CHAPTER - 1

INTRODUCTION

1. INTRODUCTION OF WORKING CAPITAL MANAGEMENT:

The importance of working capital in any industry needs no special emphasis. Working capital is considered to be life-giving force to an economic entity. Management of working capital is one of the most important functions of corporate management. Every organization whether profit oriented or not, irrespective of its size and nature of business, needs requisite amount of working capital. Capital to keep an entity working is working capital. The efficient Working capital management is the most crucial factor in maintaining survival, liquidity, solvency and profitability of the concerned business organization. It needs sufficient finance to carry out purchase of raw materials; payment of day-today operational expenses including salaries and wages, repairs and maintenance expenses etc. and funds to meet these expenses are collectively known as working capital.

In simplicity, working capital refers to that portion of total fund, which finances the day-to-day working expenses during the operating cycle. The term "working" here implies continuity of production and distribution of want removing goods and services required by the society. Working capital is necessary to finance current assets which include inventories, debtors, marketable securities, bank, cash, short term loans and advances, payment of advance tax and so on. An inadequate working capital as both the phenomena of over capitalization and under capitalization of working capital generates adverse effects on the profitability and liquidity of the concerned firm. The effective working capital necessitates careful handling of current assets to ensure short-term liquidity and solvency of the business. To be more specific, neither under stocking nor overstocking of raw materials, careful maintenance and trade off between credit receiving.

IFFCO meets its working capital needs by borrowing Fund based loans and Non-fund based loans from different banks. Fund based loans include loans like Cash credit, Working capital term loan, Working capital demand loan, Packing Credit, Advance against retention money etc..Whereas Non-fund based loans include Letter of Credit and Bank Guarantee. Generally in any company the requirements of Non-fund based loans is more than Fund based loans.

CHAPTER-2

RESEARCH METHODOLOGY

2. REASEARCH METHODOLOGY:

- **Study objectives :-**
    a) To study the nature of working capital, concepts and definition of working capital.
    b) To examine the effectiveness of working capital management practices of the firm.
    c) To find out how adequacy or otherwise of working capital affects commercial operations of the company.
    d) To prescribe remedial measures to encounter the problems faced by the firm.
    e) To study the working capital financing or means of financing of the company.

- **Scope of the study :-**
    a) Planning of working capital management
    b) Working capital finance

- **Methods of Data collection :-**
    a) Primary data:

        Basic information collected from the local sources as well as from the company staff like managers, accountants and officers. Moreover information gathered through practically preparing the data for working capital.

    b) Secondary data:

        i. From the B/S of the company
        ii. From CMA proposal report
        iii. From internet
        iv. From books

CHAPTER – 3

INDUSTRY SCENARIO

3.1 INDUSTRY SCENARIO:

The fertilizer industry in India consists of three major players; The Government owned Public Sector undertakings, Cooperative Societies like IFFCO, KRIBHCO and units from Private sector. There are about 33 major producers producing N and NP/NPK fertilizers in the country at present. The fertilizer industry of India had made constructive use of the fertilizer subsidy provided by the Government of India to ensure that the country achieved reasonable self-sufficiency in food grain production. The fertilizer industry has organized itself through Fertilizer Association of India (FAI) to coordinate with the Government of India to achieve the macro-economic objectives related to agricultural sector and to provide other services.

3.2 INDIAN FERTILIZER IINDUSTRY –

Fertilizer is generally defined as "any material, organic or inorganic, natural or synthetic, which supplies one or more of the chemical elements required for the plant growth."

Chemical fertilizers have played a vital role in the success of India's green revolution and consequent self-reliance in food-grain production. The increase in fertilizer consumption has contributed significantly to sustainable production of food grains in the country. The Government of India has been consistently pursuing policies conducive to increased availability and consumption of fertilizers in the country.

The Indian Fertilizer industry had a very humble beginning in 1906, when the first manufacturing unit of Single Super Phosphate (SSP) was set up in Ranipat near Chennai with an annual capacity of 6000 MT. **The Fertilizer & Chemicals Travancore of India Ltd. (FACT) at Cochin in Kerala and the Fertilizers Corporation of India (FCI) in Sindri in Bihar** were the first large sized fertilizer plants set up in the forties and fifties with a view to establish an industrial base to achieve self-sufficiency in food grains. Subsequently, green revolution in the late sixties gave an impetus to the growth of fertilizer industry in India. The seventies and eighties then witnessed a significant addition to the fertilizer production capacity.

Although agriculture's share in Gross Domestic Product (GDP) has declined from over half at Independence to less than one-fifth currently, agriculture remains the predominant sector in terms of employment and livelihood with more than half of India's workforce engaged in it as the principal occupation. Agriculture still contributes significantly to export earnings and is an important source of raw materials as well as of demand for many industries.

Fertilizer sector is a very crucial for Indian economy because it provides a very important input to agriculture. The fertilizer industry in India has played a pivotal role in achieving self – sufficiency in food grains as well as in rapid and sustained agriculture growth. India is the third largest producer and consumer of fertilizers in the world after China and the United States.

The Indian **fertilizer industry is broadly divided** into nitrogenous, phosphatic and potassic segments. In addition to these, nutrients are combined to produce several complex fertilizers. To express the nutrient constitution of fertilizers, the grade of a fertilizer is expressed as a set of three numbers in the order of percent of Nitrogen (N), Phosphate (P) and Potash (K). The straight nitrogenous fertilizers produced in the country are urea, ammonium sulphate, calcium ammonium nitrate (CAN) and ammonium chloride. The only straight phosphatic fertilizer being produced in the country is SSP. The complex fertilizers include DAP, several grades of nitro phosphates and NPK complexes. Urea and DAP are the main fertilizers produced indigenously.

As on 31 Jan 08, the country has an installed capacity of 120.61 lakh MT of nitrogen and 56.59 lakh MT of Phosphate. Presently, there are 56 large size fertilizer plants in the country manufacturing a wide range of nitrogenous, phosphatic and complex fertilizers. Out of these, 30 (functioning) units produce urea, 21 units produce DAP and complex fertilizers, 5 units produce low analysis straight nitrogenous fertilizers and the remaining 9 manufacture ammonium sulphate as-product. Besides, there are about 72 medium and small-scale units in operation producing SSP. The sector-wise installed capacity is given in the table below:-

Sector wise percentage contribution of Nitrogen and phosphatic (as on 1st January, 2008):

Sector	**Nitrogen**	**Phosphatic**
Public Sector	29.00	07.65
Cooperative Sector	26.27	30.27
Private Sector	44.73	62.08
Total	**100**	**100**

The Fertilizer Association of India was established in 1955 to bring together all those concerned with the production, marketing and use of fertilizers in India. It assists the Indian fertilizer industries in promoting sustainable fertilizer use, thus increasing productivity and operational efficiency in agriculture.

India is the third largest producer and consumer of fertilizers in the world with an installed capacity of Nitrogen (N) and Phosphate (P) nutrients at 14 million tones per annum.

Urea, a nitrogenous type of fertilizer, is most widely consumed in India. **Currently the urea capacity is 20.2 million tones while consumption is 21.7 million tones. The demand of urea is expected to grow at a CAGR of 4 percent.**

3.3 Determinants of fertilizer demand:

Rainfall and irrigation facilities: Adequate and well – diversified rainfall gives the farmers confidence to invest in fertilizers along with well – equipped irrigation facilities.

Relative prices of fertilizers: Indian agriculture is characterized by small holdings and demand for fertilizers tends to be price – sensitive. If there is significant price differentiation between fertilizers, demand will move in the favor of the cheaper fertilizers, even if its not the most appropriate one.

Cropping pattern: This determines the need and timing of fertilizers purchases.

Government policy: Government policies and framework influences pricing, production and distribution of fertilizers.

3.4 Type of Fertilizers:

Various types of fertilizer are used or produced in India in which some of the well known fertilizers used are:

Nitrogenous Fertilizers	
Urea	46%N
Ammonium Sulphate (AS)	21%N
Ammonium Chloride (ACl)	26%N
Calcium Ammonium Nitrate (CAN)	25%N
Phosphatic & Potassic Fertilizers	
Single Super Phosphate (SSP)	16% P2O5
Muriate of Potash (MOP)	60%K2O
Sulphate of Potash (SOP)	48%K2O
Di-ammonium Phosphate (DAP)	18 – 46
Rock Phosphate (RP)	16 - 20% P2O5
NPK Grades	
	10:26:26
	12:32:16
	14:35:14
	15:15:15

3.5 Cost of production:

Fertilizer production, particularly nitrogenous fertilizers, is highly energy intensive with cost of feedstock and fuel alone accounting for between 55 to 80 percent of the cost of production, depending upon the type of feedstock used, technology, age of plant etc. Plants in India are based on three feedstock - naphtha, fuel oil and natural gas with a significant proportion of domestic capacity of urea plants based on naphtha or fuel oil whose cost is much higher than natural gas, on which most of the global capacity is based.

The cost competitiveness of urea units in a liberalized scenario for imports would be a function of two factors—**the domestic cost of production and the international price of urea.** An important reason for domestic cost of production being high in India is that a significant proportion of domestic capacity is naphtha or fuel-oil based.

To reduce the cost of production, no. of technological programmes and other like 'Energy Saving' are held. Cost of production is the only feature of concentration for increasing the profit margin.

3.6 Industry players and profile:

The Indian fertilizer industry has a capacity of 56 lakh MT of phosphatic nutrient and 121 lakh MT of nitrogen. While the private sector has a huge installed capacity for phosphatic fertilizers, capacity utilization of nitrogenous fertilizers is higher in the public sector.

The government has established nine public sector undertakings in the Indian fertilizer market and one cooperative society, known as the Krishak Bharati Cooperative Limited (KRIBHCO) that functions under the supervision of the Department of Fertilizers in India. There are 63 large units dedicated to the production of fertilizers. Among these, 9 units produce ammonium sulphate while 38 units produce urea. There are 79 small and medium scale units producing single superphosphate.

Private Sector	**Public Sector**
Gujarat State Fertilizer Company Limited	National Fertilizers Limited
Coromondel Fertilisers Limited	Fertilisers and Chemicals Travancore Ltd.
Shriram Fertilisers & Chemicals Limited	Rashtriya Chemicals & Fertilizers Limited
Zuari Industries Limited	Madras Fertilizers Limited
Southern Petrochemicals Inds. Corpn. Ltd.	Paradeep Phosphates Limited
Mangalore Chemicals & Fertilizers Limited	Pyrites, Phosphates & Chemicals Limited
Gujarat Narmada Valley Fertilisers Co. Ltd.	Fertilizer Corporation of India Limited
Duncans Industries Limited	Projects & Development India Limited
Deepak Fertilizers & Petrochemicals Ltd.	
Indo-Gulf Fertlizers & Chemicals Corpn. Ltd.	**Cooperative Sector**
Godavari Fertilizers & Chemicals Limited	Indian Farmers Fertiliser Cooperative Ltd.
Nagarjuna Fertilizers & Chemicals Limited	Krishak Bharati Cooperative Limited
Chambal Fertilizers & Chemicals Limited	
Tata Chemicals Limited	
Oswal Chemicals & Fertilizers Limited	

Along with the public sector units, there has been a euphoric growth in the production of fertilizers in the private sector as well. Some of the companies dedicated to the production of fertilizers include Khaitan Chemicals and Fertilizers Limited, Mangalore Chemicals, Nagarjuna Fertilizers, Zauri Chambal, BEC Fertilizers and Gujarat State Fertilizers &Chemicals Limited.

The fertilizer industry in India shows an upward rising trend that would challenge the broader market in future years. The sector will witness burgeoning production that will reach new heights in the coming years. Most of the companies are expecting an approval for their huge capital expenditure plans from the Department of Fertilizers in India. The flourishing industry will fill in the gap between demand and supply of fertilizers in India.

3.7 Scope of fertilizer industries:

Until the turn of this country the nutrients supply in farm soil were entirely dependent upon natural sources like mineral deposits and animal and vegetable waste. But nowadays these nutrients are obtained from commercial and synthetic fertilizers.

As the use of synthetic fertilizers is increasingly rapidly, we can see that fertilizer industries have very bright future for marketing and in agriculture oriented country like INDIA.

CHAPTER – 4
Demand & Supply Scenario

4.1 Global Demand & Supply Scenario

The global production of Urea was about 592 lakh metric tonnes (LMT) N during 2005. Out of which 453 LMT N was meant for domestic markets and about 136 LMT was exported. The major exporting regions include Russia and Ukraine in East Europe & Central Asia and Middle East countries, which account for about 60% of the world export of Urea. Other major exporting countries include Germany and Netherlands in West Europe, Romania in Central Europe, Canada, and U.S.A. in North America, Trinidad and Venezuela in Latin America and China, Indonesia and Bangladesh in Asia.

As per IFA, the world demand for urea is expected to grow by 123 LMT (57 LMT N), from a total quantum of 1313 LMT (604 LMT N) during 2006 to 1436 LMT (661 LMT N) during 2010. As against this, the total supply is expected to increase by 298 LMT (137 LMT N), from a total quantum of 1344 LMT (618 LMT N) during 2006

to 1641 LMT (755 LMT N) during 2010. Table below presents world supply demand balance of urea during 2006 to 2010.

WORLD SUPPLY DEMAND BALANCE					
					(LMT product)
	2006	2007	2008	2009	2010
Supply	1343.9	1393.1	1471.6	1514.8	1640.7
Demand	1312.5	1344.7	1382.6	1410.2	1436.0
Surplus	31.4	44.8	89.0	104.6	201.7

4.2 Demand and Supply Gap in India

The Fertilizer Association of India (FAI) has been set up a model which is based on several factors that include fertilizer prices, high yielding areas, irrigated areas, fertilizer nutrient prices and previous years' fertilizer consumption. An estimate of the demand and supply till the end of the 11 th five year plan is given in the chart below:

YEAR	SUPPLY N+P+K	DEMAND N+P+K	DEMAND SUPPLY GAP N+P+K
2007-08	16950	25785	8835
2008-09	17585	27610	9305
2009-10	18595	28000	9405
2010-11	19912	29090	9178
2011-12	19965	30200	10235

Today, India stands as the third largest fertilizer consumer and producer of the world. It has been observed that the subsidies on Indian fertilizer have been rising at constant rate. This is due to the rise in the cost of production and the inability of the government to raise the maximum retail price of the fertilizers. The population of the country is rapidly increasing at 1.5% annually. This requires higher production of food grains. The total cropped area is only 30% of the net geographical area, which is not enough for increasing

the agricultural productivity. Now, the main focus is on the improvement of the farm income, for which the fertilizer industry needs to lay more stress on the agricultural activities in the country. This will also help to improve terms between the government agencies and the fertilizer industry in India.

4.3 Need for Expansion/Establishment of Plant

1) To overcome the shortage of fertilizer

2) As we have seen above global scenario is showing surplus result and in India, there is shortage, so to sustain in competitive global market, there is a need to enter in the global market.

3) As Kalol is a Mother plant, so IFFCO decides to expand the plant in Kalol.

4.4 RECENT PROJECTS OF IFFCO:

KALOL EXPANSION PROJECT

IFFCO has envisaged setting up 1.3 Million MT of Urea Plant at Kalol with an investment of about Rs. 4000 Crores. An agreement has been signed with Halder Topsoe for pre-engineering activities of the project and proposal for similar agreement with Saipem and PDIL is on the anvil. The No Objection Certificate has been received from Gujarat Industrial Development Corporation and Provisional Approval of Plot Plan has been obtained from the Directorate of Factories. Geo-technical investigation and Site Contour Mapping has been completed and pre-project activities of site clearances and site grading are under progress along with associated works for storm water drain,

approach roads, fencing, etc. Also, an MoU has been signed with the Government of Gujarat to facilitate State clearances, as required.

This expansion Project is Stopped nowadays because Government of India has not given permission to expand due to no further availability of Natural gas from Reliance Industry in KG Basin.

CHAPTER - 5

COMPANY PROFILE

5.1 VISION STATEMENT:

To augment the incremental incomes of farmers by helping them to increase their crop productivity through balanced use of energy efficient fertilizers, maintain the environmental health, and to make cooperative societies economically and democratically strong for professionalized services to the farming community to ensure an empowered rural India.

