FOOD CORPORATION OF INDIA

A CRITICAL APPRAISAL OF OPERATIONAL AND FINANCIAL PERFORMANCE

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF PHILOSOPHY IN APPLIED ECONOMICS OF THE JAWAHARLAL NEHRU UNIVERSITY, NEW DELHI

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I hereby affirm that the research for this dissertation titled, "Food Corporation of India - A Critical Analysis of Operational and Financial Performance" being submitted to the Jawaharlal Nehru University for the award of the Degree of Master of Philosophy in Applied Economics was carried out entirely by me at the Centre for Development Studies, Thiruvananthapuram.

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Certified that this dissertation is the bonafide work of L. Unnikrishnan. This has not been considered for the award of any other degree by any other university.

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Chapter I

INTRODUCTION

State intervention in the food economy has been an essential feature of all forms of government both in the ancient and modern world. The old Indian classic on political economy 'Arthasasthra', presumably written before 150 A.D., recommends effective public action through food subsidies as the basic remedy for famine (Rangarajan, 1992). It is advocated that the methods of counter-acting the effects of famine are, inter alia,

(i) distribution to the public, on concessional terms, seeds and food from the royal stores.
(ii) undertaking of food-for-work programmes such a building forts for irrigation works etc.,
(iii) share out the royal food stocks, and
(iv) commandeer for public distribution private stocks of food.

Distribution of food at subsidised prices forms an integral part of the public action of the welfare states in the modern period also, particularly due to the fact that famines are caused not because of non-availability of food alone, but due to entitlement failures also (Sen, 1981). In India, Government intervention in the food market, in its modern form, began during the second world war when supplies from Burma were cut off (George, 1988:229).

Developing countries are generally confronted with the problem of food deficit from an overall production angle as well as distribution. The Public Distribution System (PDS) can help in

such a situation by ensuring supply of moderate quantities of essential commodities, particularly food, to vulnerable sections of society. In addition PDS can also help in pegging down the free market price of essential commodities. Thus although agricultural production is essentially a private sector activity it calls for public sector intervention in its procurement, storage and distribution from the social point of view. Since poverty is linked to nutritional levels in developing countries like India, anti-poverty programmes and policy necessarily includes distribution of food and at subsidised prices. In Sri Lanka this was approached by issuing Food Stamps (and Kerosene stamps) with which open market itself was used to deliver food at subsidised rates. In India, however, a single parallel distribution system with countrywide operations has been created, with the statutory formation of Food Corporation of India (FCI) under which a chain of Warehouses, Depots, Wholesale and Retail outlets operated.

Theoretically, varying degrees of inequality in both personal as well as functional incomes exist in underdeveloped economies due to various distortions in factor and commodity markets. The PDS helps to improve the efficiency of the economic system, bringing it closer to a Pareto Optimal Point; with the help of the private distribution system in a complementary role and not in a substitutionary role. Since the marginal rate of substitution (MRS) of commodities for different income groups of the population is different, PDS, through food subsidy, helps narrow the gap in levels of incomes and purchasing power so that those at lower levels of income are enabled to equate their MRS of commodities with the price they pay and also equate the MRS among themselves.

Food rationing during war years and adequate social security payments are a feature of all development in capitalist economies. In socialist economies state control is exercised over the entire distribution system and only administered prices prevail. However developing economies that are neither fully capitalistic nor fully socialistic adopt a combination of the two although the actual forms of distribution systems are different among them.

PUBLIC DISTRIBUTION SYSTEM IN INDIA

Monopoly imports, procurement from domestic producers, trade regulation, price control, distribution through Fair Price Shops and buffer stock operations have been the major components of the government of India policy since independence (George, 1988). Since the separation of Burma in April 1937 and major parts of Punjab and Sindh since 1947, the production of both rice and wheat was affected. Foodgrains Policy Committee (1943 and 1947), Foodgrains Procurement Committee (1950) and the Foodgrains Enquiry Committee (1957) apart from several smaller scale studies have helped formulate measures and guidelines for an effective PDS for the country.

Bombay was the first to introduce formal rationing, in January 1943. This successful pattern of rationing was soon followed by Travancore, Cochin and a few other provinces and states. The 1943 Foodgrains Policy Committee Report was the basis of this system. Rajkrishna (1967) discussed the problems of low production, stability of consumption, growing imports and socialisation of market surplus. The Equity approach on this has been pursued by economists like Gulati and Krishnan (1975). The Nutritional

criterion and calorie deficiency was studied by CDS (1975) and others. Gailwad (1976) approached this from the angle of extension of consumer credit facilities linked with PDS. Managerial aspects have been studied by various government departments and bodies, as well as other individuals. P.S.George (1979) used the distribution approach and concluded that low income group consumers were the most prone to decline in consumption levels in the absence of rationing. It was also found that indirect income transfers through rationing may be superior to direct income transfers. In his later study (1985) it was asserted that "public distribution of foodgrains in India has resulted in some re-distribution of income". The 1979 study finding was again verified regarding the vulnerability to consumption decline of lower income group in the absence of rationing. Also, dependence on PDS declined with increase in income. Ghanashyam Das Ojha (1987) studied the organisation and management aspects at the grassroot level in Konda district of Andhra Pradesh. K.R.Venugopal (1992) has analysed PDS in India as a tool for deleverance from hunger for the poor, particularly with reference to Andhra Pradesh, Kabra 1990, Kabra and Ittyarah 1992, Tyagi 1980 and 1993, Bhalla 1994 have discussed PDS and its various dimensions.

Issues on PDS

A Dual Market benefits the poor people only if the issue price of ration items is substantially lower than that equilibrium price which would have set in the free market if there was no separate PDS. The argument is that due to large scale procurement of foodgrains by the government for distribution through PDS, the prices in the market increase due to the artificially created

demand by procurement agencies [illegible]. But the other side of this argument is that procurement during the harvest time benefits farmers and anyway the procurement price is not higher than the otherwise prevailing farm prices in general (George 1985, Tyagi 1990, Bhalla 1994). Raj Krishna and Ajay Chibber (1983) discuss the Dual grains market for wheat.

Targeting on poorer sections of society is called for, especially since the government is unable to support the food subsidy burden in a fiscal crisis period which the economy is overcoming with the help of foreign aid loans. Removing the top deciles of the population from the PDS is being suggested. (Tyagi 1990, Kabra 1990, Ahluwalia, Deepak 1993).

Viability and functioning of ration shops is an important issue. As both supply prices as well as issue price are fixed by government, the margin is fixed. Improvement of PDS and streamlining its functioning makes it necessary for looking at its viability/profitability. The small margin and low turnover is said to be a justifiable motivation for indulging in malpractices. Hence the two issues need to be tackled simultaneously. (Kabra & Ittyarah, 1992, Kabra 1990, Tyagi 1990).

Leakages through various levels of the PDS as well as poor quality of grains are two other aspects which have been discussed (Kabra 1990, Tyagi 1990, Ahluwalia, D 1993).

Urban/Rural bias is yet another issue on the debate about PDS in India. Mahendra Dev and Suryanarayana (1991) seems to point out

urban bias whereas Howes S and Shikha Jha (1992) dispute this saying there exists no discernable bias.

Allocation of PDS items to states, in practice, is based on several considerations, although it is generally supposed to be on the basis of availability and demand for foodgrains. Often in matters of fixing the allotment for a state, the previous year is used to form the basis.

FOOD SECURITY, TRADE AND DOMESTIC BUFFER STOCK

Food security for a country involves provision of `adequate' food to all citizens under all circumstances that can be reasonably expected (World Bank, 1986). It is immaterial to the notion of food security whether this is accomplished through the market mechanism or through government ration shops.

The notion of `adequate' food intake is still a matter of contention among nutritionists (Sreenivasan, 1983, provides an overview of the issues). In whatever way one may measure, one finds that millions of people suffer from hunger and poverty (FAO, 1986, World Bank 1986, 1990). It is seen that the main reason for hunger is that the hungry do not have the real income to buy the food they need. Moreover, whatever little income they have is vulnerable to various influences which can easily reduce their food consumption. Under such influences even those who normally have access to adequate food often join the ranks of the hungry.

Thus, in addition to the millions who suffer from persistent hunger (chronic food insecurity) there are millions more who suffer

periodically from hunger (transitory food insecurity). Both types of food insecurity which manifest in its extreme form of famine has attracted analysis. Linnemann (1979), Fisher (1988) et al. have underlined the cause of chronic hunger as poverty and under-development. People who are hungry are poor and they are poor because they own too little of land, capital or skills. Hunger is primarily a problem of poverty and not food production. If additional food is demanded it can be produced but not vice versa. Farmers respond to incentives by producing more, but the poor remain hungry if all that is produced remains beyond their reach. Thus food security can be provided either by increasing money income or by decrease in price at which food needed for a healthy life is made available.

There exists abundant literature on buffer-stocks (Bigman 1980, Timmer, 1986, and Pinckney, 1988, 1989). But its impact on the poor has not been emphasized. It is important to study this aspect particularly for a country like India having a large number of poor people and agricultural output still remaining dependent to a large extent on rains. Policy options against persistent food insecurity have been discussed in Parikh (1991). These are essentially long-term in nature providing for employment and income generation but do not yield quick results.

Apart from temporary and sudden loss of income, which is expected, a creeping loss of income may occur if employment opportunities do not keep pace with the growth of labour force.

Real income of the poor could fall also because food prices rise causing the poor who are net purchasers of food to be able to get only reduced amounts of food to eat. There are several factors that cause food prices to increase. If rains fail, the production declines, the poor lose employment, production falls, demand remains high and food prices soar. Even when it fails in a distant country, food prices might rise. This country would either export less or import more grains causing rise in world market prices. A poor importing country would be unable to import as much as before or get only much less of food aid causing increase in domestic price of food. Even a booming domestic economy could aggravate hunger of some poor people if their incomes do not rise as rapidly as increases in those of others.

Variability in estimates of rural poverty in India indicate that transient food insecurity is of consequence. Ahluwalia (1978) and Dev, Suryanarayana and Parikh (1992) give estimates of various measures of rural poverty by states in India between a good crop year (1964-65) and a bad one (1966-67) when the percentage of rural poor increased by as much as 10 per cent.

Governments try to protect people against transient food insecurity through efforts to ensure stable food prices through operations of buffer stock or through inter-national trade and provide subsidised food to the poor.

Reliance on foreign trade actually implies maintaining a buffer stock of foreign exchange. It is also an important but separate issue that foreign trade does not mean free trade. In the

course of a normal strategy of development and for food security, developing countries must account for the extra expenses involved in primarily relying on world prices and market for food.

The IMF Cereal Facility is quite useful in providing access to foreign exchange to met the unexpected costs of imports. But the IMF has to be repaid in foreign currency. The IMF facility in principle does make it possible for a country to rely more on trade and to aim for slightly lower food self-sufficiency than the country otherwise would have reached. Yet there are some costs to be noted. If a country's domestic production fluctuates in such a way as to make it a major exporter in some years and a major importer in other years, its exports would depress and its imports raise, world market prices. In other words, the country would have to export larger quantity in order to be able to import a given quantity. In any case it is difficult for a country to be an intermittent exporter of small quantities of food. Unless the terms of the IMF cereal facility are further softened trade cannot provide a more attractive option than of holding domestic buffer stocks. In case of disadvantageous geographical location or smallness in size, buffer stock operations would be the only feasible option for a country even if it produced intermittently small quantities of surplus.

Buffer stock operations fulfil two policy objectives. They ensure a certain level of minimum incomes to farmers through a system of support prices and a minimum level of intake of foodgrain in take for the consumers. In the European community the same objectives are realised through a trade policy with variable levy.

In a unipolar world in which the major global power is not averse to using its political power for economic gains and vice versa, a domestic buffer stock policy is inevitable for a large country like India.

Producers welcome government intervention for price support in good crop years whereas consumers object to government actions which prevent prices from falling. The reverse is true in bad crop years. Buffer stock operations thus become essential to stabilise prices and safeguard the interests of the majority of the poor affected adversely by vagaries of rainfall. In addition, it is necessary to facilitate operations of public distribution system particularly for the poorest sections of society.

The buffer stocks required for the public distribution system and for the price stabilisation objectives are not mutually exclusive. The price stabilization stock increases the availability of food grains in the economy and so does the public distribution system. Thus additional distribution will also have a price stabilization effect. Additional demand from the poorest sections is met while the major part of the distributed food helps price stabilisation purpose.

It has been estimated by Parikh (1994) that an optimum buffer stock is 14 million tonnes which is worth US dollar 1.5 billion. Interest charges, storage losses, storage and handling cost as well as cost of subsidising the public distribution system together add up to US $ 500 million. According to Parikh, this is a truly

expensive option which locks up scarce resources needed for infrastructural development and stabilising farm incomes.

The burden of food subsidy on the state is getting progressively mainly due to two reasons: increasing volume of public distribution and the growing gap between economic costs and issue prices (Ray, S.K., 1994). Widely varying views and recommendations are being expressed in this regard (see for example Bhalla, 1993 and Desai, 1993). However, there seems to be consensus that poorer people and backward regions are benefitting little from the costly operation of the present PDS, as argued by Mooiji, 1994 and Parikh, 1993. (See Ray, 1994).

An enquiry into the cost effectiveness of policies on the basis of economic theory and grounded in empirical reality, (Parikh, 1994) is therefore called for. Since FCI is the nodal agency handling procurement, imports, storage and distribution, we would concentrate on its operations (For a brief review FCI Operation see George, 1985 and 1988).

EVOLUTION OF FOOD POLICY IN INDIA

India has evolved a food policy with the overall objective of making foodgrains available to the people at reasonable prices. Food policy in India has been composed of varying degrees of the following components during different term periods (CDS, Tyagi, 1988).

a. guarantee of minimum support price to the producers of food grains,

b. an efficient and flexible system of procurement of foodgrains,

c. movement restrictions of food grains. This had changed frequently,

d. imports of food grains when necessary,

e. maintenance of public distribution system through statutory and other controls.

f. the building up and holding of a sizeable buffer stock of food grains.

It is obvious that such a policy required an efficient implementation mechanism with All-India Coverage. This mechanism needs to be a viable and dynamic organisation so that over time it would be able to acquire the required expertise in purchase, movement, and storage handling and distribution of huge volumes of food grains. Its efficiency in operation and performance is crucial in determining the cost, and even feasibility, of pursuing the pronounced food policy.

The Bengal famine of 1943 was mainly due to the failure of government policy rather than to a real overall shortage of food grain in the country. The main rabbi crop in that year was satisfactory and the overall production of major food grains was 4 million tones higher than in 1938-39 (Chopra R.N., 1988: 319).

In spite of the difficulties in import of rice for Bengal from Burma due to the Japanese occupation, the government allowed rice to flow out of Bengal, thus allowing a famine situation to emerge. There was thus nothing in the internal situation in India to

suggest that ..... the absolute physical supply had been impaired (Report of the Food grain Policy Committee 1943, p.19).

In fact, the Bengal famine is termed as a tragedy in unpreparedness (V.M.Bhatia - 1968) and provides a crucial starting point for a historical search of India's food policy.

The Department of food, Government of india was established in December 1942 and gradually field operations were organised under the Director-General of Food, with regional directors stationed at various procuring states. The concept of a central food grains authority evolved as early as 1946 from the prices subcommittee under V.T. Krishnamachari. The foodgrains policy committee under the Chairmanship of Sir Theodore Gregory was set up by the Department of Food, Government of India, to examine the nature of the food problem in India in the likely context of supplies from Burma being cut off in the event of war as well as a decline in the quantum of domestic production of rice and increase in consumption and the resultant unfulfilled demand. The report broadly suggested the following inter-related remedial measures:

1. Increase of available supplies,
2. Improved procurement machinery,
3. Measures to achieve more equitable distribution of what is available viz. by extension of rationing,
4. A check on rising food prices ie, a general extension of the principle of statutory price control, and

5. a general overhaul of the machinery of administration and readjustment of relations between provinces and the Central government.

Without an efficient procurement machinery, it was useless to increase food supplies which were to be brought to the market. Rationing was required for curbing individual rights to purchase, in order to secure fair distribution. Rationing itself involved availability of necessary supplies with the help of an efficient procurement machinery. It was also useless simply to make supplies available if the prices were too high that poorer sections of the population could not afford to purchase their entitled quota of ration. Therefore control over prices was essential. It was impossible to improve conditions unless the administrative machinery at the centre and the states was working in a co-ordinated manner. The idea of central foodgrains reserve (half a million tones) was for the first time mooted in this report. It observed that enforcement of price control and adequate procurement will not be possible without the creation of the foodgrains reserve. Rejecting the two extremes of complete free trade and complete monopoly in government foodgrains procurement the committee suggested that in order to avoid unnecessary competition the centre should entrust its physical procurement operations to the agencies set up by the provinces subject to the right of the centre for overall supervisory control. The objective in such an arrangement for procurement was to eliminate competition by having a single buffer for a specified area. After studying the procurement methods which would suit a particular area, the question of government monopoly in procurement could be considered

in due course of time. Requisitioning from the trade in connection with price control as an anti-hoarding measure was also considered to be legitimate.

Although Central Government's foodgrains monopoly was considered to be ideal in the long run, time was not available to organise such an intensive and large scale operation in the short run. Only due to this difficulty was it considered impracticable under the prevailing conditions. (Report of Foodgrain Policy Committee, 1943, p.2).

The single-most important factor which would be crucial to the solution of the food situation in India was the knowledge that a Central Foodgrains reserve existed and that it would be used as a powerful counter-weapon to any attempt to hold the country to ransom.

Drawing a distinction between price control and statutory price control, the report specified that the latter acquires teeth directly from by legislation whereas the former, in a general sense, implied various measures intended to influence purchase and selling price of foodgrains. Priority of movement of foodgrains by rail and additional shipping, rationing of consumption, etc. were some of the ways to effect price control. A statutory price control with effective sanctions was considered as almost certain to fail. Price control without control over supplies was also impossible. Hence the conditions for effective statutory price control include adequate procurement of the foodgrains control

order, effective control over transport as well as the existence of control and provincial reserve.

Prices which qualify these criteria were to be fixed with the concurrence of the central government which reserved the right to suggest changes in the prices. A committee consisting of cultivators, traders, central, provincial and state government representatives was to be set up at the centre to monitor the price situation, and all disputes were to be referred to this standing committee. The factors to be considered in deciding the appropriate prices in a particular area were the cost of inputs of agricultural production, cost of living of the cultivators and cost of cultivators of marginal lands. In the prevailing war conditions, control over prices was considered essential.

However it is interesting to note that the report clearly indicated that selling foodgrains at preferential prices (subsidised) to certain sections of society would not solve the general problem of food supply and cannot substitute for an integrated foodgrains policy (Foodgrains Policy Committee Report, 1994 p.viii).

The food Department of the Government of India was concerned with only the distribution aspects of food-procurement, allocation of supplies among deficit provinces, ensuring smooth movement of foodgrains, prevention of hoarding and control of the price situation.

The Foodgrains Policy Committee Report prepared and submitted in less than three months is truly comprehensive and gave a clear direction recommending state control under the prevailing conditions rather than laissez faire, namely levy procurement of foodgrains, rationing of distribution, and statutory price control, clear demarcation of the administrative power and responsibilities of the centre and the provinces, setting up of a central foodgrains reserve, basic plan for movement of surplus foodgrains to deficit states through procurement and distribution, a mechanism for fixing prices of foodgrains for cultivators and promotion of agricultural production. Thus the Foodgrains Policy Report constituted the true basis and guideline for the food policy in India, which has hardly deviated from these essentials.

A Central legislation was brought forward in February 1945 by the Food Department to give statutory strength to broad components of the Report; it was in implementation that attitudes changed and emphasis varied on different aspects of the control depending on the crop and at different times.

The 1945-46 crop year was a drought year and the policy recommendations of the Foodgrains Policy Committee which were being implemented were first put to a real test, succeeded remarkably well at the hands of the food administration in India. (Knight, Sir Henry, "Food Administration in India 1939-47, 1954. as quoted in Chopra, R., "Food Policy in India - A Survey, 1988).

