statistical abstracts of Goa from Department of Statistics, commercial banks, MSFC, RBI bulletin, SBI Review and Report of ad-hoc committees and commissions, published annual reports.

The study from the years 1995-2001 with recent developments was undertaken to bring out the impact of the Accounting and Financial Practices followed by the Small Scale

Units in Goa. This is based on primary and secondary data. Primary data was collected through a well planned Questionnaire and personal interview and surveys and discussions.

Industrialisation have a major role to play in economic development in the developing countries like India. The most pressing need of many developing countries of the world today is rapidly industrialising to achieve the basic objectives of their economic and social progress and for raising the living standards of the people. It also helps in increasing prosperity of a country and provides employment for skilled, semi skilled, unskilled labour. The role of Village and Small Scale Industries in the development of national economy have been stressed by the Government of India in its Industrial policy resolution of 1956 and in the successive five year plan documents. The main advantage of Small Scale Industries is that they provide large scale employment at relatively smaller capital cost, better utilisation of local resources moving towards decentralised society, increasing supplies of consumer goods and facilitate mobilisation of resources and skill which might otherwise remain unutilised.

In Goa, the major Small Scale units were located in the various Industrial Estates. There were 18 Industrial Estates in various Talukas of Goa. The Government of Goa started developing the Industrial Estate to attract more Industries and to develop the backward regions of the State.



#### **7.4 LIMITATIONS OF THE STUDY**

- i) Sample selected were limited to its existence in the past 5 years.
- ii) Absence of separate accounting department in the SSI units.
- iii) Unscientific record keeping system.
- iv) Selection of units from 1995 to 2001.
- v) Earlier records/Books of Accounts were not available consistently.
- vi) The study is also dependent upon the Annual Accounts provided by the Chartered Accounts of the respective units.
- vii) Most of the results were based on the survey conducted in the year 2000-2001.
- viii) A sample of 175 small units were chosen at random from selected industrial estates of the state for specific study. The study covered seven groups i.e. pharmaceuticals, electricals, electronics, chemicals, plastics, engineering and food & beverages.

#### **7.5 CHAPTERISATION SCHEME**

**1 Introduction** - An introduction is provided in the first chapter, covering definitions, growth pattern, review of literature used for the study, description of the problem, objectives of the study, research methodology and limitations of the study.

**2 Profile of the Units and of Entrepreneurs** - In second chapter, the profile of the units and of the entrepreneurs is given, classification of units, gestation period, employee wise classification, capacity utilisation, area of marketing and finally the socio-economic background of entrepreneurs.

**3 Accounting practices** - The third chapter is on accounting practices. It is classified into two - financial accounting, cost accounting practices.

**4 Capital Structure and financing patterns** - The details of capital structure and financing patterns and the problem faced by the SSI.

**5 Working Capital analysis** - Cash management, motives for credit sales, credit policy and inventory control methods.

**6 Profitability analysis** - The detail profitability analysis is done which covered P/V ratio, BEP analysis, Gross profit margin, net profit margin, return on net worth, on equity, fixed assets is done and analysis of cash profit to net profit, receivable management, composition of inventory were shown.

**7 Summary and Conclusion** - Seventh chapter covered about the summary, conclusions and recommendations.

## **7.6 SUMMARY OF MAJOR FINDINGS OF THE ENTIRE STUDY**

### **7.6.1 PROFILE OF THE UNITS AND OF ENTREPRENEURS**

The present study identified the following facts faced by the entrepreneurs and the units. Age wise classification of units, gestation period taken, pattern of organisation, employee wise classification, capacity, competition in the line of activity. The area of marketing, location of the unit, factors influencing location, decision, generation of the unit, sexual classification, religion, qualification, community status of the entrepreneurs, nativity, district, occupational factors.

Agewise classification of the units showed that there were maximum 30.86 percent of the sample were within the age group of 2 to 5 years followed by 52 units in the age group of 6 to 10 years while there were 4 percent units were in the age group of above 20 years.

Gestation period is the period where in there is no profits and loss of establishment expenditure. In our study it was noted that 30.86 percent of the total representing 54 units have zero to five months gestation period followed by 20.57 percent (36 units) were in six to ten month gestation period, 24 percent of the total units (42 units) were found in the 11 to 15 months gestation, while 31 and above months gestation period, 6 units (3.42 percent) were noticed.

Most of the small scale units were found in the form of partnership, 66 units representing 37.71 percent followed by sole traders 27.43 percent (48 units), joint stock company 25.57

percent, co-operative society 1.14 percent and 9.14 percent as joint family business.

Number of employees employed is one of the criteria to judge whether it is a small scale unit or large scale. It is clear that 37.14 percent small enterprises employed upto 20 employees followed by below 10 and 21 to 30 whose percentage is 22.86 for each while 10.86 percent units employed 31 to 40 employees in their enterprise and above 50 employees were employed in 4 units (2.29 percent).

Capacity utilisation study showed that 53.14 percent units (93 units) utilised below 75 percent capacity, 29.71 percent units utilised below 50 percent capacity, 13.71 percent units utilised above 76 percent while six units utilised below 25 percent capacity. The reason for under utilisation of capacity due to lack of demand, raw material and power shortage and also due to shortage of finance.

Turnover wise classification showed that 30.86 percent units, 54 units had a turnover of below 5 lakhs and 40 units have got turnover below 10 lakhs while 36 units have turnover of below 20 lakhs.

The area of marketing of small scale units is basically in the local market followed by marketing in other States and District market.

The major problem of small scale enterprise is the locational problem out of 175 units 163 units were located in village and rural areas. The factors which were influencing the most to the location decisions were due to subsidies and state aid followed by site cost, scope for expansion and access to customers and the least important aspect is the labour cost and proximity to raw material were least influencing factors.

It was found out that 74.29 percent units were the first venture started by the entrepreneur, 13.71 percent units were taken from others and 12 percent units were inherited one.

The gender wise classification of the entrepreneurs showed that 76.57 percent units representing 134 units were considered to be male entrepreneurs while 23.43 percent units. 41, units were run by female entrepreneurs. It was also understood that 42.86 percent representing 75 entrepreneurs were Hindu religion. 51 entrepreneurs out of 175 were Christian, 45 entrepreneurs were from other religions while 4 entrepreneurs were Muslim religion.

Educational background of the entrepreneur showed 64 entrepreneurs 36.57 percent were post graduates, 55 entrepreneurs (31.43 percent) were graduates and 39 entrepreneurs were technical experts while 14 of them were S.S.C.E., 3 were secondary level educated.

The Nativity of entrepreneurs were concerned it was found that 91 entrepreneurs (52 percent) were from Goa while 84 entrepreneurs (48 percent) were from other states. The occupational background of the entrepreneurs showed most of the entrepreneurs were either employees, artisans/traders or partners of the same units while 42 entrepreneurs have told that they were unemployed before and 8 entrepreneurs were the retired employees. further investigation of the entrepreneurs found that 163 entrepreneurs (93.14 percent) have got some managerial or technical experience which is very much essential for the successful conduct of the business.

Motivation to take up the line of activity is mainly come due to better prospects which have the highest rating (4.39 mean value) followed by self employment (4.22 mean value) due to subsidies 4.20 mean value. The other factors also motivated the entrepreneurs to take up the line of activity were supports from friends (encouragement), his experience and due to infrastructural facilities.

#### **7.6.2 ACCOUNTING PRACTICES**

Among Small Scale Industry only 89 enterprises representing 50.86 percent maintained a separate accounting department while 86 enterprises representing 49.14 percent did not have a separate accounting department. As a result, they

were unable to know exactly what is the correct profit and losses on time and leads to wrong decision making.

Majority of the small enterprises followed Double Entry System of Accounting i.e. 171 units (97.71 percent) while only four units representing 2.29 percent followed Single Entry. In Double Entry System the entrepreneurs know the suffering of both the side of transaction.

It is interesting to note that all the sample units of small scale units were found to have prepared a voucher register. 121 units representing 69.14 percent units followed date-wise voucher and 54 units representing 30.86 percent followed transaction-wise basis for voucher register.

Different units maintained different types of Journals as per their convenience. 74 units representing 42.29 percent maintained one journal, 21 units representing 12 percent maintained two journals, 53 units representing 30.29 percent maintained three journals while 27 percent representing 15.43 percent maintained five and above journals.

131 small scale enterprises maintained General Ledger to record the transaction while 44 units representing 25.14 percent maintained General Ledger and other Ledgers too.

Cash Book is one of the important ledgers which gives the details about the cash received and cash paid. It is good to record that all the 175 small scale units maintained the Cash Book.

While Petty Cash Book is maintained by only 23 enterprises, rest 152 units were satisfied only with the Cash Book and no Petty Cash Book.

Bank Reconciliation Statement helps to bring the correctness and accuracy in the Books of Accounts. Transactions which were passed in Bank Pass Book were sometimes missed out in the Cash Book and creates the imbalance between Cash Book and Bank Pass Book. This can be sorted out only through Bank Reconciliation Statement. The study showed that 119 units representing (68 percent) prepared a Bank Reconciliation Statement while 56 units were not bothered about to follow this system to bring accuracy to the financial statement.

In case of small scale units the depreciation is been calculated by the private auditors which can be seen from the study that showed 156 enterprises representing 89.14 percent utilised private auditors while 19 units calculated depreciation by their own Accounting Department.

The method of depreciation followed by SSI were mainly Diminishing Balance Method and Straight Line Method, but the study revealed that 169 units representing 96.57 percent followed Diminishing Balance method. While only 6 units were followed Straight Line Method of Depreciation. The method of depreciation should not be changed frequently.



The entrepreneur should be aware of the methods of depreciation followed. The study showed that 147 entrepreneur were aware of the methods of depreciation to be followed while 28 entrepreneurs were ignorant about it.

The purpose of providing depreciation is mainly for various nature like tax planning, replacement of the asset, maintaining the capacity etc. it is understood that 101 units (57.71 percent) provided depreciation for tax planning point of view, 9 entrepreneurs provided depreciation to replace the assets, 13 entrepreneurs provided for maintaining its working capacity, while 52 entrepreneurs provided depreciation due to all of the above reasons.

Financial reporting keeps the management and other stockholders informed about its achievements and development from time to time. Financial reporting helps to take the financial decision of a business unit. Financial reporting includes **Directors Report** : the study revealed that 15 enterprises prepared the directors report out of 175 units while Profit and Loss Account and Balance Sheet was prepared by all the units. Auditors report was also given by all the units. It is mainly they have to get their Books of Account approved by the Auditors to build the confidence of the shareholders. It was identified that only 26 units gave a note on Profit & Loss Account. 80 units representing 45.71 percent of the total followed schedules to

Balance Sheet, 12 units (6.86 percent) provided the five years result in brief along with annual report. 68 units representing (38.86 percent) showed the financial ratios along with the financial statements. 14 units (8.00 percent) reported about the accounting policies followed in their financial statements. 55 units representing (31.43 percent) presented fund flow statement. Only two units provided the value added statement along with financial statements. While it is shocking to report that non of the SSI units reported the Inflation Accounting Statement, Human Resource Accounting Statement, Social Accounting Statement, which were very much essential to discharge the various social obligations of the business. Segment reporting is a new upcoming area of reporting which was followed by 45 units (25.71 percent). Thus, it is noted that the SSI units followed all traditional method of reporting and neglecting the latest modern financial reporting practices.

The form of presentation of Profit & Loss Account and Balance Sheet were traditional form and Tabular form. 155 units (88.57 percent) presented Profit & Loss Account in the Traditional form and 20 units (11.43 percent) followed tabular form. While the Balance Sheet is also presented in the Traditional form 115 units (65.71 percent) and 60 units followed the Tabular form of Balance Sheet.