5.2 MISSION of IFFCO:

To provide to farmers high quality fertilizers in right time and in adequate quantities with an objective to increase crop productivity.

To make plants energy efficient and continually review various schemes to conserve energy.

Commitment to health, safety, environment and forestry development to enrich the quality of community life.

Commitment to social responsibility for a strong social fabric.

To institutionalize core values and create a culture of team building, empowerment and innovation which would help in incremental growth of employees and enable achievement of strategic objectives.

Foster a culture of trust, openness and mutual concern to make working a stimulating and challenging experience for stakeholders.

Building a value driven organization with an improved and responsive customer focus. A true commitment to transparency, accountability and integrity in principle and practice.

To acquire, assimilate and adopt reliable, efficient and cost effective technologies.

Sourcing raw materials for production of phosphatic fertilizers at economical cost by entering into Joint Ventures outside India.

To ensure growth in core and non-core sectors.

A true cooperative society committed for fostering cooperative movement in the country. Emerging as dynamic organization, focusing on strategic strengths, seizing opportunities for generating and building upon past success, enhancing earnings to maximize the shareholders' value.

5.3 BOARD OF DIRECTORS:

Mr.N.P.Patel	- Chairman
Mr.Balvinder Singh Nakai	- Vice Chairman
Mr. Prem Chanda Munsi	- Director
Mr. Tryambakrao G. Sirsath	- Director
Mr.Vithalbhai Radadia	- Director
Mr.Pramod Kumar Singh	- Director
Mr.Sheesh Pal Singh	- Director
Mr.Ravindra Pratap Singh	- Director
Mr.Simachal Padhy	- Director
Mr.K.Srinivasa Gowda	- Director
Mr. A Praveen Reddy	- Director
Mr. Anil Malik	- Director
Mr. Halappa Basappa Achar	- Director
Mr. Ramakant Bhargava	- Director
Mr. Ravindra P. Patil	- Director
Mr. Harminder Singh Jassi	- Director
Mr. Tapesh Pawar	- Director
Mr. Umesh Tripathi	- Director
Mr. Ram Chandra Singh Pradhan	- Director
Mr. Kartik Chandra Sarkar	- Director
Mr. B.S.Viahwanathan	- Director
Mr. Rajkumar Tripathi	- Director
Mr. (Dr.) U.S.Awasthi	- Managing Director
Mr. Rakesh Kapur	- Joint Managing Director
Mr. K.L. Singh	- Director (Technical)
Mr. (Dr.) G.N. Saxena	- Director (Coop. Development)
Mr. R.P. Singh	- Director(HR & Legal)
Mr. D.K.Bhatt	- Marketing Director
Mr. Manish Gupta	- Director (Strategy & JV)

5.4 REGISTERED OFFICE:

IFFCO Sadan,
C-1, District Centre
Saket Place, New Delhi-110017

5.5 PLANT LOCATIONS:

KALOL UNIT
P.O. Kasturinagar
Dist. Gandhinagar - 382423
(Gujarat)

KANDLA UNIT
Post Office: Kandla
Gandhidham - 370201
Kandla (Kachchh)
Gujarat

PHULPUR UNIT
P.O. Ghiyanagar
Dist. Allahabad - 212404
(Uttar Pradesh)

AONLA UNIT
P.O. IFFCO Township
Paul Pothen Nagar,
Bareilly - 243403 (U.P.)

PARADEEP UNIT
Village: Musadia
PO: Paradeep
Dist: Jagatsinghpur- 754142

5.6 EXISTING BANKERS:

Indian Overseas Bank

State Bank of India
Bank of Baroda
Standard Chartered Bank
The Maharashtra State Cooperative Bank Ltd.
The West Bengal State Cooperative Bank Ltd.
Madhya Pradesh State Cooperative Bank Ltd.
The Karnataka State Cooperative Bank Ltd.
The Punjab State Cooperative Bank Ltd.
The Hongkong and Shanghai Banking Corporation Ltd.
ICICI Bank Ltd.
IDBI Bank Ltd.
HDFC Bank Ltd.
Punjab National Bank

5.7 AUDITORS:

M/s. J. C. Bhalla & Co.,
Chartered Accountants,
B-5, Sector -6,
NOIDA-201 301.

M/s Rajnish & Associates,
Chartered Accountants,
92 & 87, Defence Colony Flyover Market,
New Delhi-110 024.

M/s. S.K. Mittal & Co.,
Chartered Accountants
Mital House
E-29, South Extn.Part-II
New Delhi - 110 049.

M/s. Arun Singh & Co.,
Chartered Accountants,
F-7, Lajpat Nagar III,
New Delhi-110 024.

M/s. S.P.Chopra & Co.
Chartered Accountants,
31-F, Connaught Place,
New Delhi-110 001

5.8 IFFCO ASSOCIATES:

IFFCO-Tokio General Insurance Company Ltd.

Oman India Fertilizer Company S.A.O.C.

Indo Egyptian Fertilizers Company, SAE

Jordan India Fertilizer Company, L.L.C.

IFFCO Chhattisgarh Power Ltd.

IFFCO Kisan Sanchar Ltd.

IFFCO Kisan SEZ Ltd.

Industries Chimiques Du Senegal

Kisan International Trading, FZE

National Commodity & Derivatives Exchange Ltd.

National Collateral Management Services Ltd.

Indian Potash Limited

IFFCO Kisan Bazar Ltd.

Indian Farm Forestry Development Cooperative Ltd.

IFFCO Foundation

Cooperative Rural Development Trust

IFFCO Kisan Sewa Trust

Freeplay Energy India Pvt. Ltd.

Aria Chemicals (Orissa) Ltd.

5.9 ABOUT THE COMPANY:

5.9.1 History of IFFCO Ltd:

Mr. Uday Bhansinh who is known as the founder of the fertilizer within cooperative sector rather than company. This concept was established in 1967. He told to Mrs. Indira Gandhi regarding this aid. At that time Rs.100 Crore was the requirement and 70% was granted and the rest was covered from the society. In 1969 Kalol plant was established having the investment of Rs.65 crore.

Then Kandla plant was introduced with Rs.35 crore of cost. In 1982-'83, Aonla (U.P.) plant having the investment of Rs.100 crore and in 1985 KRIBHCO., again established by IFFCO with a cost of Rs.100 crore. Kalol plant is the first one and that is why only it is called the 'Mother Plant'.

For four decades, the world's largest co-operative producer of fertilizer, IFFCO, has been the integral part of the Indian Farmers' life and time.

The strength of co-operative movement emanates from its ability to empower people who are individually weak and often helpless. The spirit of co-operations encourages people to come together on the basis of equality to achieve their economic interests. Voluntary association of individuals is the important aspect of any co-operative endeavor. Equality is assured to all the individuals involved in an unselfish atmosphere. The goal is to achieve the common economic interests of the group of individuals who have come together for the purpose.

The Indian Farmers Fertilizer Cooperative Limited [IFFCO], established in 1967, registered under the **Multi-State Cooperative Act**, is the largest fertilizer producing cooperatives in Asia. It has a membership base of 39,456 (as on Jan, 2008) agricultural cooperatives throughout the country. It is engaged in the production and marketing of chemical fertilizers. Its main objective is to provide quality fertilizer and technical know-how on agriculture to the farmers through its member-cooperatives.

The IFFCO has emerged as a fertilizer giant and the undisputed market leader in India for the supply of nitrogenous and NP/NPK complex fertilizers. It operates five large fertilizer plants located in Gujarat, Uttar Pradesh and Orissa.

In the context of innovations in technologies, changing global scenario, changing perspectives in government policies, changes in legislation, tougher competition and new players in the market place, IFFCO has instituted a number of promotional and developmental programmes to support its member-cooperatives that constitute the larger membership of the IFFCO.

IFFCO has contributed Rs.100 crore just for plantation purpose only. Generally the wasted chemical is reused by filtering it. This amount is invested by the Kalol plant at

Paradeep plant. Because of this investment, we can say that IFFCO is taking care of not only people but also environment.

5.9.2 Logo Of the Company

The Logo any organizations is very important by which the company is
Known to everyone or that is identity of the company. After one year of establishment in 1968 the organization has decide to make Logo of IFFCO. The executive of the company said that which can be easily fit any place or easily changeable according to the place & made by simple geometrical method. So the Logo is made by at last Mr. M.I.Gupta chief visualize developer is like that

Logo's ratio is 1:2:5 and the color are green. The rectangle shows that the Indian economy is depend upon the agriculture & green color shows the faith of the farmers, they believe that after Using the urea their fields will always be green, the remaining white color shows that the quality of the IFFCO's product is very good & oval shape is meant for prosperity.

5.9.3 VISION 2015

In pursuit of its growth and development, IFFCO had embarked upon and successfully implemented its cooperate plan "Mission 2005" and "Mission 2010". These plans have resulted in IFFCO becoming one of the largest producers and marketers of chemical fertilizers by expansion of its existing units, setting up joint venture companies overseas and diversification into new sectors.

IFFCO has now visualized a comprehensive plan titled "VISION 2015" which will be guided by the following objectives:

- Production of fertilizers through expansion of existing units.
- Setting up of fertilizers production facilities in India and outside the country through joint ventures.
- Diversification into other profitable sectors.
- Strengthening its raw material sourcing through strategic joint ventures in India and abroad.
- Strategic alliances through IFFCO consortium.

5.9.4 Performance Highlights for the year 2010-11:

Highest Production of fertilizers	**85.83 lacs MT** (Previous best 81.98 lacs MT in 2009-10)
Highest Production of Urea	**44.02 lacs MT** (Previous best 43.24 lacs MT in 2009-10)
Production of NPK/DAP/NP	**41.81 lacs MT** (Previous best 38.74 lacs MT in 2009-10)
Highest sales of Fertilizers	**125.28 lacs MT** (Previous best 118.27 lacs MT in 2009-10)
Highest sales of Urea	**68.23 lacs MT** (Previous best 63.35 lacs MT in 2009-10)
Highest sales of NPK/DAP/NP	**57.65 lacs MT** (Previous best 54.92 lacs MT in 2009-10)
Highest Profit before TAX	**Rs 1025.78 crores** (best PBT Rs 807.09 crores in 2002-03)
Highest Profit after TAX	**Rs 791.49 crores** (best PAT Rs 557.21 crores in 2002-03)
Total turnover	**Rs 21195.16 crores** (previous best Rs. 32933 crores in 2007-08)
Highest Plant Productivity	**1710 MT per employee** (Previous best 1669 MT in 2005-06)
Highest Marketing Productivity	**8622 MT Per Employee** (Previous Best 7885 MT in 2009-10)
Lowest Composite Energy Consumption	**5.814 Gcal/MT of Urea** (Previous Lowest 5.832 Gcal/MT in 2009-10

5.9.5 Profile of Products & Services

1. **UREA**

IFFCO's Urea is not merely a source of 46% of nutrient nitrogen for crops, but it is an integral part of millions of farmers in India. A bag of IFFCO's urea is a constant source of confidence and is a trusted companion for Indian farmer.

2. **BIO – FERTILIZERS**

A biofertilizer unit was established at Cooperative Rural Development Trust, Phulpur (Uttar Pradesh) in 1996 - 97 and other at Kalol (Gujarat) in 2003-04 with an annual capacity of 75 MT and 165 MT respectively of different cultures such as Rhizobium,

3. **AMMONIUM PHOSPHATE SULPHATE**

It is the most widely used fertilizer in the country. It is a white crystalline salt, containing 20 to 21 percent ammoniac nitrogen and 17 percent Phosphates. Being soluble in water, it acts quickly, but despite its high solubility, its nitrogen is not readily lost in drainage, because the ammonium ion is retained by the soil particles. it is, therefore, very suitable for wet-land crops

4. **NPK (Nitro-Phospho-Potassium)/DAP (Diammonium Phosphate)**

As far as Indian farmer is concerned, IFFCO's NPK/DAP is a source of crucial nutrients N, P, K for the crops. The two grades of NPK produced by IFFCO, 10:26:26 and 12:32:16, indicating the content of N, P, K proportion, are tailor made to supply the exact composition required for replenishment of the soil.

IFFCO

IFFCO

PRODUCTS

UREA

KALOL, AONLA, PHULPUR

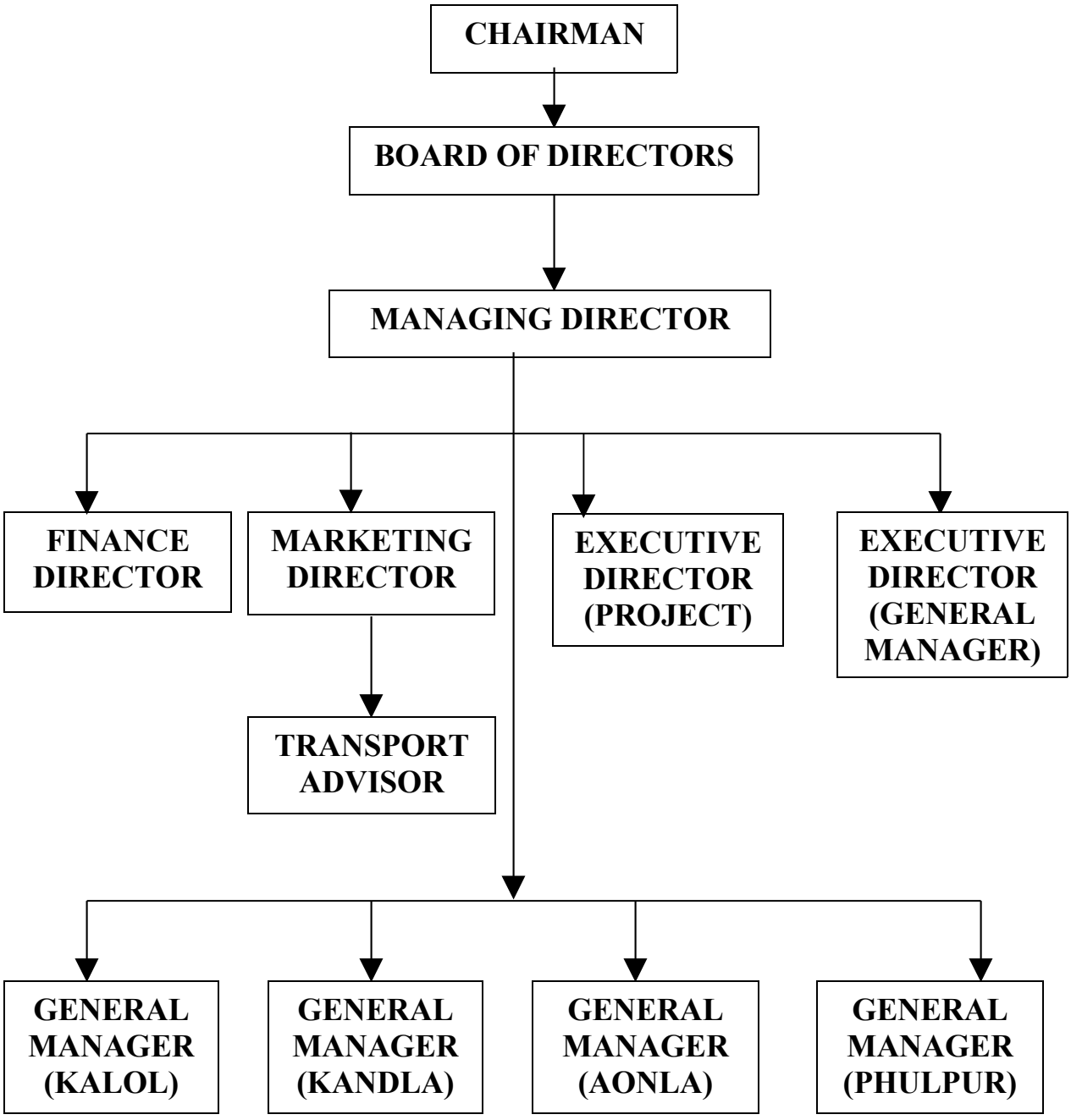
D A P

KANDLA, PARADEEP

N P K

KANDLA, PARADEEP

5.9.6 HIERARCHY OF IFFCO



5.9.7 About IFFCO Kalol Unit :

The IFFCO Kalol unit located at 26 km. from Ahmadabad - mehsana highway and is constructed over an area of 96 hectares. Kalol units commissioned its 910 tpd. (300300 tonnes/year). Ammonia plant and 1200 tpd. (396000 tonner/year). Urea plant in Nov. 1974 and jan.1975 respectively. The unit consists of plants to produce ammonia, urea, liquid CO2 and dry ice along with necessary utilities & offsite facilities. The natural gas available in the vicinity of the unit and SRN naphtha are used as feed stock for stock for the manufacture of ammonia. Associated gas, naptha, and LSHS are used as fuels. Water is supplies by GIDC from 15 bore wells around the unit. The plant is upgrated to produce 1100 tonnes of ammonia per day from 910 tpd & 1650 tpd urea from 1200 tpd by installing various schemes under Kalol expansion project.