That the troubles and turmoil of 1946-47 partition year did not affect the food sector seriously stands further testimony to

the correctness of the policy measures adopted by the government. Thus the Bengal famine of 1943 had taught the government the esson and Sir Theodore Geogory's Report of the September 1943 emphasized the fact that the problem of feeding the people could no longer be regarded as a local matter and left to free trade. The entire net work of procurement agencies, basic plan for the movement of foodgrains from the surplus to the deficit areas, enforcement of statutory price control, rationing and controlled distribution of available supplies on equitable norms and effective enforcement by the central government's Department of Food as well as subsidiary controls by provinces on possession, movement and sale of foodgrains - came up as the initial stages of an evolving comprehensive food policy. The foodgrains Enquiry Committee, 1957, presided over by Ashok Mehta is yet another landmark in the establishment of a foodgrain stabilisation organisation for the specific functions of open market purchase and sale, procurement of foodgrains and maintenance of stocks. This organisation, taking over some of the functions of the Food Department was to operate a "trader in foodgrains market" with a network of branches and agencies to operate in all important mandis particularly in the surplus areas and centres of distribution trade. (Bhatia, B.M., 1968:p.186). Further it was suggested that this organisation could be made a statutory company or a limited company. A foodgrain stabilization organisation mainly involved in buffer stock operations and to be an effective policy instrument of the Food Ministry for availability and stabilisation of foodgrain prices on the lines of the Wheat Boards of Canada and Australia which play dominant role in those countries was envisaged for the country.

Government of India's attempt to combine the functions of price stabilisation through open market operations with statutory price control through regulatory measures and introducing some sort of state trading in foodgrains during 1958-59 was a failure. (Report of the Jha Committee on foodgrain prices for 1964-65, p.12). Controls of various types - control on prices, movement, stocks, levy on farmers and traders, monopoly procurement, division of the country into food zones with restricted inter-zonal movement -were imposed and relaxed on ad hoc basis through bureaucratic decision. It was thereupon felt that "bureaucracy of a Government Department involved procedural delays and that the operational decisions could not be made with the spread and elasticity essential for market operations. Additionally departmental administration did not provide the financial incentives indispensable for efficient working of commercial enterprise". It was therefore decided to separate policy-making from the executive function of the food Department. For this latter purpose a separate organisation was to be constituted to handle the executive functions such as open market purchases, sales and maintenance. (C.Subramanian, inaugural speech of F.C.I. on 14th January 1965, reproduced in "A New Strategy In Agriculture ICIR, p.182). The setting up of the Food Corporation of India with a view to enabling the government to undertake trading operations through which it could influence the market prices and thereby minimise the use of statutory controls for enforcement of maximum wholesale and retail prices had already been welcomed by the Jha Committee (Report of the Jha Committee on food grain prices for 1964-65, p.285).

The "Chaotic tendencies of private trade" like hoarding and speculative trade were to be disciplined with the expansion of activities of the Food Corporation of India which was to act as a balancing force (K.K.S. Chauhan, 1980: p.18). Further it was hoped that the "Food Corporation will command the confidence of farmers and consumers and will become as effective as the commodity credit corporation of the United States in building up an ever-normal granary to stabilise prices over time and space".(Minister of Agriculture introducing the Food Corporation Act 1984 in Parliament).

The Government of India introduced the Bill for setting up the Food corporation of India in November 1964 "for the purpose of trading in foodgrains and other foodstuffs and for matters concerned therewith and incidental thereto". The statement of objectives and reasons attached to the Bill expressed the underlying idea of setting up a state agency functioning on commercial lines so that the primary producer gets the minimum support price; "the consumer is protected from the vagaries of speculative trade and gradually buffer stocks are built up." (Food Corporation Act of 1964, (No.37), Lok Sabha, 1964).

EVALUATION OF THE FOODGRAIN OPERATIONS OF F.C.I

The Corporation which has emerged as the largest foodgrains trading organisation both in the public and the private sector in India commenced operations from January, 1965 with an equity capital of Rs.4 crores and sales of Rs.113 crores in 1965-66. Since then equity capital has gone up to Rs.970 crores and the sales crossed the record level of Rs.9000 crores in 1993-94. The

total turnover of the Corporation (sales and purchase) at the peak was over Rs.20,000 crores in 1993-94 compared to only Rs.290 crores in 1965-66. The procurement of foodgrains which was only about 4 million tonnes in 1965-66 increased five times to over 26.36 million tonnes by the year 1993-94. In some of the major states where procurement is undertaken at about 8000 markets/purchase centres, over 95% of the market arrivals of wheat are purchased by the FCI and public agencies. With buoyancy in procurement consequent upon successive good crops, the pace of stock building became much faster in 1983-84 and 1984-85, resulting in a record level of stocks of over 28 million tonnes by July, 1985 with FCI and other government agencies.

The steady increase in foodgrain stock has enabled the Government to distribute much larger quantities through the Public Distribution System, and to take welcome policy initiatives like distribution of foodgrains as a part of poverty alleviation programmes and Employment Guarantee programmes. All these measures have led to better nutrition than before and greater stability in wheat and rice prices. In 1993-94 the total distribution of foodgrains was about 20 million tonnes. The Corporation began with a modest storage capacity of only about 7 lakh tonnes in 1965 and the efforts made during the last 28 years it has augmented the storage capacity to 230 lakh tonnes despite dehiring of a large surplus capacity in the recent past. As the procurement of foodgrains is concentrated in certain areas, large distance transportation has to be undertaken to reach the foodgrains to consuming areas. In 1965-66 such long distance transportation carried only 1.5 million tonnes while in 1993-94, the figure had

increased manifold to about 20 million tonnes. Notable achievements in different functional areas are briefly discussed.

Procurement

The Corporation along with State Governments and their agencies has been extending support price through purchase centres/mandis to the farmers all over the country. In order to facilitate the farmers to bring their produce to the procuring agencies, purchase centres have been opened even in the remote corners of the country, they have been to a large extent instrumental in curbing the distress sale in the major producing areas during the peak marketing season and inducing farmers to sustain higher production. The assured and improved income encourages reinvestment in better inputs and leads to higher productivity.

After formation of FCI, the pace of procurement got momentum and reached over 20 million tonnes during the 1990, which was 5 times of the quantity procured in 1965-66. This has been possible due to the consistent effort of the Corporation along with other procuring agencies of extending price support to the farmers. In Punjab and Haryana, the major procuring States, 95% to 99% of the market arrivals of wheat have been procured by the public agencies.

In 1965, there was a gap of 10.0 million tonnes between quantity distributed by the public distribution system and procurement, while in 1985 procurement was 4.0 million tonnes in excess of the distribution requirement of the Public Distribution Systems. During 1987-88 the country faced the worst drought in

recent years. The drought gave a setback to foodgrain production which came down to 138.4 million tonnes and which had its repercussion on domestic procurement too. In the 1987-88 crop year the procurement came down to 13.6 million tonnes as compared to 17.1 million tonnes in 1986-87. With the increase in production, the procurement again improved and reached the level of 16.7 million tonnes in 1988-89 crop year.

Storage

1) Storage Capacity

Adequate scientific storage capacity is an essential component for better preservation of foodgrain stocks. The corporation started with a storage capacity of about 7 lakh tonnes in 1965. Gradually the Corporation with its continued efforts augmented its "own" capacity to 119 lakh tonnes by 1989 which is 20 times of that in 1965. The total covered capacity (including hired capacity) which was of the order of 212 lakh tonnes in 1987, has come down to 20 lakh tonnes in 1993-94 due to dehiring of hired godowns. The Corporation developed an ingenious system of Covered & Plinth Storage (CAP) to meet the requirements of temporary storage in peak times. Now due to increase in covered capacity, dependence on CAP storage is being reduced.

2) Preservation

The high level of domestic procurement of more than 20.0 million tonnes in some years has exceeded the level of distribution and resulted in accretion to the stocks, leading to a build-up of about 29.8 million tonnes by mid-1985. In such a situation of surplus, it became necessary to preserve the stocks properly. The

Corporation with its widespread network of quality control personnel upto the lowest level of purchase centre and modern preservation technology has been able to maintain the quality of stocks.

Stocks

The Corporation started with 5.3 lakh tonnes of stocks including 2.9 lakh tonnes of wheat and 2.4 lakh tonnes of rice in 1965. To meet the growing demand of public distribution, the Corporation continuously augmented the stock mainly from domestic procurement and by imports in some years. With the increase in domestic procurement, the dependence on imports gradually declined and in the eighties the Corporation had the maximum level of stocks at 198 lakh tonnes by June, 1985. The total stocks with all public agencies including FCI were of the order of 28.7 million tonnes in the country.

The total stocks in fact exceeded the limit of 21.4 million tonnes of operational and buffer stocks. The challenge came up due to untimely rains during Rabi 1987-88; the severe drought in 1987-88 often 4 years of poor rainfall, which would not have been met but for the available excess stocks with the Corporation and the State Governments.

Transportation

To clear surplus stocks from the North and to position adequate stocks in the deficit States, movement over long distances by rail is undertaken by the Corporation. A quantity of 27.8 million tonnes of foodgrains was moved during 1993-94 as compared

to 1.5 million tonnes during 1965-66. Movement to Assam/NEF region which has a very long lead and some inherent transpor ation bottlenecks has also improved. In addition to movement by rail, movement is effected by riverine route through Bangladesh to position adequate stocks in the North-Eastern region which is basically a deficit area. The average rail lead has been about 1500 Kms of each consignment.

Distribution

1) Public Distribution Scheme

Increase in issues of foodgrain by FCI has helped in enlarging and expanding the Public Distribution System. There are about 3.75 lakh Fair Price Shops at present as against 1.09 lakhs in 1965; the quantum distributed has substantially gone up from the earlier range of 8-11 million tonnes in a year to 18-20 million tonnes in the eighties. In the drought year of 1987, the Corporation issued over 22 million tonnes of foodgrains for public distribution, relief works and open sale.

2) Poverty Alleviation Programmes

A number of new policy initiatives require enhanced allocation of wheat and rice from PDS and other schemes: Introduction of distribution of foodgrains in Integrated Tribal Development Programme (ITDP) areas at special concessional prices is an integral part of poverty alleviation programmes. Substantially larger allocation of foodgrains for NREP/RLEGP programme have been made and permitting open market sale of wheat at uniform prices throughout the country was carried out successfully.

3) Drought Management

The pace of growth of Indian agricultural production was disturbed by four poor monsoons culminating in the severe drought of 1987. Foodgrains production declined to 143.0 million tonnes in 1986-87 and further to 138.0 million tonnes in 1987-88. Adequate supplies of foodgrains were ensured in all the drought-affected States by increased allotment of foodgrains under regular Public Distribution System and in ITDP areas. In addition, special allotment of foodgrains for relief works in all the drought-affected States amounting to over 1.0 million tonnes of wheat was made which linked employment generation programmes with supplies of foodgrains. Further, additional allotment of 0.5 million tonnes of foodgrains was made under the ongoing NREP/RLEGP programmes in the drought-affected States.

4) Open Sales

For containing open market prices, important consuming centres like Bangalore, Delhi, Bombay, Madras, Hyderabad, Patna, Kanpur, Ahmedabad etc. were identified and open sale of wheat is organised. Apart from regular supplies of wheat at fixed prices, tender sales were also made to Roller Flour Mills. Total sole of wheat under open sale amounted to 3.87 million tonnes in 1993-94. From 1988-89, the allocation of wheat to Roller Flour Mills has come down considerably and they are expected to make their own arrangements for the raw material required by them.

5) Price Stabilisation

The Public Distribution System has been instrumental in stabilising the prices of foodgrains to a great extent as compared

to the prices of "all commodities". Price fluctuations in wheat and rice have been comparatively less than the fluctuations in foodgrains group. The increase in wheat prices in 1988-89 over the prices of 1971-72 was about 3 times and rice prices registered an increase of 3.5 times during the same period, while the price index of "all commodities" registered an increase of more than 4 times during the same period. The lower level of increase in the wholesale prices of wheat and rice as compared to all commodities has been due to issue of these commodities from the Food Corporation for public distribution, poverty alleviation programme, relief works and open sales.

Financial Highlights

During the last 28 years, FCI has expanded in all fields of its operations. In 1965-66, the equity of the Corporation was Rs.4.00 crores which reached Rs.969.98 crores in 1993-94 (Rs.386.32 crores) as compared to 6.29 crores in 1965-66. The turn-over (purchases + sales) of the Corporation has increased remarkably and reached a peak level of Rs.10,863.4 crores in 1987-88 while it has been only Rs.289.61 crores during 1965-66.

The Corporation has undertaken various measures like improvement in productivity, reduction in staff, etc. The productivity per person in the Corporation has gone upto 631 MTs in 1987-88 as compared to 395 MTs in 1979-80. The level of staff has also come down to 65931 in march 1994 compared to the peak level of 73640 in 1979-80.

Imports/Exports

Just after independence, the extent of PDS was quite low and that too was being managed through imports. In 1965-66, the imports of foodgrains were about 7.5 million tonnes. With the increase in production and procurement, the dependence on imports was reduced. During 1985-86 to 1987-88, the imports of foodgrains were completely stopped. Again due to drought of 1987-88, the foodgrain stocks depleted and to improve the stock availability, the county resumed imports in 1988-89 and total quantity of 2.68 million tonnes of foodgrains have been imported in 1992-95. Import of such a large quantity was successfully managed by the Corporation.

FOOD SUBSIDY

Policy makers in developing countries are faced with a dilemma: on the one hand high food prices from which poor consumers need protection and on the other, high prices which are required to encourage farmers to produce more. Subsidies are an inevitable component of government policy and need to be kept at a minimum for optimum utilization of scarce investible resources. Currently consumer subsidy has grown beyond the level of Rs. 5000 crores. Any attempt to study food subsidy must first identify the causes behind such progressive increase. Chief among them appears to be the ever-increasing volume of procurement, public distribution and food grains stock. The unit cost of operation is growing at a faster rate than selling price of the Public Distribution System (PDS).

Table 1

Consumer Subsidy 1980-81 to 1993-94 (Amount in Rs Crores)

Years	Consumer subsidy	Carrying Cost of buffer stock	Total Amount
1980-81	486	176	662
1981-82	623	155	778
1982-83	760	184	944
1983-84	822	269	1091
1984-85	855	498	1353
1985-86	1373	518	1891
1986-87	1623	510	2133
1987-88	1924	204	2128
1988-89	1745	114	1859
1989-90	1774.2	167.22	1941.4
1990-91	2071.7	476.17	2547.9
1991-92	2892.6	432.74	3325.3
1992-93	3583	397	3980
1993-94	3175	1245.3	4420.3

Source: FCI Annual Reports, Various Issues

THE PROBLEM

The food subsidy incurred by the Government of India has been increasing at a rapid pace. The subsidy is reimbursed to the Food Corporation of India which is the implementing Agency of the Government. The issue/sale price and procurement/purchase price are fixed by the government. The sales realisation does not cover the Economic Cost, which is made up of Procurement/Purchase prices and the operation cost of FCI. Thus the subsidy amount is essentially the difference between the Economic Cost and Sales Realisation. The growth rate of subsidy is attributed to the growth rate in the gap between issue prices and procurement price along with the growth of operational costs of FCI. Therefore the problem under study is to analyse the physical (operational) performance and costs on the one hand and financial performance on the other in order to understand the growth in food subsidy.

Earlier studies (BICP, 1990, George 1985 etc.) pertains to the period till 1988-89. Major policy changes have come about in the economic scenario in general and subsidies, in particular food subsidy. This necessitates a reassessment of the performance of FCI.

OBJECTIVES

Thus the objectives of the study is to analyse

1. the nature and cost of the various operations of FCI,
2. the aggregate operational costs and other items included in the computation of food subsidy over the years,
3. the subsidy region wise, commodity wise and scheme wise, and
4. the financial performance of FCI based on analysis of ratios and trends.

METHODOLOGY

The various operational elements of cost and the nature and trends of the operations themselves are analysed individually, From the insights obtained from this computation of total economic costs and subsidy are made for a limited number of years.

The total subsidy amount is further disaggregated commodity wise, regionwise and schemewise for the years selected for analysis.

DATA BASE

The main constraint of many a study is admittedly the limitations of the requisite data most of which is not available in

published from. However, this study utilises unpublished data from FCI files. The data gaps have been filled to the extent possible by statistical methods and informed surmises.

Further the study also relies upon the data available from the Annual Reports of FCI for various years upto 1993-94.

A major constraint in this study has been the problem of obtaining the unpublished disaggregated data for a longer time period. Hence the study is compelled to be restricted to a short period from 1989-90 to 1993-94, for the period that data was obtained. For 1992-93, revised estimation figures have been used for a continuity in analysis.

In addition qualitative information from various reports, articles and publications have also been used for understanding the changes in trends.

QUESTIONS ASKED

The specific questions addressed in this study are the following:

1. How has the FCI performed operation wise?
2. How have the operating costs varied over time?
3. How has the total subsidy amount been divided between the two main commodities - wheat and rice?
4. How has the total subsidy amount been divided among various regions/states?

5. How has the total subsidy amount been divided among different schemes?

6. What can be inferred from the indicators of financial performance of FCI and what are the implications of the results of ratios and trend analysis?

CHAPTERISATION

Following this introduction, chapter -II analyses the purchase operation of FCI and the operating cost of purchase or purchase incidentals, for wheat, rice and paddy. Comparison of the performance of FCI and State Procurement agencies is made as a means to evaluate the performance of FCI over the period from 1988-89 to 1993-94.

Chapter - III discusses and analyses the Distribution and Distribution costs of various operation. Sales and Sales Turnover in total and for different regions/states for wheat and rice, separately, are analysed in section 1 of this Chapter. Transport operational cost for rail, road and other modes of transport for wheat and rice and the nature of problems of transport operation are analysed in section 2. Section 3 analyses stocks, quality and age of stocks, storage capacity agency-wise, owned and hired, utilization of storage capacity and storage costs. Section-5 deals with handling and handling cost-nature, capacity and types of labour. Section 5 deals with interest charges, section-6 discusses grain shortages including transit and storage and section 7 is concerned with buffer stock operations and costs. Section-8 deals with personnel and administrative overheads including staff strength, productivity and administrative costs.

Chapter IV analyses consumer subsidy and carrying costs of buffer stocks for rice and wheat for different schemes, and for different regions.

Chapter V looks into the behaviour of indicators of financial performance of FCI using ratio and trend analyses.

The outcome of the four preceding chapters is presented in the final chapter.

Chapter II

PROCUREMENT OF FOODGRAINS

Procurement of foodgrains is undertaken by the FCI to cater to the needs of the public distribution system and for creation of a reserve buffer stock. Internal availability of foodgrains is determined through local production and net imports. A portion of the local production is procured by the government for meeting the requirement of the public system.

Imports have declined from a peak level of 14% of the net availability in 1966 to a period of continuing decline since 1981. This has been due to the increase in domestic agricultural production. Hence domestic procurement operations have become almost the sole purchase channel for the central pool.

The major quantum of the foodgrains are offered for purchase during the immediate post-harvest period at the end of the Kharif and Rabi seasons. The task of the procuring agencies including FCI is mainly confined to about two months at the end of each cropping season. Kharif season procurement of paddy and coarse grains are undertaken for a two month period between November and February while the Rabi season procurement, mainly of wheat, is during May-June months. Lakhs of tonnes of foodgrains have to be procured and moved quickly to storage locations at the earliest since the monsoons occur during or immediately after either of the peak procurement seasons.

The FCI along with other state government agencies undertakes massive procurement of wheat, paddy and coarse grains, directly from farmers at the procurement prices (minimum support price) fixed by the Government of India on the recommendations of the Commission for Agricultural Costs and Prices (CACP) for each season. The farmers are free to sell their produces at the Mandis at the best price they can avail of. Usually, in this auction, private traders purchase the grains if they can competitively bid a price higher than one at which the FCI and the other procuring agencies make the purchase.

Wheat

The FCI, along with the other state agencies, has been procuring foodgrains for the central pool. An analysis of the wheat procurement data (table 2.1) indicate that the percentage share of FCI in the total procurement of wheat for the central pool has declined from 43.6% in 1988-89 to 28.52% in 1990-91 after which it has hovered around 27%. One of the reasons attributed to this is that the FCI did not have many procuring centres allotted to them mandi centres were uneconomical due to poor location and weak arrivals. The total quantity procured during Rabi season however has not varied much over the years.