#### **7.6.2.1 COSTING**

Costing is also another system of Accounting which helps the management accountant to take various decisions regarding pricing, determination of cost of product, cost of each activity and others. But as far as small scale units were concerned they have shown some sort of unfamiliarity with the cost accounting which can be understood from the very first aspect itself i.e. maintenance of costing department where in only 21 units maintained it while large majority of SSI units i.e. 154 units representing 88 percent have not maintained a separate Costing Department. Separate Costing Department is a must to keep upto date records of costing and small scale units must maintain a Costing Department.

Methods of costing adopted were Job Costing, Process Costing, Contract Costing, Operating Costing and Batch Costing. Process Costing was used by 64 units (36.57 percent), Job Costing is followed by 47 units (26.86 percent). Batch Costing was used by 28 units (16 percent), Contract Costing was used by 20 units (11.43 percent) and Operating Costing was followed by 16 units (8.57 percent). Thus it is used as per the nature of the Industry and its product. The method will be selected as per the suitability and convenience of the entrepreneurs.

The material issue pricing is done on the basis of First-in-First Out (FIFO) 70 units (40 percent), whereas Average Method is followed by 63 units (36 percent) while Last-in-First Out method is followed by 42 units (24 percent).

The cost of wages, mainly consists of contract wages, piece wage and time wage. Contract Wages were given in 68 small enterprises, piece wage is given in case of 55 small enterprises while 52 units gave Time wage to their employees. Contract wages doesn't build up the loyalty and commitment among the workers. It may be cheap in the short run but in the long run it is a big loss for the small scale units.

Overheads cost was allocated based upon the material cost, Labour cost basis, Machine hour rate, Labour hour rate and Rate per unit output. 61.14 percent of small scale units (107 units) allocated their overheads based on machine hour rate. 39 units (22.29 percent) followed labour cost basis, 16 units (9.14 percent) followed material cost basis, 10 units were as per rate per unit output and 3 units were on the basis of labour hour rate method.

Determining of product is one of the important exercise the Cost Department have to do. 132 units representing 75.43 percent of the sample units followed Average Cost to determine the product cost while 43 units (24.57 percent) followed Marginal Cost as product cost.

Inventory valuation is an art. It can be valued on the basis of market value, cost value, cost or market whichever is low. The study of the units revealed that cost price and cost and market value whichever is less were both followed by 61 units each while market price valuation was done incase of 53 units. Cost or

market price whichever is less creates some sort of secret value and as a result it will not show the correct picture as per current prices.

Fixing material standard is a must to maintain the desired quality. The study showed that 128 units (73.14 percent) fixed material standard every time while 47 units (26.86 percent) have not fixed any material standard.

Setting labour cost standard also helps to plan the use for the required number of labour force and the amount. In small scale units setting labour cost standard was done in case of 49 units (28 percent) while 126 units (72 percent) did not fix any labour standard.

Every small business enterprises should have a cost centre which regulates and controls the cost and maintains the detail records of cost of a particular activity. But in Goa, the small scale units have a different pretence altogether. 137 units (78.29 percent) did not have a cost centre while 38 units (21.71 percent) have a cost centre to regulate.

Fixing overheads standards is again another important issue in costing but in small scale units it was only 24 units (3.71 percent) which fixed overhead standards where as 151 units (86.29 percent) did not fix any overhead standards.

A study conducted to know the Variance analysis showed that material cost variance was followed in 38 units (21.71

percent) while 137 units (78.26 percent) have not follow material variance. Labour cost variance is another variance analysis . The study showed that 33 units (18.86 percent) used labour cost variance, while 142 units (81.24 percent) did not use labour cost variance. Overheads variances were followed by 13 units (7.43 percent) whereas 162 units (92.57 percent) have not use any overheads variances. Small scale units must follow variance analysis which guides them and controls their cost from all the angles.

In any business operation budgeting plays a crucial role and Small Scale units were no exception. The budgets were prepared by various parties such as Accounting Department, Private Auditors or owners. 124 enterprises reported that their budgets were being prepared by their owners themselves, 38 units showed they got the work done through some outsiders or experts while 13 enterprises revealed that the budgets were prepared by their own accounting department.

Small Scale units were not familiar to preparation of budget manual which can be seen from the study that as many as 161 units (92 percent) have not prepared Budget manual and only 14 units (8 percent) prepared the budget manual. 120 units representing (68.57 percent) revealed that they prepare budget for a short period/short run only. While 55 units prepared budget for the long run purpose.

10 units representing (94.29 percent) did not prepare Master Budget. Master Budget is a must for any business organisation to bring about overall check and control over all the activities of the business. Without Master Budget the unit is handicapped and to coordinate and control becomes difficult. It is a good thing that all the sample units of Small Scale Industry prepare the budgets. Some were preparing only functional budget while some were preparing both functional and master budget to plan, coordinate and control their business activities.

### **7.6.3 CAPITAL STRUCTURE**

With regards to the capital structure and financing pattern is concerned. The study of the small scale enterprises and their overall debt equity ratio revealed that debt capital is more than the equity capital. The overall average showed 62.05 percent debt capital in the total capitalisation of small scale enterprises and 37.95 percent is the equity capital. It is mainly the small scale units want to keep the total financial structure more flexible which gives them lots of option to go for Capital Gearing and trading on equity. Debt equity ratio as per the units showed 72.57 percent representing 127 units were in between one and two debt equity ratio. 32 units (18.29 percent) were in above two debt equity ratio and 16 units (9.14 percent) were below one debt equity ratio. 32 units whose ratio is above two were ready to take any risk and have a very flexible type of capital structure. The financial

manager is having lots of option to go for Capital Gearing and trading on equity. Investors considered it as a risky venture. 127 units were in between one and two ratio showed moderate risk involvement. They were not yet reached to the extreme. They always want to play safe and remain in the middle. 16 units whose debt-equity ratio was below one were very conservative which did not want to take any risk. The return earned by the equity shareholders here is comparatively low. They prefer more of equity capital in their total Capital Structure. This type of Capital Structure will be more of a rigid nature which will be difficult to make any change in the future.

The long term debt equity ratio indicated the average long term debt. The overall ratio of 0.96 showed the more or less equitable proportion of debt and equity. Larger proportion of long term debt is desirable in case of small scale units in view of its stability and unpredictability of profits. The financial strength of these units is strong and the financial risk is low. The long term debt-equity ratio is more than the overall average ratio in case of electricals and plastic units. The Capital Structure ratio of long term debt to equity in terms of units were 116 units whose ratio was below one. 26 units (14.86 percent) were between the ratio of one and two while 3 units (1.71 percent) had a debt-equity ratio above two.

Interest coverage ratios were computed in order to relate the financial charges of the small scale units to its ability to pay them.



The interest coverage ratio showed average of 39.45 percent is the interest on the long term debt for all the industries. The percentage was higher than the average in case of electricals 40.81 percent, electronics 42.18 percent, engineering 41.42 percent and food & beverages 39.82 percent. The overall interest coverage ratio showed 1.53 and industry wise chemicals got the highest 1.80 followed by plastics 1.62 and pharmaceuticals 1.56 while the lowest ratio was noticed in case of electronics 1.37, engineering 1.41, electricals 1.45 and food & beverage 1.51. Interest coverage ratio according to units wise showed that 69 units were coming under two to three ratio of interest 67 units were under the interest of one and two, 24 units were under the interest rate of 3.1 to 4.0, 8 enterprises were under above four and below 5 category, 3 units in the category of 5 and below 6, 3 units in case of 6 to 7 percent and one unit which is from food and beverages was under the category of seven and eight.

Investment in the fixed and working capital showed that 56.14 percent of the total invested in acquiring the fixed assets while 43.86 percent of the total investment was invested in financing the various working capital needs. The average ratio of fixed capital to working capital showed 1.28 while industries like pharmaceuticals 1.5, chemicals 1.46, engineering 2.40 and food and beverages 1.47 showed higher ratio than the average overall ratio.

Among all these sources the major fixed capital financing agency for small enterprises was commercial banks which provided 60.21 percent of their total fixed capital needs, followed by other sources 14.36 percent, Maharashtra State Finance Corporation 5.15 percent, financial institutions 10.17 percent and through Government subsidies 10.11 percent.

Working capital needs of small scale units were from the banks, own source and through other sources. Working capital is more crucial to small scale units than the fixed capital. The study of sources of working capital requirement borrowed revealed that 71.91 percent of the total working capital requirements were from banks, 9.06 percent of the total working capital was from the own source and 19.04 percent of the total was from other sources. From the banks the engineering units were the highest utilisers 80.11 percent followed by chemicals 76.24 percent. For own source, electronics 15.12 percent was the highest utilisers followed by food & beverages 10.18 percent. While from other sources electricals was the highest 24.76 percent followed by electronics 24.07 percent.

Sources of equity base were equity shares, retained earnings and subsidies received from the Government. In this case the entrepreneur did not have to ask the external parties to lend finance for his business. From the above study it is clear that 86.61 percent of equity base came from the equity share capital.

While 8.86 percent of equity base came from retained earnings and 5 percent was from subsidies from the Government. Industry wise engineering 90 percent utilised the highest amount through equity shares followed by chemicals 89 percent. Electronics units were the highest user of retained earnings 12 percent followed by pharmaceuticals and food & beverages 10 percent each. While subsidies, it was the pharmaceuticals 8 percent followed by electricals and food & beverages 6 percent each.

The different types of loans used by the small scale units were Term Credit, Cash Credit and Bills facility. The Term Loan was used by all the sample units except three units in case of plastics. Cash Credit was used by 161 units overall which included 20 units of pharmaceuticals. All 25 units each in case of electricals, plastics, engineering, 21 units of electronics, 23 units of chemicals and 22 units of food & beverages. Bills facility was used by seven units which included 2 units each in case of pharmaceuticals and engineering, three units each in case of plastics and food & beverages. Term loan is considered to be the long term loan and Cash Credit and Bills facility is considered to be the short term loan.

The term loans were given at a varied interest rates. Three units (1.71 percent) were given term loan at below 10 percent interest rate, 66 units representing 37.71 percent were given term loan at 11 to 15 percent interest, 70 units representing 40 percent

were given at 16 to 18 percent interest, 28 units (16 percent) were given at 19 to 21 percent interest while 8 units (4.57 percent) were given term loan at 22 to 24 percent interest rate. The main user of term loan in below 10 percent interest rate were pharmaceuticals (2 units) and electricals (1 unit), 11-15 percent was chemicals and engineering with 12 units each followed by plastics (10 units), 16-18 percent was the plastics (14 units) followed by pharmaceuticals (12 units), 19-21 percent was electricals and electronics with 8 units each followed by pharmaceuticals and food & beverages with 4 units each and in 22 to 24 percent was electronics with two units and rest all of them with one unit each.

The short term loans acquired by the small scale units were at a various interest rates which showed that below 10 percent interest rates there were 09 units (5.14 percent) with chemicals (3 units) and pharmaceuticals and electronics with two units each were maximum users. In 11 to 15 percent interest rate there were 70 units (40 percent) with electricals and chemicals with 12 units each were at the top of the list. In 16 to 18 percent interest rate there were 64 units which used this and the main users were pharmaceuticals 12 units and food & beverages 11 units each. In 19 to 21 units there were 16 units (9.14 percent) who used this loan was plastics and electronics 4 units each followed by food & beverages 3 units. In 22-24 percent interest rate there were 10 units which used short term loan and the main units which used this loans were engineering with 3 units followed by electronics

and plastics two unit each. In 24 percent and above there were six units (8.43 percent) with plastics (3 units) and electronics with 2 units were the main users.