The IFFCO Kalol is located in the rural area of Gandhinagar district. The plant is having far surface road inside the premises including premises including periphery road. Plant-layout is such that in case of any emergency the employees can easily evacuated.

YEAR OF COMMISSIONG	: 1975
INVESTMENT	: 71.23 CRORES
YEAR OF COMMISSIONG	: 1997
INVESTMENT	: 149.70 CRORES

5.9.8 Basic Information Of The Kalol Unit:

1. Annual licensed capacity	Original Plant	With Expansion
Urea Plant (tpa)	396,000	544,500
Ammonia Plant (tpa)	300,300	363,000
2. Indusry license no.		L/18(1)/1
3. D.G.T.D. Factory no.		D W – 302001
4. Date of start of Construction Work		23-06-1972
5. Mechanical completion – ammonia		15-03-1974
6. Mechanical completion – urea		15-10-1974
7. Commercial Production – ammonia		01-03-1975
8. Commercial Production – Urea		01-04-1975
9 Production of Dry ice		March 1978
10. Production of Liquid CO2		April 1998
11. Dedication of Kalol Plant By Prime Minister late smt.Indira Gandhi		08-11-1974
12. Dedication of KEP to Farmers by the Union home minister Of India, shri L.K.Advani		02-08-1998
13. ISO 9002 Certificate of Approval		10-08-1996
14. ISO 9002 Re-Certification		07-08-1999
15. ISO 14001 Certificate by BVQI		20-09-2000
16. Area Of the Project Side		96 hectares
17. Area of Township		21.85 hectares

5.9.9 Kalol Unit's Major Awards:

Kalol unit has received major award in following institution:

Seven award for overall performance from F.A.I

Two award for industrial safety from G.O.I

Awards for technical; innovation from F.A.I.

Two Rajya Bhasa Shilelds for promoting Hindi.

Three awards for safety from national safety council, Chicago & guj.safety council.

Indo germen Greentech environment excellence award.

5.9.10 Environmental Management System At IFFCO Kalol:

IFFCO-Kalol unit has sound environment management system comprising of following features:

Facilities for effluent treatment.

Monitoring of environment quality.

Implementation of waste minimization / pollution abatement schemes.

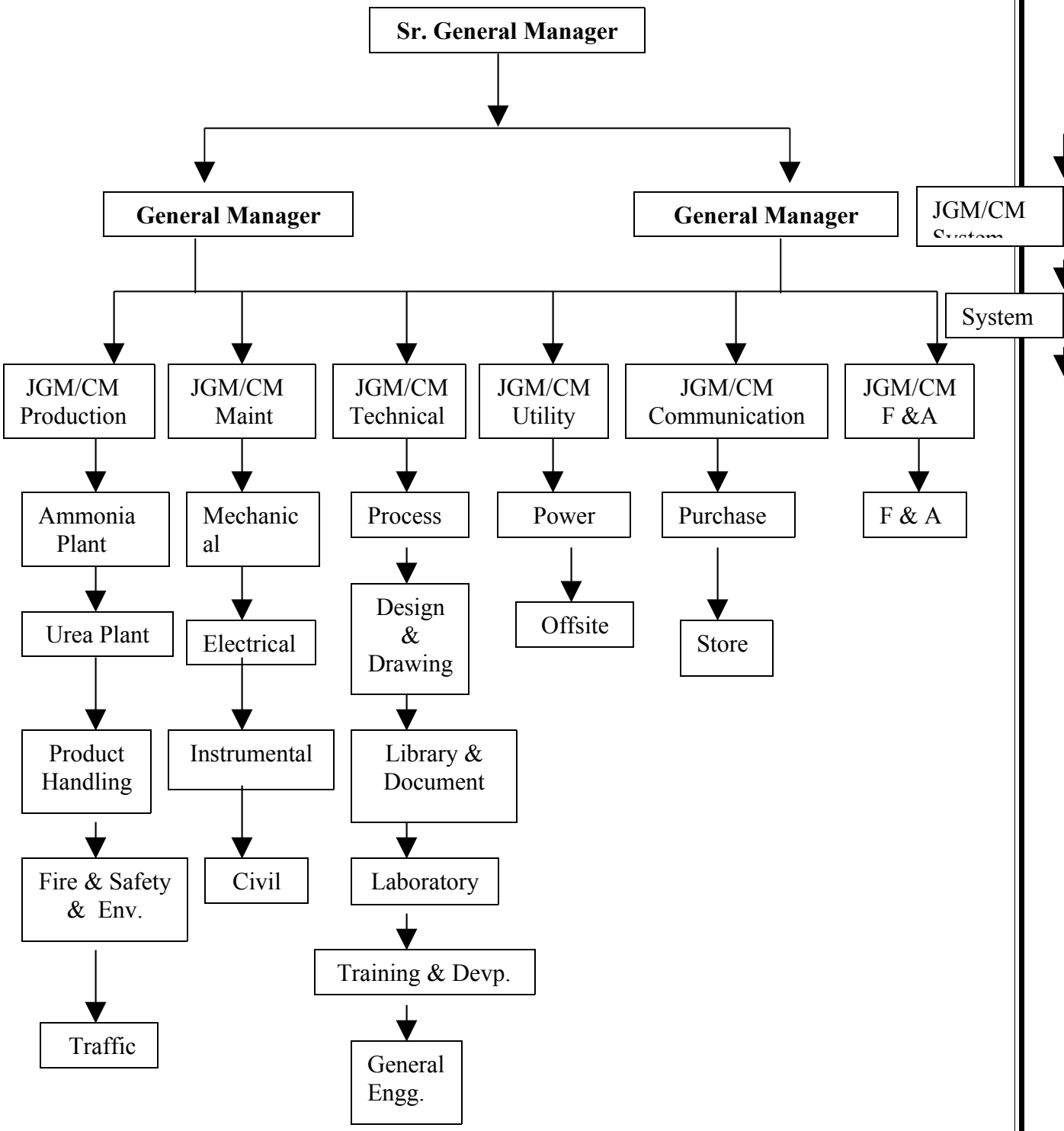
Well equipped laboratory and EPC cell.

Green belt development

ISO 14001 Accreditation both for plant and township.

Development of all around awareness regarding environmental issues.

5.9.11 ORGANISATION CHART AT KALOL UNIT



5.9.12 Various Departments At IFFCO Kalol:

1.Fire & Safety:

INTRODUCTION OF FIRE

Fire means combustion, may be defined as chemical reaction of rapid oxidation accompanied with the evolution of heat & light.

The basic requirement is necessary before combustion namely:

1. The presence of oxygen or other supporter of combustion.

2. The presence of fuel or combustible substance.

3. The presence of heat.

CAUSES OF FIRE

1. Sparking or short-circuiting on electrical system.
2. Friction in rotating equipments.
3. Open flame smoking, matches
.
4. Spontaneous ignition of material accelerated by external heat from dryer, boiler, oven etc.
5. Spark from combustion from mechanical tools & equipments.
6. Static electricity & lightening leakages of flammable stuffing box etc.

CLASSIFICATION OF FIRE

It can be classified into following categories.

1. **Class A fire**

Fire in ordinary combustible material such as wood, paper, & fertilizers etc. cooling effect of water is essential for extinguishing the fire. Generally soda acid type fire extinguishers or water is used for extinguishing the fire.

2. **Class B fire**
   Fire in flammable liquid like oily solvents, petroleum products, varnishes & paints etc. where blanketing effect is essential. Foam, Co2 & other extinguishers can be used.

3. **Class C fire**
   Fire involving gaseous substances under pressure where it is necessary to dilute the burning gas at a very fast rate with an inert gas or powder CO2 & dry powder type fire extinguishers are available for extinguishing such type of fires

4. **Class D fire**
   Fire involving metals like Hg,Al,Zn, K,etc. where the burning metal is reactive to water & which requires special extinguishing media or techniques, sand buckets & dry powder extinguishers are suitable. In some cases special type of powder is used.

5. **Class E fire**
   Fire involving electrical equipments where the non-conductivity of the extinguisher is important. CC14, CO2 & dry chemical powder can be used as extinguishers.
   "In IFFCO-Kalol unit, three fire-fighting vehicles & small portable extinguishers are installed at regular places to prevent any major fire hazards."

Personal Protective Equipments:

They are divided into two parts.

Respiratory protective devices

The air we breathe is sometimes contaminated with dust vapors , toxic fumes or gases. Various types of respiratory protective equipments are provided which enables as to breathe in an uncontaminated atm, even in presence of contaminant.

Non-respiratory protective devices

Eye protection, Head protection, Hand protection, Foot protection, Body protection, Hearing protection, Safety belts.

2. Personnel & Administrative:

Time-office

Time office is attendance related office.

Attendance is capturing through on line data capturing terminals. There are two machines one is Time-In machine &other is Time-Out machine.

Time-In machine is user at the entering in the iffco. Time-out machine is use at the time of going from iffco by there employees.

Time office is also loading the leave foams and over time foams for attendance of that employee.

Final marking is done at 25th of the every month. Then it is given to accounts department and according to it the pay-slip is prepared & that amount is deposited directly to there employees accounts. And if there is any absentee is found then salary is cut from its pay-slip directly.

Welfare activities

Welfare activity mainly includes retirement benefits. It includes gratuity, provident fund, pension plan, transportation, town-ship etc.

Gratuity is received at the time of the retirement. For gratuity there is one formula is there.
(Basic+D.a.)* no. of service years *15/26

Provident fund is 10% of basic is deducted from every month's salary and it is given at the time of the retirement with the interest

Pension is cut @ 1.33% from the p.f.and it is also given at the time of the retirement.

Iffco is also giving bus services for the employees.

Iffco is also providing town-ship for the employees.

Beside its iffco has its own benevorant trust. In which Rs .2500 is given to the employee every for that employees has to put Rs.20 & management put Rs.20

Every month at the time of the retirement in that trust min. Rs10000 of amount is required in the account of the employees for its benefit.

IFFCO has retirement policy canteen facilities. There are two canteens one is big canteen for launch & dinner and another is small canteen for snacks, tea, &coffee. There is sport service available from canteen.

Medical

Dispensary at plant is open for 24 hours. There are four pharmacists and one helper is there for 24 hours available. There is also one ambulance available for 24 hours.

First aid treatment is available at plant and hospital is available at Kasturinagar town-ship

In hospital there are three pharmacists, two sisters & two doctors is available for 24hours.

They are giving free service to their employees and dependable.

If employee go out side & get treated than that expense is 100% reimbursement

There are two types of claims normal & special. In case of normal claim lower limit is Rs.2250 (colony resident)& Rs. 4500 (except colony). And in case of special claim there is no limit.

Medical department will pay the money to the hospital directly in case of the special claims. In case of normal treatment they are paid to the employees accounts.

Employees have to first get approval from the medical department and then his/her treatment is process further. In case of the emergency employee has to take approval after the treatment is over. That is called Ex post facto.

Incase of Rs.30000 IIFCO (Kalol) is giving approval and above Rs.30000. They have to send to the H.O. and they are giving approval for that treatment.

If you get permission of Rs.1 lakh and expense is went over Rs.1 lakh. Then you have to do an enhancement for expense above Rs.1lakh.

I.R.&H.B.L.

I.R. is industrial relation and H.B.L. is house building loan.

I.R.is maintaining trough good relation with the union. That department is taking care of legal activities, fatal accident, normal accident, theft, misbehave, misconduct, high absenteeism, etc.

H.B.L. is given to the employee for the construction, renovation, purchase of hour. And there rate of interest is only 5.5%per annum.

They are also giving car loan, convenience loan, and personnel loan. The loan is given on the basis of the basic salary.

3. Material & Purchase:

Material and purchase department mainly includes two things that is procurement and contracting procedure. Another is powers of officers. That is expressed below.

Procurement &contracting procedures

Scope
Responsibility for purchase-function
Registration of vendors
Requisition for purchase
Record and numbering of requisition
Invitation to bird
Time allow for submission of bids
Validity of bids
Opening of bids
Late, invalid and unsolicited bids and emd
Quotation comparison statement
Tender committee
Selection of successful bidder
Single tender
Negotiation
Rate contracting
Purchase order
Guarantees
Amendment to purchase order
Extension of delivery or completion time
Repeat order
Follow of purchase orders-by stores
Inspection of material
Clearing and transportations of material
Damage/short/rejected materials
Insurance claim

Local/cash purchase

4. Marketing Department:

IFFCO is not to meet the total of the fertilizer industries in India besides that IFFCO is the largest production of fertilizer industries in India. So the question of exporting does not arises at the present and in the future they are not exporting newt 4 to 5 year. IFFCO has 5 zonal, 17 states, 64 area and 374 district offices.

Central Office

53-54, Govardhan,
Nehru Palace,
New Delhi-110 019
Fax: 011-26237704, 26288203
Phone: 26432507/511

Zonal Office (West Zone)

Block 2,3rd Floor, Paryawas,
Arera Hills, Bhopal
Phone-0755-2555854, 2764932
Fax-0755-2553093
Email: zmbhp@iffco.nic.in

State Office (Gujarat)

2nd Floor, Mistry Chambers,
Khanpur, Ahmedabad-380001
079-25601493, 25601175
Email: smmgujarat@iffco.nic.in

Area Offices(Gujarat)

Block No.F-27,2nd Floor,
Khetivadi Utpadan Bazar Samiti,
Mehsana 384002
Email: am_mehsana@iffco.nic.in

Aga Khan Hostel Building,
College Road,
Junagadh 362001
Email: am_junagadh@iffco.nic.in

1st Floor, "Maruti", Behind Dhareshwar Farm,
Kotecha Chowk, Kalavad/Nirmal Road
Rajkot 360001

3rd Floor, Murlidhar Sahakar Bhavan,
Near Hotel Yuvraj, Opp. Railway Station,
Surat 395001
Email: am_surat@iffco.nic.in

10, Kamla Nehru Park Society,
Mehsana Nagar, Nizampura,
Vadodra 390002
Email: am_vadodra@iffco.nic.in

Two field representatives who are assisted by district field officer are appointed at the district level. The sale of IFFCO's fertilizer and various programs are conducted by about 500 field officers who are graduates and most in agricultural and supported by a team of manager at area, state, zonal & head office level.

Field Officer

A field officer is basically an agricultural graduate. The field officers are given special incentives. Their work is to give advice to farmers and area officers in other promotional activities. Round about 10 to 15 officers are under each area office.