Table 2.1: Agency-wise Procurement of Wheat During Rabi Season 1988-89 to 1993-94

(Qty. in lakh tonnes)

Region	1988-89			1989-90		
	FCI	S.A	Total	FCI	S.A	Total
Punjab	24.50	22.99	47.49	22.82	33.19	56.02
Haryana	3.64	8.96	12.60	9.40	10.33	19.73
U.P	0.35	4.86	5.21	0.67	12.56	13.23
Rajastan				0.33	0.73	1.06
Others						
Total	28.49	36.81	65.30	32.23	56.81	90.04
% of FCI Purchase as part of total procurement	43.60			36.90		

Region	1990-91			1991-92		
	FCI	S.A	Total	FCI	S.A	Total
Punjab	25.12	42.34	67.46	19.88	35.59	55.47
Haryana	4.61	21.26	25.87	1.45	16.89	18.34
U.P	1.23	14.52	15.75	0.06	3.62	3.68
Rajastan	0.54	0.80	1.34	0.08		0.08
Others		0.01	0.01			
Total	31.50	78.93	110.43	21.47	56.10	77.57
% of FCI Purchase as part of total procurement	28.52			27.68		

Region	1992-93			1993-94		
	FCI	S.A	Total	FCI	S.A	Total
Punjab	16.40	28.49	44.88	21.06	43.86	64.92
Haryana	1.63	12.09	13.72	5.50	29.04	34.54
U.P	0.18	4.29	4.97		18.95	21.37
Rajastan	0.02		0.22	4.96		4.96
Others			Neg	0.60	2.03	2.63
Total	18.43	45.37	63.80	34.28	93.88	128.16
% of FCI Purchase as part of total procure-ment	28.89			26.75		

S.A. = State Agencies
Source: F.C.I.

The fall in 1991 Rabi over the previous year is mainly attributed to heavy retention by the farmers due to high market price and heavy purchase by traders. But FCI had lifted 63.2 lakh tonnes of Rabi wheat in 1991-92 to offset the short-fall in direct purchase so that sufficient stocks were available. The same trend continued during the next year. The following table shows the total quantity of wheat directly purchased and (indirectly) lifted from state agencies by FCI. Table-1 indicates the total procurement by all agencies for the central pool during the Rabi season while Table 2.2 gives total purchases by FCI directly and lifting of stocks held by state agencies for the entire financial year.

Thus although direct procurement fell, FCI could collect enough stocks to be moved to consuming centres around the country. FCI is the sole agency permitted to move foodgrains freely and to undertake storage and distribution of procured grains on an inter-state basis.

Table 2.2: State-wise Details of Purchases of Wheat for the Year 1989-90 to 1993-94

(Qty: lakh tonnes)

Region	1989-90	1990-91	1991-92	1992-93	1993-94
Punjab					
FCI	22.82	25.12	19.88	16.40	21.15
Lifting	28.69	37.47	39.96	31.87	36.59
Total	51.52	62.59	59.84	48.27	57.74
Haryana					
FCI	9.40	4.61	1.45	1.63	5.52
Lifting	9.42	17.84	19.95	23.12	23.12
Total	18.83	22.45	21.40	15.49	28.64
UP					
FCI	0.66	1.23	0.06	0.18	2.02
Lifting	12.50	14.53	3.56	4.78	19.29
Total	13.17	15.76	3.62	4.06	21.31
WYL					
FCI	0.33	0.54	0.03	0.22	3.12
Lifting	0.73	0.81	0.05		1.85
Total	1.06	1.35	0.08	0.22	4.97
Others					
H.P					
FCI		0.01			0.01
Lifting					
Total		0.01			0.01
Delhi					
FCI					0.20
Lifting					
Total					0.20
MP					
FCI					0.01
Lifting					2.03
Total					2.42
GRAND TOTAL	84.59	102.16	84.94	68.94	115.29

Region-wise analysis of procurement of wheat from the table indicates that Punjab contributes the bulk of wheat followed by Haryana and (western) U.P. The performance of state procurement agencies in their respective states have been excellent in terms of procurement levels in comparison with those of the FCI.

Paddy & Rice

Table 2.3
State wise procurement of Paddy and Rice

Qty: Lakhs Tonnes

	89-90	90-91	91-92	92-93	93-94
Punjab	49.25	47.85	43.40	49.50	51.92
Haryana	9.74	10.52	9.34	9.10	12.07
U.P	14.59	13.23	8.84	11.7	0.21
Rajastan	0.35	0.29	0.22	0.22	0.05
Delhi	0.06	0.05	5.05	0.05	38.38
A.P	21.83	35.24	22.32	30.46	1.56
Karnataka	1.71	1.58	1.19	1.09	0.03
Tamilnadu	0.04	0.04	0.04	0.06	8.09
M.P	3.36	5.59	4.64	6.24	3.83
Orissa	2.10	2.55	2.64	3.51	1.51
W.Bengal	0.94	1.13	0.73	1.75	0.05
Assam	0.08	0.07	0.07	0.10	0.67
Maharashtra		0.02	0.38	0.66	0.03
Bihar	0.01				
Kerala					
Total	105.04	118.16	93.80	114.51	131.71

In the case of Rice the major surplus states are Punjab, Andhra Pradesh, Haryana and Uttar Pradesh which together account for about 89% of the total rice procured for the central pool in 1993-94: The FCI procured 88.21% of this quantity. In 1988-89, the FCI procured 98.97% of all rice for the central pool with Punjab, Andhra Pradesh, Uttar Pradesh and Haryana accounting for about 89% of the total share.

In the case of rice an important aspect is its variety-wise composition and the state-wise/region-wise differences in variety.

Table 2.4: Variety-wise Procurement of Paddy and Rice (Qty.Lakh tonnes)

Variety	1989-90		1990-91		1991-92		1992-93		1993-94	
	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice	Paddy	Rice
Common	32.30	20.20	11.85	19.58	11.80	17.65	11.80	11.65	5.06	19.78
Fine	2.70	24.60	1.24	31.94	1.16	24.10	1.16	24.10	22.70	32.37
Superfine	65.00	55.20	86.91	49.08	87.04	58.25	87.04	58.25	72.24	47.85
Total	100	100	100	100	100	100	100	100	100	100

Source : FCI

Table 2.5: Variety-wise Composition of Rice State-wise 1989-90 and 1993-94

State	1989-90			1993-94		
	% share of			% share of		
	C	F	SF	C	F	SF
Punjab	8.10		91.90	2.18	15.45	82.37
Haryana	6.00		94.00	0.01		99.99
UP	75.80	6.00	18.20	83.86	7.39	8.75
WYL	31.40		68.60	26.93		73.07
Delhi			100.00			100.00
AP	1.30	68.70	30.00	1.75	69.10	29.15
Pondicherry	1.30	68.70	30.00			
Karnataka	9.30	16.90	73.80		11.93	80.07
W.B.	90.50	9.40	0.10	98.93	1.07	
Orissa	90.20	9.80		90.44	0.66	8.90
Assam	89.60	1.40	9.00	50.71	49.29	
M.P.	43.80	56.20		65.00	27.50	7.50
Bihar						
Tamilnadu						
Maharashtra						
Orissa						
Taken over from State						
Govt.Punjab	14.20		85.80			
Haryana			100.00			
U.P.						
All India	20.20	24.60	55.20	19.76	32.37	47.87

C- Common F - Fine SF - Superfine
Source: FCI Files

Purchase of superfine quality of paddy has been preferred so as to consumers taste for superior quality rice. In the case of rice the product is predominantly procured on levy from rice-

millers who prefer to supply inferior qualities to FCI so that the millers could retain more of superior quality rice for open market sale.

The northern states of Punjab and Haryana produce and offer superfine quality rice (more than 90%) whereas eastern states of West Bengal, Assam and Orissa offer common variety of rice to the extent of 90% of the rice sold by them to procurement agencies. Interestingly, Andhra Pradesh which is the largest contributor of rice to the Central pool contributes nearly 70% of fine variety of rice. UP has increased the share of common variety from 75% in 1989-90 to 85% in 1993-94.

Rice is procured mainly from rice millers whereas paddy is procured directly from farmers and processed in the Modern Rice Mills of FCI and some of the state government agencies. In Tamil Nadu the paddy procured under (monopoly procurement) is processed by the Tamil Nadu Civil Supplies Corporation in their own Modern Rice mills, and released through the PDS. In Andhra Pradesh farmers sell their produce to licensed rice millers who contribute 33% of the rice produced to FCI, at procurement prices and 17% to Andhra Pradesh Civil Supplies Corporation. The millers sell 33% in the state's open market and are allowed sale of the remaining 17% outside the state. The system of procurement of rice in different states is appended in Annexure 2 and the price of Levy Rice variety-wise for the period 1988-89 to 1993-94 state-wise is appended in Annexure 2.

Coarse Grains

Since April 1990, FCI has been designated as the nodal agency and entrusted with the work of ensuring price support operations for procurement of coarse grains all over the country. Coarse grain procurement has been made mostly in the Kharif season. Open market prices at procurement time are usually higher than support price. This fact and the poorer quality of grains offered to government agencies result in very low procurement of coarse grains. Only about 2% of this production, usually in the drier regions of the country are purchased by FCI. Therefore we have not attempted any further analysis of the purchasement of course grains. The following table summarises the entire purchase operations of FCI.

Table 2.6 : Variety-wise Details of Total Purchase 1989-90 to 1995-96

Qty : Lakh tonnes
Value : Rs.Crores

Procurement	89-90		90-91		91-92		92-93		93-94		94-95		95-96	
	Qty	Value	Qty	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
Wheat	84.59	1547.39	102.16	2178.29	84.94	1896.09	68.94	1895.00	115.29	3784.24	102.80	3598.0	115.84	4170.24
Paddy*														
Common	2.73	75.74	2.69	82.39	1.25	43.00	1.35	54.97	0.81	37.76	1.10	55.76	0.76	38.53
Fine	0.02	0.41	0.28	8.32	0.12	3.99	0.13	5.37	3.65	180.48	5.06	272.16	3.46	186.10
S.Fine	6.81	228.31	19.66	661.50	9.24	346.35	9.94	432.39	11.60	609.09	15.86	899.08	10.86	615.64
Total	9.56	304.46	22.63	752.2	10.61	393.42	11.42	492.73	16.06	827.33	22.02	1227.00	15.08	840.27
Rice														
Common	19.86	583.22	18.70	617.98	14.67	555.09	15.79	724.99	22.86	1151.33	22.12	1211.36	22.00	1204.79
Fine	18.34	572.72	29.94	1044.25	20.06	785.49	21.55	1003.84	37.45	2069.06	35.39	2128.50	35.20	2117.07
S.Fine	56.28	1940.52	46.89	1833.91	48.46	2150.53	52.09	2703.05	55.38	3366.56	53.08	3516.28	52.80	3497.73
Total	94.48	3096.46	95.53	3496.14	83.19	3491.11	89.43	4431.88	115.69	6586.95	110.59	6856.14	110.00	6819.59
Rice+Paddy	104.04	3400.92	118.16	4248.35	93.80	3884.53	100.85	4924.65	131.75	7414.28	132.61	8083.14	125.08	7659.86
Coarse-grains	0.01	0.19	0.01	0.16					0.13	3.36	0.15	4.28	0.15	4.28
Grand Total	188.64	4948.50	220.33	6426.80	178.74	5780.62	169.79	6819.01	247.17	11201.88	235.56	11685.42	243.07	11834.38

Source:- FCI Files and annual reports.
Note:- Paddy in terms of rice is obtained by using standard conversion rate.

Annexure 1 Procurement Prices of Levy Rile for Kharif

Rs.Qtl.

	Common						Fine						Superfine					
	88-89	89-90	90-91	91-92	92-93	93-94	88-89	89-90	90-91	91-92	92-93	93-94	88-89	89-90	90-91	91-92	92-93	93-94
W.Bengal	290.25	323.15	370.25	433.80	488.25	531.95	308.35	341.55	389.15	453.33	536.90	575.55	323.50	356.70	404.30	568.50	561.20	605.05
Assam	301.60	335.75	384.45	450.50	514.70	545.25	322.10	356.75	406.25	473.25	554.30	584.80	337.90	372.60	422.10	489.10	586.00	615.10
Orissa	307.40	345.05	394.90	462.75	528.80	576.15	323.35	361.10	411.00	478.80	560.90	608.30	339.25	377.15	427.05	494.90	593.05	640.40
Pondi-cherry	283.00	313.90	356.70	425.30	489.05		298.60	328.20	371.50	440.05	518.75		313.40	343.00	386.30	454.75	548.30	
A.P.	304.15	338.53	387.55	454.15	518.90	565.45	319.90	354.30	403.30	469.90	550.40	596.95	335.65	370.05	419.05	485.65	518.90	628.45
Karnataka	289.49	322,29	369.10	432.45	494.05	538.35	304.35	337.15	384.05	447.45	524.00	568.25	319.35	352.10	399.05	462.40	553.95	598.20
M.P.	298.95	334.55	385.10	448.85	512.85	558.10	314.40	350.10	398.65	464.40	543.95	589.15	329.90	365.65	414.20	479.95	575.10	620.20
Gujarat	281.25	313.00	358.55	419.95	484.45		295.70	327.50	373.05	434.45	513.30		310.20	342.00	387.55	448.95	543.15	
Mahra-rashtra	294.40	330.05	377.90	442.55	501.65	546.30	309.55	345.35	193.15	457.85	581.90	526.60	324.70	360.60	408.45	473.15	562.20	606.85
Bihar		326.20	373.70	435.85	500.20			344.80	393.80	457.60	535.90			360.10	408.10	472.90	566.50	
Delhi		347.50	396.65	463.45	529.20			374.95	425.20	494.00	578.25			394.10	445.10	514.45	616.00	
Haryana		347.50	396.65	463.45	529.20	579.80		374.95	425.20	494.00	578.25	630.30		394.10	445.10	514.45	616.00	608.50
Punjab																		
UP/ Chandigarh		347.25	369.40	463.10	533.40	582.55		374.55	424.90	493.55	582.90	633.40		393.80	444.80	514.10	620.90	671.85
WYL		341.25	389.45	455.20	521.80	566.15		365.00	414.50	481.55	565.35	611.10		386.95	437.15	505.25	606.75	653.10
U.P.		330.70	377.80	441.30	501.45	546.35		345.90	393.00	456.50	531.75	576.65		368.25	417.45	482.35	575.75	620.45
Tamilnadu						489.05						518.70						548.30

Source: FCI

PROCUREMENT PROCESS

The Agricultural Market bye-laws in the main producing states of Punjab and Haryana specifies that the total quantity of wheat and paddy produced and marketed in the state o be sold by auction from the regulated mandis operated by the Marketing Boards. Kutcha Achatyas who are licensed commission agents are appointed by the Marketing Boards to provide the services of linking buyers and sellers. The farmers dump their marketable produce on the `tharas' earmarked for each Kutcha Achatya - who provides unloading, cleaning and dressing of the stocks and then arranges for auctioning and weighment. The charges for unloading, cleaning and dressing are paid by farmers; cleared stocks which are cleaned are

then put to open auction under the direct supervision and control of the Local Market Committee in which both public agencies as well as private traders are represented. Auctioneers are appointed by the Market Committee to conduct the auction. Usually stocks which fetch higher prices are purchased by private traders while the rest are purchased by FCI and other state agencies at support prices (procurement price) fixed by Central Government if the stocks conform to Fair Average Quantity (FAQ) specifications

. If the moisture content is higher or the quality of grains is slightly lower, the FCI and state procuring agencies impose quality cuts on the procurement price, with the consent of the farmers and the Market Committee. Once the FCI or other state procurement agencies decide to purchase, they are required to make payments to the Kutcha Achatyas who in turn are required to pay the farmers immediately after weighment is over.

For the services rendered by the Kutcha Achatyas, an ad-valorem commission fixed by state government is to be paid by the procuring agencies. In addition the procurement agencies are required to make statutory payments like market fee, auction fee, rural development cess, etc. at ad-valorem rates fixed by the state governments.

Procurement Cost/Incidentals

The procurement cost of wheat and paddy includes Mandi charge which is made up of (i) Market fee; (ii) Auction fee; (iii) Rural Development Cess; and (iv) Commission to Kutcha Achatyas which are all statutory state levies.

Table 2.6 gives the statutory charges as percentage of procurement price fixed by the state governments of Punjab, Haryana and Uttar Pradesh for the years 1989-90 and 1993-94.

Table 2.7 : Mandi Charges for Selected States as Percentage of Procurement Price
(per cent)

Item of Cost	1989-90			1993-94		
	Punjab	Haryana	UP	Punjab	Haryana	UP
Kutcha Achatya Commission	2.00	2.00	1.50*	2.00	2.00	2.00
Market Fee	2.00	2.00	1.00	2.00	2.00	1.00
Auction Fee	--	0.08	0.05*	--	0.08	0.05
Rural Development Cess**	1.00	1.00	--	2.00	1.00	--
Total	**5.00**	**5.08**	**2.55**	**6.00**	**5.08**	**3.05**

* Introduced on 1.4.1989. ** Introduced on 1.4.1987
Source: FCI

In addition, the statutory and obligatory costs include purchase/sales Tax which are levied differently on different commodities in different states. Table 2.8 gives the rates for the various major procurement states for the year 1993-94.

Thus the total statutory cost (Mandi charges + Purchase/Sales Tax) comes to about 10% of the total procurement price and procurement cost.

The gunny bags in which the grains are dressed and kept ready for transportation and storage, are purchased by the FCI through the DGS & D at rates fixed by them. Cost of gunnies incurred by state agencies who surrender bagged stocks to FCI as well as the rice miller who supply bagged rice are reimbursed. The cost incurred on gunnis is thus obligatory but not controllable by the FCI.

Table 2.8: Ad-valorem Purchase Tax Details for 1993-94 for selected States

Percentage

State	Wheat		Rice		Paddy	
	Point of Tax	% of Tax	Point of Tax	% of Tax	Point of Tax	% of Tax
Punjab	FP	4%	LP	4%	LP	4%
Haryana	FP	4%	FS	4%	LP	4%
Uttar Pradesh	FP	4%	FP	4%	FP	4%
Rajasthan	FSP	4%	FSP	4%	FSP	4%
Madhya Pradesh	FS	3%	FS	3%	FS+ET 2.5%	2.5%
Andhra Pradesh	FS+1.5% +10% tot.	1%	FS	4%	FS	4%
Gujarat	Tf	Tf	Tf	Tf	Tf	Tf
Maharashtra	Tf	Tf	Tf	Tf	Tf	Tf
Tamil Nadu	Tf	Tf	Tf	Tf	Tf	Tf
West Bengal	last sale	1% w.e.f 2% T.O.T	LS	1%+2% T.O.T.	Tf	Tf
Bihar	FS	4%	FS	4%	FS	3%
Orissa	FS	4%	FS	4%	FS	4%
Assam	Tf		Tf		Tf	

FS - First Sale; FP - First Purchase; T.O.T. - Turn Over Tax
LS - Last Sale ; LP - Last Purchase ; Tf - Tax Free

Source: FCI.

Controllable Costs of Procurement therefore include: (i) Mandi Labour; (ii) Forwarding Charges; and (iii) Internal Movement Charges. For all these operations the FCI calls for open tenders and finalises contracts on most favourable rates bearing little scope for any enforced reduction. Since Mandis are allotted to the FCI by state governments some rationalisation in this may reduce these costs, particularly if they are located near the storage depots or rail heads and reasonable quantum of grain arrivals is ensured.

The FCI also lifts stocks of foodgrains procured and stored on its behalf by various state agencies, reimbursing them for overall

procurement cost, storage cost and interest costs of the stocks transferred to FCI. Establishment costs paid to these agencies are included in the procurement as evident from Tables 9 and 10. But these items for FCI are not included in the computation of procurement cost for FCI. Comparison of procurement cost between FCI and other agencies is possible although post-procurement costs of FCI cannot be compared with that of any other organization due to the absence of any other such organization in the country.

Table 2.9 helps to compare the procurement costs of FCI and other agencies. FCI does not account for Administration charges, interest charges, storage charges etc. separately in its own accounts because FCI perceives the procurement cost as the expense incurred in between purchase and transfer of purchased stocks to its nearest initial storage point. Other agencies incur these costs in procuring and maintaining stocks till FCI takes them over. These costs are reimbursed by the FCI when stocks are transferred to FCI by and so they account for these in their procurement cost accounts.

Table 2.9 : Procurement Costs of Wheat for FCI and Other Agencies

Year	FCI	Other Agencies
1988-89	33.38	38.59
1989-90	31.76	45.84
1990-91	41.51	60.30*
1991-92	41.84	78.09
1992-93	47.34	67.59
1993-94	52.07	81.24

* The purchase tax in Punjab for other agencies includes the payment of Rs. 10.23 crores relating to 1989-90 and Rs.51.21 crores for 1990-91 made due to amendment in sales tax by Punjab Government.

Source : FCI files and annual report

Table 2.10 : Procurement Incidentals of the FCI for the Year 1993-94 (Wheat) for Major Producing States

(Rate Rs./Qtl.)