Obtaining finance whether short term or long term it is not an easy task. A unit have to produce proper documents, its credit worthiness will be judged based on the various information provided financial or non-financial in nature. The study showed that 135 units (77.14 percent) have faced problems in obtaining finance while 40 units (22.86 percent) reported no problem. The main industries which faced the major problems were engineering (22 units) followed by electronics (21 units). The problem of obtaining finance is due to various reasons such as credit squeeze, security, delay in sanctions and distribution and due to corruption problem. The credit squeeze problem showed an overall average mean of 4.14 which represent high problem of obtaining finance. Units like electronics (4.24 mean), chemicals (4.20 mean), plastics (4.44 mean) and engineering with (4.32 mean value) were reported higher problem than the overall average mean value.

Providing security to the loan granted is another problem faced by the Small Scale Industries. Since the banks and financial institution demands security for the loan granted by them it becomes very difficult for the small enterprises to arrange for the same as a result security becomes the most important problem among rest of all problems. The overall average mean value

showed 4.29 high problem again of obtaining finance. The units like food & beverages (4.52 mean), plastics with (4.44 mean), chemicals with (4.32 mean value), electricals (4.28 mean) and pharmaceuticals with 4.24 mean value were reported higher than the overall mean value. Security is the main problem in obtaining finance for all the small scale units.

Another problem in obtaining finance is delay in sanction and disbursements of loan. The average overall mean value showed 3.87 while units like chemicals 4.04 mean value, plastics 4.04 mean and food & beverages 3.96 mean value were found having higher mean value than the average overall mean value. The average overall mean value showed moderate effect.

Term loan have to be repaid back over a period of time. It may vary anywhere between the first month to indefinite period of time. It have been noted that there were five units (2.86 percent) whose repayment period of loan starts from first month onwards it is mainly from two units of food & beverages and one unit each in case of chemicals, plastics and engineerings. Repayment period of term loan starts from after gestation period were 34 units representing (19.43 percent) while maximum units, 136 units (77.71 percent) whose repayment period starts from after a definite period of time. The main units were electronics (22 units) followed by electricals and chemicals with 21 units each.

Repayment period have to be properly fixed without affecting the working capital requirement nor liquidating the fixed assets.

Repayment period of short term loans again varies from first month onward till after a definite period. Here the picture is exactly opposite to that of long term loans. In case of 146 units (93.43 percent) and the main units that came under this category were plastics (24 units) chemicals and food & beverages with 22 units each. 8 units (4.57 percent) which borrowed the short term loan whose repayment period starts after the Gestation period while 21 units representing 12 percent whose repayment period starts after a definite period.

Study conducted to know whether the small scale entrepreneurs were regular in making the payment on time. There were 19 units (10.86 percent) who did not respond either positively or negatively. They did not response mainly they want to keep this information bit confidential. They were quiet suspicious. 30 units representing (17.14 percent) have said they have failed to pay the loan installments on time and the main units were chemicals and food & beverages with 8 units each followed by engineering 6 units. While 126 units representing (72 percent) replied saying they have not failed to pay the loan installments on time and the most successful enterprises were the pharmaceuticals 20 units followed by electricals and electronics with 19 units each. Quick payment of loan installments builds up the confidence of the

creditors/lenders which leads to increase in the credit worthiness of the business.

#### **7.6.4 WORKING CAPITAL ANALYSIS**

Cash management is one of the key area of working capital management. Cash is the most important current asset for the operation of the business. Working capital cycle starts with cash and ends with cash alone. In order to manage cash smoothly and efficiently the small scale units must understand motives of holding cash. The motives behind holding cash were transaction motive, pre-cautionary motive, speculative motive and compensating motive. the main motive behind holding cash is transaction motive which represents 83.81 percent overall average percentage in which food & beverage with 89.10 was at the top most followed by plastics industries with 88.11 percent. While industries like electricals and engineering had cash holding motive more than the overall average. Pre-cautionary motive was the second important soon after transaction motive, which represented a 14.62 percent overall percentage in which electronics with 21.29 percent was the highest followed by engineering 16.09 percent. The units like pharmaceuticals and chemicals have got pre-cautionary motive more than the average overall pre-cautionary motive. Due to speculative motive of holding cash was 1.57 overall where in pharmaceuticals (4 percent) and chemicals (3 percent) was at the top while



compensatory motive of holding cash did not exist among the small scale units.

Cash planning helps to anticipate future cash flows and needs of the firm and reduces the possibility of idle balances and leads to maximum utilisation of the cash. Cash planning is done according to time factor such as daily, weekly, monthly, jobwise, projectwise. 15.43 percent of small scale units representing 27 units planned cash on daily basis and the industry which favour this most were food & beverages and electronics with 8 units each followed by electricals 4 units. 19.43 percent units (34 units) one planned cash on weekly basis and the main followers of this system were electricals (9 units) followed by engineering (8 units). 52.57 percent (92 units) followed cash planning on monthly basis and the major industries were plastics (20 units) followed by chemicals (18 units). Cash planning according to jobwise or projectwise were 22 units where in engineering with 10 units and pharmaceuticals with 5 units were on the top of the list.

Cash planning is done on the basis of net cash forecasted by preparing cash budget, forecasting the overall working capital position and also with the help of the previous experience. Cash budget is used as a tool or technique of cash planning by 47 units (26.86 percent) in which food & beverages with 10 units followed by plastics 9 units were on the top of the list. 44 units representing (25.14 percent) used cash flow statement to plan the

cash position of the units wherein engineering with 11 units and electricals with 7 units were on the top position. To plan cash previous experience helps a lot specially among small scale units which showed 84 units (48 percent) planned cash based upon their previous experience. The industries which showed higher faith in it were pharmaceuticals 16 units followed of cash planning rather than any other tools.

When there is a cash shortage due to wrong planning of cash, it leads to a very panic situation in a business specially the small scale units. It may be frequently, occasionally or sometimes never if we plan well. 91 units representing 52 percent had the severity of cash shortage very frequently and the main industry which fall back on this were food & beverage 19 units (76 percent) followed by electricals 18 units (72 percent). Occasionally the severity of cash shortage came in case of 84 units representing 48 percent whereby chemicals with 17 units (68 percent) and engineering with 16 units(64 percent) were on the top while there have been a situation where in the severe cash shortage problem did not exists among the Small Scale Industries.

An observation in the working capital analysis indicated that the reasons for cash shortage were various such as delay in the realisation of book debts, stock holdings, credit squeeze, diversification of funds and lack of proper planning. One of the most highly rated reasons for cash shortage is the delay in the

realisation of book debts which showed 4.13 as average overall mean value where in the industry like pharmaceuticals (4.16 mean), chemicals (4.16 mean), engineering (4.64 mean) which were higher than the average overall mean value. The average overall mean value reflected the shortage of cash is very high. While the industry like food & beverages (3.52 mean) and electronics 4.04 were the least affected due to delay in the realisation of book debts.

Stockholdings is another reasons for cash shortage which is shown by the mean value of 3.94. The investigation showed that units like electricals (4.00 mean value), electronics (4.12 mean value), chemicals (4.08 mean value), engineering (4.28 mean value) were higher than the average overall mean value. While units like food & beverages, pharmaceuticals and plastics have affected at a very low level due to stockholdings.

Cash shortage comes in small scale units due to credit squeeze. Credit squeeze by banks due to low performance of the small scale units and irregular payments of credit granted. The average overall credit squeeze can be seen by the overall mean value of 3.86. While some of the units like electricals (4.12 mean value), electronics (4.16 mean value) and plastics (4.44 mean value) have got higher mean value than the average overall mean, resulting in greater cash shortage than what is expected while units like pharmaceuticals (2.36 mean), chemicals and

engineering with 3.60 mean value each were well within the control of the business units.

Diversification of funds for which it was allocated leads to shortage of cash for the activity. This misappropriation of funds create a big problem for the small scale units. The problem is at the low level which can be seen by the average overall mean value of 2.56. Industry like pharmaceuticals (2.68 mean), electronics with (2.88 mean) and food & beverages with (3.08 mean) had slightly higher cash shortage than the average overall. While industry like electricals (2.36 mean) and plastics (2.40 mean value) had the least cash shortage due to diversification of funds.

Faulty or wrong cash estimate and plans will leads to shortage of cash among the small scale units. Cash shortage due to lack of proper planning is reflected by the average overall mean value of 2.98. It is very low problem but units like electricals (3.40 mean), electronics (3 mean), plastics 3.64 mean had higher shortage of cash compared to the average overall mean value. Whereas units like engineering (2.16 mean) and pharmaceuticals with 2.76 mean were least affected due to lack of proper planning.

Cash management is necessary in order to avoid cash shortage. Cash shortage is the main cause of the downfall of small scale units. The impact of cash shortage have some severe effects on foregoing the opportunities, borrowing at higher interest rate, reduced production and unable to pay the loans

installments. Lack of cash in hand leads to foregoing the opportunities, specially for small scale units. The overall foregoing opportunities due to cash shortage were moderate which can be seen from the average overall mean of 3.21 while industries like electronics (3.32 mean), chemicals and food & beverage with 3.28 mean value and plastics 3.40 mean which represented higher impact of cash shortage than the overall average.

Higher cash shortage drives the small scale units to borrow the additional finance at a very high interest rate which ultimately reduces the profit. Due to cash shortage units were forced to borrow the cash at a very high interest rate which is evidenced from the average mean value of 4.16. Units like electricals (4.20 mean), plastics and engineering with 4.28 mean value each had more problem than the overall situation but units like food & beverage (3.64 mean) and electronics (4.00 mean) had the least of impact.

Curtailement of production due to shortage of cash is the least expected step in the business. Low capacity under utilisation of the capacity which ultimately leads to reduced profit and low productivity. among the small scale units it was found that 3.60 is mean value which is considered moderate but industries like electronics with 3.76 mean, chemicals with 3.84 mean value, plastics with 4 mean value and food & beverages with 3.72 had greater impact than the average overall impact while

units like pharmaceuticals (3.04 mean) and engineering with 3.40 had the least impact on cash shortage.

Loans, dues and credit can be settled only when the units makes good profit. In absence of reasonable profit the small scale units will be unable to repay the loans which creates distrust and low credit worthiness. The overall situation can be seen with average overall mean value of 3.63. In case of pharmaceuticals (3.84 mean), plastics (3.96 mean value) and electronics and chemicals with 3.68 each mean value showed higher impact of cash shortage than the average overall while in industries like food & beverages (3.20 mean) and electricals with 3.48 mean were the least affected due to cash shortage.

In small scale units the sales were composed of cash sales and credit sales. The average overall cash sales showed 34.56 percent with industry like food & beverage (45.90 percent) and plastics (47.87 percent) while credit sales were consisting of 65.44 percent overall. Industry wise credit sales were higher in case of engineering (75.11 percent), electronics with 72.41 percent and electricals with 70.41 percent. Small scale units although preferred cash sales but they cannot do anything about it, due to the competitiveness of the business, internet and computers. The policy of buy now pay latter still stand strong.

The motives of credit sales were varied in nature which include as to face the market competition, as an obligation and as

a tradition to face the market competition have got the highest importance among the other factors. 66.11 percent of the total credit sales is to face the market competition and the industries which gave more importance to this factor were food and beverages with 75.61 percent of the total and electronics with 70.96 percent while industries like plastics (50.21 percent) and chemicals with 58.15 percent were influenced the least. As an obligation to increase the sales and to keep intact the market share, small scale units have to sell goods on credit. The overall average percentage showed 20.33 percent while units like plastics (40.98 percent) and chemicals with 26.67 stands above the overall average percentage. As a tradition 13.56 percent of the sale is on credit basis. Industry wise units like pharmaceuticals (15.67 percent), electronics (18.58 percent), chemicals (15.18 percent) and food & beverages (14.18 percent) have higher rank than the average overall percentage. While units like plastics (8.81 percent) and electricals with (10.42 percent) were influenced less by this traditional factors.