Marketing Department do the following activities

Marketing services

Product planning

Product pricing

Product distribution

Promotional activities

Transportation

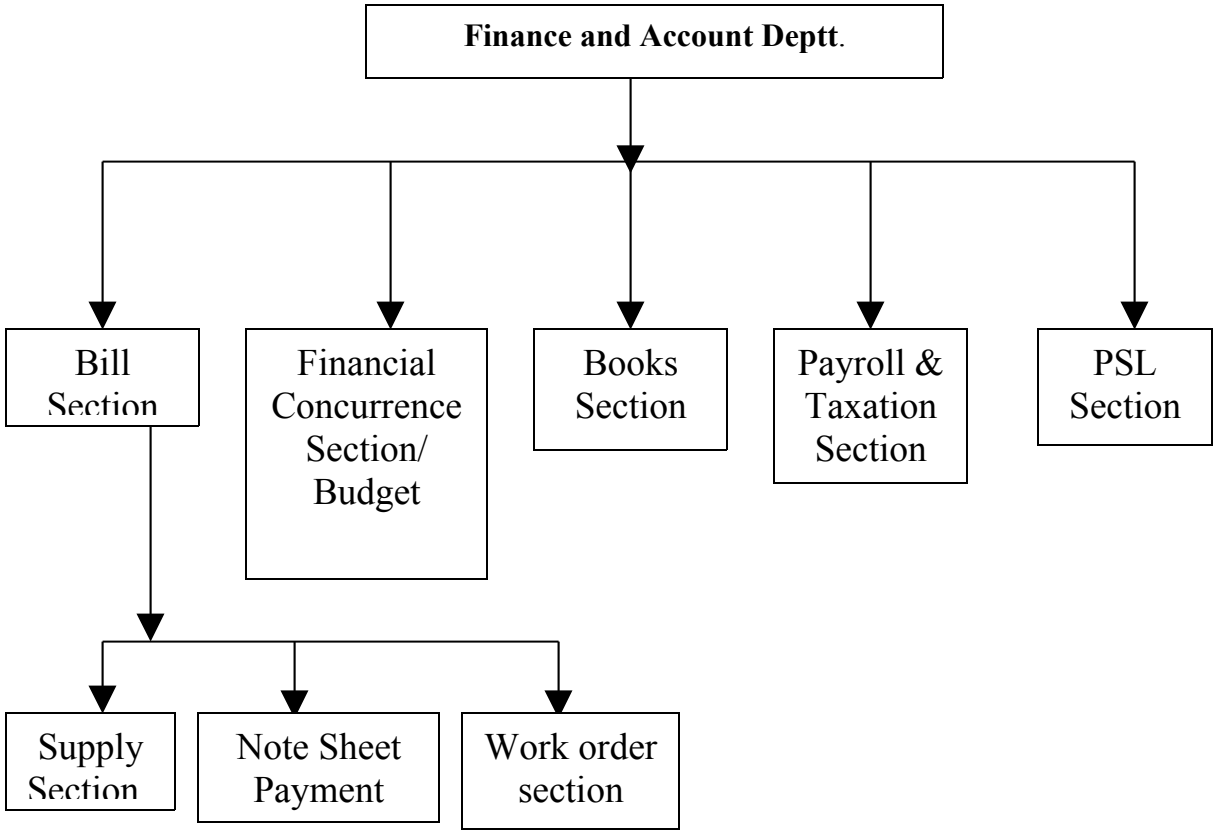
Agricultural services

Training of farmers

Warehousing facilities

Finance & Accounts Deptt. At A Glance

The Finance & Accounts Department. of IFFCO, Kalol is divided into 3 sections, to facilitate smooth and easy functioning and control.



5. Finance & Accounting:

Function of F & A

Bills section

Stores Accounts section

F.C. section

Cash and bank

Books

F.I.C.C.

Managerial Reporting

Insurance

Fixed asset

Raw material payment

Pay roll and established section

Taxes

Budget

Function of F & A

To make payments

To receive payment

Accounting of transactions as per: Accounting standard published by institute of charted accountant

Company's significant accounting policy

Master chart of account

Stores Accounts section

This section controls the inventories. In IFFCO there is about RS.39 crores inventories.

This section booking receipt of inventories on the basis of S.R.V. (Stores Receipt Voucher) which issued at the time when raw material is coming in the plant.

This section booking consumption of inventories on the basis of S.I.V. (stores issue voucher) Which issued at the time when inventories are going in the use of the plant

There is nearly about 47000 items are stored in inventory section.

Account department make payment when they received S.R.V. from the stores section.

Financial Concurrence section

F.C. section is considered when the purchase amount or contract amount is more than RS.1 lakh.

This section sees whether purchases are as per purchase procedure.

To see whether requirement is genuine and also checks the availability of the budget for that purchase.

This section also sees purchases are economical and feasibility of the purchase.

Cash and bank

Cash and bank section arrange fund as per the requirement of the different section for daily, weekly, monthly, quarterly forecast

This section prepares the check for all purpose.

Writing of cash book, bank book, bank reconciliation etc. and also tally cash on hand daily.

Books

This section prepares monthly, quarterly, yearly account.

Accounts are audited by internal auditors and statutory auditors.

This section also analyze financial ratio, BEP , IRR, pay back period.

This section also prepare cost sheet.

F.I.C.C.

F.I.C.C. stands for fertilizer industries co-ordination committee.
This committee fixes the selling price. This committee belongs to government and it is for all the fertilizer industry.
For getting subsidy IFFCO has to follow the guideline of F.I.C.C.

Managerial Reporting

Account is first audited by unit level.

Secondly it is audited by H.O. level.

Than it is audited by the government body.

Insurance

IFFCO'S all insurance are with the IFFCO-TOKIO general insurance company. In this company. In this company IFFCO is major share holder with 51% of holding share.

Now IFFCO has taken one big mega risk policy for all the plants. Which include followings:

- Fire insurance
- Earthquake
- Cyclone
- Other natural calamities
- Machine break down (accident)
- Loss of profit policy
- Cash in transit
- Motor vehicle policy
- Worker' policy
- Public liability policy
- Group gratuity cum life assurance policy
- Personnel accident policy and relevant policy for plant.

Fixed Asset

Fixed asset issue mainly include land, building, machines, plants, town ship, bus and truck, equipment, railway sidings, furniture & fixture and other fix assets.

In IFFCO there is as wall as 54 heads of fixed assets.

IFFCO is applying S.L.M.(strait line method) for the depreciation.

Rate of depreciation is decided by the H.O.

For the disposal of the any unused fixed asset there is some provision .

Raw material payment

For the payment of the raw material following things are required:

- S.R.V.(stores receipt voucher)
- P.O. bill (purchase order bill)
- Bill from supplier

Pay roll and Establishment section

This section is mainly related to the payment of the employees related. This include the followings

- Salary
- Wages
- Ta/Da
- Medical reimbursement
- LTC
- HBL
- Convenience achievement etc.

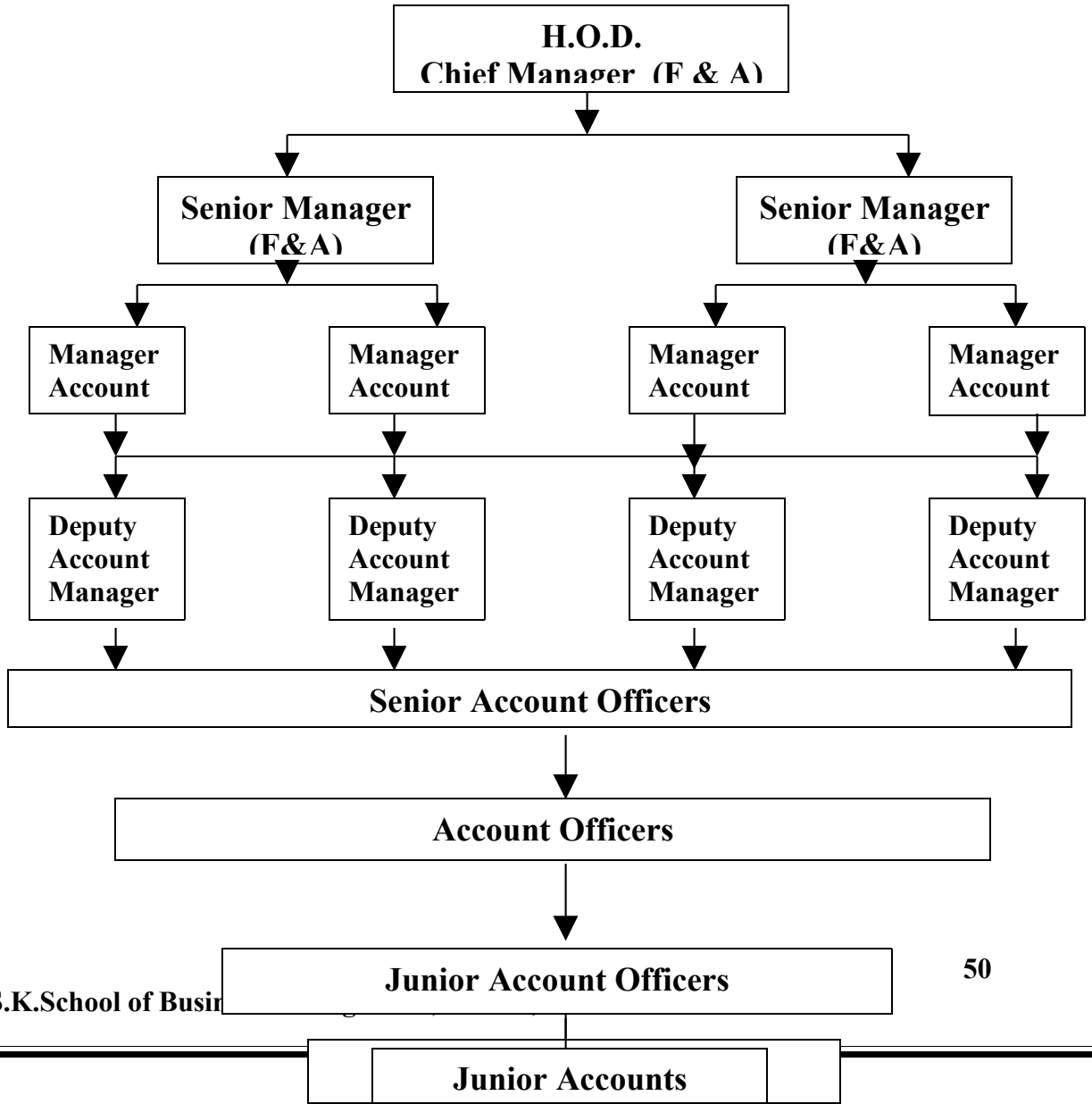
Taxes

There are mainly two types of taxes excise duty and VAT & Additional VAT, Service tax etc

Excise duty is levied by the central government. And sales tax is levied by the state government.

Now 16% excise duty is charged by the central govt. and 4 & 12.5 % Vat and 1 & 2.5 % Additional Vat is charged by the state govt. and 10.3% service tax charged by govt.

Line Of Control in Finance &Account Department



5.9.13 Overview of Internal Control Relating to Inventory

Internal control refers to the norms through which a particular activity can be carried out. In IFFCO, the material is purchased in the following norms:

Steps:

1. **MPR :**For raw material, the particular department will issue MRP (material purchase requisition) notes, to the purchase department.
2. **TENDER :** On the basis of MPR note, the purchase will be issue tender or will intimate to registered parties for the quotation.
3. **ENQUIRY**: On the basis of quotation the committee will decide which party is competent for the requisite material.
4. **PURCHASE ORDER:** After decision the purchase department will issue purchase order to the competent party.
5. These **purchase order will be issued** to for the concern parties-
    a) Suppliers
    b) Account section
    c) Purchase account
    d) Store
6. **INSPECTION**: After purchase and supply of material, the indent department will inspect the material.
7. **NORMS**: After inspection, all the material will be issue according to their own norms.
8. **SRV:** After storing , the store department sends SRV (store receipt voucher) notes to the following department –

a) 1 copy to the purchase department

b) 1 copy to the indent department

c) 2 copy to the accounts department

d) 1 copy to lies to the store department itself.

9. **PAYMENT:** After pricing the SRV by the billing section of F & A department and after receipt of invoice from the supplier, the accounts section will issue the cheque to the concerned party for the value received as per condition.

DIFFERENT VOUCHERS IN IFFCO

In IFFCO, there are 3 types of receipt and issue vouchers, generally used for the particular receipt and issue materials. The lists are as follows:

- Receipt vouchers:

  a) SRV (store receipt voucher)

  b) ISRV (internal store receipt voucher)

  c) DCSRV (direct consumer store receipt voucher)

- Issue vouchers:

  a) SIV (store issue voucher)

  -Department issue (2 Copies)

  -Contractor issue (4 Copies)

- Adjustment vouchers:

  a) SAV (stock adjustment voucher)

b) STV (stock transfer voucher)

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CHAPTER –6

THEORY OF WORKING CAPITAL MANAGEMENT

S.

6.1 NATURE OF WORKING CAPITAL:

Working capital management is concerned with the problems that arise in attempting to manage current assets, the current liabilities and the interrelationship that exists between them. The term current assets refers to those assets which in the ordinary course of business can be or will be, converted into cash within one year without undergoing a diminution in value and without disrupting the operations of the firm. The major current assets are cash, marketable securities, accounts receivables and inventory. Current liabilities are those liabilities which are intended, at their inception, to be paid in the ordinary course of business, within a year, out of the current assets or earnings of the concern. The basic current liabilities are account payable, bills payable, bank overdraft, and outstanding expenses.

The goal of working capital management is to manage the firm's current assets and liabilities in such a way that a satisfactory level of working capital is maintained. This is so because if the firm cannot maintain a satisfactory level of working capital, it is likely to become insolvent and may even be forced into bankruptcy. The current asset

should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. Each of the current assets must be managed efficiently in order to maintain the liquidity of the firm while not keeping too high a level of any one of them. Each of the short-term sources of financing must be continuously managed to ensure that they are obtained and used in the best possible way. The interaction between current assets and current liabilities is, therefore, the main theme of the theory of the theory of working management.

The basic ingredients of the theory of working capital management may be said to include its definition, need, optimum level of current assets, and the trade–off between profitability and risk which is associated with the level of current assets and liabilities, financing-mix strategies and so on.

6.2 CONCEPT OF WORKING CAPITAL:

There are two concepts of working capital: Gross and Net.

- The term **gross working capital,** also referred to as working capital, means the total current assets.
- The term **net working capital** can be defined in two ways:
    1. the most common definition of net working capital(NWC) is the difference between current assets and current liabilities; and
    2. Alternate definition of NWC is that portion of current assets which is financed with long-term funds.

The task of the financial manager in managing working capital efficiently is to ensure sufficient liquidity in the operations of the enterprise. The liquidity of a business firm is measured by its ability to satisfy short-term obligations as they become due. The three basic measures of a firm overall liquidity are

i. The current ratio

ii. The acid-test ratio, and

iii. Net working capital ratio

Net working capital (NWC), as a measure of liquidity is not very useful for comparing the performance of different firms, but it is quite useful for internal control. The NWC helps in comparing the liquidity of the same firm over time. For purpose of working capital management, therefore, NWC can be said to measure the liquidity of the firm. In other words, the goal of working capital management is to manage the current assets and liabilities in such a way that an acceptable level of NWC is maintained.

The two concepts of working capital – Gross and Net – are not exclusive; rather, they have equal significance from the management viewpoint.

6.3 DEFINITION :

Working capital refers to the cash a business requires for day-to-day operations, or, more specifically, for financing the conversion of raw materials into finished goods, which the company sells for payment. Among the most important items of working capital are levels of inventory, accounts receivable, and accounts payable. Analysts look at these items for signs of a company's efficiency and financial strength.

Working capital is commonly defined as the difference between current assets and current liabilities. Efficient working capital management requires that firm should operate with some amount of working capital, the exact amount varying from firm to firm and depending, among other things, on the nature of industry. The theoretical justification for the use of working capital to measure liquidity is based on the premise that the greater the margin by which the current assets cover the short –term obligations, the more is the ability to pay obligations when they become due for payment. The NWC is necessary because the cash outflows and inflows do not coincide. In other words, it is

the non-synchronous nature of cash flows that makes NWC necessary. In general, the cash outflows resulting from payment of current liabilities are relatively predictable.