Regions	All India			Punjab		Haryana		Uttar Pradesh		Rajasthan	
	Weighted	FCI	Other Agencies	FCI	Other Agencies	FCI	Other Agencies	FCI	Other Agencies	FCI	Other Agencies
01 Mandi charges	12.89	14.92	12.45	15.25	15.25	15.35	15.49	4.53	4.57	11.15	4.88
02 Mandi labour	2.76	2.08	3.04	1.78	3.70	3.36	3.25	1.17	1.80	2.35	--
03 Forwarding	0.96	0.87	0.99	0.63	1.04	--	1.90	0.08	--	--	--
04 Storage charges	1.13	--	1.57	--	3.30	--	--	--	0.35	--	--
05 Internal movement	7.59	7.20	7.74	8.71	7.36	5.04	3.45	4.16	13.76	3.60	6.07
06 Interest charge	5.08	--	7.06	--	14.00	--	2.55	--	--	--	2.25
07 Adm. charges	4.68	--	6.52	--	8.00	--	6.63	--	4.50	--	4.00
08 Purchase tax	11.40	10.80	11.63	12.20	12.20	12.20	12.20	12.20	12.20	--	--
09 Sales tax	0.15	--	0.21	--	0.14	--	0.53	--	--	--	--
10 Guarantee fee	0.18	--	0.25	--	0.56	--	--	--	--	--	--
11 Gunny cost	17.13	17.10	17.14	17.51	17.61	16.27	17.12	16.33	16.33	16.66	17.50
12 Arrears	9.09	-	12.69	-	9.88	-	14.79	-	17.86	-	-
Total	73.04	52.07	81.24	54.79	93.04	52.22	77.90	38.47	71.36	33.76	34.70

Source : FCI

Note - Weighted average of total expenditure on purchase incidents of FCI and other agencies taken together.

The controllable items of cost like Mandi labour, Forwarding and Internal Movement are all higher for the other agencies than for FCI in all the states. Similarly even when the charges reimbursed to state agencies like Administration, storage and internal charges are also deducted it is found that still the FCI's total procurement cost is much lower than that of the other agencies. The statutory charges are similar for both FCI as well as the other agencies.

Further comparative analysis of procurement incidentals in the four main wheat-producing states shows that except for the state of Rajasthan the total procurement incidentals for FCI is considerably lower than those for the state and other agencies. Hence, it is not economical for FCI to lift stocks held by these other procurement agencies. The establishment charges, interest and

storage costs reimbursed to these agencies are overlooked by FCI in its own accounting as FCI does not include them in computing their

Table 2.11: Procurement Incidentals for Wheat 1988-89 to 1993-94

Rate : Rs./Qtl.

Item of cost	1988-89	1989-90	1990-91	1992-92	992-93	1993-94
Mandi charges	8.21	7.13	10.36	11.24	12.35	14.02
Purhase Tax	7.31	7.75	8.44	8.67	9.98	10.80
Gunny cost	10.50	10.90	13.86	15.78	14.98	17.10
Non-controllable cost						
Statutory and obligatory cost (Total)	26.02	24.78	32.66	35.69	37.31	41.92
Mandi Labour	1.05	0.93	1.16	1.40	1.43	2.08
Forwarding charges	0.21	0.20	0.37	0.28	0.52	0.87
Internal Movement	4.18	5.80	7.32	9.47	8.08	7.20
Controllable Cost (Sub-total)	5.44	6.93	8.85	11.15	10.03	10.05
Storage charges	2.28	3.20	2.63	2.80	2.65	1.57
Interest	6.52	6.50	7.80	8.83	11.92	7.06
Admn. charges	2.33	0.63	5.94	6.99	6.73	6.52
Guarantee Fee		0.08	0.02	0.25		
Charges to be paid * State agencies ** (Sub-total)	11.13	16.41	16.44	18.87	21.30	15.40
Total Procurement cost (Total)	31.46	31.76	41.51	46.84	47.34	52.07
Percentage of non-controllable cost in procurement cost	82.70%	70.02%	78.67%	76.19%	78.81%	80.50%
Percentage of controllable cost in procurement cost	17.29%	21.8%	21.32%	23.84%	21.18%	19.49%

* To be paid to state agencies later.
** Only for wheat.

Source : FCI files and annual report.

Table 2.12: Procurement Incidentals for Rice 1988-89 to 1993-94

Rate : Rs./Qtl.

Item of cost	1988-89	1989-90	1990-91	1992-92	992-93	1993-94
Mandi charges	--	--	--	--	--	--
Purhase Tax	2.16	0.86	2.16	2.42	2.06	5.32
Gunny cost	10.68	11.40	13.84	14.52	14.90	14.39
Non-controllable cost						
Statutory and obligatory cost (Total)	12.84	12.26	16.00	16.94	17.86	19.71
Forwarding charges	1.60	1.63	2.06	2.58	4.13	3.70
Internal Movement	0.62	0.59	0.81	1.18	1.43	1.48
Controllable Cost (Total)	2.22	2.22	2.87	3.76	5.56	5.18
Mandi charges	6.27	8.77	10.64	12.09	14.20	19.55
Purchase Tax	8.06	2.63	5.81	13.18	11.55	16.79
Gunny Cost	13.2	16.83	17.99	17.87	17.46	24.55
Non-controllable Statutory Obligatory cost (Sub-total)	56.8 (27.53)	28.23	34.44	43.14	43.21	60.89
Mandi labour	0.96	1.44	1.64	2.03	2.25	2.45
Forwarding charges	0.37	0.31	0.53	0.8	0.66	0.63
Internal movement	7.85	7.33	7.25	9.18	9.01	5.24
Controllable cost	5.58	9.08	9.42	11.89	11.92	8.32
Storage charges	0.07	0.01	--	--	0.16	0.01
Interest	0.45	0.29	0.27	0.25	0.23	0.35
Admn. charges	1.33	1.32	1.45	1.51	1.17	2.57
Charges to be paid to State agencies	1.85	1.62	1.72	1.76	1.40	2.92
Total Procurement cost (Total)	16.16	18.10	20.59	23.38	24.98	27.12
Percentage of non-controllable cost in procurement cost	75.44%	67.73%		77.77%	71.50%	72.67%
Percentage of controllable cost in procurement cost	13.12%	12.56%	13.93%	16.08%	22.25%	19.10%

Source : FCI files and annual report.

own procurement cost figures. Since there is no state procuring agency of Rajasthan government it is interesting to note the procurement cost of FCI particularly the statutory non-controllable cost are fixed very high to benefit the state.

Table 2.12A PROCUREMENT INCIDENTAL CHARGES FOR RICE 1993-94
[Selected States]
Qty. in Lakh Tonnes
Rate Rs. per Qtl.

Region	Punjab	Haryana	U.P.	M.P.	Maharashtra	W.Bengal
Quantity	36.45	11.53	13.35	8.09	0.67	1.51
Forwarding charge	4.53	2.72	0.25	4.43	4.18	-
Internal movt	0.37	1.66	3.67	1.48	-	3.96
Storage charges	-	0.05	0.01	-	-	-
Interest charges	0.03	-	2.96	-	-	-
Admn. Charges	0.74	1.16	8.72	9.64	-	0.99
Purchases tax	6.31	0.76	20.07	11.47	-	4.82
Gunny cost	12.55	15.39	11.36	15.47	15.07	15.74
ARREARS relating to previous years	5.09	0.19	12.17		0.67	-
Total	29.72	22.13	59.21	42.49	19.92	25.51

Source : FCI files

In the procurement of rice the most important distinction is that it is directly levied from rice millers and therefore mandi charges do not appear. Further levy rice to the central pool is entirely procured by FCI, and so comparison between FCI and other state agencies as in the case of wheat is not possible. However, paddy is procured and processed in rice by some of the state agencies and supplied to FCI. The purchase tax details for rice has already been provided in Table 2.8. During 1994-94 Andhra Pradesh (38.38 lakh tonnes) followed closely by Punjab (36.45) are the states contributing the maximum to the central pool of rice (115.59 lakh tonnes).

Forwarding charge in Punjab and Andhra Pradesh are quite high (above Rs.4/- per quintal) compared to Haryana (2.72) and Uttar Pradesh (-0.25) etc. However, the internal movement charges in Uttar Pradesh is very high, (Rs.3.57 per quintal), compared to Andhra Pradesh (Rs. 1.72 per quintal), Haryana (Rs.1.86 per quintal and Punjab Rs.3.75 per quintal. It is also seen that the gunny cost is high in Andhra Pradesh, Tamil Nadu and Karnataka compared to Punjab. The purchase tax per quintal of rice is extremely high in Uttar Pradesh (Rs.20.07 per quintal) and Madhya Pradesh (Rs.11.47 per quintal). Due to this the procurement incidental charges for rice are the highest in Uttar Pradesh (Rs.47.04 per quintal) and Madhya Pradesh (Rs.42.49 per quintal) compared to the all India average (Rs. 27.12 per quintal).

Procurement charges for paddy 1994-95

[illegible] shows that in comparison with the all-India average of Rs.71.97 per quintal the rates in Punjab was 72.30 where and in Uttar Pradesh it was only Rs.34.97 per quintal. Mandi charges in Punjab and Haryana compared to Uttar Pradesh and Andhra Pradesh are very high. Similarly purchase tax is also high in Punjab, Haryana, Andhra Pradesh and Orissa as compared to Uttar Pradesh. Thus the high procurement incidental charges for Punjab and Haryana may be attributed largely to these non-controllable procurement costs of FCI.

Table 2.13: Procurement Incidentals for Paddy 1988-89 to 1993-94

Rate : Rs./Qtl.

Purchase incidentals for Paddy

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Mandi charges.	6.27	8.77	10.64	12.09	14.20	15.55
Purchase Tax.	36.91*	2.63	5.81	13.18	11.55	16.79
Gunny cost.	13.2	16.83	17.99	17.87	17.46	24.55
Non controllable statutory and obligatory cost (Total).	27.53	28.23	34.44	43.14	43.21	60.89
Mandi labour.	0.96	1.44	1.64	2.03	2.25	2.45
Forwarding charges.	0.37	0.31	0.53	0.68	0.66	0.63
Internal movement.	7.25	7.33	7.25	9.18	9.01	5.24
Controllable cost.	8.58	9.08	9.42	11.89	11.92	8.32
Total procurement cost.	64.92	37.31	43.86	55.03	55.13	71.97
% of Non controllable cost in Total procurement Cost.	87.47 %	75.66%	78.52%	78.39%	78.37%	98.49%
% of Controllable cost in total procurement cost.	13.21 %	24.33%	21.47%	21.60%	21.62%	11.56%

Source:- FCI files.

* Abnormal increase in procurement charges of paddy on account of payment of purchase tax during the year on transfers/purchases during previous year in Punjab. Hence 8.06 RE is taken for analysis.

Source: - FCI files

From these tables the increases in procurement cost as a percentage of procurement price for wheat, rice and paddy are shown in the following table;

Table 2.14-A : Procurement Price, Procurement Incidentals and Percentage of Incidentals to Price

Year	Wheat			Rice			Paddy		
	Price	Incidentals	%	Price	Incidentals	%	Price	Incidentals	%
1988-89	173	36.36	21	266	16.91	6.35	160	34.92	21
1989-90	183	40.32	22	304	19.10	6.28	165	37.31	23
1990-91	215	54.50	25	339	23.66	6.97	205	43.86	21
1991-92	225	68.95	25	388	26.32	6.78	230	55.03	24
1992-93*	275	62.18	31	454	24.98	5.50	270	55.13	20
1993-94	330	73.04	22	518	30.85	5.98	310	71.97	23

* RE

Table 2.14-B Index of Price and Incidentals

Base 1988-89 = 100

Year	Wheat		Rice		Paddy	
	Price	Incidentals	Price	Incidentals	Price	Incidentals
1988-89	100	100	100	100	100	100
1989-90	105	110	114	113	103	107
1990-91	124	150	127	140	128	116
1991-92	130	190	146	156	143	158
1992-93	159	171	171	148	169	158
1993-94	191	201	194	182	194	195

Source - FCI

The procurement prices for wheat, paddy and rice have increased by over 90% over this five year period i.e. at an annual average of 18%. The procurement costs (or procurement incidentals) increased more rapidly than procurement prices till 1991-92 after which procurement price has shot up much faster than procurement cost. This is attributed to the sharp increase in procurement prices allowed by the government from 1992-93 on the basis of recommendation of the Commission of Agricultural Costs and Prices (CACP), considering the increase in cost of

cultivation with reduction in fertilizers' subsidy and increase in fertilizer price since 1991-92. This also indicates that although most of the non-controllable items of procurement cost are ad-valorem based, the other incidentals have been well under control of the FCI indicating better performance.

Disaggregated analysis of increases in procurement incidental indicates that over the period of five years the non-controllable items of cost like Mandi charges, purchase tax as well as obligatory cost on Gunny have increased.

Table 2.15: **Percentage Increase in Costs between 1988-89 and 1993-94**

Non-controllable cost	Wheat	Rice	Paddy
Mandi charges	70	--	211
Purchase tax	47	47	108
Gunny cost	63	35	56
Total Non-controllable Cost	61	57	122

Non-controllable items of cost shown an average annual increase of 10% for both wheat and rice, while that of paddy was 22%. Mandi cost, in particular, of paddy has shown an annual increase of 35%, purchase tax 18% and gunny cost 9%. This is rather high when compared to wheat and rice which have shown reasonable rates of increase.

The share of controllable items have begun to show a marginal decreasing trend since 1991-92. Analysis of procurement cost for wheat indicates a sudden increase in controllable cost item, internal movement and a decrease in mandi-charges and purchase tax which are components of non-controllable costs. The

of controllable to non-controllable costs for wheat.

In the case of wheat the share of controllable cost in total procurement cost gradually rises to a peak of 23.80 per cent in 1991-92 and then gradually decline to 19.94 per cent in 1993-94, indicating better per control and performance lately. The total cost of procurement has increased by 65.5 per cent over the six year period indicating an annual average of 11 per cent. The controllable cost has increased by about 87 per cent with an annual average increase of 14.5 per cent. Non-controllable cost has increased gradually and steadily by 61 per cent. The annual average increase is 10 per cent during this period.

In the case of rice, the share of controllable cost in total procurement cost shows a gradual but definite increasing trend. The non-controllable cost for rice is less than that for wheat because it is directly levied from millers completely avoiding mandy charges. The forwarding charges as well as the internal movement charges show an increasing trend. The controllable cost has increased by 13.3 per cent, over this period, the annual average working out to about 22 per cent compared to about six per cent for non-controllable items of cost. In general, the controllable cost items have shown higher rates of growth than non-controllable items indicating poor performance of FCI in procurement cost.

Since during 1988-89 the purchase tax indicates the annual figure combined with arrears for previous years paid during that year. The analysis avoids this year.

From 1989-90, contrary to that for wheat and rice controllable cost of paddy as a percentage of total cost shows an almost constant figure between 21 and 22 per cent for the three years 1990-91, 1991-92 and 1992-93 after which there is a sharp fall which is attributed to a sharp increase in the non-controllable charge, mandi charges and gunny costs.

Annexure - II

PROCUREMENT METHODS FOLLOWED FOR RICE/PADDY

Andhra Pradesh Assam Orissa Rajasthan Tamil Nadu Chandigarh	50% levy on millers /dealers. No levy on producers.
Gujarat	15% levy on millers (1985-86)
Haryana	75% levy on millers /dealers
Punjab	90% levy on millers
Delhi	75% levy on millers /dealers
Madhya Pradesh	60% levy on millers /dealers 25% on dealers for export
Maharashtra	15% export levy for every person intending to export paddy & rice (1985/86)
Uttar Pradesh	60% levy on millers /dealers (40% in some districts)
West Bengal	40% levy on millers /dealers
Pondicherry	30% to import levy on paddy/rice when taken out of State 20% purchase levy on paddy
Karnataka	33 1/3% levy on millers/dealers
Jammu & Kashmir Tripura Kerala Bihar	No levy

Source: Bulletin of Food Statistics, GOI.

Chapter III

DISTRIBUTION AND DISTRIBUTION COSTS

3.1 SALES

The sales function of FCI mainly comprises (a) issue of foodgrains from the central to the state government and central government departments including defence; (b) issue of foodgrains under the Revamped Public Distribution System (RPDS) and Integrated Tribal Development Programme (ITDP); (c) Issue under poverty alleviation and employment generation programmes like Jawahar Rozghar Yojana (RLEGP and NREP); (d) Sale of wheat or rice in open market and (e) export.

The details of sales of FCI from 1988-89 to 1993-94 indicates that in the case of wheat under various categories the main category of sales was the PDS which caters to the entire target population of the country. Nearly 68 percent of the quantity sold in 1988-89 was of this category. During the following years the proportion has varied. The total sales of foodgrains through PDS (off-take) varies inversely, with the local market arrivals and directly with the difference between issue price and open market price which in turn depends upon agriculture output (D.S.TYAGI, 1990 page no:40). On the whole except for the extreme fluctuation between 1989-90 and 1991-92 the total sales for wheat has kept within 10 per cent of the base year.

Table 3.1.1 : Details of Sales - Wheat of the FCI for the year 1988-89 - 1993-94

Qty in lakh tonnes

Wheat	1988-89		1989-90		1990-91		1991-92		1992-93		1993-94	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
PDS	61.12	1243.74	64.26	1310.9	64.86	1502.17	82.33	1982.01	64.24	1794.89	41.92	1438.30
Export	0.15	2.93	0.12	2.43	2.56	55.17	6.83	152.55	0.11	2.8	0	0
Open Market Sales	11.52	288.24	2.27	55.19	12.37	405.12	8.93	364.74	0	0	28.73	1191.89
ITDP	8.85	132.33	7.91	119.89	8.15	148.9	8.26	162.11	18	414	6.21	181.06
JRY	0	0	2.51	51.2	0.04	0.81	0.04	1.02	0.6	16.8	1.8	60.67
RPDS	0	0	0	0	0	0	0	0	0	0	11.56	34.95
Defence Sales	0	0	0	0	0.91	24.36	0.9	28.86	1	28	1.21	41.76
Damaged	0.32	2.42	0.2	1.39	0.04	0.37	0.04	1.39	0.05	0.37	0.04	0.61
Other Schemes	7.65	144.7	0	0	0	0	0	0	0	0	0	0
Total	89.52	1814.46	77.27	1541	88.93	2133.9	107.33	2692.68	84	2256.86	91.47	3255.24

Source:- FCI files

The sale of wheat through the PDS as percentage of total sales indicates a peak of 83.16 per cent in 1989-90 and a low of 45.82 per cent in 1993-94. One of the reasons for the sharp decline in PDS sales of wheat is the sharp increase in issue price during 1993-94 and the easy availability in the open market.

Such a situation has necessitated open market sale in 1993-94 of an unprecedented high quantity of 28.73 lakh tonnes to keep FCI stocks at an optimum.

In 1992-93, 18 lakh tonnes of wheat was sold in the ITDP areas. In 1993-94, 11.56 lakh tonnes of wheat was sold under the RPDS mostly in tribal areas, so that a total figure for ITDP and RPDS together equalled the ITDP sale figure of 1992-93.

Minor quantities of grain are exported as bilateral aid or gift of the Government of India no competitive export trade being involved.

In the case of rice, the sale figures have not shown corresponding sharp fluctuations from year to year. In 1989-90,the quantity of sales was 89.11 percent, of the 1988-89 figure of 85.07 lakh tonnes. In 1991-92, the sales of rice reached the maximum, mainly due to high open market price for foodgrains. This has gradually declined in subsequent years due to sharp increases in issue price during 1993 and 1994, reducing the gap between the market price and retail PDS price.

Table 3.1.2: Details of Sales - Rice

Rice	1988-89		1989-90		1990-91		1991-92		1992-93		1993-94	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
PDS	71.16	1955.35	62.09	1893.15	67.89	2264.75	88.57	3311.25	77.97	3402.46	65.85	3398.93
Export	0	0	0.05	1.99	01.10	6.08	0.47	24.07	0.43	24.8	0.4	25.4
Open Market Sales	0.37	10.55	0.44	11.53	0.42	5.96	1.22	29.64	0	0	1.06	40.17
ITDP	12.02	227.12	11.65	282.54	10.99	342.69	13.66	423.84	19	621.3	8.31	394.12
JRY	0	0	1.96	55.6	0.32	11.61	0.20	7.94	1	43.82	2.22	111.94
RPDS	0	0	0	0	0	0	0	0	0	0	15.40	701.40
Defence Sales	0	0	0	0	1.39	47.66	1.6	68.82	1.5	65.72	1.4	75.10
Damaged	0.07	0.76	0.13	1.4	0.08	0.6	0.04	0.76	0.10	1.27	0.25	1.42
Other Schemes	1.45	36.57	0	0	0	0	0	0	0	0	-	-
Total	85.07	2230.35	76.32	2246.21	81.19	2679.35	105.76	3866.32	100	4159.37	94.89	4748.50

Source:- FCI files

Except during 1992-93 and 1993-94 the PDS share of total sales has remained around 83 per cent.