Credit worthiness of a small scale units can be judged based upon the evaluation of the following : *Bank reference, Trade reference, financial status and Government Departments.* Bank reference is concerned, it have 0.71 percent share of the total. It is mainly banks keep all the information of customer as confidential and it is very difficult to judge the credit worthiness of the unit. Only in case of food & beverage it was found (2.10

percent) and pharmaceuticals with 1.95 percent. Trade reference affects 14.58 percent which included food & beverages (22.71 percent) and chemicals with (19.81 percent) as the highest. Financial statement evaluation to judge the creditworthiness of a Small Scale Industry is the main basis of deciding the credit policy which represents 55.75 percent of the total credit basis. Industry wise it was chemicals (62.50 percent) and electronics (61.18 percent) were at the top of the list while engineering (35.18 percent) was at the lowest.

Government department also gives the credit worthiness of the small scale units. Government judges the units based upon its past performance and its plans and policies. Government department gave 28.96 percent of the total credit worthiness. It stood second after the financial statement. Government gave credit worthiness highly for engineering 58.81 percent followed by pharmaceuticals 36.77 percent while the least among them was chemicals (17.69 percent) and food & beverages 14.68 percent.

Credit period is the length of time for which credit is extended to customers. If sanctioned depends upon the past record and the regularity of payments made by the customers. 12 units sanctioned credit period upto one week to their customers and the main units were food & beverages (5 units) followed by pharmaceuticals and plastics with two units each. 29 units sanctioned credit for a period of one week to three weeks. Again



food & beverage with 10 units and pharmaceuticals and plastics with six units each were at the top position. In the credit period of three weeks to five weeks were given by 50 units. The main units which were at the top position were chemicals and plastics with 9 units each followed by food & beverage (8 units). Credit period sanctioned 5 weeks and above were 74 units which included electronics and engineering 18 units each followed by electricals 15 units. Industry like food & beverage with two units and plastics with 8 units were the lowest in the particular category.

Credit collection period of small scale units varies from industry to industry and customer to customer. 31 units (17.71 percent) on an average have a collection period of upto one month where in food & beverage 8 units (32 percent) followed by pharmaceuticals and plastics 6 units each. 46 units (26.29 percent) had a credit collection period between one month to three months in which 12 units (48 percent) followed by plastics 8 units (32 percent) were at the top in this category while engineering with 3 units was the lowest. 58 units representing (33.14 percent) have a credit collection period between three months to five months. The units which came at top of this category were electronics with 11 units followed by chemicals 10 units while pharmaceuticals with 5 units is at the lowest. In the category of 5 months and above there were 40 units representing 22.86 percent wherein engineering with 11 units followed by electricals and chemicals with 8 units each was at the top in that group. Credit collected

also determines the strength of working capital of a small scale units.

The policy adopted by the small scale units to recover the credit granted to the customers were as follows chasing with letters, through personal contact, offering various cash discounts and priority in supply. Chasing with letters for prompt payments of credit is one of the common and highly rated policy. It is represented by an average overall mean value of 4.19. The small scale units like electricals (4.40 mean), electronics (4.29 mean), chemicals (4.44 mean) and engineering (4.20 mean) were found more rigorous in sending letters to remind the customers to make prompt payments while food & beverage with 3.96 was rated the lowest among them. Prompt payment of credit is possible mainly through personal contact which is rated very high with a mean value of 4.75 but units like electricals, electronics and engineering with 4.80 mean value each followed by chemicals and plastics with 4.76 mean value were rated higher than the overall average mean value. While pharmaceuticals with 4.64 mean was the lowest in this category. Offering cash discount for prompt payment of dues is again an important policy to recover the credit. Cash discount policy showed 3.29 mean value wherein units like pharmaceuticals with 3.32 mean, electronics with 3.68 mean, plastics with 3.96 and food & beverage with 3.44 were reported higher than the average overall mean. While engineering with 2.56 mean value were reported lowest. Another policy adopted for

prompt payment of credit is priority in supply. The customer who makes prompt payment will be given special treatment when it comes to supply of products were concerned. The priority in supply was rated with an overall mean value of 3.88 in which pharmaceuticals with 3.92 mean, engineering with 4 mean value and food & beverage with 4.20 mean were found above the average overall mean value while plastics with 3.64 mean value were reported the lowest among them.

Overall the main policy that the small scale units relied upon one personal contact (4.75 mean) followed by chasing with letters with 4.19 mean value, priority in supply with 3.88.

The composition of inventor in small scale units revealed the average overall raw material consisted of 29.38 percent where in industry like electricals (37.01 percent), electronics (31.13 percent), chemicals (32.27 percent) and food & beverage (31.2 percent) kept raw material stock more than the average overall position. Work-in-progress is another component of inventory. It consists of 13.74 percent of overall average work-in-progress, but industries like pharmaceuticals (16.02 percent), electronics (19.16 percent), plastics (14.19 percent) and engineering with 16.81 percent were found having work-in-progress more than the overall average like while chemicals units with 9.11 percent were reported the lowest among them all. The maximum portion of inventory in small scale units were found with finished goods with an average

overall 56.88 percent. The finished goods kept by chemicals units (58.62 percent), plastic with 65.07 percent, engineering with 57.75 percent and food & beverage with 60.08 percent were found with more finished goods than the overall average. Industry like electronics with (49.71 percent) is reported too with the lowest stock of finished goods.

To determine the optimum level of inventory which involved two types of cost: Ordering cost and carrying cost. Order cost is used in case of raw material and included the entire cost of acquiring raw materials. The order system followed by the small scale units were as follows, single order, according to need Economic Order Quantity (EOQ) is determined or fixed quantity system. Single Order System was followed in 14 units (8 percent) where in plastics with 5 units followed by electronics 3 units were the main followers. Most of the small scale units order the goods/raw material as and when the need arises which is seen that 101 units representing 57.71 percent ordered as per their needs. The main industry which followed this system is pharmaceuticals 18 units (72 percent) followed by engineering with 17 units (68 percent) while chemical units were reported the lowest with 5 units (20 percent). Order is given after EOQ is in 8 units (4.57 percent) where in pharmaceuticals with 3 units (12 percent) followed by chemicals 2 units (8 percent), engineering 2 units (8 percent). Fixed Quantity order system was followed by 52 units (29.71 percent) and the main follower of this system were

chemicals 16 units (64 percent) followed by food & beverages with 10 units (40 percent) while pharmaceuticals and engineering with 4 units (16 percent) each were reported to be the lowest user of this system.

ABC analysis of Inventory Control Technique was been used when there were many items in the Inventory. It helps the small scale units to give more attention and importance to inventory which is very important and make the best use out of it. Among the small scale units ABC Analysis was followed incases of 91 units (52 percent). The main users were chemicals 19 units (76 percent), electricals 17 units (68 percent), electricals 16 units (64 percent) in case of plastics it was 5 units (20 percent) and food & beverage with 9 units (36 percent) were the lowest users. All together 84 units (48 percent) have not used ABC technique of Inventory control.

Economic Order Quantity is a Quantity of materials to be ordered which takes into account the optimum combination of bulk discounts from high volume purchases, usage rate, stock holding cost, storage capacity, order delivery time, time, cost of processing the order. It is the optimum size among the small scale units it was reported that 167 units representing 95.43 percent have not followed E.O.Q. while only 8 units (4.57 percent) followed the E.O.Q. System of Inventory control. The industry which used

E.O.Q. were pharmaceuticals 3 units (12 percent), chemicals and engineering with two units each one unit of electricals.

Maintenance of base stock or safety stock is very much essential for any business unit. This stock helps to make some alternate arrangement before it is completely utilised. Minimum level of stock or base stock is necessary for the small scale units too. The study revealed that 162 units representing 92.57 percent maintained the base stock while 13 units reported not kept any base stock they included 6 units of food & beverages (24 percent), four units of electronics (16 percent) and three units of electricals (12 percent). Base stock helps to keep the production and manufacturing activities continuous.

Minimum level of inventory were maintained based upon the consumption pattern and the lead time. In case of Small Scale Industry minimum level of inventory level is maintained based upon the consumption pattern which can be seen that 124 units represented by 70.58 percent. The main follower of this system were engineering with 23 units (92 percent), electricals 20 units (80 percent) and electronics with 21 units (84 percent) while lead time system was followed by 51 units (29.14 percent) where in chemicals with 18 units (72 percent) and pharmaceutical and food & beverage with 8 units each were the main followers of this lead time system.

Optimum level of Inventory maintenance is a must for the smooth and efficient functioning of the small scale units. The optimum level of inventory is based upon the storage space, price changes, availability of funds, credit facility available, supply condition and future demand.

Optimum level of inventory is based upon the storage space. The average overall mean value of storage space showed 2.94 which is a very nominal problem for small scale units. Industries like pharmaceuticals (3.40 mean), chemicals (3.20 mean), engineering (3.00 mean) were reported having higher level of stock as compared to the overall average stock. Units like plastics (2.64 mean) and electricals with 2.68 mean were found at the lowest level. Price fluctuation is another reason for maintaining optimum level of stock among the small scale units. The overall average mean value showed 3.46 while units like electricals 3.80 mean, electronics with 3.76 mean, chemicals 3.52 mean value were found higher then the overall average mean value. While units like food & beverage with 2.88 mean was reported the lowest among them.

Availability of funds is the major factor that comes on the way of optimum level of inventory. It is represented with average overall mean value of 4.02 which was very high problem. Availability of funds were the major reasons that restricted the small entrepreneurs to maintain the optimum level of inventory.

Units like electricals with 4.32 mean, electronics with 4.36 mean, engineering with 4.20 mean and food & beverage with 4.08 mean were reported having higher mean value than the average overall mean in funds position and availability of credit facility that comes on the way of optimum level of inventory. The overall average mean value showed 3.91 and units like pharmaceuticals with 4.00 mean, electricals with 3.92 mean, chemicals with 4.44 mean, plastics with 4.20 mean and food & beverage with 4.28 mean value have shown greater need than the average overall value.

Continuous supply of raw material is another factor needed to maintain optimum level of inventory among the small scale units. The supply condition is represented by a mean value of 3.42. The units like electricals with 3.56 mean, chemicals with 4.28 mean and plastics with 3.76 mean value showed greater need for continuous supply of raw materials. While units like engineering with 2.68 mean value and food & beverage with 2.88 mean value have reported less need for this factor.

Future demand is the main reason to keep the optimum level of inventory. It is reported to be the highest problem of small scale units. Future demand showed 4.43 average overall mean value wherein the units like pharmaceuticals with 4.64 mean, electricals with 4.44 mean, electronics with 4.64 mean and engineering with 4.68 mean had greater mean value than the average overall mean while units like chemicals with 3.92 mean



and plastics with 64.32 were reported at the lowest level optimum level of Inventory helps to absorb the shocks of business and take maximum advantage of the situation as and when the need arises.

Bin Card, it is a inventory control system maintains the Quantitative records of the receipts of issues and closing balances of items of stores. Maintaining proper quantitative records of inventory in case of small scale units helps to control the inventory and smooth functioning of business possible. In small scale units the Bin Card is maintained by 57 units representing (32.57 percent) which includes pharmaceutical 18 units (72 percent) followed by chemicals 17 units (68 percent) were the main user of Bin Card System. While large number of small scale units representing 118 units (67.43 percent) were reported not using the Bin Card System due to their unawareness of the system.