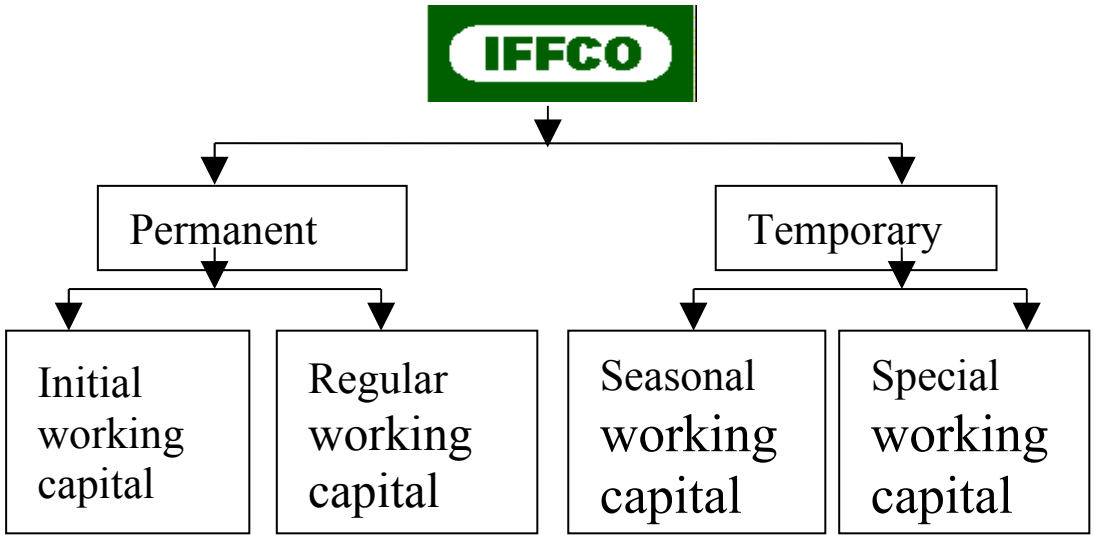
Some companies are inherently better placed than others. Insurance companies, for instance, receive premium payments up front before having to make any payments; however, insurance companies do have unpredictable outgoings as claims come in. Normally a big retailer like Wal-Mart has little to worry about when it comes to accounts receivable: customers pay for goods on the spot. Inventories represent the biggest problem for retailers. Manufacturing companies, for example, incur substantial up-front costs for materials and labor before receiving payment. Much of the time they eat more cash than they generate.

6.4 NEED FOR WORKING CAPITAL:

The need for working capital (gross) or current assets cannot be overemphasized. Given the objective of financial decision making to maximize the shareholder's wealth, it is necessary to generate sufficient profits. The extent to which profits can be earned will naturally depend, among other things, upon the magnitude of the sales. A successful sales programme is, in other words, necessary for earning profits by any business enterprise. However, sales do not convert into cash instantly; there is invariably a time-lag between the sale of goods and the receipt of cash. There is, therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sales activity.

6.5 TYPES OF WORKING CAPITAL:

WORKING CAPITAL



Business activity does not come to an end after the realization of cash from customers. For a company, the process is continuous and, hence, the need for a regular supply of working capital. For all practical purposes, this requirement has to be met permanently as with other fixed assets. This requirement is referred to as **permanent or fixed working capital**.

Any amount over and above the permanent level of working capital is **temporary, fluctuating or variable working capital**. This portion of the required working capital is needed to meet fluctuations in demand consequent upon changes in production and sales as a result of seasonal changes.

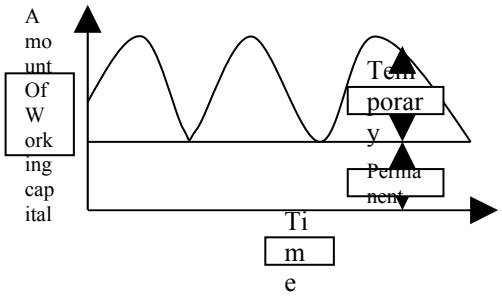


Figure shows that the permanent level is fairly constant, while temporary working capital is fluctuating-increasing and decreasing in accordance with seasonal demands.

Initial working capital:

In the initial period of its operation, a company must have enough money to pay certain expenses before the business yield a cash receipt. In the initial years bank may not grant loans or overdraft. Sales may be made in credit and may be necessary to make payment to creditors. Hence the necessary fund will have to be supplied by the owner in initial year.

Regular working capital:

It is the working capital required to continue the regular business operation. It is required to maintain regular stock of raw material and work –in-progress, finished goods. Regular working capital is the excess of current assets over current liabilities; it ensures smooth operation of business.

Seasonal working capital:

Some business enterprises require additional working capital during the season. For ex: - sugar mill have to purchase sugarcane in particular season and have to employ additional labor to produce.

Special working capital:

In all enterprise some unforeseen events do occur, when extra funds are needed to tide over such situation. Some of these events are sudden increase in demand of final product, downward movement of price, and sales during depression.

6.6 DETERMINANTS OF WORKING CAPITAL:

A firm should plan its operations in such a way that it should have neither too much nor too little working capital. The total working capital requirement is determined by a wide variety of factors. These factors, however, affect different enterprise differently. They also vary from time to time.

General Nature of Business:

The working capital requirements of an enterprise are basically related to the conduct of business. Enterprise falls into some broad depending on the nature of their business. For instances, public utilities have certain features which have a bearing on their working capital needs. The two relevant features are:

1. the cash nature of business, that is, cash sales, and
2. Sale of services rather than commodities.

In the view of these features, they do not maintain big inventories and have, therefore, probably the least requirement of working capital.

Production cycle:

Another factor which has a bearing on the quantum of working capital is the production cycle. The term production or manufacturing cycle refers to the time involved in the manufacture of goods. It covers the time-span between the procurement of raw materials and the completion of the manufacturing process leading to the production of finished goods. Funds have to be necessarily tied up during the process of manufacture, necessitating enhanced working capital. In other words, there is some time gap before raw material becomes finished goods; to sustain such activities the need for working capital is obvious.

Business cycle:

The working capital requirements are also determined by the nature of the business cycle. Business fluctuations leads to cyclical and seasonal changes which, in turn, cause a shift in the working capital position, particularly for temporary working capital requirements. The variations in business conditions may be in two directions:

1. upward phase when boom conditions prevail, and
2. downswing phase when the economic activity is marked by decline.

Production policy:

The quantum of working capital is also determined by production policy. In case of certain lines of business, the demand for products is seasonal, that is, they are purchased during certain months of the year. What kind of production policy should be followed in such case? There are two options open to such enterprise: either they confine their production only to periods when goods are purchased or they follow a steady production policy throughout the year. During slack season, the firms have to maintain their working force and physical facilities without adequate production and sale.

Credit policy:

The credit policy relating to sales and purchase also affects the working capital. The credit policy influences the requirement of working capital in two ways:

1. through credit terms granted by the firm to its customers , buyers of goods;
2. credit terms available to the firm from its creditors.

The credit terms granted to customers have a bearing on the magnitude of working capital by determining the level of book debts. The credit sales result in higher book debts. Higher book debts mean more working capital. On the other hand, if liberal credit terms are available from the suppliers of goods, the need for working capital is less.

Growth and Expansion:

As a company grows, it is logical to expect that a larger amount of working capital is required. It is, of course, difficult to determine precisely the relationship between the growth in the volume of business of a company and the increase in its working capital. The composition of working capital in a growing company also shifts with economic circumstances and corporate practices.

Vagaries in the Availability of Raw Material

The availability or otherwise of certain raw material on a continuous basis without interruption would sometimes affect the requirement of working capital. There may be some materials which cannot be produced easily either because of their sources are few or they are irregular. To sustain smooth production, therefore the firm might be compelled to purchase and stock them far in excess of genuine production needs.

Profit Level:

The level of profits earned differs from enterprise. In general, the nature of the product, hold on the market, quality of management and monopoly power would by and large determine the profit earned by a firm. A *priori,* it can be generalized that a firm dealing in a high quality product, having a good marketing arrangements and enjoying monopoly power in the market, is likely to earn high profits and vice-versa.

Level of Taxes:

The first appropriation out of profits is payment or provision for tax. The amount of taxes to be paid is determined by the prevailing tax regulations the management has no discretion in this respect. Very often, taxes have to be paid in advance on the basis of the profit of the preceding year. Tax liability is, in a sense, short-term liability payable in cash. An adequate provision for tax payments is, therefore, an important aspect of working capital planning.

Dividend Policy:

Another appropriation of profits which has a bearing on working capital is dividend payment. The payment of dividend consumes cash resources and, thereby, affects working capital to that extent. Conversely, if the firm does not pay dividend but retains the profits, working capital increases. In planning working capital requirements, therefore, a basic question to be decided is whether profits will be retained or paid out to shareholders.

Price Level Changes:

Changes in the price level also affect the requirements of working capital. Rising prices necessitate the use of more funds for maintaining an existing level of activity. For the same level of current assets, higher cash outlays are required. The effect of rising prices is that a higher amount of working capital is needed.

IFFCO

CHAPTER – 7

ANALYSIS OF

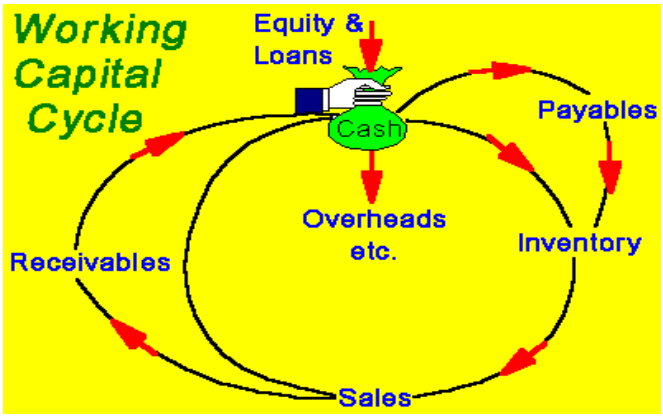
WORKING CAPITAL

7.1 WORKING CAPITAL CYCLE:

Current assets are needed because sales do not convert into cash instantaneously. There is always an **operating cycle** involved in the conversion of sales into cash. There is a difference between current and fixed assets in terms of their liquidity. A firm requires many years to recover the initial investment in fixed assets such as plant and machinery or land and buildings.

Working capital cycle is the time duration required to convert sales, after the conversion of resources into inventories, into cash. The cycle of a manufacturing company involves three phases:

1. conversion of cash into inventory;
2. conversion of inventory into receivables;
3. conversion of receivables into cash.



Working capital cycle, also known as the asset conversion cycle, net operating cycle, cash conversion cycle or just cash cycle, is used in the financial analysis of a business. The higher the number, the longer a firm's money is tied up in business operations and unavailable for other activities such as investing. The cash conversion cycle is the number of days between paying for raw materials and receiving cash from selling goods made from that raw material.

The operating cycle consists of three phases. In phase I, cash gets converted into inventory. This includes purchase of raw material, conversion of raw materials into work-in-progress, finished goods and finally the transfer of goods to stock at the end of the manufacturing process. In phase II of the cycle, the inventory is converted into receivables as credit sales are made to customers. In phase III, when receivables are collected complete the operating cycle.

The length of the operating cycle of a manufacturing firm is the sum of:

i. inventory conversion period
ii. debtors conversion period, total of these called Gross operating cycle.

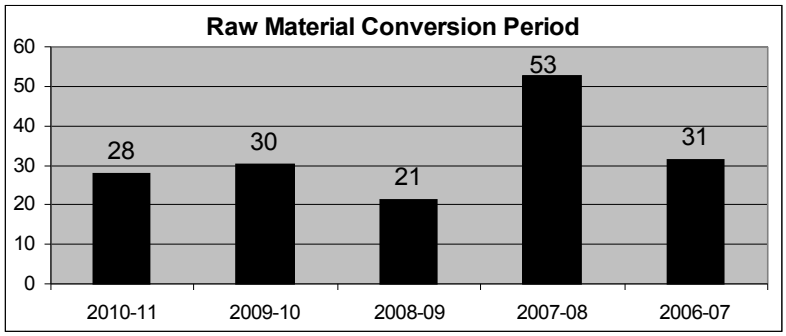
The difference between operating cycle and payables deferral period is net operating cycle, also represents the cash conversion cycle.

INVENTORY CONVERSION PERIOD

- **Raw material conversion period:**

$$\textbf{RMCP} = \frac{\text{Raw material inventory} * 365}{\text{Raw material consumption}}$$

1) Raw Material Conversion Period					Rs. In crores
	2010-11	2009-10	2008-09	2007-08	2006-07
Raw material inventory	813.25	718.1	823.39	959.39	551.27
Raw material consumption	10686.71	8714.44	13997.22	6646.44	6428.37
Ratio(days)	28	30	21	53	31



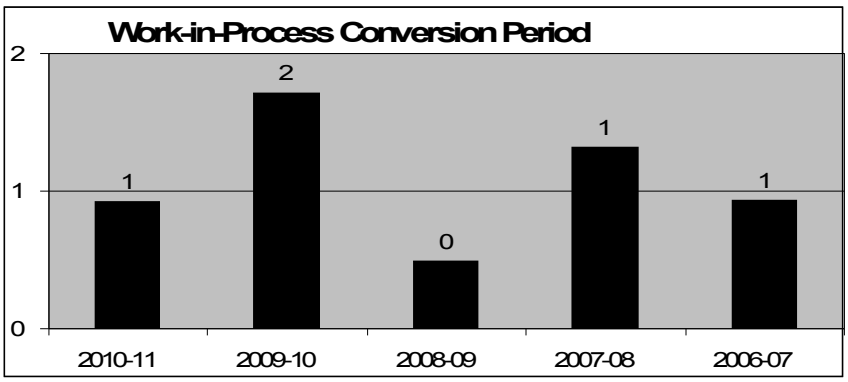
Interpretation:

Raw material Conversion Period indicates that how many days raw material takes to convert into work-in-progress inventory. In IFFCO, The raw material includes potash, urea, ammonia, p2o5, phosphoric acid, naphtha, natural gas. In these, most of the raw materials are imported. So IFFCO should cautious to maintain this inventory in this way that production does not stop without availability of raw materials. So the raw material conversion period is very high in IFFCO. Though Company takes a effective step to reduce its period as we see that it was decreased to 28 days in this year as compared to the year 2007-08 (53 days).

- **Work-in-progress inventory conversion period:**

$$\text{WIPCP} = \frac{\text{work-in-progress inventory} * 365}{\text{Cost of production}}$$

2) Work-in-Progress Conversion Period					Rs. In crores
	2010-11	2009-10	2008-09	2007-08	2006-07
work-in-progress inventory	50.12	72.89	42.3	36.89	26.44
Cost of production	19740.12	15540.72	31771.85	10190.11	10334.96
Ratio(days)	1	2	0	1	1



Interpretation:

At IFFCO most of the plants operate for almost more than 320 days in a year for 24 hours so the work in progress inventory is almost negligible, even if there is some work in progress they try to convert it into finished goods and then properly pack it and send the same to the warehouse for dispatch.

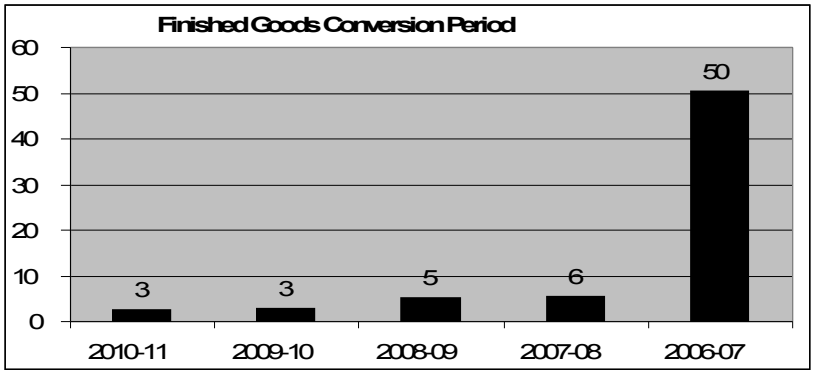
- **Finished goods conversion period:**

$$\text{FGCP} = \frac{\text{finished goods inventory} * 365}{\text{Cost of goods sold}}$$

2) Finished Goods Conversion Period

Rs. In crores

	2010-11	2009-10	2008-09	2007-08	2006-07
Finished goods inventory	141.48	130.14	449.34	174.24	1320.9
Cost of goods sold	19728.78	15859.92	31496.75	11,336.77	9,578.09
Ratio(days)	3	3	5	6	50



After the goods are produced i.e. fertilizer produced is sent to bagging plant for packing in either gunny bags or plastic bags and then the packed fertilizer is sent to the warehouse for further distribution to the end users i.e. farmers. IFFCO supplies its fertilizers material mostly through a network of about 40000 cooperative societies in different states. Nearly 48 % of the finished goods were sold directly to the societies whereas 44%

was routed through state federations. A 5% fertilizers were sold through Service Centres run by IFFCO and about 3% through Agros. The marketing strategy of IFFCO is designed to ensure timely availability of reasonably priced quality products right at the door step of the farmers through the nationwide co-operative network.