Region-wise analysis of the sales turnover of wheat indicate that upto 1992-93, Maharashtra was the biggest consumer (See table 3.1.2). In 1993-94, Uttar Pradesh became the largest consumer by gradually increasing purchase of FCI wheat over the years. Obviously in the producing states of Punjab and Haryana very little of PDS wheat was consumed. The share of West Bengal also went down gradually.

TABLE 3·1·2
REGION - WISE - SALES TURN OVERBY FCI
COMMODITY - WHEAT Qty. lakh tonnes

Region	1988-89	1989-90	1990-9	1991-92	1992-93*	1993-94
J & K	2.02	1.47	1.32	1.84	4.50	1.88
Punjab	0.55	0.73	1.27	1.99	1.50	2.57
U.P	6.25	4.59	6.37	8.45	7.50	13.01
Rajasthan	9.35	6.63	6.50	8.55	7.50	6.57
Haryana	1.23	0.19	1.23	2.57	1.50	6.21
Delhi	6.78	6.11	7.31	8.64	7.50	5.90
H.P	1.26	0.94	0.82	1.27	1.00	1.19
Tamilnadu	4.59	3.86	4.63	4.34	3.50	4.29
Kerala	2.21	2.33	2.93	3.84	3.50	3.32
A.P	2.63	1.85	2.23	2.02	1.50	2.39
Karnataka	3.62	3.09	4.63	5.03	4.50	4.20
P.O.Vizag	0.00	0.16	0.02	0.26	0.20	0.13
P.O.Madras	0.19	0.01	0.10	0.61	0.50	0.34
Maharastra	12.34	13.06	13.80	15.50	12.50	7.59
M.P.	3.59	4.10	3.47	4.19	3.50	4.39
Gujarat	7.97	3.16	7.63	9.50	7.00	3.63
P.O.Kandla	0.32	0.18	1.32	4.27	1.00	0.31
Bihar	7.41	6.16	5.28	6.36	5.00	6.63
Assam	2.55	2.22	2.61	3.09	2.00	2.74
N.E.F	0.90	1.58	1.67	1.68	1.30	10.30
Orissa	3.04	2.75	3.08	3.46	2.50	2.99
P.O.Calcutta	0.83	0.45	0.68	0.55	0.50	2.05
West Bengal	9.89	9.65	9.53	9.29	7.00	7.76
H.Q.	0.00	0.00	0.00	0.00	0.00	0.15
TOTAL	89.52	75.27	88.43	107.30	87.00	100.54

Source: FCI files and annual reports * Revised estimates

TABLE - 3.1.3
REGION WISE SALES TURN OVER BY FCI
COMMODITY-RICE

Qty lakh tonnes

Region	1988-89	1989-90	1990-91	1991-92	1992-93*	1993-94
J & K	2.25	2.58	2.19	2.76	2.50	1.97
Punjab	0.49	0.49	0.40	0.43	0.50	0.95
U.P	4.11	3.42	2.67	4.16	3.35	2.81
Rajasthan	0.21	0.19	0.24	0.38	0.30	0.25
Haryana	0.37	0.36	0.20	0.29	0.30	0.26
Delhi	2.72	2.08	1.72	1.89	2.00	1.50
H.P	0.66	0.56	0.56	0.73	0.60	0.78
Tamilnadu	7.66	7.17	7.46	9.91	9.00	8.75
Kerala	15.41	13.19	15.57	18.06	17.00	16.04
A.P	8.54	9.10	14.52	22.99	22.00	23.04
Karnataka	5.84	5.89	5.32	6.25	6.00	6.33
P.O.Vizag	0.00	0.08	0.00	0.00	0.00	0.00
P.O.Madras	0.15	0.11	0.13	0.17	0.20	0.55
Maharastra	7.85	7.05	6.13	7.42	7.00	6.53
M.P.	2.41	2.46	1.87	2.72	2.50	2.49
Gujarat	3.55	2.76	2.82	3.46	3.20	2.43
P.O.Kandla	0.13	0.12	0.21	0.27	0.25	0.18
Bihar	0.54	0.47	0.28	1.04	1.05	1.30
Assam	5.36	4.98	4.98	5.43	5.45	5.09
N.E.F	4.99	5.11	5.15	5.95	5.56	5.49
Orissa	2.57	1.89	1.86	3.25	3.30	2.18
P.O.Calcutta	0.86	0.77	0.81	1.04	1.00	1.25
West Bengal	8.40	5.54	6.10	7.26	7.00	4.64
H.Q.						0.08
TOTAL	85.07	76.37	81.19	105.86	100.06	94.89

Source: FCI files and annual reports * Revised estimates

In the case of rice (See table 3.1.3), Kerala was single largest consumer in 1989-90. with a share of around 17 per cent of the total rice sold by FCI and continues to remain a major PDS rice consuming state even in 1993-94. This is largely attributed to it being a food deficit state. No clear trends are observed except in the case of Andhra Pradesh which is a major producer of rice and a major consumer too, this is attributed to the high state subsidy on rice prevailing in Andhra Pradesh, increasing their purchase of rice sold by FCI from just 8.54 lakh tonnes in 1988-89 to 23.04 lakh tonnes in 1993-94, thus becoming the largest consumer.

DISTRIBUTION COST

One of the major groups of cost is the distribution cost which consists of various costs from the end of the procurement operation stage to the final sale from F.C.I godowns. Till 1993-94, distribution cost figures separately for wheat and rice are not available and so only the common average figures are available for computation of economic cost for rice and wheat till 1992-93. From table 3.1.4 total distribution cost can be seen to have risen steeply between 1991-92 and 1992-93. By 1993-94, it had touched 58 percent over the base period cost of 78.33 Rs./Qtl., ie, an average annual increase of about 11.5%.

Freight by far is the single largest component of distribution cost but its share in the total distribution cost has steadily declined from 41.88% in 1989-90 to 3737.93% in 1993-94 indicating more efficient transport planning and management.

TABLE 3.1.4

DETAILS OF DISTRIBUTION COSTS — Rate Rs./Qtl.

Element of cost	1989-90	%	1990-91	%	1991-92	%
Freight	31.97	41.9%	36.08	41.2%	29.35	31.9%
Handling expenses	7.8	10.2%	8.37	9.6%	9.56	10.4%
Storage charges	9.98	13.1%	6.86	7.8%	7.81	8.5%
Interest charges	13.94	18.3%	20.89	23.9%	29.3	31.9%
Grain shortages in transit	3.77	4.9%	6.16	7.0%	6.7	7.3%
Grain shortages in storage	0.78	1.0%	1.07	1.2%	1.48	1.6%
Admn. Overheads	8.09	10.6%	8.05	9.2%	7.4	8.1%
TOTAL	76.33	100.0%	87.48	100.0%	91.9	100.0%

Element of cost	1992-93*	%	1993-94	%
Freight	31.52	28.0%	45.92	38.0%
Handling expenses	11.09	9.9%	10.7	8.8%
Storage charges	11.2	10.0%	8.09	6.7%
Interest charges	37.88	33.7%	38.09	31.5%
Grain shortages in transit	7.01	6.2%	5.9	4.9%
Grain shortages in storage	1.25	1.1%	1.33	1.1%
Admn. Overheads	12.5	11.1%	10.94	9.0%
TOTAL	112.45	100.0%	120.97	100.0%

Source: FCI files

* Revised estimates.

Interest charges has been the next largest item of distribution cost of about 30%. After the lean stock period of 1989-90, interest charges have increased sharply with increased procurement prices and huge stocks.

Storage charges, the next largest component of distribution cost has shown a decline not only in the percentage composition each year, but even in absolute values for two years after 1989-90, recovering marginally, but coming down to about 8% in 1993-94. This again indicates better performance in storage operations.

Handling expenses has also shown a stable but slow declining trend from 10.21% in 1989-90 to 9.04% in 1993-94. This again indicates good performance in storage operations.

Both storage and transit shortages have increased during the period from 1989 to 1992 after which some amount of efficient operations seems to have helped reduce the share of these in the corresponding total distribution cost.

From such a broad understanding of the operations and cost elements in the distribution cost, detailed analysis of each of these is independently carried out in subsequent sections of this chapter.

3.2 TRANSPORT OPERATIONS AND COST

Foodgrain procured from surplus states mainly in Northern India and Andhra Pradesh are moved over long distances throughout

the country. The stock procured in the Mandis are collected ir the nearest depots of FCI and then despatched to the deficit states at the earliest. Apart from the movement of indigenous grain, imported foodgrain received at the different ports are also moved to various states.

Foodgrain is one of the main commodities carried by Indian Railways. The movement of foodgrains from procuring states to the consuming states are based on the issues of PDS, operational stocks and buffer stocks required to be maintained in the state. High levels of procurement would necessitate larger movement to the storage regions for buffer stocking. The total quantity moved by rail or road within the state and inter-state is observed to be more than the quantity procured in each year.

Ideally the total of quantity moved should equal the total quantity procured. But since it is not practicable to plan movements with complete accuracy and also since initial unloads may have to be done at certain terminals, transhipment to interior areas may amount for an additional 25% of the movement. [According to MoU of FCI with government based on BICP study finding.]

From Table 3.2.1, it is clear that the percentage of total movement to total purchase varied from 153 in 1988-89 to 111 in 1993-94. The percentage of total movement to total sales for the same period varied from 141 downwards to 77 in 1990-91 and upwards to 149 at the end of the period. Further analysis commodity-wise indicates that the percentage of movement to

TABLE 3.2.1

DETAILS OF ROAD AND RAIL MOVEMENT

Qty: lakh tonnes.

	1988-89	1989-90	1990-9	1991-92	1992-93*	1993-94
INTER REGION						
WHEAT						
Rail	66.77	70.18	87.65	76.15	59.72	73.42
Road	6.92	11.92	9.46	10.51	5.59	9.42
Sub Total	73.69	82.1	97.11	86.66	65.31	82.84
RICE						
Rail	71.66	59.9	68.66	73.22	86.4	105.65
Road	2.65	6.28	14.89	5.54	3.6	8.87
Sub Total	74.31	66.18	83.55	78.76	90	114.52
Total Inter region	148	148.28	180.66	165.42	155.31	197.36
INTRA REGION						
WHEAT						
Rail	20.73	13.51	9.27	19.39	14.88	15.41
Road	24.7	11.46	10.17	13.94	10.12	24.68
Sub Total	45.43	24.97	19.44	33.33	25	40.09
RICE						
Rail	21.8	21.57	8.4	40.95	19.5	19.56
Road	31	21.59	14.03	20.27	15.5	21.15
Sub Total	52.8	43.16	22.43	61.22	35	40.71
Total Inter region	98.23	68.13	41.87	94.55	60	80.8
Total Movement	246.23	216.41	222.53	259.97	215.31	278.16
Total movement by rail	180.96	165.16	173.98	209.71	180.5	214.04
% movement by rail	73.48	76.31	78.18	8.67	83.83	76.95
Total movement by road	65.25	51.25	48.55	50.26	34.81	64.12
% movement by road	26.47	23.68	21.82	19.33	16.16	23.05
% movement - wheat purchase	180	127	114	134	131	108
% movement - rice purchase	187	105	90	149.2	124	118
% movement - wheat sales	133	139	131	112	108	134
% movement - rice sales	149	143	131	132	125	164
% of Movement to purchase	153	109	100	145	134	111
% of Movement to sales	141	141	77	122	117	149

Source: FCI files

purchase of rice to that of wheat shows fluctuations whereas the percentage of movement to sales of rice compared to that of wheat shows a definite higher value and a trend towards stability throughout the period. From this, it is clear that these percentages pertaining to rice is higher than that for wheat. In the case of percentage of movement to sales for wheat, a steady declining trend from 1989-90 to 1992-93 is observed after which there is a sudden spurt which is attributed more to changes in the quantities sold rather than the movement itself.

It can be observed that a substantial portion of the movements of about 25% actually represents the movement of grains from one storage depot in a state or region to another storage depot in the same state or region. Most of this intra-region transport is by road.

Whenever the percentage of quantity moved to quantity purchased is above 100 it underlines the fact that existing stocks have had secondary and subsequent movements which are inevitable in any system with a large distribution network. However, it is essential to optimize movement and minimize transport cost.

Average lead of Rail movement is the measure of volume of transport measured in Km. which depends upon the quantities procured, quantities distributed and the locations of storage godown in different areas. Lead average figure indicates better performance. Average lead of transport for foodgrains for various years from 1988-89 to 1993-94 are presented below.

TABLE 3.2.2
Average lead for Rail movement

Year	Average Lead
1988-89	1473
1989-90	1414
1990-91	1688
1991-92	1608
1992-93	1452
1993-94	1571

Source: FCI Annual Reports Various Years

Note: Lead denotes the average distance moved by one tonne of food grains during all operations of procurement, storage and distribution.

The average lead for rail movement had increased substantial in 1990-91 subsequently better transport planning is indicated the average lead steadily declining. The 1992-93 figure is lower because the need for rail movement was reduced during that year due to the import of 13.8 lakh tonnes of food grains and movement from the ports to the nearby states.

On an average, the movement by rail is about 75% whereas the movement by road which is more expensive constitutes the balance of 25%. It is observed that there has been a steady increase in the quantity moved by rail from 180,96 lakh tonnes in 1988-89 to 214.04 lakh tonnes in 1993-94. A steady rising trend is also observed for the percentage quantity moved by rail from 73.49% in 1988-89 to 83.43% in 1992-93. This indicates increased usage of the cheaper rail mode of transport, than road and better transport management.

The FCI mainly uses rail wagons for its transport requirements. Given the telescopic structure of rates applicable

to the railways, longer uninterrupted runs from the procurement centres to the final storage and consuming centres should help in reducing transport costs. Usually, wherever possible, for short distance upto 75Kms road transport is preferred.

Details of foodgrains movement by Rail can be seen from Table 3.2.3.

TABLE 3.2.3
A Details of food grains movement by rail

Movement by Rail	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
EX Punjab	8.52	7.61	9.83	9.97	8.94	8.71
Ex Haryana UP & Rajasthan	3.68	4.41	4.61	4.69	4.02	5.06
Ex MP & AP	1.07	1.58	1.36	2.35	2.07	2.61
Ex Other states	1.10	1.06	0.77	0.93	0.71	0.65
Ex ports (Imports)	1.41	0.32	0.07	--	1.38	0.43
Total	15.76	15.02	16.64	17.94	17.12	17.46

Source: FCI Annual Reports Various Years.

There has been an almost steady increase in the total quantity of foodgrains moved by rail from 15.76 lakh tonnes in 1988-89 to 17.46 lakh tonnes 1993-94 indicating the increased usage of the rail mode of transport. A substantial increase in the movement of foodgrains by rail ex M-P & A-P is observed from 1991-92 onwards. This is reflected in the low cost figures for rice (A.P is a major producer of rice) during the period in comparison with wheat given in the subsequent table 3.2.3 on freight and movement cost.

TABLE 3.2.4 FREIGHT & MOVEMENT COST FOR WHEAT AND RICE Rs. Crores.

	1988-89 Cost	% of Total	1989-90 Cost	% of Total	1990-91 Cost	% of Total
Rail Freight						
Wheat	186.16	40.6%	213.68	43.2%	268.44	43.5%
Rice	183.38	40.0%	187.83	38.0%	244.05	39.5%
Total	369.54	80.6%	401.51	81.2%	512.49	83.0%
Road Freight						
Wheat	25.57	5.6%	21.06	4.3%	16.88	2.7%
Rice	26.61	5.8%	33.08	6.7%	33.49	5.4%
Total	52.18	11.4%	54.14	11.0%	50.37	8.2%
Air/Steamer Fgt	0.81	0.2%	0.99	0.2%	1.05	0.2%
Sales Freight	6.9	1.5%	8.58	1.7%	9.27	1.5%
Freight on gunnies, stores and spares	2.12	0.5%	2.72	0.6%	5.23	0.8%
Rail demurrages	6.37	1.4%	8.26	1.7%	11.11	1.8%
Diversion fees and siding charges	4.18	0.9%	3.77	0.8%	4.71	0.8%
Hill subsidy, transport subsidy paid to Andaman Nicobar and Lakshadeep Admn	16.2	3.5%	14.27	2.9%	23.18	3.8%
Total freight	458.3	100.0%	494.24	100.0%	617.41	100.0%

	1991-92 Cost	% of Total	1992-93* Cost	% of Total	1993-94 Cost	% of Total
Rail Freight						
Wheat	264.32	41.7%	212.35	36.6%	407.34	43.7%
Rice	258.79	40.8%	250.5	43.2%	384.35	41.2%
Total	523.11	82.4%	462.85	79.8%	791.69	84.9%
Road Freight						
Wheat	24.35	3.8%	25.44	4.4%	31.36	3.4%
Rice	36.58	5.8%	38.78	6.7%	60.59	6.5%
Total	60.93	9.6%	64.22	11.1%	91.95	9.9%
Air/Steamer Fgt	0.46	0.1%	3	0.5%	3.83	0.4%
Sales Freight	0.07	0.0%	10	1.7%	0	0.0%
Freight on gunnies, stores and spares	2.25	0.4%	5	0.9%	1.66	0.2%
Rail demurrages	11.75	1.9%	10	1.7%	16.53	1.8%
Diversion fees and siding charges	5.69	0.9%	5	0.9%	6.37	0.7%
Hill subsidy, transport subsidy paid to Andaman Nicobar and Lakshadeep Admn	30.27	4.8%	20	3.4%	20	2.1%
Total freight	634.53	100.0%	580.07	100.0%	932.03	100.0%

Source: FCI files and annual reports * Revised Estimates.

Table 3.2.5

AVERAGE COST OF FREIGHT FOR AVERAGE LEAD — Rupees.

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Average cost of Rail Freight						
Wheat	212.7543	255.3232	276.9707	276.659	284.6515	458.5613
Rice	196.2123	230.5511	316.7013	226.6708	236.5439	306.9643
Overall Rail	204.2109	243.1037	294.5683	249.4445	256.4266	369.8795
Average cost of Road Freight						
Wheat	80.86654	90.07699	85.99083	99.591	161.9351	91.96481
Rice	79.07875	118.6939	115.8022	141.728	203.0366	201.8321
Overall Rail	79.94484	105.639	103.7487	121.2296	184.4872	143.403
Average Lead for Rail	1473	1414	1688	1608	1452	1571
Average cost per tonne km for Rail	0.138636	0.171926	0.174507	0.155127	0.176602	0.235442

Source: Calculated from data available in FCI files.

The cost figures in the Table 3.2.4 correspond with the physical movement figures given in Table 3.2.1. Rail freight accounts for an increasing share of 84.94% of the total cost grain movement by 1993-94 from 80.63% in 1988-89. Road freight has declined from 11.38% in 1988-89 to 9.87% in 1993-94. This is definitely a good performance trend. Substituting cheaper rail mode of transport for the more expensive road transport. Commodity wise the trend is similar for both wheat and rice but the former shows a marginally faster pace of increase. Although percentages wise the cost incurred on Rail demurrage is less than 2 per cent of total transport expenditures, this avoidable cost shows a disconcerting upward trend, telling adversely on operational performance. Diversion fees for diversion of rakes from central locations to nearby locations were stocks are to be stored and railway siding charges indicate a clear improvement in operational efficiency.

The Table 3.2.4 derived from the earlier Tables in this section shows that the average cost of Road freight (for the average lead of overall road movement) was much less than that for railways simply because road transport involves very low lead figures as this mode of transport is not preferred if rail transport is available, for movement of more than 75Kms.

The average cost of transport for rice is considerably higher than that for wheat. This is also because rice includes paddy (in terms of rice) and therefore the actual tonnage is far more than indicated in terms of rice. This is mainly because rice has to transported over longer distances from the producing

areas to the consuming areas in South and North Eastern India and the secondary movements are more for rice.

Since the average lead for rail movement alone is available the unit cost of movement (ie. tonne-Km) is calculated as Average cost/tonne-Km for rail. Obviously this shows a more or less steady rising trend particulary in 1993-94 when it shoots up mainly de to the hike in rail freight rates.

NATURE AND PROBLEMS OF TRANSPORT OPERATION

Unlike industrial raw materials or finished goods, movement of foodgrains is seasonal in nature. Market arrivals in the short run indicate post-harvest peaks are very high. Wheat procurement is concentrated in very limited time span of about 30 to 45 days at the end of the Rabi season during May and June. Moreover 90% of the wheat, procured in this limited time span is from the northern states of Punjab, Haryana, Rajasthan and Western U.P. from where it has to be hauled over long distances to other states spread all over the country. Immediate movement of the entire quantity of the entire quantity of procured is not practicable as it involves creation of huge infrastructure which will remain unutilized for the rest of the year. Therefore it is necessary to provide adequate storage facility in the procurement areas. But this increases internal movement and handling costs. Moreover the immediate post procurement period is the monsoon period requiring additional care both in local movement and storage.