System of Inventory control were of two types, *periodic inventory control* which is verified at the end of the term and *perpetual inventory control* which is continuous and regular. The study revealed that small scale units basically follow periodic inventory control system which can be seen that 116 units representing 66.29 percent where in the industries like engineering with 23 units (94 percent) plastics with 20 units (80 percent) and electricals with 19 units (76 percent) were the main user of this system. While perpetual Inventory control system was followed by 59 units (33.71 percent) in which chemicals with 16

units (64 percent), food and beverages with 12 units (48 percent) and electronics with 10 units were the main users where as units like engineering with 2 units and plastics with 5 units were the lowest user of this system for proper control of inventory. Perpetual Inventory control system is a must for the small scale units.

#### **7.6.5 PROFITABILITY ANALYSIS**

Value added analysis is a relationship between sales and the cost of raw material. It helps to measure the performance of small enterprises and to put profit into proper prospective. The value added analysis showed a overall percentage of 50.05 percent as value addition by the small scale units to the original raw material. It showed that the maximum value addition is done in case of food and beverages with 66.17 percent wherein the material cost is 33.83 percent followed by plastics with 63.57 percent, chemicals with 60.43 percent were reported to be made maximum value addition more than the average overall percentage while units like engineering with 32.21 percent, pharmaceuticals with 44.98 percent, electricals with 46.41 percent and electronics with 48.06 percent were reported to be lower in value addition as compared to the average overall percentage.

Cost is an important factor to know the profitability of a unit. Costs were classified into fixed and variable cost. The average overall fixed cost percentage showed 19.90 whereas the

average overall variable cost showed 80.10 percent. Fixed cost is more in case of units like electronics it was 28.53 percent followed by electricals with 26.10 percent, pharmaceuticals with 21.71 percent in case of plastics the fixed cost was minimum i.e.12.11 percent followed by engineering 15.25 percent. Variable cost is more in case of units like plastics 87.89 percent followed by engineering with 84.75 percent, chemicals with 83.59 percent. The lowest variable cost was reported in case of electronics 71.47 percent followed by electricals with 73.9 percent.

The fixed cost structure of small scale units were mainly consisted of interest, depreciation and others. The fixed cost incurred in the form of interest showed the overall average of 30.73 percent in which the cost of interest in case of electricals was 40.38 percent, electronics 32.01 percent which is more than the overall average percentage of interest while in case of units like engineering with 25.08 percent, plastic 29 percent, pharmaceuticals with 29.49 percent, food & beverages with 27 percent were reported to be at the lowest level. Whereas Depreciation is concerned the average overall percentage showed 20.02 percent in which the units like electronics with 25 percent, food & beverage with 24.99 percent, electricals with 21.01 percent had fixed cost more than the overall percentage while units like pharmaceuticals with 17.01 percent, chemicals with 18 percent were reported less than the overall average percentage.

The fixed cost involved in small scale units is more in case of others. Here the others included other than interest and depreciation cost. It showed an average overall percentage of 49.31 percent higher than the rest of fixed cost. The fixed cost in case of others is more in case of units like pharmaceuticals 53.50 percent, engineering with 54.89 percent, plastic with 51.97 percent, chemicals with 51.96 percent were reported having a higher percentage than the overall average percentage for others while units like electricals with 38.62 percent and food & beverages with 48.01 were reported to be at the lower than the overall average.

C.V.P. Analysis of small scale units revealed that the average overall Profit Volume (P/V) Ratio was 20.26 percent where in units like electronics the P/V Ratio was the highest with 28.53 percent followed by electricals with 26.10 percent, pharmaceuticals with 21.71 percent was reported the highest P/V Ratio more than the overall average ratio while units like plastics with 12.11 percent, engineering with 15.25 percent, chemicals with 16.41 percent and food & beverage with 19.21 percent were reported lower P/V Ratio than the average overall. P/V Ratio expresses the relationship between the contribution and sales. Higher ratio means greater profit and lower P/V Ratio means lower profits.

The contribution margin of small scale units showed that below 10 percent contribution margin, there were 4 units (2.29 percent) which were mainly from plastics and food & beverage with two units each between 11 percent and below 20 percent there were 43 small scale units representing (24.57 percent) with electricals with 5 units (32 percent) and food & beverage with 7 units (25 percent) were at the top of the list where as units like electronics and plastics with 5 units each were reported the lowest among them. There were 73 units representing (41.71 percent) fell under 21 to 30 percent category where in electronics with 13 units (52 percent), pharmaceuticals with 12 units (48 percent) and engineering with 11 units (44 percent) were on the top of the list while chemicals with 8 units (32 percent) and plastics with 9 units (36 percent) were at the lower level. In 31 to 40 percent category, there were 29 units (16.57 percent) in which electricals, chemicals and plastics with 5 units each (20 percent) were on the top while units like electronics and engineering with 3 units each were at the lower level. In above 40 percent category, there were 26 units representing (14.86 percent) in which units like chemicals with 6 units (24 percent), engineering with 5 units (20 percent) were on the top of the list while electricals and food & beverage with two units each were at the lower level.

Margin of Safety indicates that the business is in sound even if there is a substantial fall in sales. Whereas small margin of safety indicated the position of the business. The Margin of

Safety (MOS) percentage for all the segments of small scale units showed a overall average margin was 14.61 percent. The industry like engineering with 20.98 percent, plastic with 17.35 percent, pharmaceuticals with 16.63 percent and food & beverage with 16.08 were recorded with higher MOS than the overall average MOS, while units like electricals with 8 percent and chemicals with 12.19 percent were recorded with the lowest Mos. Small scale units should have the higher MOS which indicates the sound policies of the business and sound health of the business even if there is substantial fall in sales.

MOS, according to industry wise reflects that 113 units representing (64.57 percent) were below 20 percent category in which units like electricals with 23 units (92 percent), chemicals with 20 units (80 percent), pharmaceuticals with 18 units (72 percent), electronics with 17 units (68 percent), plastics and food & beverage with 15 units with (60 percent) each were the main industries, were fallen under it. Between 21 percent to 40 percent there were 42 units representing 24 percent in which engineering with 12 units (48 percent) and plastics with 8 units (32 percent) were leading in this category where as in case of 41 percent to 60 percent MOS there were 20 units (11.43 percent) which included 3 units of engineering with 32 percent and three units each of pharmaceuticals, electronics and food & beverage.

The average gross profit ratio 20.26 percent is just reasonable in the combined position of the sample units of Small Scale Industry. An inter-unit analysis of the sample showed that electricals with 26.10 percent of gross profit margin, electronics with 28.53 percent and pharmaceuticals with 21.71 percent were able to produce relatively higher Gross Profit than the overall average Gross Profit while units like plastics with 12.11 percent, engineering with 15.25 percent and chemicals with 16.41 percent Gross profit were relatively lower than the average overall gross profit percentage.

Average Gross Profit Margin according to Industry wise showed that 45 units representing 25.71 percent of the total fell in the Gross Profit Margin which is below 20 percent and the inter-unit analysis showed that plastics with 10 units (40 percent), chemicals and engineering with 8 units (32 percent) were on the top of the list in that category. Between 20 percent and 30 percent category there were 119 units representing (68 percent) in which industries like electronics with 20 units (80 percent), electricals with 19 units (76 percent) and pharmaceuticals with 18 units (72 percent) were on the top of the list in that category.

Above 30 percent Gross Profit Margin there were 11 units (6.29 percent of the total) in which industries like pharmaceuticals with 3 units (12 percent) and electronics, engineering and food &

beverages with two units (8 percent) were the main industries in this type of category.

Average Net Profit Margin of 2.96 percent is not reasonable in the combined position of the sample units. An inter-industry analysis of sample units showed that pharmaceuticals with 3.61 percent, electronics with 3.48 percent, engineering with 3.20 percent and food & beverage with 3.09 percent were able to produce relatively higher net profit than the overall average Net Profit while industries like chemicals 2 percent and electricals and plastics with 2.09 percent were relatively lower than the average overall Net Profit Margin.

The Net Profit Margin according to industry wise revealed different picture. Below 5 percent Net Profit there were 83 units representing (47.43 percent) in which chemicals with 18 units (72 percent), plastics with 17 units (68 percent) and electricals with 16 units (64 percent) were on the top of the list. Between 6 percent and 10 percent category, there were 67 units representing 38.29 percent where in units like pharmaceuticals with 15 units (60 percent), electronics and food & beverage with 12 units (48 percent) each were the leading industries in this category. Between 11 to 15 percent category there were 17 units representing (9.71 percent) where in engineering with 4 units (16 percent), electronics and food & beverage with 3 units each (12 percent) were on the top of the list in this category where as in



case of 16 to 20 percent category there were 8 units representing (4.57 percent) were in industries pharmaceuticals, electronics, engineering and food & beverage with two units each.

The return on capital employed which had fluctuated marginally denoted the uniformity in the earning power of the sample units. Further the average overall ratio showed 5.59 percent and the industry wise analysis showed electricals with 6.68 percent, chemicals with 5.82, plastics with 7.41 percent and food & beverage with 9.12 percent had relatively higher return on capital employed than the overall average Ratio, while units like engineering with 4.36 percent and pharmaceuticals with 5.1 percent were found with relatively lower ratio than the overall average ratio. Small scale units should strive hard to improve this lower return on capital employed ratio.

Return on Equity which had fluctuated widely denoted the absence of uniformity in the earning power of the sample units. The average overall ratio of return on shareholders investment showed 21.37 percent. Further in electronics with 21.86 percent, plastic with 22.50 percent and food & beverage with 35.42 percent which showed higher return on shareholders funds than the combined average. Therefore, it can be inferred that these units were more profitable than the others. There is a decline on return on equity shareholder investment in case of pharmaceuticals with 17.82 percent, engineering with 19.45 percent and chemicals with

16.60 percent as compared to the average overall ratio. Thus, situation ultimately may cause difficulty in raising additional funds when needed in future for the same industry.

Net profit to fixed asset ratio showed the return on fixed assets of the small scale units. The ratio of 11.69 percent had fluctuated widely again denoting the absence of uniformity in the earning power of the assets. In chemicals units, the ratio was 18.10 percent, plastics it was 23.82 percent, engineering it was 16.74 percent and food & beverage it was 29.15 percent where in the net profit to fixed asset was more than the combined average. It signifies that the fixed assets were used efficiently where as in case of electricals with 5.48 percent, pharmaceuticals with 8.34 percent and electronics with 9.18 percent ratio which is far below the combined overall ratio signifying the returns were not appropriate on the fixed assets. The small scale units should see to extract maximum return from the fixed assets employed in the business.

Fixed Asset Turnover Ratio indicated the extent to which investment in fixed assets contribute towards sales. The ratio measures the efficiency and profit earning capacity of the units. The fixed asset turnover ratio showed an overall average of 3.94 percent. Industry wise analysis showed there was a wide range of fluctuation in this ratio among the small scale units. In plastic units with 11.32 percent, chemicals units with 9.05 percent,

engineering with 5.23 percent and food & beverage with 9.43 percent was higher than the combined average ratio of the units as in case of pharmaceuticals with 2.31 percent, electricals with 2.62 percent and electronics with 2.63 percent. It reflects the use of the different assets of the firm and how best they were utilised.

Analysis of cash profit to net profit showed the relationship between profit earned from various sources and the final super profit left with the small scale units. The average overall percentage showed 59.78 percent cash profit to net profit is relatively stabilised as compared to the industry with the overall average percentage. In industry like food & beverage with 69 percent, chemicals with 65 percent and plastics with 68 percent were recorded relatively higher percentage than the average overall percentage. While in case of pharmaceuticals with 55 percent, engineering with 56 percent and electricals with 58 percent were recorded with lower percentage than the combined overall percentage. The overall healthy percentage is the reflection of the strong cash profit to net profit percentage which also reflects the strong position of the small enterprises in this case and for internal financing.