Interpretation:

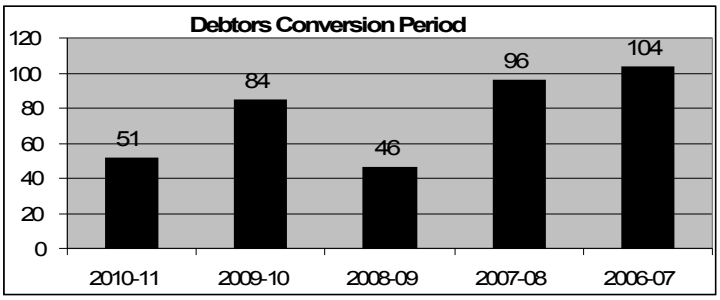
IFFCO'S management of distribution of fertilizers is very strong and also the demand of fertilizers increased year to year. So finished goods conversion period is less in all years except the year 2006-07. In the year 2006-07, finished goods stock remained very high at the end of the year. So it shows very high period of conversion of finished goods into sales.

DEBTORS CONVERSION PERIOD

$$\text{DCP} = \frac{\text{Average debtors} * 365}{\text{Net sales}}$$

3) Debtors Conversion Period					**Rs. In crores**
	2010-11	2009-10	2008-09	2007-08	2006-07
Sales	21195.16	16808.57	32933.3	12162.82	10330.11
Avg.Debtors	2979.76	3876.05	4176.11	3194.69	2935.63
Ratio(days)	**51**	**84**	**46**	**96**	**104**

Sales = Net sales + Subsidy from Government
Avg Debtors = Avg Sundry Debtors (+) Avg Claims For subsidy from Government



Interpretation:

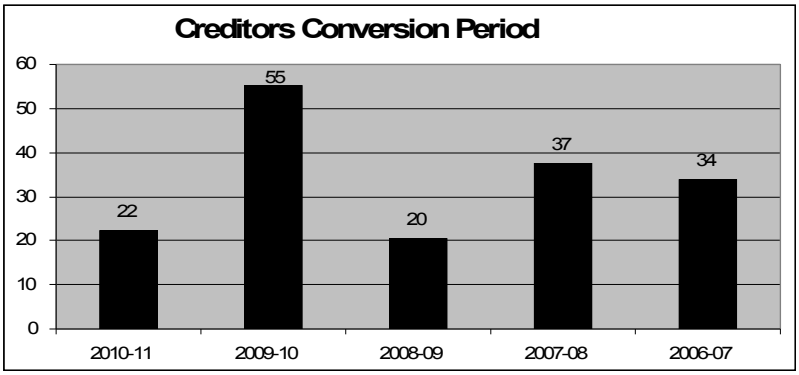
IFFCO sales its fertilizers according to the price decided by the Ministry of finance. So the Government of India pays subsidy to IFFCO as per subsidy policy in approximately 4 to 5 months. IFFCO claims for subsidy to FICC on quarterly basis, though the customers pay to IFFCO within a one week.

Debtors' conversion period is very high due to late payment of claims of subsidy by the Government of India, though it is less as compared to Fertilizer Industry of India.

CREDITORS DEFERRAL PERIOD

$$\text{CDP} = \frac{\text{Average creditors} * 365}{\text{purchase}}$$

5) Creditors Deferral Period					(Rs. In Crores)
	2010-11	2009-10	2008-09	2007-08	2006-07
Average creditors	1042.335	1972.76	1664.225	833.87	913.425
purchase	17147.25	13097.20	29863.21	8127.62	9868.9
Ratio(days)	22	55	20	37	34



Interpretation:

This ratio indicates in how many days the amount is being paid to creditors. From the above chart we can interpret that IFFCO paid to creditors within 20-40 days. IFFCO

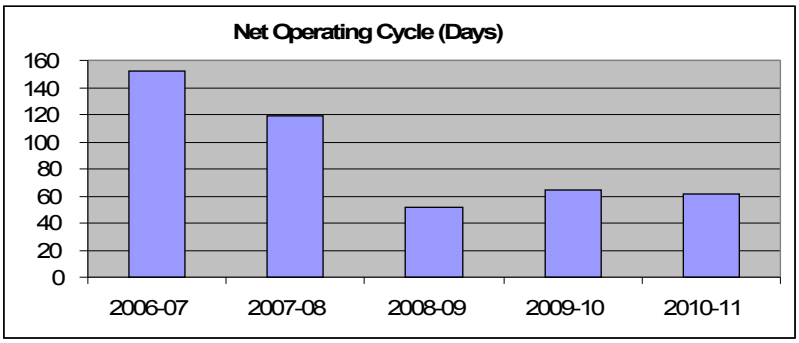
paid to creditors within the time limit taken or given to creditors. As Compared to 2009-10, IFFCO paid to creditors more quickly which increased the credit worthiness of IFFCO.

WORKING CAPITAL CYCLE

Net operating cycle = Gross operating cycle – Creditors deferral period

= (RMCP + WIPCP + FGCP + DCP) – CDP

Particular	2010-11	2009-10	2008-09	2007-08	2006-07
Raw material conversion period	28	30	21	53	31
Work in progress conversion period	1	2	0	1	1
Finished goods conversion period	3	3	5	6	50
Debtors collection period	51	84	46	96	104
Gross operating cycle [Total A]	83	119	72	156	186
Creditors deferral period **[B]**	22	55	20	37	34
Net operating cycle [A-B] (days)	61	64	52	119	152



Company's working capital cycle completes in 61 days in the year 2010-11 which is 152 days in the year 2006-07 . In case of inventory conversion period, raw materials mainly are potash, urea, ammonia, p2o5, phosphoric acid, naphtha, natural gas. Raw Material conversion Period is 28 days and Work In Progress Inventory Conversion Period is 1 Days and Finished goods Conversion Period is 3 days in the year 2010-11. So total inventory conversion period is 32 days while Debtors Conversion period is 51 days which is quite good. So IFFCO's gross operating cycle is 83 days. But Creditors Deferral Period is 22 days. It is better in comparison with the Debtors Conversion period. So Net Working Capital Cycle is 61 days. So this is long working capital cycle and it indicates that IFFCO is not well managing its working capital. As stated above a business should not over invest in working capital. The key point to note here is that a longer cash cycle ties up a bigger investment in working capital. It is therefore useful to monitor the length of cash cycle, and changes in it, to judge whether a business has an excessive working capital level or perhaps whether working capital is inadequate which may lead to liquidity problems.

From the above chart, we can indicate that IFFCO takes an effective step to maintain its net working capital cycle to 2 months which is good as compared to Industry.

7.2 WORKING CAPITAL ANALYSIS:

The two components of working capital are current assets and current liabilities. They have a bearing on the cash operating cycle. In order to calculate the working capital needs, what is required is the holding period of various types of various inventories, the credit collection period and the credit payment period. Working capital also depends on the budgeted level of activity in terms of production/sales. As the working capital requirement is related to the cost excluding depreciation and not to the sale price, working capital is computed with reference to cash cost.

Working capital: excess of current assets compared to current liabilities, and indicates amount of excess current assets relative to current liabilities available to conduct revenue generating operations.

Total current assets minus current liabilities are value of working capital.

- **Current Assets**: cash, marketable securities, notes receivable, accounts receivable, inventories, supplies, and prepaid expenses
- Consumed in production of sales revenue
- **Current Liabilities**: accounts payable, accrued expenses,(e.g. wages payable, interest payable, taxes payable)
- Operating cost incurred on credit

Inflows- Sources of Working Capital:

- **Income from operations**
    a) Accrued income is sales revenue less all expense incurred in producing sales revenue inflow
    b) Sales revenue generated by cash sales or on credit through receivables
    c) Expenses incurred by immediate payment of cash or credit through Payable
- **Accrual net income**

a) Determined after deducting noncash expenses
b) To convert net income to increase working capital, capitalized expenses added to net income

- **Sale of long term assets**

a) Land, building, furniture, equipment, investment
b) Sale treated as flow which increases working capital

- **Increase in long term liability**

a) Create or increase loan, mortgage, or bond achieves this
b) Inflow that increases working capital
c) Borrowing long tern debt create increase in cash, current assets, or current receivable with no effect to current liability

Outflows - Uses of Working Capital:

- **Loss from operations**

a) When loss occurs, expenses have exceeded sales revenue
b) Decreases working capital

- **Purchase of long term asset**

a) Land, building, furniture, equipment, investment
b) Outflow that decreases working capital

- **Payment of Long term liabilities**

Payment reducing principal amount owed on long term liability

Payment of cash dividends

Payable obligations

b) In partnership, current asset withdrawals by owner are reductions to capital investments.

CURRENT LIABILITIES

Schedule-12 & 13 (Rs. in Crores)

	2010-11	2009-10	2008-09	2007-08	2006-07
LIABILITIES					
CURRENT LIABILITIES					
1. Bank Overdraft	10.53	10.05	9.29	12.23	7.21
2. Sundry creditors	586.81	1497.86	2447.66	880.79	786.95
3. Advance payments	17.02	68.62			
from customers			7.29	5.21	6.15
4. Interest payable	12.00	15.89	30.22	15.16	19.59
5. Other statutory liability	38.51	35.16	26.36	19.36	15.92
6. Deposits	43.76	40.94	35.24	27.53	31.34
7.Other current liabilities	222.45	130.88	303.82	88.21	161.31
8. Provisions	431.23	392.22	322.71	323.08	172.76
Total current liabilities	**1362.31**	**2191.62**	**3182.89**	**1371.57**	**1201.23**

CURRENT ASSETS

Schedule-8 to 11 (Rs.In Crores)

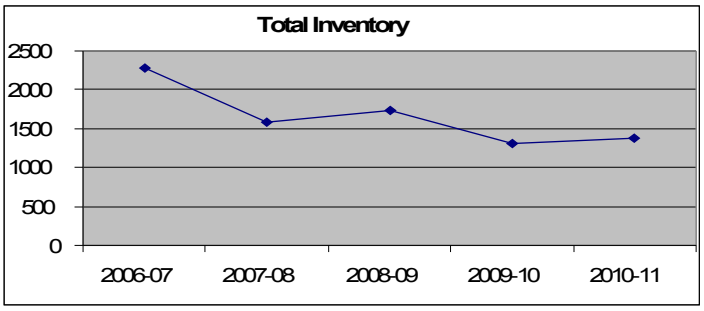
	2010-11	2009-10	2008-09	2007-2008	2006-2007
CURRENT ASSETS					
9.Cash & Bank balances	2570.24	1075.31	69.63	243.32	**330.84**
10.Debtors (i) Considered as Good	1.84	0.01	0.41	0.75	**2.00**
(ii) Considered as Doubtful	0.3	0.35	0.01	0.21	**2.47**
(iii) Other Debts Unsecured (Considered as Good) Less: Prov.for Doubtful Debt	144.93 0.30	68.07 0.35	406.82 (0.01)	413.01 (0.21)	**359.68** **(2.47)**
Total(Debtors)	144.77	68.08	407.23	413.76	**361.68**
11. Inventory					
(i) Raw material	813.25	718.10	823.39	959.39	**551.27**
(ii) Stock in progress	50.12	72.89	42.30	36.89	**26.44**
(iii) Finished goods	141.48	130.14	449.34	174.24	**1320.90**
(iv) Stores & Spares	257.9	259.58	290.21	327.83	**311.74**
(v) Loose Tools	1.84	1.96	2.03	1.83	**2.25**
(vi) Chemicals & Catalysts	69.06	77.73	72.49	28.94	**30.81**
(vii) Packing Materials	40.61	30.50	37.49	33.26	**28.08**
(viii) Construction Material	9.92	10.79	14.11	14.72	**12.45**
Total(Inventory)	1384.18	1301.69	1731.36	1577.10	**2283.94**
12. Loans and Advances	3807.86	3377.43	5464.77	3541.56	**3104.82**
13. Total current assets (Gross working capital)	7909.05	5822.51	7672.99	5775.74	**6081.28**
NET WORKING CAPITAL (Current assets – Current liability)					
(13 – 9)	**6546.74**	**3630.89**	**4490.10**	**4404.17**	**4880.05**

Analysis

Inventory Management

	2010-11	2009-10	2008-09	2007-08	2006-07

Inventory					
(i) Raw material	813.25	718.1	823.39	959.39	551.27
(ii) Stock in progress	50.12	72.89	42.3	36.89	26.44
(iii) Finished goods	141.48	130.14	449.34	174.24	1320.9
(iv) Stores & Spares	257.9	259.58	290.21	327.83	311.74
(v) Loose Tools	1.84	1.96	2.03	1.83	2.25
(vi) Chemicals & Catalysts	69.06	77.73	72.49	28.94	30.81
(vii) Packing Materials	40.61	30.5	37.49	33.26	28.08
(viii) Construction Material	9.92	10.79	14.11	14.72	12.45
Total(Inventory)	1384.18	1301.69	1731.36	1577.1	2283.94



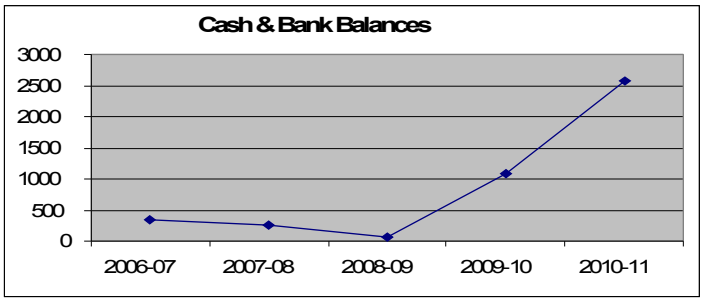
Interpreataion:
From the above table & chart, We can interpret that IFFCO took effective step to decrease its inventory so that it can increase its liquidity. In the year 2006-07, finished goods inventory is high at 31st march but it dispatched to farmers in the month of April. From the table we can analyzed that

(i) IFFCO maintains inventory of Stores & Spares on an average 300 crores
(ii) Company increased the inventory of Chemicals & Catalysts to double as compared to the year 2006-07

Cash & Bank Balance Management:

	2010-11	2009-10	2008-09	2007-08	2006-07
Cash and Bank Balance					
Cash in hand	0.25	0.3	0.27	0.35	0.3
Cheques in hand	42.03	20.46	24.95	30.37	8.15

Remittance-in-Transit	41.81	34.19	19.83	53.77	34.03
Balances with Scheduled Banks in Current Accounts	2486.15	1020.36	24.58	158.83	288.36
Total	2570.24	1075.31	69.63	243.32	330.84



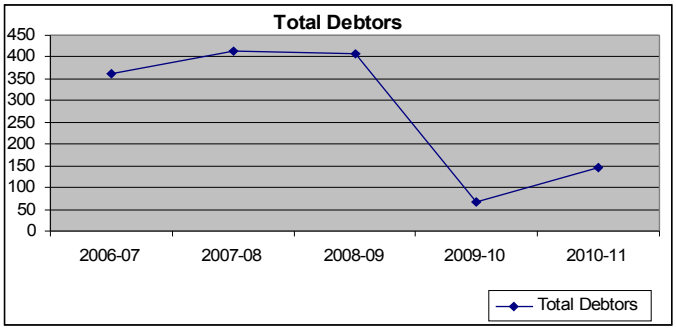
Interpretation:

Chart shows that Cash & bank balances varied much during the period of study. In the year 2008-09, it decreased to 69.63 crores because IFFCO purchased special fertilizer bonds from Government of India of Rs.6000 crores. Major reason behind increased in cash in the year 2009-10 is Interest. In this year Net interest paid decreased to Rs.623.95(952.48-328.53=623.95) due to interest received of special bonds from GOI.In the year 2010-11, Cash & bank balance increased to Rs. 2570.24 due to sale of special bonds Government.