The problem of demurrage is mainly due to the insufficient time given by the Railways for loading/unloading operation. For a full rake about 50 to 100 waggons the railways allow six to ten hours for loading/unloading depending on the number of wagons. Time for communication and for making arrangement for loading/unloading is often too short and the grains have to be dumped at rail heads leading to transit and higher handling costs. The rising trend in demurrage cost needs to be curbed as this is an area of fall in the efficiency of performance.

Yet another problem is that many of the storage godowns are not equipped with railways sidings and have to be road-fed. The small size of most of the godown makes it uneconomical to provide railways sidings, necessitating transportation by trucks increasing the cost of transhipment and transit cost.

Very often wagons connected special rakes of hundred or fifty wagons get detached or damaged or mixed up and reach wrong destinations. Often, diversion of rakes is done at F.C.I's request or due to operational needs of the Railways.

Transit shortages representing the difference between the despatch weight and the receipted weight are analysed in a subsequent section on grain shortages.

3.3 STOCK, STORAGE AND STORAGE COST

The Corporation holds stock of foodgrains to meet the commitment under Public Distribution System and other welfare scheme through out the length and breadth of the country and for

maintaining stocks to meet the seasonal variations and to meet operational needs as well as to provide food security in the country. While four months requirement of foodgrains for issue under PDS and other welfare schemes is earmarked as operational stocks, the balance is treated as buffer stocks.

Physically, buffer and operational stocks merge into one and are not distinguishable. The buffer stock serves as an insurance against crop failure and/or other contingencies and ensures uninterrupted supply during inter-seasonal scarcity. It is thus needed to safeguard the interest of producers as well as consumers particularly vulnerable sections of the society. While taking stock of foodgrains available at reasonable prices during the years of crop failure, FCI endeavours to protect the interest of the farmers against undue fall in prices in the years of bumper crop.

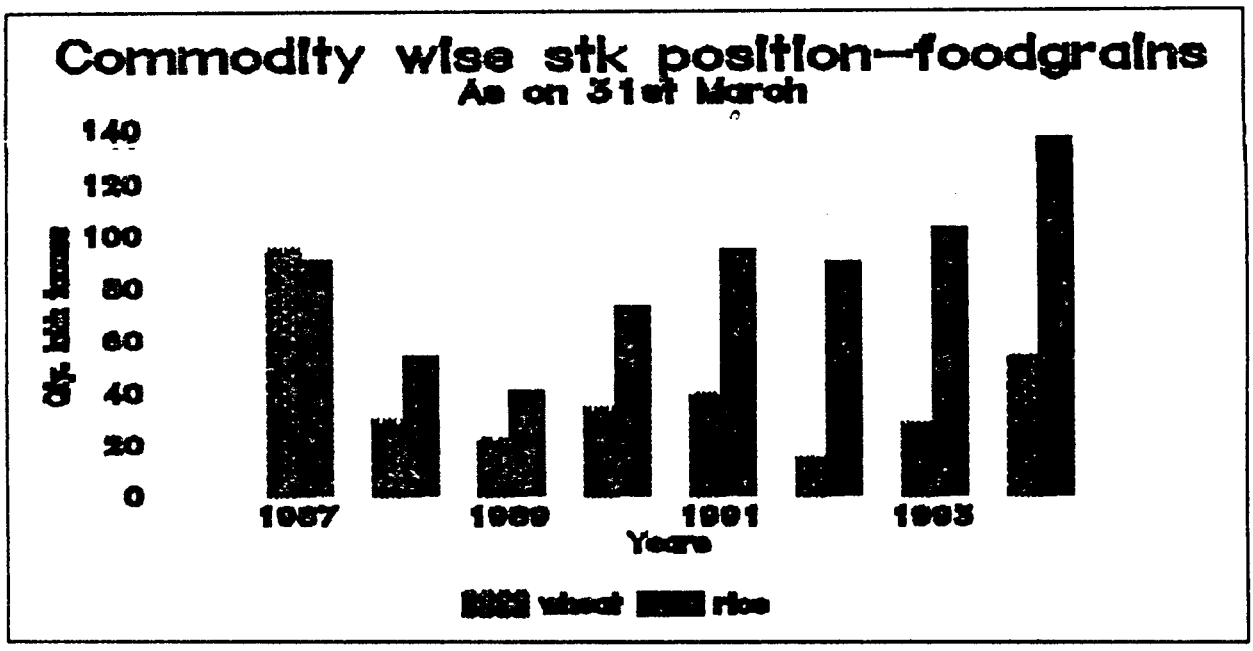
Table 3.3.1
COMMODITY WISE STOCK POSITION OF FOODGRAINS

Qty. Lakh Tonnes

Year	Wheat	Rice	Coarse grains & others	Total	Value (Rs.crore)
1988	28.6	053.0	0.1	081.7	1996.07
1989	21.3	040.2	0.1	061.1	1683.39
1990	33.2	072.2	0.1	105.5	3050.97
1991	38.5	093.7	0.1	132.3	5002.16
1992	13.9	088.8	0.1	102.8	4044.57
1993	27.0	102.0	0.1	129.1	5866.46
1994	52.4	135.9	0.1	188.4	9656.85

Source:- FCI file and Annual Report.

The commodity wise stock position of foodgrains as on 31st March of the years 1987 to 1994 is presented is Table 3.3.1 and Fig.1. It is clear from the table that the stock of wheat compared to rice has always been lower except in 1987. The main reasons for this is that, 31st March happens to fall immediately



after the kharif procurement period for rice (November-February) and immediately before that of Rabi, wheat (May-June). Therefore it is not very useful to compare closing stocks of these commodities at the end of the financial year. However, comparing the stock position of each commodity by itself shows that except for a fall during 1991-92 the stock position of wheat and rice have shown an increasing trend.

Distribution and Buffer Stocks

The stock of wheat and rice held by the Corporation are conceptually divided into two categories i.e. distribution and buffer stocks. The distribution stocks are taken as four months average offtake under public distribution system and various schemes and the balance stocks are treated as buffer stocks to meet the future requirements for public distribution.

The broad break-up of the average stock of wheat and rice including paddy in rice terms held during each year are given in Table 3.3.2.

TABLE 3.3.2
DISTRIBUTION STOCKS/BUFFER STOCKS

Qty: Lakh Tonnes
Value: Rs.Crores

	88-89 Quantity	Value	89-90 Quantity	Value	90-91 Quantity	Value
DISTRIBUTION						
WHEAT	29.79	667.62	25.76	591.14	28.55	764.4
%GE OF TOTAL	51.2%	44.4%	50.3%	40.7%	51.4%	43.3%
RICE	28.36	837.57	25.44	859.97	27.03	1000.25
%GE OF TOTAL	48.8%	55.6%	49.7%	59.3%	48.6%	56.7%
COARSE GRAINS						
TOTAL	58.15	1505.19	51.2	1451.11	55.58	1764.65
BUFFER STOCK						
WHEAT	11.71	262.43	17.99	412.83	31.52	843.92
%GE OF TOTAL	63.5%	56.9%	56.8%	47.1%	42.1%	34.0%
RICE	6.74	199.06	13.69	462.78	43.42	606.76
%GE OF TOTAL	36.5%	43.1%	43.2%	52.8%	57.9%	24.5%
COARSE GRAIN					0.01	
TOTAL	18.45	461.49	31.68	876.61	74.95	2480.83

	91-92 Quantity	Value	92-93* Quantity	Value	93-94 Quantity	Value
DISTRIBUTION						
WHEAT	33.68	1004.06	27.96	1047.88	30.49	1265.03
%GE OF TOTAL	49.0%	41.3%	45.7%	40.2%	49.2%	42.6%
RICE	35.1	1424.6	33.19	1559.53	31.5	1705.41
%GE OF TOTAL	51.0%	58.7%	54.3%	59.8%	50.8%	57.4%
COARSE GRAINS					0.02	0.54
TOTAL	68.78	2428.6	61.15	2607.41	62.01	2970.98
BUFFER STOCK						
WHEAT	5.82	173.49	0.78	29.23	38.45	1595.29
%GE OF TOTAL	10.4%	7.9%	0.2%	1.5%	36.2%	30.3%
RICE	49.98	2028.54	42.13	1979.69	67.84	3672.86
%GE OF TOTAL	89.6%	92.1%	12.3%	98.5%	63.8%	69.7%
COARSE GRAIN						
TOTAL	55.8	2202.03	342.91	2008.83	106.29	5268.15

Source: FCI files

* Revised Estimates.

Age-wise Position of Stock

The Corporation generally follows the "First in First Out" method for issue of stocks. Weightage is also given to the quantity aspect of the stocks while assessing the priority for issue. However, some stocks are stored for longer period due to factors like delay in fixation of issue prices and obtaining sanctions for issue in open market, absence of demand for issue at the place of storage etc. (See table 3.3.3 (A).

The total stocks during any year have been split up as indicated in the table depending upon the age of the stock. For wheat, rice and paddy separately, it is observed that the older stocks are much smaller in the case of paddy in 1989.

Quality of Stocks

The foodgrains in the stocks of FCI have been categorised as A, B or superior quality C & D deteriorated but fit for consumption after processing and below D category which is clubbed with damaged stock.

The position of C & D category of stocks foodgrains with the Corporation included in the stocks during various years (March) is given in Table 3.3.3(B). These stocks are issued to roller flour mills or open sales or disposed of through tender and are not issued to public under public distribution system.

TABLE 3.3.3 (A)
AGE-WISE POSITION OF STOCK
As on 31st March

Qty. Lakh Tonnes

	1989			1990			1991		
	WHEAT	RICE	PADDY IN RICE TERM	WHEAT	RICE	PADDY IN RICE TERM	WHEAT	RICE	PADDY IN RICE TERM
LESS THAN 1 YEAR	19.73	35.74	0.32	22.81	83.27	3.51	33.96	84.09	2.24
1 to 2 years	0.42	1	0.02	3.83	1.89	0	4.16	7.47	0.07
2 to 3 years	0.24	0.7	0.05	0.2	0.31	0.02	0.32	1.02	0.02
3 to 4 years	0.19	0.59	0.02	0.09	0.42	0.03	0.07	0.27	0.02
4 to 5 years	0.11	0.88	0.02	0.02	0.4	0.04	0	0.33	0.02
Over 5 years	0.05	0.34	0.02	0.08	0.49	0.03	0.01	0.55	0.06
Total	20.74	39.25	0.45	27.03	66.78	3.63	38.52	93.73	9.99

	1992			1993			1994		
	WHEAT	RICE	PADDY IN RICE TERM	WHEAT	RICE	PADDY IN RICE TERM	WHEAT	RICE	PADDY IN RICE TERM
LESS THAN 1 YEAR	8.94	66.54	3.16	26.26	88.56	2.74	47.55	114.48	2.08
1 to 2 years	2.84	11.53	0.14	0.47	5.83	0.19	4.39	14.21	0.16
2 to 3 years	0.42	2.53	0.52	0.21	2.09	0.07	0.29	2.53	0.03
3 to 4 years	0	1.06	0	0.04	1.37	0.1	0.14	0.95	0
4 to 5 years	0	0.2	0.01	0	0.73	0	0	0.7	0.03
Over 5 years	0	0.44	0.04	0	0.34	0.31	0.01	0.81	0
Total	12.2	82.3	3.64	36.98	98.92	3.11	52.38	133.68	2.3

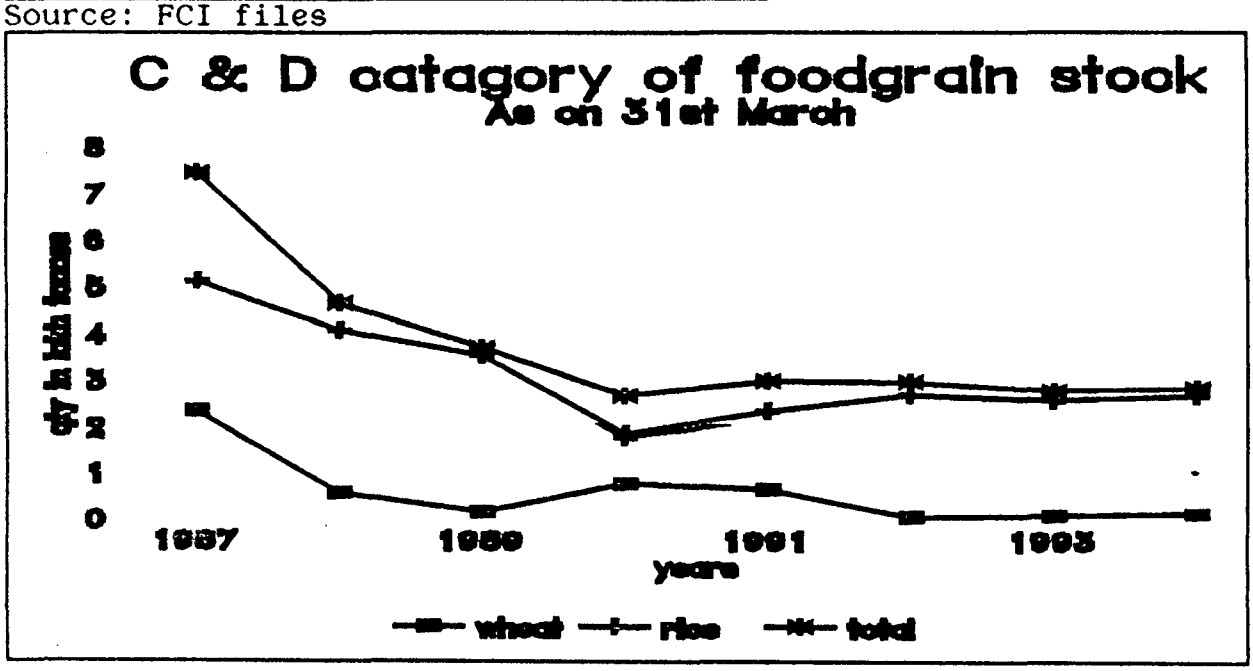
Source: FCI files * Revised estimates

Table 3.3.3(B)
C & D CATEGORY OF STOCKS OF FOODGRAINS

As on 31st March Qty. Lakh Tones

Year	Wheat	Rice	Paddy in Rice terms	Total
1987	2.34	5.11	-	7.45
1988	0.57	4.06	0.02	4.65
1989	0.15	3.52	0.02	3.69
1990	0.70	1.88	0.02	2.67
1991	0.64	2.35	-	2.99
1992	0.05	2.68	0.24	2.97
1993	0.08	2.57	0.12	2.77
1994	0.14	2.66	0.04	2.84

Source: FCI files



Quantities of C & D categories of wheat, rice and total are given in the table and Fig.III. From these it can be seen that there has been a marked fall in this category of stock for wheat between 1987-90. After which gradual increase and stabilisation below 3 lakh tonnes. In the case of rice, however during the last 3 years such categories have steadily declined between 1989-92, the C & D category of rice has shown some increase, subsequently.

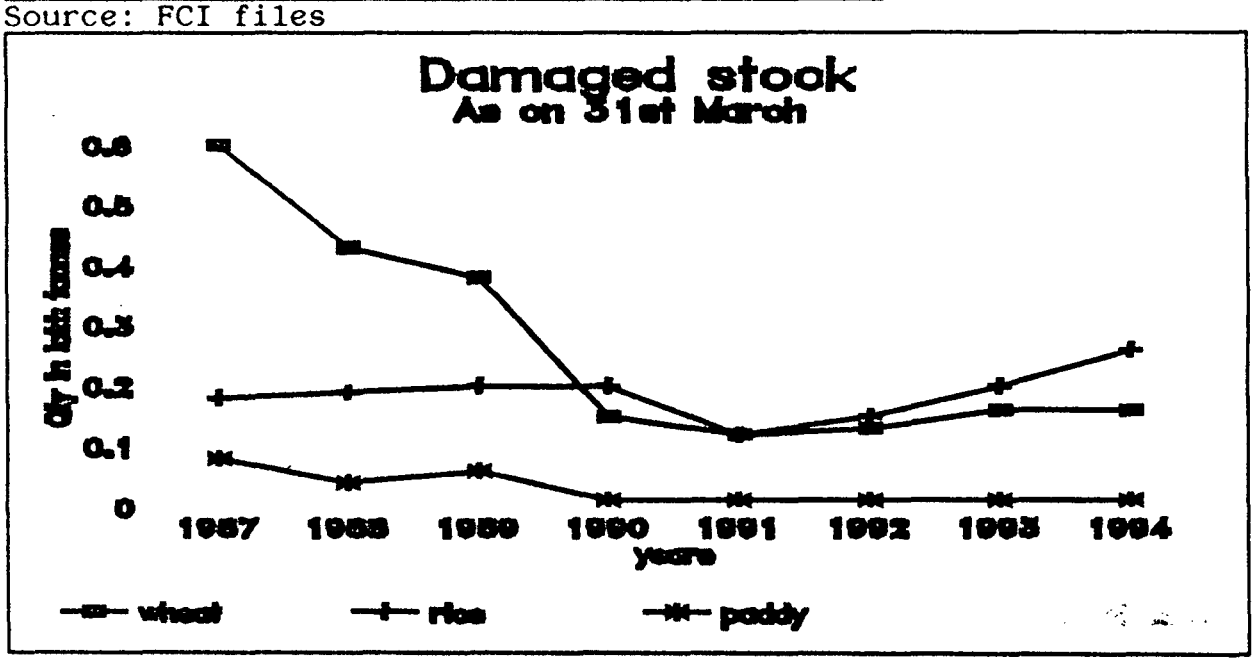
On the whole the quantity C&D categories of grain have been kept under strict control indicating better performance of FCI in this area.

Damaged stock of foodgrains with the FCI as well as the position of "below D" category of wheat stock which are disposed off trough tender for other than human consumption are presented in the following table and graph.

TABLE 3.3.4
DAMAGED STOCK — Qty. Lakh Tonnes

Year	Wheat	Rice	Paddy in Rice terms	Wheat below D category
1987	0.60	0.18	0.08	-
1988	0.43	0.19	0.04	0.36
1989	0.38	0.20	0.06	0.09
1990	0.15	0.20	0.01	0.07
1991	0.12	0.12	0.01	0.50
1992	0.13	0.15	0.01	0.32
1993	0.16	0.20	0.01	0.07
1994	0.16	0.26	0.01	0.23

Source: FCI files



From these we observe a almost declining trend for paddy which stabilised since 1990. Wheat stocks which are damaged came down rapidly upto 1991, after which a gradual increase is observed. But in the case of below D category, a massive increase from below 0.1 lakh tonnes to 0.5 lakh tonnes is observed within one year. This has been brought down sharply to the initial level after which it has again shown tendency to rise sharply. This indicates that FCI has not been able to avoid wide fluctuations in the stocks below D category.

Storage Capacity

The Food Corporation of India constructs/hires godowns to fulfil storage requirement of holding buffer and operation stocks of foodgrains and to meet the requirements of the PDS including

Table 3.3.5:Details of Storage Capacity As on 1st April of the Year

Capacity - lakh Tonne

	1989	1990	1991	1992	1993	1994
1. Covered Storage						
a) Owned	118.60	119.36	119.97	119.82	121.74	122.50
b) Hired from C-W-C	015.20	014.59	021.92	015.95	014.12	023.95
c) Hired State Govt.	004.64	005.22	006.10	006.24	006.87	009.04
d) Hired from SWC	005.89	007.32	015.32	010.97	010.55	022.01
e) Hired from Pvt.Parties (Genl.)/ A.R.D.C.Schemes	035.64	029.38	032.61	030.16	0026.9	032.14
SUB TOTAL	180.97	175.87	195.92	183.14	180.18	209.64
2. Cap Storage						
a) Owned	012.49	010.73	010.42	011.32	011.05	013.18
b) Hired	025.80	010.14	014.74	005.19	003.36	013.77
SUB TOTAL	038.29	020.87	025.16	016.51	014.41	026.95
GRAND TOTAL	219.26	196.74	221.08	199.65	194.59	236.59

Source: FCI Annual Report.

various programmes like RPDS/ITDP, JRY etc. taken up by the Government which require distribution of foodgrains. The storage capacity available to FCI on 1st April of each year is given in Table.