## **7.7 SUGGESTIONS AND RECOMMENDATIONS**

### **7.7.1 SPECIFIC**

- ▶ A separate Accounting Department is a must for the Small Scale Units.

- ▶ Petty Cash Book should be maintained by all the Small Scale Industrial units.
- ▶ Depreciation method should be followed as per the nature of fixed assets and not as a formality.
- ▶ Reporting on fund flow statements, segment, reporting and human resource accounting should be done by the Small Scale Industries Units.
- ▶ SSI Units should have a separate Costing Department.
- ▶ For Material Issue pricing the FIFO method is the preferred method.
- ▶ SSI Units should prepare budget as per the budget manual which links the master budget.
- ▶ SSI Units should prepare long term as well as short term budgets.
- ▶ Food & beverages and electronics with higher debt-equity ratio have a higher chances of going for trading on equity and maximising the returns of the equity holders.
- ▶ Government subsidies should be increased from the financial point of view in order to support SSI units, so as to strengthen its fixed capital base.
- ▶ Capital structure of SSI Units is flexible which helps the Units to change and modify easily.

- ▶ The cost of financing of fixed capital and working capital is to be brought under control in order to increase the profitability.
- ▶ SSI Units should increase the percentage of retained earnings which will strengthen its capital structure.
- ▶ Low profitability and low credit worthiness leads the SSI Units into a severe problem in obtaining finance.
- ▶ The SSI Units should follow the rules and procedures properly to avoid corruption factor from its financing pattern.
- ▶ Cash planning is a must for all the SSI Units and it should be done on daily basis in addition to weekly and monthly basis.
- ▶ Cash budgeting should be done to plan the cash on daily, weekly and monthly basis of planning the cash.
- ▶ Every Units should have a good credit policy including the credit collection period.
- ▶ Inventory Control System should be followed properly with the techniques like ABC analysis, Base Stock and Economic Order Quantity.
- ▶ Bin Card control system should be followed by all the SSI Units.
- ▶ Inventory should be controlled on the basis of perpetual valuation rather than periodic valuation.

### **7.7.2 GENERAL**

- All the SSI Units should have a qualified Accountant looking after the accounts and informs the management from time to time.
- SSI should be more cost conscious rather than giving more importance to cost ascertainment.
- Large number of SSI Units still needs improvement in the mode of accounts maintained since it is costly for a SSI Units to employ full fledged Accountant and Cost Accountant in view of the above suggestions. They can employ a well organised computer software on accounting which generates and interprets accounting reports. They can use the latest Accounting and Finance Software packages in their routine planning and controlling of the units.
- The cost of production is an important determinant of the sale of goods produced by Small Scale Industries. It is, therefore necessary for these industries to control costs through proper product mix, maximum utilisation of capacity, standardisation and Quality control. The cost of production should always be related to the customers needs and requirements. In Small Scale Industry, it is generally dependent upon inventory management from procurement cost to discharge of goods as a finished product.
- The working capital management is an integral part of overall management of Small Scale Industries. There is a need for greater co-ordination between small scale units in Goa and the

financial institutions. Planning and control of working capital and sound cash planning which includes setting of cash policies and procedures and the control over cash and credit. As far as possible the small scale units must try to keep the working capital cycle as short as possible

- The prime motive of every small scale entrepreneurs is to earn maximum profit. The cost of production influences both his sales and his profit. The entrepreneur should know the technique like How to reduce cost so as to increase the profitability. The entrepreneur have to be progressive in his approach so that the small scale unit can contribute to the economic development of the country.

In the light of the short comings experienced in the performance of Small Scale Industrial units with regard to Accounting Practices, Working Capital and Composing Pattern of Financing, Profitability Analysis and others. The following Policy Recommendations are made in order to bring a turn around in the overall performance of Small Scale Units in the State of Goa.

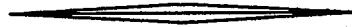
### **7.7.3 RECOMMENDATION**

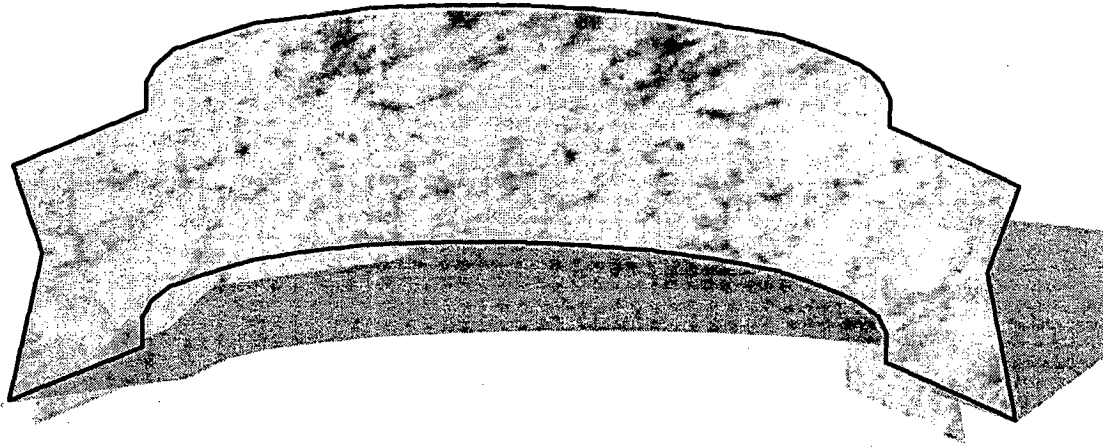
- Appointment of common independent Auditors by the lending Agencies to Audit the accounts of the various SSI units is felt very essential so as to improve the working efficiency of Small Scale Industrial units.

- All the Off Balance Sheet Liabilities which are not reflected in the Balance Sheet should be properly shown in the Financial Statement of SSI units.
- Working Capital finance should be diversified to Capital Expenditure to finance weaker units.
- Lack of managerial skill, owners failure, need a professional approach to the problems of Small Scale units.
- Entrepreneurial counseling and professional training is very essential for Small Scale Industrial units.
- There should be proper integration of SSI units with the large scale and agricultural sector. Agro-based Small Scale Sector is to be promoted.
- Small Scale Industrial units should have broad vision and should think big but start with the small right type of people.
- The subsidies should encourage and develop the right blend of vision and practical sense to become successful entrepreneurs from that locality/ region only. They, than become “demonstration models” to the community, and once a right climate is generated, entrepreneurship become a way of life.
- The Specialisation function of management and use of right type of managerial skill and talent is absent in case of SSI. This can be restored in the interest of the Small Scale Industrial units.

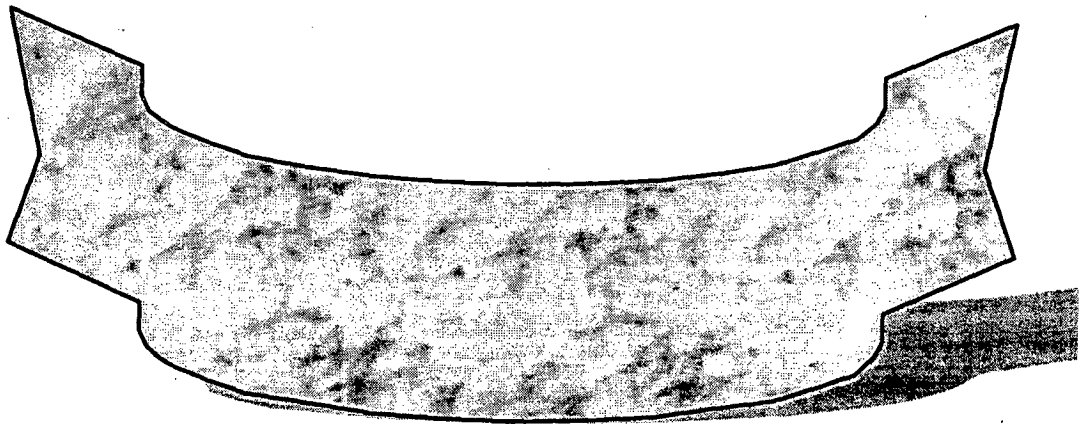


➤ The entrepreneurs need to broaden and change their thinking and approach towards Small Scale Industrial units in the light of the changing environment. He should think globally. The Government Agencies and other bodies should show the career opportunities to the small entrepreneurs. He should think of growing, developing and marketing his products at the international market. They should grow from small to big gradually.





# ***BIBLIOGRAPHY***



## BIBLIOGRAPHY

A. Carl Tietjen, "Accounting principles, practices and methods", The Journal of Accountancy, February 1973.

Acharya, Sarthi and Niru Acharya, *Structural Adjustment and Small producers: Reflections from Case Studies*, SSI/Employment 30, 1, 7 Jan 1995.

Agarwal, N. K., *Management of working capital*, Sterling Publishers(P) Ltd., New Delhi, 1985.

Agarwal, N. P., *Analysis of financial statements*, National Publishing House, New Delhi, 1985.

Agarwal, S. S., "How Small Scale Industries can survive, ORGANISER, 49(9), 28 Sept 1997, p. 16.

Ambhore, G. M. and others, "Small enterprise management techniques and methodologies in UK: Quality control", SEDME, 24(1), March 1997, pp. 1-37.

Anandhrajakumar, P., "Small Industries and sustainable rural development", Kisan World, 24(10), Oct 1997, pp. 29-30.

Anderson D., "Establishing on Accounting practice", Small Business Reporter, no.119, Bank of America 1978.

Andrew H. Barnett & William J. Read, "Sampling in small business Audits", Journal of Accountancy, January 1986.

Anthony B., "Small scale industries in final outputs, intermediate activities and primary inputs", The Indian Economic Journal, vol.30, 1982-83.

Arora, A. K., *Financing of small scale industries*, Deep & Deep Publication, New Delhi, 1996.

Arun Kumar, A. V., "Modern small industry in Karnataka growth and structure", Econ. & Pol. Weekly 31(21), 25 May 1996, pp.15-21.

Arunachalam, M., "SSI, to reach every village by 2000", Organiser(Suppl.) 47(20), 17 Dec 1995, pp.4-5.

Ashok K. Arora, *Financing of small scale industries*, Deep & Deep Publication, New Delhi.

- Avadhani V. A., "Small scale industries in the east and north eastern region", The Economic Journal, vol.29, 1981-82.
- Awasthi, Dinesh N., "Impact of New Economic Policy on Small and Tiny enterprises", SEDME, 23(1), March 1996, pp. 35-48.
- B. K. Kale, "Sickness among industries – Basically a management problem", Laghu Udyog Samachar, November 1977.
- B. L. Amla, "Food industries in the SSI", Laghu Udyog Samachar, September 1977
- B. Majumdar, "Development of Electronics in small scale sector", Laghu Udyog Samachar, September 1981.
- Bajpai, Utpal, "Technology Bureau for SSI units", Organiser(Suppl.) for SSI units 47(20), 17 Dec 1995.
- Bala Shashi, *Management of small scale industries*, Deep & Deep Publication, New Delhi, 1984.
- Bala Subrahmanya, M. H., *Product Reservation Policy for Small Industry*, SSI 31, 39, 28 Sept 1996.
- Bala Subrahmanya, M. H., "Small Industry Reservation Policy", Econ. & Pol. Weekly, 30(45), 11 Nov 1995, pp. 2895-96.
- Bala Subrahmanya, M. H., *Reservation Policy for SSI: has it delivered goods?*, SSI 30, 21, 27 May 1995.
- Bala Subrahmanya, M. H., *Small Industry Reservation policy comment on K. R. G. Nair in 2 Sept 1995*, SSI 30,45, 11 Nov 1995.
- Balla, A. S., *Innovations and small producers in developing countries*, SSI/Technology 24,8, 25 Feb 1989.
- Balu, V., "Need for HRD in Small Units", Southern Eco 34(12), 15 Oct 1995, pp. 5-6.
- Bandyopadhyaya, Tarun, "SSI an over view", *North Bengal Univ. Rev.*, 1993, pp. 159-70.
- Banerjee, Pranab K. and Lakshmi, M. S., "A note on small enterprises: Innovation and technology", Abhigyan, Sep 1996, pp. 53-58.