Total Debtors :

Debtors	2010-11	2009-10	2008-09	2007-08	2006-07
(i) Considered as Good	1.84	0.01	0.41	0.75	2
(ii) Considered as	0.3	0.35	0.01	0.21	2.47
Doubtful					
(iii) Other Debts					
Unsecured	144.93	68.07	406.82	413.01	359.68

(Considered as Good)					
Less: Prov.for Doubtful Debt	0.3	0.35	-0.01	-0.21	-2.47
Total(Debtors)	**144.77**	**68.08**	**407.23**	**413.76**	**361.68**

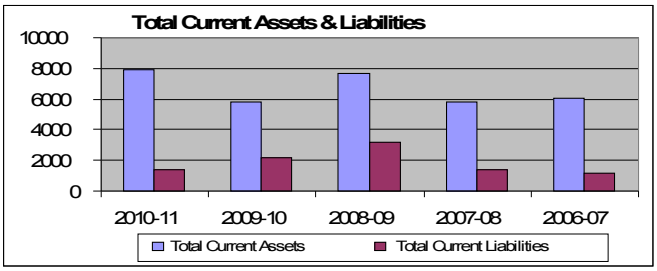


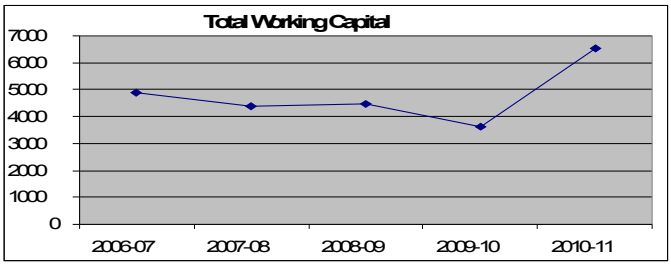
Interpretation:

Chart shows that IFFCO takes an effective step to reduce its debtors so that it can increase its liquidity. In the year 2009-10, Debtors decrease to Rs. 68.08 Crores which was Rs.361.68 crores in the year 2006-07. So it indicate that IFFCO'S Receivables management is very efficient.

Net Working Capital :

	2010-11	2009-10	2008-09	2007-08	2006-07
Total Current Assets	7909.05	5822.51	7672.99	5775.74	6081.28
Total Current Liabilities	1362.31	2191.62	3182.89	1371.57	1201.23
Total Working Capital	6546.74	3630.89	4490.1	4404.17	4880.05





Interpretation:

From the analysis of above tables and charts, we can found that the net working capital is positive, In the year 2006-07 the net working capital was Rs.4880.05crore but in the year 2007-08 the net working capital was decreased to Rs.4404.17crores, then after in the year 2008-09 the net working capital is increased to Rs.4490.10crores. Whereas in the year 2009-10, it decreased to Rs. 3630.89 which increased by 1.8 times(Rs.6546.74) in the year 2010-11. Because in the year 2010-11 total current assets are increased with the compare to previous year, and total current liabilities are also decreased with the compare to previous year.

But overall, net working capital is positive. So it shows efficient working capital management of IFFCO.

IFFCO

CHAPTER – 8
WORKING CAPITAL RATIOS

8.1 RATIO ANALYSIS:

This is the measure of inter relationship between different sections of the financial statements which then is compared with the budgeted or forecasted results, prior year results and or the Industrial results. To be most important ratios must include a study

of underlying data. Ratios should be taken as guides that are useful in evaluating a company's financial position and operations and making comparisons with results in previous years or with other companies. The primary purpose of ratios is to point out areas needing further investigations. Ratios will not carry meaningful business reasoning if there is no supporting quantitative and financial information.

Nevertheless, it is possible to construct a series of ratios that together will provide all of them with something that they will find relevant and from which they can investigate further if necessary. It removes some of the mystique surrounding the financial statements and makes it easier to pin point items which it would be interesting to investigate further.

8.2 Data Analysis and Interpretation of Working Capital Ratios:

Working Capital Ratios in order to examine short-term liquidity and solvency of firm is shown below. Working Capital Ratios show the financial ability of the firm to meet its current liabilities as well as its efficiency in managing currents assets for generation of sales. It needs no mention that cash/bank balance is converted into raw materials, raw materials is converted into work-in-progress, work-in-progress into finished goods, finished goods is converted into debtors and receivables through credit sales and finally debtors to cash/bank and this cash to cash phenomenon is technically known as operating cycle and shorter the operating cycle, greater the degree of efficiency in working capital management.

(8.2.A) Analysis of Short-Term Financial Position or Test of Liquidity

The short –term creditors of a company such as suppliers of goods of credit and commercial banks short-term loans are primarily interested to know the ability of a firm

to meet its obligations in time. The short term obligations of a firm can be met in time only when it is having sufficient liquid assets. So to with the confidence of investors, creditors, the smooth functioning of the firm and the efficient use of fixed assets the liquid position of the firm must be strong. But a very high degree of liquidity of the firm being tied – up in current assets. Therefore, it is important proper balance in regard to the liquidity of the firm. Two types of ratios can be calculated for measuring short-term financial position or short-term solvency position of the firm.

1. Liquidity ratios.
2. Current assets movements 'ratios.

1.CURRENT RATIO:

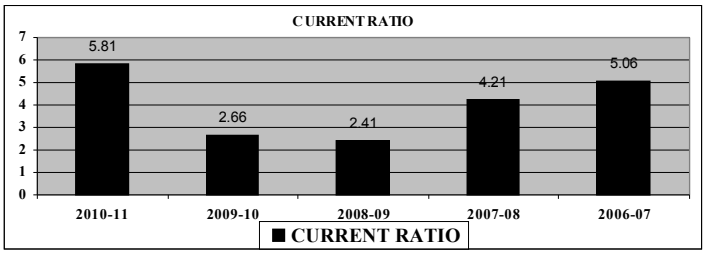
Current Ratio, also known as working capital ratio is a measure of general liquidity and its most widely used to make the analysis of short term financial position or liquidity of a firm. It is defined as relation between current assets and current liabilities.

A relatively high current ratio is an indication that the firm is liquid and has the ability to pay its current obligations in time. On the other hand a low current ratio represents that the liquidity position of the firm is not good and the firm shall not be able to pay its current liabilities in time. A ratio equal or near to the rule of thumb of 2:1 is considered to be satisfactory.

1) Current Ratio= Current Assets/Current Liabilities

Rs. In Crores

	2010-11	**2009-10**	**2008-09**	**2007-08**	**2006-07**
Current Assets	7909.05	5822.51	7672.99	5775.74	6081.28
Current Liabilities	1362.31	2191.62	3182.89	1371.57	1201.23
Ratio(Times)	**5.81**	**2.66**	**2.41**	**4.21**	**5.06**



Interpretation:

From the above chart, we can indicate that Current ratio of the IFFCO varied during the period of last five years. Current ratio of the IFFCO is highest in the year 2010-11 as compared to last years. It indicates that the firm is liquid and has the ability to pay its current obligations in time. As compare to last year, it is high in this year because Current liabilities decreased by 38%, whereas cash & bank balance increased by 139%. It indicates that company increases cash & bank balance because Company may make

payment of raw material like Natural gas, phosphorus, potash etc. fastly which is essential for the production of finished goods.

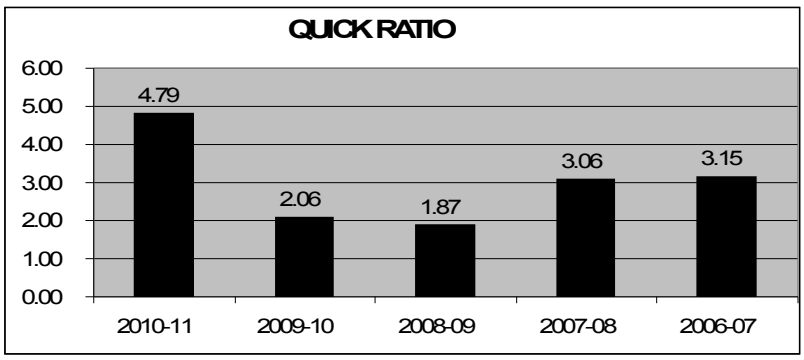
But Company should also keep in aware that the high working capital increase the interest burden of the company & some current assets may be not efficiently used. So IFFCO should take steps to decrease the current ratio.

2. QUICK RATIO:

Quick ratio is a more rigorous test of liquidity than current ratio. Quick ratio may be defined as the relationship between quick/liquid assets and current liabilities. An asset is said to be liquid if it can be converted into cash with a short period without loss of value. It measures the firms' capacity to pay off current obligations immediately.

It is often theorized that an acceptable figure should be 2:1 for current ratio and 1: 1 for quick ratio but these should only be used as a guide. Different businesses operate in very different ways.

2) Quick Ratio= Quick Assets/Current Liabilities				**Rs. In Crores**	
	2010-11	2009-10	2008-09	2007-08	2006-07
Quick Assets	6524.87	4520.82	5952	4197.0042	3783.87
Current Liabilities	1362.31	2191.62	3182.89	1,371.57	1,201.23
Ratio(Times)	4.79	2.06	1.87	3.06	3.15



Interpretation:

Current Assets minus Inventory are Quick Assets and on an average, it increased to Rs. 4.79 in 2010-11 for every rupee of quick liabilities. Quick ratio is highest in the year 2010-11. It indicates that the IFFCO is very capable to pay off current obligations immediately. But as the high quick assets increase the interest burden of the company, It should try to decrease the quick ratio.

The combined interpretation of Current ratio & quick ratio reflects that the interest of short-term creditors is at all protected by adequate solvency and liquidity of far from money assets.

(8.2. B) CURRENT ASSETS MOVEMENT RATIOS

Funds are invested in various assets in business to make sales and earn profits. The efficiency with which assets are managed directly affects the volume of sales. The better the management of assets, large is the amount of sales and profits. Current assets movement ratios measure the efficiency with which a firm manages its resources. These ratios are called turnover ratios because they indicate the speed with which assets are converted or turned over into sales. Depending upon the purpose, a number of turnover ratios can be calculated. These are :

1. Inventory Turnover Ratio
2. Debtors Turnover Ratio
3. Working Capital Turnover Ratio
4. Current Assets Turnover Ratio

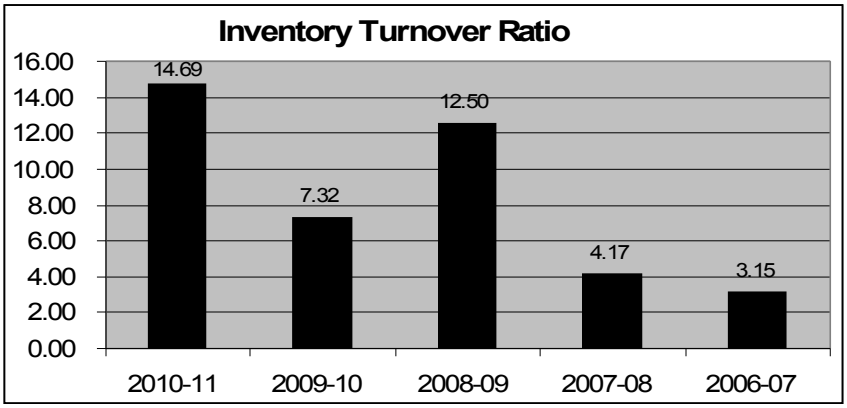
The current ratio and quick ratio give misleading results if current assets include high amount of debtors due to slow credit collections and moreover if the assets include high amount of slow moving inventories. As both the ratios ignore the movement of current assets, it is important to calculate the turnover ratio.

1. Inventory Turnover Ratio:

Every Firm has to maintain a certain amount of inventory of finished goods so as to meet the requirements of the business. But the level of inventory should neither be too high nor too low. Because it is harmful to hold more inventory as some amount of capital is blocked in it and some cost is involved in it. It will therefore be advisable to dispose inventory as soon as possible.

Inventory turnover ratio measures the speed with which the stock is converted into sales. Usually a high inventory ratio indicates an efficient management of inventory because more frequently the stocks are sold; the lesser amount of money is required to finance the inventory. Where as low inventory turnover ratio indicates the inefficient management the inventory. A low inventory turnover implies over investment in inventories, dull business, poor quality of goods, sock accumulations and slow moving goods and low profits as compared to total investment.

4) Inventory Turnover Ratio = COGS/Avg. Inventory (Rs. In Crores)					
	2010-11	**2009-10**	**2008-09**	**2007-08**	**2006-07**
COGS	19728.78	15859.92	31496.75	11,336.77	9,578.09
Avg.Inventory	1342.935	2167.93	2519.91	2719.07	3043.76
Ratio(Times)	**14.69**	**7.32**	**12.50**	**4.17**	**3.15**



Interpretation:

The ratio indicates how fast inventory is sold. This ratio shows how rapidly the inventory is turning into receivable through sales. A high ratio is good from the viewpoint of liquidity and vice versa. Inventory Turnover Ratio increases from 3.15 times in 2006-07 to 14.69 times in 2010-11.The trend shows inventory turn over ratio increases. As compare to last year, Inventory turnover ratio is almost double in this year. However, on overall analysis, it may be opined that inventory management is extremely satisfactory.

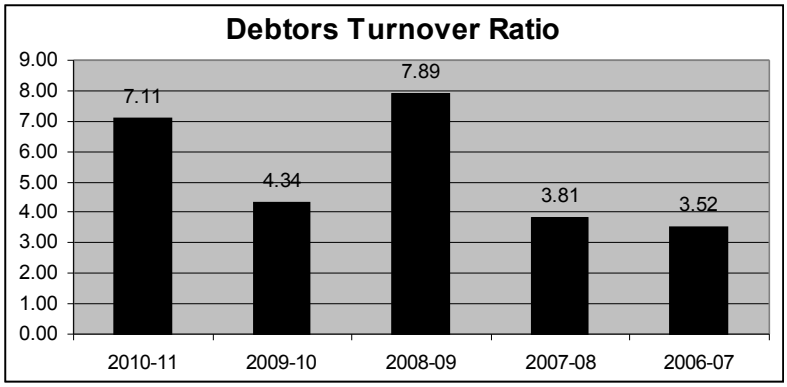
2. Debtors Turnover Ratio:

Debtors' velocity indicates the number of times the debtors are turned over during a year. Generally higher the value of debtor's turnover ratio, the more efficient is the management of debtors/sales or more liquid are the debtors. Where as a low debtors turnover ratio indicates poor management of debtors/sales and less liquid debtors. This ratio indicates poor management of receivables.

5) Debtors turnover ratio = Credit Sales/Avg.Debtors

Rs. In Crores

	2010-11	2009-10	2008-09	2007-08	2006-07
Sales	21195.16	16808.57	32933.3	12162.82	10330.11
Avg.Debtors	2979.76	3876.05	4176.11	3194.69	2935.63
Ratio(Times)	7.11	4.34	7.89	3.81	3.52



Interpretation:

Debtors turnover ratio varied between 3.5 to 8 times during period of the study. In IFFCO, Debtors turnover ratio is low just because of late subsidy payments made by the government. But it is good as compared to Fertilizer Industry. In the year 2010-11, It was 7.11 times which was high as compared to the 2009-10(4.34) but low as compared to the year 2008-09(7.89). So we can interpret that company take steps of increasing Debtors turnover ratio.

3. Working Capital Turnover Ratio:

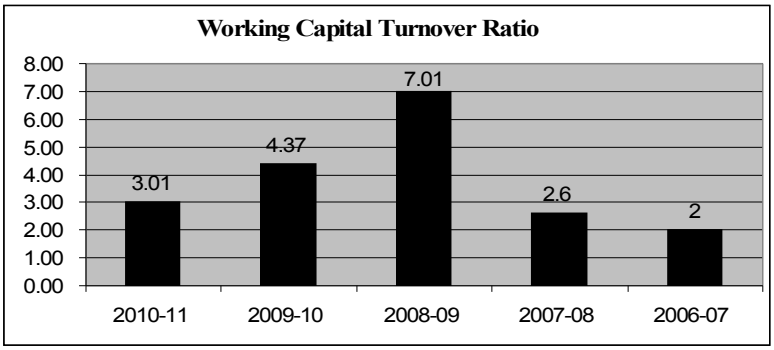
Management is required to maintain an optimum level of working Capital. Remember if an entity is having high inventory levels it will incur high storage costs, theft, insurance costs and stock losses. Like wise having low stock levels will disturb the production run of the company as it will regularly run out of inventories thereby loosing important business opportunities. The same can be said of receivables, having more receivable the company may run the risk of bad debts but also being too strict with debt repayment period may result in loss of customers.

Working capital turnover ratio indicates the velocity of utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of the year. This ratio measures the efficiency with which the working capital is used by the firm. A higher ratio indicates efficient utilization of working capital and a low ratio indicates otherwise. But a very high working capital turnover is not a good situation for any firm.