The basic role of FCI is holding the buffer and the operational stocks on behalf of the government. The total capacity of storage has fluctuated according to the requirements of FCI. The covered storage accounts for the major part. The covered storage owned by FCI has gradually increased from 118.6 lakh tonnes in 1989 to 122.5 lakh tonnes in 1994. One of the main reasons for the slow progress of creating own covered storage capacity is that the funds have to come from government allocation usually in the form of equity. According to the needs FCI, hires storage capacity from the Central Warehousing Corporation, State Warehousing Corporation from state governments, and from private parties. The Corporation continues with the programme of construction of godowns during five year Plan. During 1993-94 physical storage capacity of 2.19 lakh tonnes have been completed against the target of 2.32 lakh tonnes. The storage godowns constructed by FCI are based on standard specifications evolved by it.

Covered and Plinth (CAP) Storage

CAP storage impl storage of foodgrains stocked on open plinth and covered by polythene covers. The Corporation hires plinths in procuring states on guarantee basis to store paddy or wheat in open, in the absence of covered storage, which entails physical grain losses, losses due to deterioration of quality etc. Hence FCI prefer covered storage capacity and utilises

CAP storage only when absolutely necessary. The percentage of covered storage to the total storage varies upto 94% in some years.

Utilisation of Storage Capacity

In conventional type of godowns normally upto 18 foodgrains bags are stacked. (In Kerala especially the labour does not permit more than 12 bags to be stacked one on top of the other). Capacity utilisation depends upon the type of capacity available and the level of procurement and off-take in general. Therefore seasonal fluctuations are very common as can be seen from the following table and graph.

Table 3.3.6: Capacity Utilisation in percentage of total capacity

Years	COVERED			CAP		
	Maximum	Minimum	Average	Maximum	Minimum	Average
1988-89	45	29	34	26	2	2
89-90	54	35	52	30	3	30
90-91	73	56	68	77	26	41
91-92	70	50	60	57	31	31
92-93	65	42	65	51	17	17
93-94	84	71	84	77	33	49

Source: FCI Annual Report.

The average capacity utilisation particularly of CAP which is not the preferred form of storage capacity, is either the peak value or the minimum value. This is so because it depends upon the extent and the days within a year in which the acquired capacity is utilised. Over the years capacity utilisation in general seems to have vastly improved. But it has to be noted that capacity utilisation also depends upon whether it is owned or not the level of stocks procured, the quantum of off-take and

the location of godowns. The performance of FCI in this regard seems to have improved while considering the above factors.

Storage Cost

Table 3.3.7: Details of Storage Cost

Rs. in lakhs

Element of cost	1989-90	1990-91	1991-92	1992-93	1993-94
1. Depreciation of godowns, weight bridges, railway sidings etc.	4460.29	3137.87	3544.63	3367.40	3296.67
Rate per Qtl.	42.27	23.71	34.48	26.08	17.49
2. Establishment charges	15637.01	18037.02	19037.96	27572.00	27854.61
Rate per Qtl.	148.21	136.33	185.19	213.57	147.84
3. Repairs and maintenance	904.85	990.48	1187.98	600.00	1247.72
Rate per Qtl.	8.57	7.48	11.55	4.64	6.62
4. Stores and Spares	585.63	1179.16	1049.96	1129.06	2133.03
Rate per Qtl.	5.55	8.91	10.21	8.74	11.32
5. Insurance	0.19	0.01	1.97	1.95	1.73
6. Municipal Taxes	119.34	128.37	203.00	205.00	211.91
Rate per Qtl.	1.13	0.97	1.97	1.58	1.12
7. Rent for godowns hired from					
i. C.W.C.	1505.81	1861.68	2594.60	1132.93	2641.54
ii. S.W.C.	556.30	1138.45	1665.84	706.85	2339.25
iii.Pvt. parties under SRDC Scheme	1459.74	1554.58	1496.41	975.02	1238.76
iv. State government	67.95	100.07	145.76	105.00	163.53
. CAP	270.34	4.00	0.81	0.95	243.47

Source:- FCI files

The storage cost incurred by the Corporation godowns (owned and hired) comprises establishment costs, stores and spares, consumed, depreciation charges, repair and maintenance, insurance and taxes etc. in respect of godowns owned by the Corporation and

rent paid for hired godowns. The storage charges also include the value of polythene covers used for CAP storage. However storage losses/shortages are dealt with in a subsequent section (3.7).

Table 3.3.7 gives the details of total storage cost and storage cost per quintal for the period of study from 1989-90 to 1993-94. Establishment charges is by far the single largest component in the total storage cost. With about 1702 depots including 518 CWC and SWC in 19 93-94. This value was 61% of total storage cost in 1989-90 but it has increased to 67% by 1993-94. This shows the increasing trend in establishment charges relative to the other elements of storage cost. With increase in storage capacity owned by FCI over the years depreciation has also increased. Repairs and maintenance shows a fluctuating trend. Stores and spares which include polythene covers chemical and fumigants etc also show considerable increase. The per quintal cost on this has increased from Rs.5.55 in 1989-90 to Rs.11.32 in 1993-94. Insurance and Municipal taxes are other minor elements.

Rent on hired godowns works out to about 16% of the total storage cost in 1993, Corresponding to 100.91 lakh tonnes capacity or 42% of the total storage capacity. The same for 1989 works out to 15% of the total storage cost corresponding to 88.17 lakh tonnes capacity or 40% of the total storage capacity which shows that there have been no relative increase in the component of rent among the other elements of storage cost.

Agency-wise break up of storage cost per quintal of average capacity for various years is presented in Table 3.3.8 below.

Table 3.3.8
Cost of Storage Agency wise

Rate Rs.Qtl of average capacity per month

	1989-90	1990-91	1991-92	1992-93	1993-94
1.Covered					
a) Owned	1.17	1.24	1.32	1.82	1.74
b) C.W.C	0.88	0.90	1.14	1.05	1.12
c) SWC	0.74	0.94	1.07	0.95	1.16
d) ARDC/Pvt	1.18	1.37	1.36	1.92	1.76
e) State Govt.	0.91	1.12	1.18	1.74	1.60
2. CAP					
a) Owned	0.44	0.51	0.52	1.12	0.88
b) Hired	0.57	0.51	0.52	1.12	1.01
Weighted Covered and CAP	1.04	1.13	1.19	1.70	1.55

Source: FCI Files and Annual Reports.

It is clear from this that FCI's own storage facility cost are almost as high as that of private hired godowns (rent) i.e. 1.74 for FCI and 1.76 for ARDC/pvt. during 1993-94. Therefore it may be more economical for FCI to hire storage capacity of other agencies and this clearly indicates poor performance of FCI vis-a-vis the other agencies in storage and operation cost, excluding storage losses/shortages which is analysed separately.

3.4 HANDLING COST

Handling costs incurred at the mandis form part of procurement expenses and are included in the purchase cost of indigenous foodgrains. The handling in processing units is treated as processing cost. Thus both these items are not considered as handling cost.

When the import and export operations are undertaken the departmental labour employed at ports is utilised for specific handling jobs and the cost thereof is reflected, in respect of import, operations as port clearance charges and in respect of export operations as direct cost of the export operations. The port clearance charges in respect of import operations like payments to handling, transport contractors, stevedoring contractors at ports form part of the landed cost of the imported foodgrains. In years in which such operations are not performed, the cost of departmental labour employed at the port becomes an idle cost. The strength of departmental labour in depots and ports stood at 14962 and 824 respectively besides 1224 piece rate system (B category depot labour with lesser benefit) in hired depots and 7590 labour under direct payment system (DPS)invarious depots in 1993-94.

The handling at rail heads and at depots (both port and inland depots) constitute the godown operation of the Corporation. The cost thereof also includes road movement from and to depots/ rail heads and inter depot movement for short leads.

Apart from the usual system of appointing handling and transport contractors for the work at the godowns, the Corporation also employs labour directly under "departmental labour system" and "direct payment system". The Corporation also operates depots through mate system and labour cooperative system.

Table 3.4.1: Handling Capacity at Godowns and Ports

Lakh tonnes

Mode of Handling system Capacity Covers as on	31.3.90	31.3.91	31.3.92	31.3.94
Direct Labour Payment	9.95 (5.05)	13.01 (5.88)	13.27 (6.51)	13.27 (5.61)
Mate System	15.25 (8.67)	15.25 (6.87)	15.25 (7.63)	7.49 (3.16)
Departmental Labour	20.03 (11.38)	20.03 (9.02)	42.95 (21.15)	41.41 (17.51)
Handling Contract Payment	130.65 (74.28)	172.79 (77.8)	128.44 (64.3)	170.57 (72.15)
Others	0	0	0	236.39 (0.02)
Total	175.88	221.08	199.65	236.39

Figures in parenthesis indicate percentage of total.
Fig. for 93 is not available in this form.
Source:- FCI Files

Table 3.4.1 gives the composition of handling capacity at godowns on the closing day of each year. It is clear that handling contract payment is the most prevalent mode of handling System with over 70% share each year. Since the number of contract workers or their working conditions are not known, Table 3.4.1 cannot be made using number of labourers. This has hardly shown any major changes except in 1992 when departmental labour has shown a major hike. This is due to the agreement between the FCI management and FCI workers union departmentalising contract labour in 56 depots owned by the FCI in 41 hired notified depots. This process was to continue in the later years. The incidence of handling cost of godowns is partly variable and partly fixed in respect of departmental labourers and direct labour system. Contract labour cost varies with the volume of operation. The handling cost is expressed in terms of Rs./quintal taking into

account the volume of handling, which in respect of each region, represents the receipts (purchase + transfers-in) and issues (sales + transfers-out).

Table 3.4.2 presents the break up of handling expenses among 3 modes of employment per labour and the rate per quintal for the years 1989-90 to 1993-94.

Table 3.4.2: **BREAK UP OF HANDLING EXPENSES AMONG THREE MODES OF EMPLOYMENT OF LABOUR IN GODOWN**

Rs.Crores

	1989-90	1990-91	1991-92	1992-93	1993-94
1. Contract labour	095.96	127.96	144.87	160.00	157.52
2. Direct payment system	010.60	011.40	012.81	0	037.96
3. Departmental Labour	042.93	056.60	104.38	110.00	103.64
4. Total	149.22	395.96	262.16	270.00	299.12
5. Volume of operations in lakh tonnes	806.89	921.66	933.24	894.34	969.88
6. Rate/qtl.	001.85	002.12	002.81	003.02	003.08

Source: FCI files

The share of contract labour cost decreases abruptly in 1991-92 and continues a rising trend from the lower level of 1991-92. We have already explained the changes in contract labour due to departmentalisation in 1991-92 and this is reflected in the figures of department labour in 1991-92 and thereafter. The upgradation of male/women workers as direct payment scheme labourers in 1993-94 has been reflected in the direct payment system figures for the year. The volume of operations has gradually increased over the years except for a minor fall in 1992-93. The handling expenses/qtl on an average

has shown a clear and steady rising trend from Rs. 1.85/qtl to Rs.3.08/qtl in 1993-94, i.e. an increase of 0.66% for the 5 year period or an annual average of over 13%.

3.5 INTEREST COST

The working capital requirement of the Corporation is financed through equity and loans provided by the Government of India and through cash credit facilities from the banking sector available as part of RBI National Food Credit Policy.

The Govt. of India have provided cash equity and soft loans (at the rate of payable 91 days treasury bills) for partly meeting the fund requirement for buffer stock holdings. The RBI periodically fixes cash credit limit after assessing the needs of the Corporation, and the funds are arranged by a consortium of banks and channelised through SBI, against hypothecation of the stocks. The rate of interest change on bank borrowing has decreased to 14.50% per annum, to be applied each quarter w.e.f. October 1994, from 15.50% per annum - from 2.9.93. In addition, penal interest of 2% per annum on drawings exceeding the value of stock hypothecated would be levied availing a limit by less than 15% of what is sanctioned from time to time and attract levy of commitment charges around 1% of short utilisation. The administration of the funds, for better control, is centralised in the headquarters, while some drawing limits, depending on the requirements have been allotted to the 5 zonal office and J.M. (operations). The zonal office in turn have further allotted the drawing limits to different district offices/pay offices/ procurement centres.

The RBI have also stipulated that closing stock valued at central issue prices at the end of each month should cover the actual availment of the bank borrowing, failing which levy of penal interest becomes applicable. Proposal has also been submitted to approach the banking sector to reckon the dues from the Govt. of India towards subsidy; as additional drawing power, to avoid the incidence of penal interest.

The following table gives details of interest payment from 1989-90 to 1993-94.

Table 3.5.1: Interest Payment on Foodgrain Operations

Interest on	1989-90	1990-91	1991-92	1992-93	1993-94
Bank borrowing	120.94	417.25	754.03	827.32	1288.56
Deferred payment for imports made in earlier years inclusive of R.E.	83.64	109.77	30.84		
Loan from G.D.I. for financing buffer state	55.2	55.15	55.2	56	55.2
Other items	5.38	6.33	9.29	9	42.45
Total	265.16	587.9	849.36	892.32	1386.21

Source: FCI files.

Bank borrowing has been rising since 1989-90 mainly due to the increase in procurement and stocks during these years. Loans from the government of India for financing buffer stock has remained steady with the loan amount of Rs.1200 crores still outstanding. Thus the total interest charges have been going up from 265.16 crores in 1989-90 to 1386.21 crores in 1993-94. Procurement price of grains and the volume of procurement have

both increased and hence the rising trend in interest payment has resulted.

3.6 Grain Loss Cost

Food Corporation of India moves foodgrain throughout the length and breadth of the country and holds large quantities of stocks in its godowns which include open storage for long periods of time. Grain losses or shortages occur as a result of movement, storage for long periods of time. and handling at different points. Losses on movement or transit losses essentially is the difference between the quantity of foodgrain despatched from one destination point and received at another. It is understood from discussion that often the railways do not accept liability for losses as F.C.I. is unable to load foodgrain bags with suitable packing on the sides of inside the wagons and obtain clear railway receipts based on actual weighment at rail loading points. Very often the receipts indicate 'said to contain' rather than 'actually contains'. Transit shortages are due to operational problem of various agencies and not of FCI alone. Usually, transhipment from trucks to wagons from broad gauge to meter gauge or narrow guage, poor quality of gunny bags supplied by DGS and D, lack of mechanical loading and unloading facilities requiring multiple manual handling in several stages of operation, spillage due to improper stitching,movement in open wagons, missing and unconnected wagons due to mechanical failure, pilferage along the long distance transit routes etc. are the reasons reported for transit shortages. Transit losses include voyage loss and inland transit loss.

Storage losses occur due to natural causes including driage of moisture levels, rodent and bird menace, deterioration in quality due to poor condition of godowns, human failure such as pilferage and theft, fire etc. Concerned officials check whether these losses have occurred due to human failure and recoveries are made from storage staff if responsibility is fixed. Large-scale malpractices occur on the part of FCI officials both at despatch points and at destination station to escape accountability for storage losses by showing them as transit losses. This is one of the reason why transit losses are far more than storage losses.

Table 3.6.1: Grain Shortage

Qty-Lakh Tonnes
Value-Rupees Crores

Years	1988-89			1989-90		
Particulars	Qty	Value	%	Qty	Value	%
Transit Shortages	3.02	79.81	71.39	2.38	67.97	80.41
Storage Shortages	1.21	34.26	28.61	0.58	20.28	19.59
Total Shortages	4.23	114.07	10	2.96	88.25	100
Growth Rate	100			69.98		
% of Shortage on purchases and sales on qty basis			1.25			0.85

Years	1990-91			1991-92		
Particulars	Qty	Value	%	Qty	Value	%
Transit Shortages	3.44	110.34	74.78	4.12	146.62	69.83
Storage Shortages	1.16	45.87	25.22	1.78	73.64	30.17
Total Shortages	4.6	156.21	10	5.9	220.26	10
Growth Rate	108.75			139.48		
% of Shortage on purchases and sales on qty basis			1.17			1.49

Years	1992-93			1993-94		
Particulars	Qty	Value	%	Qty	Value	%
Transit Shortages	3.02	128.59	76.12	2.61	126.36	62.59
Storage Shortages	0.82	40.34	23.88	1.56	88.33	37.41
Total Shortages	3.84	168.93	10	4.17	214.69	10
Index	90.78			98.58		
% of Shortage on purchases and sales on qty basis			1.33			0.95

Source: FCI Files.

Table 3.6.1 gives the quantity and value and percentage composition of total shortages in terms of transit shortages and storage shortages. Total shortages show a fluctuating trend with a peak of 5.9 lakh tonnes (value 220.26 crores) in 1991-92 and a low of 2.96 lakh tonnes (value 88.25 crores) in 1989-90. The

percentage composition of total shortages into transit and storage shortages also shows a fluctuating trend as indicated in the table. Total shortages as a percentage of purchase and sales on quantity basis also shows a fluctuating trend with the peak of 1.49 per cent in 1991-92 and a low of 0.85 per cent in 1989-90. Further disaggregated analysis of total shortages commodity wise is presented in Table 3.6.2.

From this table it is seen that the quantity of transit shortage as well as storage shortage is more for rice than for wheat. Transit shortages for wheat shows a fluctuating trend. With a peak of 1.71 lakh tonnes in 1999-91 and a low of 1·16 lakh tonnes in 1993-94. It is interesting to note that the storage losses for wheat for all years except 1988-89 is negative indicating gain in quantities. This is attributed to strict quality cuts at mandis on specification of fair average quality by Government of India and subsequent actual weighment and accounting of stocks in the depots. This is not the case for rice which is levied from millers on accurate weighment and assessment of quality (no quality cuts). Transit shortages for rice also shows a fluctuating trend with a peak 2.12 lakh tonnes in 1992-93 and a low of 1.22 lakh tonnes in 1989-90.

Table 3.6.2: Total grains shortage observed - commodity wise

Year	1988-1989				1989-1990			
	Tran Shortage		Storage Shortage		Tran Shortage		Storage Shortage	
Commodity	Q	V	Q	V	Q	V	Q	V
Wheat	1.38	30.86	0.05	0.91	1.15	26.58	-0.26	-7.47
Paddy		0.11	0.11	2.33	0.01	0.4	0.14	4.3
Rice	1.64	48.83	1.05	30.87	1.22	40.87	0.7	23.21
Others		0.01		0.15		0.12		0.24
Total	3.02	79.81	1.21	34.26	2.38	67.97	0.58	20.28

Year	1990-1991				1991-1992			
	Tran Shortage		Storage Shortage		Tran Shortage		Storage Shortage	
Commodity	Q	V	Q	V	Q	V	Q	V
Wheat	1.71	45.7	-0.24	-6.9	1.99	59.25	-0.09	-2.87
Paddy	0.02	0.84	0.37	14.72	0.01	0.18	0.3	12.64
Rice	1.71	63.72	1.03	37.89	2.12	87.1	1.57	63.4
Others		0.08		0.16		0.09		0.47
Total	3.44	110.34	1.16	45.87	4.12	146.62	1.78	73.64

Year	1992-1993				1993-1994			
	Tran Shortage		Storage Shortage		Transit Shortage		Storage Shortage	
Commodity	Q	V	Q	V	Q	V	Q	V
Wheat	1.17	44.63	-0.10	-3.88	1.16	47.88	-0.3	-13.07
Paddy	0.01	0.24	0.18	9.27	0.01	0.69	0.36	21.46
Rice	1.48	69.66	1.09	50.88	1.44	77.69	1.5	79.55
Others		0.08		0.63		0.1		0.39
Total	2.66	114.61	1.18	56.93	2.61	126.36	1.56	88.33

Source: FCI Files and annual reports.

Grain shortages occur not only due to multiple handling before issue but also due to movement over long distances and shortage at various centres. The volume of operations related to grain shortages relating transit shortages to the quantity moved and the storage shortages to the quantity issued are presented in Table 3.6.3.

TABLE 3.6.3: Percentage of Transit Shortages to quantity moved and storage shortage to the quantity (Issued)

Percentage

	1988-1989		1989-1990		1990-1991	
	Qty	Qty	Qty	Qty	Qty	Qty
Commodity	moved(% issued)	%	moved(% issued)	%	moved(% issued)	%
Wheat	1.29	0.03	1.17	-0.15	1.56	-0.12
Paddy	0.5	3.84	1.59	1.9	1.11	1.74
Rice	1.65	0.56	1.39	0.42	1.8	0.58
Weighted average	1.37	0.3	1.28	0.17	1.66	0.29

	1991-1992		1992-1993		1993-1994	
	Qty	Qty	Qty	Qty	Qty	Qty
Commodity	moved(% issued)	%	moved(% issued)	%	moved(% issued)	%
Wheat	1.84	-0.04	1.51	-0.07	1.06	-0.15
Paddy	0.42	1.86	1.1	2.09	1.01	2.1
Rice	1.94	0.72	1.78	0.68	1.38	0.75
Weighted average	1.88	0.39	1.65	0.38	1.21	0.37

Source: FCI Files.