- Bansal, S. K., *Financial problems of small scale industries*, Anmol Publication (P) Ltd., New Delhi, 1992.
- Batty, J., *Management Accounting*, MacDonald and Evans Ltd., London, 1970.
- Beng Chew Soon, "Performance of Small firms under adversity: The Singapore experience", The Indian Economic Journal, vol. 38, 1990-91.
- Bharadwaj, H. C. and others, "Bank services to small business in UK", SEDME, 24(1), March 1997, pp. 39-53.
- Bhat A. R., "Small scale industry: problems & challenges", Commerce, August 1974.
- Bhatt, V. S., *Bank finance to agriculture, small industry: proposal for a scheme of approved dealers*, Banking/Credit/Agriculture/SSI, 5, 47, 21 Nov. 1970.
- Biswal, B. N. and others, "Supporting Small Business development : A Comparison between the approaches of United Kingdom and India", SEDME, 24(2), Jan 1997, pp. 89-100.
- Biswal, B. N. and others, "Supporting small business development : A comparison between the approaches of United Kingdom & India", SEDME, 24(2), June 1997, pp.89-100.
- Buchan, Joseph & Koenigsbert Ernest, *Scientific Inventory management*, Pretence Hall India Pvt. Ltd., New Delhi, 1970.
- C. R. Rama Rao, "Benefits of Standardisation to small scale industries", Laghu Udyog Samachar, September 1988.
- Capital: Needs and sources managing the small business, Small Scale Industries promotion in a developing countries, Research Institute for Management Science, 1981.
- Cartiller, Michel, *Role of Small Scale Industries in economic development : Irrigation pumpsets industry in Coimbatore economic development*, Small Scale Industry/Pumps, 10, 44-5, 4 March 1978.
- Chandra Poojary M., *Small scale sector: Myth and reality*, Economic and Political Weekly, 25 May 1996.
- Chatterjee, Rama, *Early twentieth century Bengali enterprise review: Swadeshi enterprise in Bengal 1900-1920*, by Amit Bhattacharyya, SSI, 23,34, 20 Aug 1988.

- Chhikara, M. S., "Bridging Techno-managerial gaps in small scale enterprises", Survey 34(1-4), 1994, pp. 66-75.
- Chhikara, M. S., "Consultancy services for small scale sick units", Survey, 35(1-4), 1995, pp. 44-56.
- Chilton, Carls S., *Successful small client accounting practice*, Englewood Cliff, N. J. Prentice-Hall, 1976.
- Dan Steinhoff & John F. Burgess, *Small business management fundamentals*.
- Dantwala M. L., "The case for village and small scale industries", The Indian Economic Journal, vol.3, 1955-56.
- Dasgupta, Nandini, *Capital, State and Petty Trading in Calcutta*, Calcutta/SSI 26, 30, 27 July 1991.
- Datt, Rudelar, "Abid Hussain Committee's Recommendation and the Small Scale Sector", Mainstream 35(51), 29 Nov 1997, pp. 22-25.
- Datta, S., *Small Industries information guidance and monitoring agency : a model single window clearance system for India*, Information System/SSI, 22,35, 29 Aug. 1987.
- Daveker S. R., "Tax incentives of small scale industries under Income Tax Act", State Bank of India, monthly review, vol. XVIII, May 1979.
- David Gadenne, "Critical success factors for small business: An inter-industry comparison", International Small Business Journal, vol. 16, no.3, issue no. 63, April-June 1998.
- David Storey, Kevin Keasey, Robert Watson & Pooran Wynerezyk, *The performance of small firms*, p.1.
- Dawar, Ram, *Institutional finance to small scale industries*, Deep & Deep Publication, New Delhi, 1986.
- De Souza, Gerald A., "Surveying the Industrial Scene", Goa Today, Sept 1998, pp. 32-39.
- Desai, Ashok V. and Taneja, Nisha, "Small firms in Indian Industry economic characteristics and functioning", J.P.Indian School Po. Econ. 5(2), April-June 1993, pp. 203-66.
- Desai, Vasant, *Management of small scale industries*, Himalaya Publishing House, New Delhi, 1979.

Desai, Vasant, *Small-scale industries and entrepreneurship*, Himalaya Publishing House, New Delhi, 2000.

Desai, Vasant, *Small-scale industries problems and prospects*, Himalaya Publishing House, New Delhi, 1980.

Development of Small Scale Industries in India Report of the International perspective planning team 1963 (Sponsored by the Ford Foundation), Ministry of Industry, Government of India, *Indian School Pol. Econ.* 5(2), April-June 1993, pp.331-70.

Dixit, B. K., *Small Scale Industries III and remedies*, Yojana, 1-15 March 1988, p.8-16.

Donald P. Stegall, Lawrence L. Steinmetz & John B. Kline, *Introduction to small business management – Managing the small business*, 1978.

Donald Rappaport, "Small Business: The challenge of the entrepreneur", Journal of Accountancy, May 1986.

Flink & Grunewald, *Management finance*, John Wiley & Sons Inc., New York, 1975.

Fromont Michel, "Small Enterprises create most new jobs", Southern Econ. 35(9), Sept 1996, pp. 23-24.

G. S. Gupta & A.K. A. Rathi, *Small scale chemical industry in Gujarat*, Economic and Political Weekly, November 30, 1996.

Geoffrey Knott, *Financial Management*.

Ghosh, Arun, *Development Strategy and Small Industry growth review: Small Industries policy in India*, by Nasir Tyabji, SSI. 24, 22, 3 June 1989.

Ghosh, P. K. & Gupta, G. S., *Fundamentals of management accounting*, National Publishing House, New Delhi, 1982.

Gill, Sucha Singh, *Labour process and characterisation of small industry sector review: political economy of unorganised industry*, by Manjit Singh, SSI/Labour policy 26, 21, 25 May 1991.

Goldar, Bishwanath, *Employment growth in modern small scale industries in India*, pp. 652-67.

Harikumar, V. and Sasikumar, "Pre-operational problems of SSI Units in Kerala", Southern Econ. 36(8), q5 Aug 1997, pp. 29-31.

Holmstrom, Mark, *Flexible specialisation in India?*, SSI 28,35, 28 Aug 1993.

Hornngren, Charles T., *Cost Accounting: a managerial emphases*, Prentice Hall, 1982.

Howard C. Geer, "How to succeed in confusing people without really trying", The Journal of Accountancy, March 1963.

Ian, M. D., Little, Mazumdar D. & Page, M. John (Jr.), *Small manufacturing enterprises*, Oxford University Press, 1987.

Indrase, P., "Marketing problems in SSI", Khadi Gamodyog, 42(3), Dec 1995, pp. 165-68.

Inigo, R. Maria, "Management of working capital in small scale industries in India", Abhigyan, August 1996, pp. 59-62.

Iyer Krishna, T. N., *Guidelines for financing small scale industries*, Himalaya Publishing House, New Delhi, 1993.

J. C. Sandesava, "Incentives and their impact – some studies on small scale industries", Economic and political weekly, November 1982.

K. R. Punia, "Small scale industries in Haryana – Performance and perspectives", Laghu Udyog Samachar, January 1989.

K. Thiripurasundar, "Commerce education –today and tomorrow", Kisan World, November 1999.

Kapoor, Ravi and others, "Export possibilities to UK for SSI Entrepreneurs", SEDME, 24(2), Jan. 97, pp. 65-75.

Khan, M. Y. & Jain P. K., *Financial Management*, Tata McGraw-Hill Publishing House, Delhi, 1980.

Kishore, R. M., *Cost & Management Accounting*, Taxmann's, New Delhi, 1999.

Kuchal, S. C., *Corporation finance – principles and problems*, Chaitanya Publishing House, Delhi, 1980.

Kulshrestha, N. K. *An appraoch to management Accountancy*, Navman Prakashan, Aligarh, 1975.



- Kumar Dev S., "Background area: Role of small scale industries", *Commerce*, vol. 133, April 1976.
- Kumar, A. V. Arun, *Modern Small Industry in Karnataka: growth and structure*, SSI/Karnataka 31, 21, 25 May 1996.
- Kumar, Mohan R., "Work values of workers and supervisors in SSI: A sample survey", SEDME, 23(4), Dec 1996, pp. 57-65.
- Kumar, Pradeep K., "Quality of work in small scale industries", SEDME, 23(4), Dec 1996, pp. 23-31.
- Kurien, C. T., *Small Sector in new Industrial policy*, *Industrial planning/Small Scale Industry*, 13,9, 4 March 1978. -
- Laxman and Waghmare, Shivaji, Abid Hussain Committee Report a New Policy approach, Southern Econ, 36(18), 15 Aug 1997, pp. 21-22.
- Liquidity crunch hits small units badly, monthly comm. on Indian Economic Conditions 38(9), April 1996, pp.16-19.
- Lydall, H. F. & Dhar, P. N., *The Role of small enterprises in economic development*, Asia Publishing House, New Delhi, 1972.
- M. L. Bhatia, "Scope and development of food processing industries in the SSI", Tyabji Nasir, "Capitalism in India and the small industries policy", Economic & Political Weekly, vol. XV, Nov.1980., September 1977.
- M. Selvam(Dr.), *SWOT perspective of SSI*, Laghu Udyog Samachar, newsmagazine on SSI, vol. III, no. 5, December 1996, p.3.
- Maheshwari, S. N., *Management Accounting and financial management*, Sultan Chand & Sons, New Delhi, 2000.
- Mario R. & Upadhya, C. *Small business entrepreneurs in Asia and Europe*.
- Mathew, P. M., "From beautiful small to flexible specialisation : Asian experience of small enterprise development", Econ & Pol. Weekly, 32(2), 18 Jan 1997, pp. 84-86.
- Mathew, P. M., *More politics of business than business comment on S. Nanjundem in 27 Jan 1996*, SSI 31, 3 Aug 1996.
- Michael, Firth, *Management of working capital*, The Macmillan Press Ltd., 1979.

- Mishra G. P. & Mishra P. N., "Government policies for promoting small scale industries", Laghu Udyog Samachar, June 1979.
- Mishra G. P. & Mishra P. N., "Government policies for promoting small scale industry", Laghu Udyog Samachar, June 1979.
- Mishra R. K., *Problems of working capital in selected public undertakings*, Sir Issac Pitman and Sons Ltd., London, 1978.
- Mishra, J. N., *Small scale & cottage industry in Saugor District Jabalpur*, 1981.
- N. D. Tiwari, "Financing of Small Industries", Laghu Udyog Samachar, May 1982.
- N. Raghunathan, "40 years of growth of small scale industries", Laghu Udyog Samachar, October 1987.
- N. Raghunathan, "Role and performance of SSI in the national economy", Laghu Udyog Samachar, December 1988.
- N. T. Vedachalam, *Incidence of Industrial sickness in small scale industries*, Himalaya Publishing House, New Delhi.
- Nagaiya, D., "Impact of liberalisation on small scale sector and the unfinished agenda", SEDME, 23(1), March 1996, pp. 11-25.
- Nagaraj, R., *Some aspects of Small Scale Industries in India*, SSI, 20,41, 12 Oct. 1985.
- Nair, K. R. G., *Op. Cit.*, SSI 31, 6, 10 Feb 1996.
- Nair, K. R. G., *Reservation policy for small industry comment on M. H. Bala Subrahmanya in 27 May 1995*, SSI 30, 35, 2 Sept 1995.
- Nanjappa K. L., *Industries in rural economy: A Review of progress and prospects*, Yojana, Vol. XX, no. 4, January 26, 1973, p.17.
- Nanjundan, S., "Economic Reforms and Small Scale Industry", Econ. & Pol. Weekly 31(4), 27 Jan 1995, pp. 191-92.
- Nayak, P. and Dey, Nikhil Bhusan, "Productivity in Small Scale Industry in Assam", Yojana, 40(5), Oct 1996, pp. 31-32.