3) Working capital turnover ratio= COGS/Net working capital

Rs. In Crores

	2010-11	**2009-10**	**2008-09**	**2007-08**	**2006-07**
COGS	19728.78	15859.92	31496.8	11,336.77	9,578.09
Net working capital	6546.74	3630.89	4490.1	4404.17	4880.05
Ratio(Times)	**3.01**	**4.37**	**7.01**	**2.6**	**2**



Interpretation:

This ratio indicates how much net working capital requires the cost of sales. In 2010-11, the reciprocal of this ratio (1/3.01) shows that for the cost of sales of Rs. 1 the company requires 33 paisa as working capital. Working capital turnover ratio is highest in the year 2008-09. Thus this ratio is helpful to forecast the working capital requirement on the basis of cost of sales. This ratio signifies efficient working capital management of IFFCO.

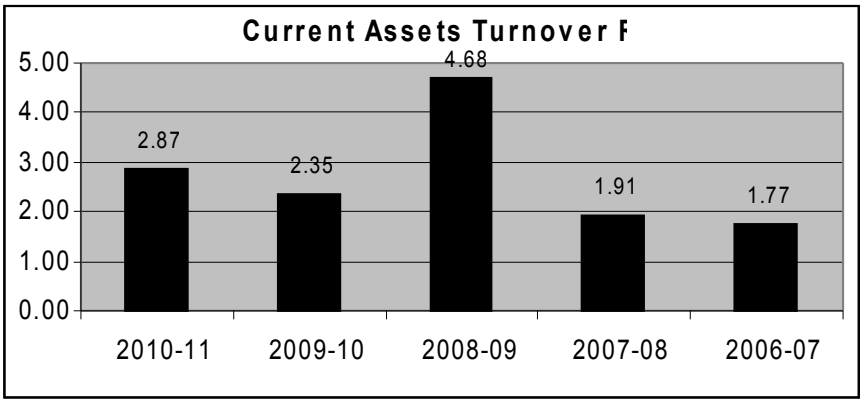
4.Current Assets Turnover Ratio:

Current asset turn over ratio indicates that on an average, the firm has generated sales of Rs. with the current assets worth Rs.

6) **Current asset turnover ratio = COGS/Avg.Current Assets**

(Rs. In Crores)

	2010-11	2009-10	2008-09	2007-08	2006-07
COGS	19728.78	15859.92	31496.75	11,336.77	9,578.09
Avg.Current Assets	6865.78	6747.75	6724.365	5928.51	5415.135
Ratio(Times)	2.87	2.35	4.68	1.91	1.77



Interpretation:

The Current Assets Turnover Ratio was 2.87 times in the year 2010-11. which is highest (4.68) in the year 2008-09. This indicates that IFFCO's gross working capital was not performed well to generate sales as compared to the year 2008-09. So Company should

try to increase current assets turnover ratio otherwise it leads to decrease in profitability and productivity of company.

On the basis of overall analysis, it is therefore pertinent to state that the company isn't suffering from crises of working capital. Short term liquidity and solvency of the firm is in very good position. Interest and financial security of the short-term creditors is not at risk. Utilization of current assets should have been made in much more effective manner.Last but not the least, working capital is the blood and life-giving force to the company and positive working capital can only save the life of the firm in any way, and company has it then company can meets its liabilities and manage day-to day activities.

IFFCO

CHAPTER – 9

WORKING CAPITAL FINANCE

After determining the level of working capital, a firm has to decide how it is to be financed. The need for financing arise mainly because the investment in working capital/current assets, that is, raw material, work-in-progress, finished goods and receivables typically fluctuates during the year. The present chapter discusses the main sources of finances for working capital. Although long-term funds partly finance current assets and provide margin money for working capital, such assets working capital is virtually exclusively supported by short-term sources. The main sources of working capital financing, namely, trade credit, bank credit, commercial papers and factoring.

IFFCO has divided its working capital needs which can be satisfied by two ways.
In IFFCO working capital financing is mainly divided into two parts:
1) Fund based working capital financing
2) Non-fund based working capital financing.

Difference between Fund based and Non-fund based loan

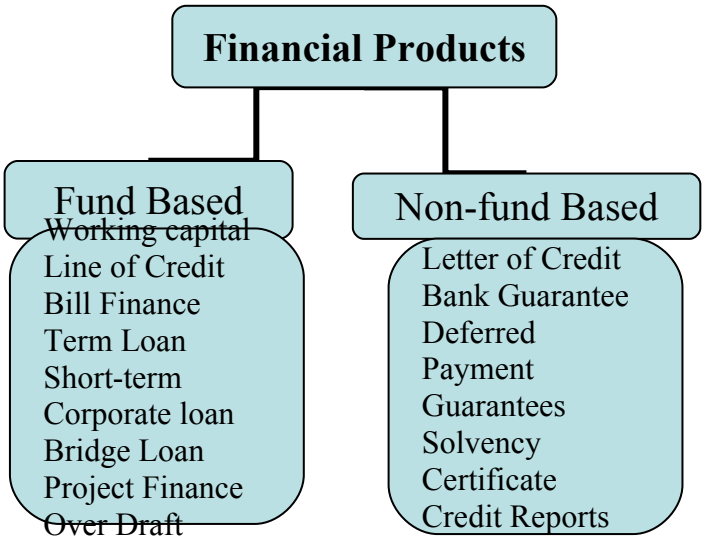
Fund based loans are actually received in cash whereas Non-fund based loans are not received in cash. Non-fund based loans are given by bank to other parties on the behalf of a company. In Fund based loans there is no limit utilization whereas in Non-fund based loans there is certain limit to which it can be utilized. We may be aware that fund- based finance for exporters are considered at all times by the bankers in view of the necessity to earn foreign exchange. The computation of the credits for the exporter is taken up in the usual way as for any working capital limits. The maximum permissible bank finance is arrived at and the exporter is asked to bring in his share or stake.

The non-fund-based limits are necessary to enable the parties concerned to get the requisite goods without the necessity of parting with the funds in advance. Based on the guarantee extended by the purchaser's bank the supplier sells the items and thereafter claims under the L/C. the non-fund based limits confers to both the bankers and the exporters.

1. No blocking of funds. Hence no impact on credit-deposit ratio.
2. Banks are able to earn hefty income from commission without advancing any fund.

9.1 MARKET SCENARIO:

Financial Assistance provided by financial institutions & commercial banks mainly includes following products.



Today, the market providing financing solutions to corporate is very competitive. The only difference that the provider can make is the differentiation through its services. Modifying some of the product features can distinguish the service provider but there is very less scope in that front as the current products are almost in line with its most innovative nature. Companies utilize this product according to its nature of business as well as financial terms agreed with its supplier and customers.

9.2 FINANCIAL INSTRUMENTS USED

These two pats are further divided into subparts.

Fund based financing can be classified into sub parts like

1) Cash Credit
2) Short term loans from Banks

Non-fund based working capital can be divided into sub parts like

1) Bank Guarantee or Letter of Guarantee
2) Letter of Credit or Line of Credit

Maximum Permissible Bank Finance		2010-11	2009-10	2008-09	2007-08	2006-07
Current Assets		7909.05	5822.51	7672.99	5775.74	6081.28
Current Liabilities		1362.31	2191.62	3182.89	1371.57	1201.23
Method 1	0.75(CA-CL)	4910.055	2723.1675	3367.575	3303.1275	3660.0375
Method 2	0.75(CA)-CL	4569.4775	2175.2625	2571.8525	2960.235	3359.73

CHAPTER - 9

CONCLUSION & Suggestions

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Having done a detailed study of the financial performance and financial standing of IFFCO, under this project work I find out following things and also I would like to make the following suggestion for the improvement in the financial management of the company, with special reference to its Working Capital Management.

- IFFCO is facing increased competition in the market so it will have to adopt more aggressive working capital management policy in order to increase its share and sales turnover.

- Company has to maintain sales turnover for that purpose company has to maintain and increase their working capital.

- As compare to last year, current ratio is high(5.81) in this year because Current liabilities decreased by 38%, whereas cash & bank balance increased by 139%.

- Quick ratio is increased to 4.79 times in the year 2010-11 due to sale of special bonds

- IFFCO have over staff of officers so fixed costs is high due to high salary.

- IFFCO'S Profit before tax increased to Rs. 1025.78 crores in this year despite suffering huge losses on the Fertilizer bonds issued by the Government of India in lieu of payment of concession in cash.

- Company require lesser amount as working capital for sales of Rs.1 year to year. It means company utilise working capital efficiently.

- IFFCO has been maintaining an excellent current ratio which was 5.81 during 2010-11. This has been helping IFFCO to cope up with any urgent obligations without much hassle.

- As compare to last year, Inventory turnover ratio is almost double(14.69 times) in this year. This is an excellent sign indicating high production as well as high demand.

- The company has been maintaining a high liquidity level.

- The company has been paying a constant dividend of around 85.18 crores to its shareholders that are the cooperative societies. The company can easily continue to pay the same dividend as the dividend coverage ratio has being greater than 3 for almost all the years.

10.2 Swot analysis of IFFCO Ltd:

Strength:

- Largest producer of fertilizers in the country.
- Five strategically located plants with cutting edge production technologies.
- Most plants achieve capacity utilization in excess of 100%.
- A large number of co-operative societies are associated with IFFCO (40000 at present).
- Vast marketing and distribution network due to the high number of co-operative associates with IFFCO.
- Their service network and feedback network is also pervasive in INDIAN RURAL AREAS.
- Highly diverse and strategic portfolio of external investments.
- No external trade union exercises any power within IFFCO.
- The society derives strength from the invaluable contribution made by its talented and dedicated employees, who is well accomplished to deliver in the dynamic economic scenario for gaining competitive advantage.

Weakness:

The use of fertilizers is depending only on rain and irrigation facilities. If both are not good it will directly affected to the use of fertilizers.

IFFCO is Multi State Co-operative Society registered under Bombay Co-operative Societies Act (Act 7 of 1925) and under Multi Unit Co-operative Societies Act 2002. Being a Co-operative Society it can not issue the equity share capital as company.

Pricing policy of the IFFCO has totally formulated by the government of India. IFFCO has not any power to decide the price of its fertilizers. IFFCO can not sale its fertilizer at higher price than price decided by central government.

Opportunity:

Expand the market by globalization.

IFFCO has a good distribution network by which he will sale pesticides, bio fertilizer, research seeds etc

Sourcing raw materials for production of phosphatic fertilizers at economical cost by entering into Joint Ventures outside India.

In India more than 65% population are live on agriculture and the fertilizer is the main source of increasing the agriculture productivity and the production of Indian agriculture.

Government are now more concentrate on agriculture by more and more irrigation facilities like Narmada Saradar Sarovar Yojana, Suzlam-Suflam Yojana, Micro Irregation with 50% subsidy etc.

Threat:

When any change in crop patent it will directly affected to the use of fertilizers,

The fertilizers use is directly depending on the irrigation facilities, if irrigation is less then the use of fertilizers is also less.

IFFCO run by share capital of co-operative branches if branches are become weak it will directly affected to the IFFCO.

Increasing input costs of feed stock i.e. Fuel Oil/LSHS/NG/Naphtha.

Slow growth in urea consumption during last 7-8 years.

Globalize competitive scenario in industrial products and reducing trend of import duties and the threat from dumping of low products.

11. BIBLIOGRAPHY

Books

Annual Reports of IFFCO Ltd. Of last Five years

Financial Management: By Prasana Chandra

Websites

www.iffco.nic.in

www.investopedia.com

www.fert.nic.in

www.indianfertilizers .com

PROFIT & LOSS ACCOUNT OF IFFCO	2010-11	2009-10	2008-09	2007-08	2006-07
Income From Operations					
Turnover					
Sales	8529.26	7247.33	7387.77	5968.47	5557.97
less: Excise Duty	4.32	0.03	0	0	3.44
	8524.94	7247.3	7387.77	5968.47	5554.53
Subsidy on Fertilizers	12670.22	9561.27	25545.6	6194.35	4775,58
Other Revenue	741.24	841.55	499	354.77	244.66
Increase(decrease) in Stocks	-11.43	-288.61	280.51	-1136.21	754
	21924.97	**17361.51**	**33712.81**	**11381.38**	**11328.77**
Less: Cost of Operations					
Consumption of Raw Materials, Stores and others					
Raw Materials	10686.71	8714.44	13997.22	6646.44	6428.37
Stores & Spares	129.53	110.1	108.34	96.46	96.47
Chemicals & Catalysts	51.85	43.52	41.38	38.22	30.53
Packing Materials	225.43	204.5	200.39	170.43	173.46
Power,fuel and Water	764.24	689.89	981.8	756.48	629.26
	11857.76	9672.44	15329.13	7707.83	7358.09
less: Stock Transfer for self Consumption	430.99	253.42	159.41	118.81	128.83
	11426.77	9509.02	15169.72	7589.02	7229.26
Purchase of Products for Resale	5640.99	4017.85	14539.23	1245.44	1875.34
Employees' Remuneration and benefits	755.35	702.12	595.96	405.75	312.55
Manufacturing Administration, distribution and Other Expences	1895.52	1309.6	1481.91	959.49	916.39
Interest	717.13	764.98	1023.2	389.37	353.94
Depreciation/Amortisation	464.71	457.94	470.4	410.93	391.49
Prior Period Adjustments(Net)	-1.28	28.82	-13.46	-3	-5.37
Deferred Revenue Exp. Written off		3.9	3.9	3.86	3.92
	20899.19	**16794.23**	**33270.86**	**11000.86**	**11077.52**
Profit Before Tax	**1025.78**	**567.28**	**441.95**	**380.52**	251.25
Provision for Taxation	234.29	166.18	81.94	122.93	76.23
Profit After Tax	**791.49**	**401.1**	**360.01**	**257.59**	**175.02**
Profit Transferred to:					
Capital Repatriation Fund	1.65	0.47	1.47	0.46	0.45
Net Profit	**789.84**	**400.63**	**358.54**	**257.13**	**174.57**

BALANCE SHEET OF LAST FIVE YEARS	2010-11	2009-10	2008-09	2007-08	2006-07
SOURCES OF FUNDS					
Shareholders' Funds:					
Share Capital	425.95	426.24	426.28	423.93	422.83
Reserve and Surplus	4542.09	3844.26	3532.59	3264.73	3219.01
	4968.04	4270.5	3958.87	3688.66	3641.84
Loan Funds					
Secured Loans	3519.38	5032.93	7373.18	2404.67	2398.91
Unsecured Loans	7833.56	6499.24	5429.6	4370.97	4087.21
	11352.94	11532.17	12802.78	6775.64	6486.12
Deferred Tax Liability(Net)	416.33	516.78	542.12	534.19	534.02
TOTAL	**16737.31**	**16319.45**	**17303.77**	**10998.49**	**10661.98**
APPLICATION OF FUNDS					
Fixed Assets:					
Gross Block	9257.29	9100.6	8808	8138.98	7808.44
Less: Depriciation / Amortisation	4665.59	4276.32	3842.16	3400.04	3006.42
Net Block	4591.7	4824.28	4965.84	4738.94	4802.02
Capital Work-in-Progress	441.68	333	290.98	430.85	227.68
	5033.38	5157.28	5256.82	5169.79	5029.7
Investments	5157.19	7531.28	7552.95	1416.73	740.46
Current Assets,Loans,and Advances					
Invetories	1384.18	1301.69	1731.36	1577.1	2283.94
Debtors	146.77	68.08	407.23	413.76	361.68
Cash and Bank Balance	2570.24	1075.31	69.63	243.32	330.84
Loan and Advances	3807.86	3377.43	5464.77	3541.56	3104.82
	7909.05	5822.51	7672.99	5775.74	6081.28
Less:Current Liabilities and Provisions:					
Current Liabilities	931.08	1799.4	2860.18	1048.49	1028.47
Provisions	431.23	392.22	322.71	323.08	172.76
	1362.31	2191.62	3182.89	1371.57	1201.23
Net Current Assets	6546.74	3630.89	4490.1	4404.17	4880.05
Miscellaneous Exp.					
Voluntary Retirement Scheme Exp.	0	0	3.9	7.8	11.77
TOTAL	**16737.31**	**16319.45**	**17303.77**	**10998.49**	**10661.98**