Neelamegam, R. and Manickavel, S., "Marketing Management in Small Industries Sector of a developing country with reference to India", Abhigyan, Sep 1996, pp. 47-51.

Ojha P. D., "Finance for small scale enterprises in India", RBI Bulletin, November 1982.

P. M. Chivminatto, *Financing a small business: A working capital – A key to credit* ; Selected reference material on small industry development, Asian productivity organisation, part I & part II, March 1970.

Pandey, I. M. *Financial management*, Vikas Publishing House Pvt. Ltd., New Delhi, 1985.

Pareek, H. S., *Financing of small-scale industries in a developing economy*, National Publishing House, New Delhi, 1978.

Parik, S. N., *How to finance small business enterprises*, Macmillian India Ltd., Madras, 1977.

Parker, Ronald L. and others, "Small enterprises adjusting to liberalization in five African countries", World Bank Discussion papers No, 271, Book Rev., Africa Quart 36(2), 1996, pp. 109-11.

Patel, Sujata, *Small Scale industrialization in South Gujarat review : Industrial transition in rural India*, by Hein Streefkerk, SSI/Gujarat, 23, 43, 22Oct 1988.

Pathak, H. N., *Entrepreneur, technician and manager in SSI units*, Manager/SSI/Entrepreneur, 7, 48, 25 Nov.1972.

Pathak, H. N., *Small Scale Industries in Ludhiana*, SSI/Punjab, 5,28, 11 July 1970.

Patra, S. C., *Promotion and management of small scale industries*, Discovery Publishing House, New Delhi, 1993.

Patra, S. C., Promotional and Management of SSI, p. 74.

Phanalkar, S. J., "How not to ruin your small industry", Prajan, 25(2), July 1996, pp. 179-80.

Pillai P.P., "Scale and efficiency of small scale industries in India", Asian Economic Review, April 1978.

- Pillai, R.S. N. & Bagarathi, V., *Management Accounting*, S. Chand & Company Ltd., New Delhi, 1996.
- Poojary, Chandra M., "Small scale sector in Dakshina Kanada: A study", SEDME, 23(4), Dec 1996, pp.13-22.
- Poojary, Chandra M., "Small Scale Sector: Myth and reality", Econ. & Pol. Weekly(Suppl.) 31(21), 25 May 1996, pp. m.11-m.14.
- Poojary, M. Chandra, *Small Scale Sector: Myth and Reality*, SSI/Karnataka 31, 21, 25 May 1996.
- Pradhan, Gopinath, *Comparative performance of technocrats, educated unemployment trader entrepreneurs: a case study of Small Scale Industry in Orissa*, SSI/Orissa, 19,47, 24 Nov. 1984.
- Prasad, Chandra J. and Rao, Narayan V., "SSI in the arena of exports", Southern Econ 34(!7), 1Jan 1996, pp. 7-12.
- Prasad, N. K. *Principles and practice of cost accounting*, Book Syndicate Pvt. Ltd., Calcutta, 1983.
- Prasanna Chandra, *A financial management*, Tata Mcgraw-Hill Publishing Company Ltd., New Delhi, 1984.
- Prime Minister's Rozgar Yojana, Laghu Udyog Samachar, March 1994.
- R. L. Hyderabad (Dr.), "Factoring : Cost-Benefit Analysis", The Management Accountant, March 1988.
- R. N. Sengupta, "Financial Options Available to SME's for raising Finance".
- R. N. Verma, "Importance of SSI in Rural Development of Bihar", Laghu Udyog Samachar, July 1982.
- R. V. Rao, *Small industries and the developing economy in India*, Concept Publishing Company, New Delhi.
- Raju, V. B., " A Study of selected Small Business centres in UK", SEDME, 24(2), Jan 1997, pp.51-64.
- Ram Krishna, K. T., *Finances for small scale industries in India*, Asia Publishing House, Bombay, 1978.

- Ramaiah, V., *Organisation and management of small scale industries*, Printwell, Jaipur, 1995.
- Ramakarishna, K. T., *Finances for small scale in India*, Asia Publishing House, Bombay, 1962.
- Ramaswamy, K V., *Policy for Small Industry review : Structure and Promotion of SSI in India* NCAER, SSI 29, 41, 8 Oct 1994.
- Ramaswamy, K. V., *Small Scale Manufacturing Industries : Some aspects of size, growth and structure*, SSI 29-9, 26 Feb 1994.
- Ramkrishnan, K. T., *finances of small scale industries in India*, Asian Publication, 1962.
- Ranabijoy, Deb, *Finance: Small Scale Industries in India*, Mittal Publication, New Delhi, 1993.
- Ranjankumar, "Survival strategies of SSI's under economic liberalisation: Some considerations", SEDME, 23(2), June 1996, pp. 59-63.
- Raymond J. Chambers, "Accounting principles or Accounting policies?", The Journal of Accountancy, May 1973.
- Robert W. Ingram, Dan M. Gvy, Issam I. Meri & Robert T. Justis, "Disclosure practices in unaudited financial statements of small business", The Journal of Accountancy, August 1977.
- Robert W. Vossen, "Research Note: Relative strengths and weaknesses of small firms in innovation", International Small Business Journal, vol. 15, Jan-March 1988.
- Rodrigues, G.(Mrs.) & others, Indian economy problem, p.385.
- Role of Computer in small industry, Laghu Udyog Samachar, November 1988.
- Roy, Chowdhari A. B., *Analysis and interpretation of financial statements through financial ratios*, Orient Longmans, Bombay, 1970.
- Rutten, Mario and Upadhyaya, Carol, "Small business entrepreneurs in Asia and Europe : Towards a comparative perspective", SEMINAR, New Delhi, 459, Nov 1997, pp. 72-73.
- S. Nanjudan, *Economic reforms and Small Scale Industry*, Economic and Political Weekly, 27 January 1996.

- Saikia, Sunil Kumar, "Development of Small Scale Industries in North Eastern region", Khadi Gamodyog 43(8), May 1997, pp. 452-55.
- Sandesara J., *Modern Small Industry, 1972 and 1987-88: Aspects of growth and structural change*, SSI 28,6, 6 Feb 1993.
- Sandesara, J. C., *Assisting Small Businesses Review: Seeking solution*, edited by Charles K. Mann et al, *Small Scale Industry*, 25,14, 7 April 1990.
- Sandesara, J. C., *Small Industry production in 1982-83 : a quick comment*, *Small Scale Industry*, 13, 17, 29 April 1978.
- Sandesara, J. C., *Small Scale Industrialization : The Indian experience*, SSI/23,12, 26 Mar. 1988.
- Saroja, *Management of small scale industries*, Shet Publishers, Bombay, 1979.
- Seth, Anuradha, "Cost efficiency of small manufacturing enterprises implications for employment policy", Econ. & Pol. Weekly 30(47), 25 Nov 1995, M-130 M-134.
- Shanka, S. S.(Dr.), "Development of Small Scale Industries in Assam", Yojana, Sept 1998, pp. 41-49.
- Sharma, Narendra, "Higher investment ceiling for small units, New Age, 45(6), 9 Feb 1997.
- Shetty, M.C., *Preparation for financing small industry*, SSI, 4, 50, 13 Dec. 1969.
- Shukla, M. C. & Grewal J. S., *Advanced Accounts*, Sultan Chand & Company Pvt. Ltd, New Delhi, 1985.
- Singhania, S. S., "Small Scale Sector: An overview", Organiser(Suppl.) 47(20), 17 Dec 1995, pp. 10-11.
- Sinha, Anup Kumar, "A national outlook needed for SSI", ORGANISER, 49(9), 28 Sept 1997, p. 17.
- Small Business: Sample Size factors influencing the decisions of Surveyed Auditors, Journal of Accountancy, January 1986.
- Small Scale Industries in India - hand book of statistics, NISIET Publication, 1999.

Streefkerk, Hein, *Op. Cit.*, 16, 17, 25 April 1981.

Streefkerk, Hein, *Op. Cit.*, 16,16, 18 April 1981.

Streefkerk, Hein, *Too little to live on, too much to die on – employment in Small Scale Industries in rural South Gujarat*, Gujarat/Small Scale Industry/employment, 16,15; 11 April 1981.

Subha Rao, K. G. K. and R. P. Pathak, *RBI Survey of Small Industrial Units*, comments on R. Nagaraj in 12 Oct. 1985, SSI, 21,8, 22 Feb. 1986.

Subrahmaniam, K. K. and P. Mohan Pillai, *Liberalisation and small Industry: need for new growth strategy in Kerala*, Liberalisation/SSI/Kerala 29,33, 13 Aug 1994.

Suresh D. Tendulkar & T. A. Bhavani, *Policy on modern small scale industries: A case of government failure*, Indian Economic Review, vol. XXXII, no.1, 1997, pp. 39-64.

Suri, K. B., *Small scale enterprises in industrial development: The Indian experience*, Sage Publications, New Delhi, 1988.

T. N. Krishna Iyer, *Guidelines for financing small scale industries*, Himalaya Publishing House.

Thoms, T, *Relationship between Small Scale and Large Scale Industry*, SSI/Large Scale Industry, 14, 9, 3 March 1979.

Timberg, Thomas A., *A Small Scale Industry Survey data : a note*, Small Scale Industry, 13, 34, 26 August 1978.

Toor, N. S., "Bank finance to small scale industry", Prajan 24(2), July-Sep 1995, pp. 176-77.

Tyabji Nasir, "Capitalism in India and the small industries policy", Economic & Political Weekly, vol. XV, Nov.1980.

Tyabji Nasir, *Proving small industry's inefficiency review : Small Scale enterprise in Industrial development: The Indian experience*, edited by Kuri, Small Scale Industry/Industrial development, 23,43, 20 Aug. 1988.

V. Ramaiah, *Organisation and management of small scale industries*, Printwell, Jaipur(India).

Varma R., "Employment and production in small scale industries: Some findings of the RBI Survey", RBI occasional paper, 1980.

Vasant Desai, Management of small scale industry.

Vedachalam, N. T., *Incidence of industrial sickness in small scale industries*, Himalaya Publishing House, New Delhi, 1991.

Velankar S., "Finance for small scale industry", *Commerce* vol. 143, November 1981.

Vepa, Ram K., *Small Industries in Japan*, Vora & Co Publishers Pvt Ltd, Bombay, 1971.

Vepa, Ram K., *Small Industry development: restructuring the Institutional frame*, *Industrial Development/SSI*, 22,35, 29 Aug. 1987.

Vinod K. Tewari, Joseph Phillip & Amarnath Pandey, "Small scale industry: Success and failure", Concept publishing Co, New Delhi.

Vivek Deolankar, "Capital Structure of SSI", SEDME, vol. X, September 1983.

Walsh, C., *Key management ratio's*, Macmillan India Ltd., 1993.

Wessel, Robert H., *Principles of financial analysis – A study of financial management*, The Macmillan Company, New York, 1961.

William, T. D., "Small Business: Winner or Loser under Tax reform?", Journal of Accountancy, December 1986.