On the whole, since 1991-92, transit shortages for wheat and rice show a declining tendency. The peak transit shortages for both rice and wheat occurs in 1991-92 while it is the lowest for paddy.

Total storage losses as a percentage of quantity issued shows a somewhat stable but high figures during 1991-92 to 1994-95 (0.39%, 0.38%, 0.37%) and a low of 0.17% in 1989-90. No discernible trend is observed for rice, wheat and paddy separately. The negative figures for wheat are already explained.

FCI makes recoveries toward shortages from different sources held responsible for them very often, after long investigation and legal battles. The recoveries effected for appropriate years indicate a rising trend in the case of recoveries from millers/ agents and FCI staff (except 1992-93) while it shows a declining trend since 1990-91 for railway claims on wheat.

Government of India regularizes shortages after a prolonged consideration and reimburses FCI for the regularised portion of the shortages. However, from the following table it can be seen that on the whole there is a rising trend of unregularized shortages. This clearly indicates poor performance of FCI particularly when the percentage of unregularised is considered with the total shortage (Table 3.6.4).

Rs Lakhs

Table 3.6.4:Shortages, Regularised and Unregularised

Year	Total Shortages Incurred	Shortages Regularised till March 94	Unregularised shortages	Unregularised as % of total shortages
1980-81	9114.27	4933.78	4180.49	45.87
1981-82	11250.19	6927.22	4322.97	38.43
1982-82	14064.54	8141.08	5923.46	42.12
1983-84	13167.56	8512.86	4654.70	34.35
1984-85	11759.42	7718.17	3659.22	31.12
1985-86	11377.39	9658.41	2101.01	18.47
1986-87	14593.45	10604.35	3989.10	27.33
1987-88	16226.95	11702.07	4524.88	27.28
1988-89	10602.02	7581.11	3020.91	28.49
1989-90	7718.34	6538.16	1180.18	15.29
1990-91	14842.05	10774.00	4068.05	27.41
1991-92	21503.25	13284.41	8218.84	38.22
1992-93	21549.80	9894.09	11655.71	50.09
1993-94	20551.76	4647.44	15904.38	77.38
Total	198320.99	120917.15	77403.84	39.02

Source FCI Files.

Table 3.6.5:Recoveries Towards Shortages-Source Wise

Particulars	1991-92	1992-93	1993-94
A. Income from Rly. claim for shortages, Damages compensative for shortages			
(i) Wheat	2.06	6.84	8.04
(ii) Rice/ Paddy	14.33	27.08	10.57
(iii) other commodity	0.05	0	0
B. Income from tenable shipping claims			
(i) wheat	-3.22	290.19	38.91
(ii) Rice	14.88	23.84	3.7
C. Income in respect of recoveries for transit shortages			
(i) Reco. from state/ procuring agencies for transit shortage	3.14	4.15	33.27
(ii) Reco. from handling and transit central	235.58	379.44	350.09
D. Income in respect of recoveries of storage shortage			
(i) Recoveries from handling and transport contr. for storage	17.11	17.75	10.62
(ii) Recovering from SWC towards shortages	0	0	0
(iii) Recovering from millers/Agents	43.62	49.9	242.51
(iv) Recoveries from cost of gunnies from agent/millers	50.92	33.16	57.17
(v) Recoveries from FCI officials	60.66	24.8	157.56
Total	457.13	857.15	912.74

3.7 Carrying Costs of Buffer Stocks

Along with distribution cost, the cost of carrying buffer stock forms the post-procurement costs. FCI computes distribution cost and buffer stocking costs separately on certain principles of accounting and claims subsidy separately. Distribution costs were worked out, per quintal of sale and

carrying costs of buffer stocks are worked out per quintal of average buffer stock.

The buffer carrying cost per quintal of the average stocks as computed by FCI is given below.

Table 3.7.1: Details of Carrying Cost of Buffer Stock

Elements of cost	1989-90	1990-91	1991-92	1992-93	1993-94
Freight					6.99 (5.00)
Storage charges	29.93 (56.7)	20.99 (33.0)	24.27 (31.3)	34.03 (36.8)	24.32 (20.75)
Handling Expns	5.85 (11.1)	6.30 (9.9)	7.23 (9.3)	8.39 (9.1)	8.02 (6.8)
Grain shortages in storage	2.28 (4.32)	3.38 (5.2)	6.17 (8.0)	3.96 (4.3)	5.52 (4.7)
Admn Overheads	6.06 (11.5)	6.07 (9.6)	5.60 (7.2)	9.32 (10.1)	8.21 (7.0)
Transit shortages					1.13 (0.9)
Interest charges	8.65 (16.4)	26.96 (42.4)	34.28 (44.2)	36.82 (39.8)	62.97 (2.3)
Total	52.77	63.53	77.55	92.52	117.16
Growth Rate	(100)	(120.4)	(147.0)	(175.3)	(222.0)

Figures in parenthesis denote percentage share in Total.

One of the two major storage cost components is the total carrying cost of buffer stocks, other than the end years of 1989-90 and 1993-94 the average storage cost as a percentage of total cost works out to about 33% of the total cost. Interest charge is the other major component of the total cost of carrying buffer stock. From 1991 onwards it shows a rising trend, reaching a maximum of 62.97 Rs.per quintal. This corresponds with the trend of increasing average buffer stock level for this period which has been discussed in the section on stocks. All the other

elements of carrying costs of buffer stocks are comparatively less significant. Handling expenses forms an average of about 9%, administrative overheads show somewhat decreasing trends from 11.5% in 1989-90 to 7.0% in 1993-94. Handling expenses also show a decreasing trend from about 11.1% in 1989-90 to 6.8% in 1993-94. With the introduction of the new system of accounting and computation in 1993-94 for carrying cost of buffer stocks, two elements of cost, transit shortages and freight, which used to appear only in distribution cost earlier, has begun to appear as elements of the total cost of carrying buffer stocks. These changes have come about as buffer stocks become operational stocks at different points of time as there is no label - for buffer stocks and all stocks have to be rotated out depending on age and condition of the stocks i.e. on First in First out.

The storage charges include storage establishment and storage losses. Allocation for the buffer stocks are worked out considering the average buffer stock quantity and average rate of storage. The storage losses may be based on average percentage of the loss and the interest costs are computed on the basis of average buffer stock and average interest rate. Overall the total cost and carrying cost of buffer stock per quintal has grown steadily by about 122% over the 5 year period indicating an annual average rate of 24.4%. Although stock levels have been rising such an increase in the cost cannot be justified and the performance of FCI in this regard is poor. (Even if the new elements of cost in 1993-94 are excluded the increase in the cost and carrying buffer stock is about 106% over the 5 year period with an annual average of 21%). Thus it can be concluded that

the cost of carrying buffer stock over the years indicates poor performance.

3.8 PERSONNEL AND ADMINISTRATIVE OVERHEADS

The FCI functions as a three tier organisation with headquarters at the apex, translating government of India's decisions and directions on policy matters into concrete actions;with zonal offices responsible for direction and coordination of the implementation, and regional offices executing the operations through the field offices in the districts. Administrative and financial decentralisation exists at the different levels. The Corporation has 5 zonal offices, 19 regional offices, 4 sub-regional offices, 3 post-operational offices and 962 district offices with about 1702 depots under them including 518 depots of Central Ware housing Corporation and State Warehousing Corporations.

Staff Strength

Table 3.8.1 gives details of overall staff strength under various categories.

Table 3.8.1: Staff strength as on April 1.

Category	1989	1990	1991	1992	1993	1994
I	820	812	764	769	754	784
II	4247	4251	4160	4121	4034	4067
III	39419	39567	29474	39019	38371	37926
IV	25498	24768	24106	23879	23472	23154
Total	69984	69398	68504	67788	66631	65931

Source:- FCI Annual Reports

From the table we see staff strength as at the beginning of each financial year. On an average during this 5 year period 1.2 percent of the employees belong to category I, about 6 per cent to category II, nearly 57 per cent to category III and about 35 percent to category IV. Over the years the total staff strength shows a steady declining trend. Compared to 1989, there has been a fall of 5.8 per cent in the number of employees. When one looks closer, one sees that the number of employees under category I which had shown a decrease of 0.1 percent in 1990-91 had increased to 1.2 percent in 1994 after a period of three years. Similarly a marginal increase of 0.2 percent is seen in category II after a more or less stagnant share of 6.1 percent of the total staff strength during this five year period. The bulk of the increase in the share of employees strength seems to have occurred under category III. which froms 56.3 per cent of total staff strength, although the absolute numbers have declined by 3.8 percent even in this category. However the most drastic fall in staff strength (proportionately and in absolute values) seems to have occurred in category IV where a fall of 9.2 per cent has occurred during the six year period. It can be summed up that, even as the corporation's scale and magnitude of operation was increasing, FCI functioned in various operations with less number of employees. 0

Table 3.8.2: Staff Strength, Volume of Operations and staff cost

Year	Staff Strength	Storage Operation Rs.Crores	Other Operation Rs.Crores	Total Rs.Crores	Average Salary/ Employee/ Month Rs.
1988-89	69984	208.56	177.66	386.22	4598
1989-90	69398	152.78	140.02	292.80	3516
1990-91	68504	178.44	170.69	349.13	4247
1991-92	67788	190.08	173.43	363.51	4468
1992-93	67100	255.72	247.59	523.31	6499
1993-94	65931	274.72	237.15	511.87	6469

Source:- FCI files

Table 3.8.2 gives the staff strength and per employee staff cost for the two types of operation - storage and other operations. As already seen in Table 3.8.1 the staff strength has fallen steadily. This has occurred in the staff employed for storage operations also i.e. from 54.8 percent to 53.7 percent of the total strength between 1989 and 1994. The staff strength employed for other operations has also decreased in absolute numbers after a peak position in 1991 of 48.9 percent of total staff strength to a lower 46.3 percent in 1994.

Although the staff strength has fallen in absolute numbers for the different operations, staff costs have shown an increase of 32.53 percent in 1994 over the 1989-90 fig. This corresponds to an annual average increase of 5.42 percent of staff cost.

The average monthly salary per employee however has shown ar increase of 40.69 percent between 1988-89 to 1993-94 with an annual average of 6.87%. Percentage increase of the total cost during the same period was 32.52 with an annual average of 5.42%. Thus the difference in the rates per annum between employee salary and average total cost was 1.36 per annum.

Table 3.8.3: Productivity and Administrative Cost

Year	No.of persons	Vol. of operation (Purchase + sale)		Metric tonnes/ Employee	Administrative cost/Qtl.
		Lakh/ Tonnes	%		
1988-89	69984	350.06	100.0	516	2.64
1989-90	69398	338.25	096.0	544	2.49
1990-91	68504	393.60	112.0	610	2.27
1991-92	67788	417.41	119.0	620	5.05
1992-93	67100	414.72	118.4	618	6.64
1993-94	65931	462.30	132.0	701	7.06

Source: FCI files.

Table 3.8.3 gives the volume of operations and productivity per employee. The total staff cost includes the cost of staff engaged in manning the storage depots. Although the number of persons employed has decreased the volume of operations (purchase+sales excluding processing cost) has increased. By 1993-94, this has steadily increased to 462.30 lakh tonnes from 350.06 lakh tonnes in 1988-89 after a brief decline of four per cent between 1988-89 and 1989-90. The overall percentage increase in this volume of operations excluding storage/processing cost is 32 per cent over the six year period i.e., an average of 6.73 per cent per annum. The productivity per employee in metric tonnes increased from 516 metric tonnes per employee in 1988-89 to 701 metric tonnes per employee in 1993-94; an increase of 35.8 per cent at an annual average of about six per cent during the period. Again this indicates good performance with increase in volume of operations along with decrease in staff strength. However, the administrative cost per quintal which indicates performance in financial terms shows steep increase. In 1991-92 settlement of LIC, PLI, OTA and pay arrears of the staff who opted for IDA a little late was made.

The new settlement entailed higher costs reflecting in a steep jump from 2.27 rupees per quintal to 5.05 rupees per quintal. Anyhow the average annual increase in administrative cost per quintal was about 27 per cent. This in any case shows that the administrative cost of operations including only purchase and sale has increased disproportionately compared to other parameters.

The administrative overheads incurred by the FCI consists c staff cost and other administrative overheads. The staff cost comprises salaries and allowances, contributions to provident fund, pensionary benefits including gratuity, overtime allowances, medical expenses and welfare expenses in respect of the staff employed at various levels for field operations. Othe administrative overheads (mainly procurement, storage, movement, distribution and quality control) are rent for office, taxes, telephone, telex, postage, printing, stationery, advertisement, vehicle maintenance, repair and maintenance of office, depreciation of assets etc. Details of administrative overheads during the period of analysis are given as Appendix.

Table 3.8.4: Administrative Cost and Productivity

Year	No.of persons	Total Vol. of operations (lakh tonnes)	Productivity per employee MT/Employee	Cost per Qtl.on Vol.of operati Incl.Stg/ processing staff cost
1988-89	69984	811.00	1159	3.60
1989-90	69398	806.84	1163	4.02
1990-91	68504	921.66	1345	4.20
1991-92	67788	785.60	1119	5.20
1992-93	67100	748.13	1115	7.05
1993-94	65931	815.00	1236	7.37

Source: FCI Files.

Table 3.8.4 indicates the total volume of operations and administrative costs. Even as the number of employees decreased, the total volume of operations has not decreased and has in fact increased. In 1989-90, the volume of operations was 806.84 lakh tonnes of foodgrains for which per employee figure on productivity was 1163 metric tonnes per employee. This productivity figures has fluctuated on the basis of fluctuations in the total volume of operations and the decline in staff strength. This physical measure clearly indicates increased efficiency in the operations of FCI. The cost per quintal on volume of operations including storage and processing staff costs shows substantial increase from 4.34 to 7.37 between 1989 and 1994. As employees (staff) are also posted for supervising loading/unloading operations in godowns/goods sheds, the productivity per employee is worked out after taking into account the total volume of operations. Cost per quintal on volume of operations for storage and processing staff cost available for three years, 1991-92 to 1993-94, indicates that administrative cost for storage operations for the three years are 48.46, 47.80, and 48.16 percent respectively of the total administration cost. Thus the storage establishment cost constitutes almost half the staff cost.

In sum the analysis of the activities of the personnel and the administrative wing of the F.C.I. indicates good physical performance although in terms of financial performance, the Corporatioln leaves many things to be desired.

Chapter IV
CONSUMER SUBSIDY

The Food Corporation of India purchases foodgrains for the central pool at the procurement prices fixed by Government of India and issues the same at the issue prices which are also fixed by the Government of India. From time to time procurement prices have been increased to favour producers. But issue prices remain fixed for long periods as a populist measure. The issue prices fixed by the government do not cover the full cost incurred by the Corporation during its operations of procurement from the producers, movement, storage and distribution of foodgrains. This difference between the issue price and the full cost/economic cost represents the consumer subsidy on food which is reimbursed by Government of India to Food Corporation of India. In addition, the FCI maintains buffer stock of foodgrains on behalf of the Government of India. Carrying charges of the buffer stock are also reimbursed to FCI by Government of India.

Table 4.1 shows the consumer subsidy and carrying charges of buffer stock for the period from 1989 to 1993-94. From the Table we see that the rate of subsidy has increased steadily from 1989-90 to 1992-93 after which it has slowed down. That is, over this period of 5 years, the rate of subsidy has increased to a peak of 194.73 (67.6%) after which it declined to 47.7%. However, the quantum of subsidy has steadily increased by 63% i.e. 5.6% per annum during this period. Total quantity of foodgrains has increased to a peak in 1991-92 after which it has declined.

Table 4.1
CONSUMER SUBSIDY AND CARRYING COST OF BUFFER STOCK
Qty. Lakh Tonnes, Rate. Rs./Qty, Amt. Rs. Crores

	1989-90			1990-91		
	Qty	Rate	Subsidy Amount	Qty	Rate	Subsidy Amount
Wheat	77.27	106.9	826.04	88.93	116.55	1036.4
Rice	76.32	124.23	948.16	81.19	127.5	1035.2
Coarse grains				0.01	98.4	0.1
Total Consumer Subsidy	153.59	115.52	1774.2	170.13	121.77	2071.7
Carry Charges of Bff stk	31.68	52.77	167.22	74.95	63.53	476.17
Total Subsidy			1941.42			2547.91

	1991-92			1992-93		
	Qty	Rate	Subsidy Amount	Qty	Rate	Subsidy Amount
Wheat	107.87	139.11	1500.5	84	228.1	1916
Rice	105.76	131.46	1390.4	100	166.7	1667
Coarse grains			1.64			
Total Consumer Subsidy	213.63	135.32	2892.6	184	194.73	3583
Carry Charges of Bff stk	55.8	77.55	432.74	42.91	82.52	397
Total Subsidy			3325.3			3980

	1993-94		
	Qty	Rate	Subsidy Amount
Wheat	91.47	176.15	1611.27
Rice	94.89	164.68	1562.62
Coarse grains	0.1	109.62	1.1
Total Consumer Subsidy	186.46	170.28	3174.99
Carry Charges of Bff stk	106.29	117.16	1245.34
Total Subsidy			4420.33

Source:- FCI files.

The quantum of bufferstock fluctuates and reaches a peak of 106.29 lakh tonnes from 31.68 tonnes in 1989-90. This is about 33.5% higher compared to 1989-90. While the rate of carrying charges of buffer stocks has steadily increased to 06.4%, the amount incurred on buffer stock has increased enormously from Rs.167.22 crores to Rs.1244.5 crores which is an increase of 644.7% between 1989-90 to 1993-94. Commodity wise, the ratio of quantity of wheat to rice changes in favour of rice from 1992-93

The rate of subsidy is higher for wheat than for rice during the initial two years but changes in 1991-92. The quantum of subsidy is higher for rice than wheat but the trend reverses since 1992-93. The quantity and subsidy of coarse grains is almost insignificant and therefore omitted from the anlaysis.

Table 4.2 gives the economic cost, consumer subsidy and cost of carrying buffer stock. Costs of procurement incidentals purchase of pooled cost of grains, carry over charges paid to state agencies and distribution cost add up to give the economic cost. The difference between economic cost and sales realisation is subsidy. The economic cost of operation for both wheat and rice has increased, by 73.7% for wheat 59.1% and for rice over this five year period, i.e. an average annual increase of 14.5% for wheat and 12% for rice. The trends of changes in the values i.e. components of economic cost are analysed below as a share of economic cost each year.

Table 4.2

ECONOMIC COST, CONSUMER SUBSIDY AND COST OF CARRYING BUFFER STOCK

Amount: Rate Rs/ Qty

Qty:- Lakh Tonnes

	1989-90		1990-91	
	Wheat	Rice	Wheat	Rice
Sales quantity(L/T)	77.27	76.32	88.93	81.19
Cost of grains	184.51 (60.2%)	320.11 (76.5%)	234.68 (65.8%)	338.42 (74%)
Pooled cost of grains	40.75 (13.3%)	22.11 (5.3%)	54.5 (15.0%)	31.62 (6.9%)
Procurement incidentals	4.74 (0.3%)	(0%)	9.84 (29%)	(0%)
Carry over charges Paid to state agencies	76.33 (2.9%)	76.33 (18.2%)	87.48 (24.5%)	87.48 (19.1%)
Distribution cost	306.33	418.55	356.5	457.52
Economic cost	199.43	294.32	239.95	330.02
Sales realisation Subsidy	106.9	124.23	116.55	127.05
Carrying cost of buffer Stocks (Rs/ Qty)	52.77	52.77	63.53	63.53
Average buffer stocks (Lakh Tonnes)	17.99	13.69	31.52	43.42

	1991-92		1992-93	
	Wheat	Rice	Wheat	Rice
Sales quantity(L/T)	107.87	105.76		
Cost of grains	211.02 (54%)	372.45 (74.9%)	294.35 (59.3%)	436.63 (75%)
Pooled cost of grains	68.95 (17.6%)	32.69 (6.6%)	89.49 (18%)	33.52 (5.8%)
Procurement incidentals	18.74 (4.8%)	(0%)	(0%)	(0%)
Carry over charges Paid to state agencies	91.9 (23.5%)	99.9 (18.5%)	112.45 (22.6%)	112.45 (10.30%)
Distribution cost	390.79	497.04	496.79	552.6
Economic cost	251.68	365.58	268.69	415.9
Sales realisation Subsidy	139.11	131.46	228.1	166.7
Carrying cost of buffer Stocks (Rs/ Qty)	27.55	77.55	92.52	92.52
Average buffer stocks (Lakh Tonnes)	5.82	49.98		43.43

	1993-94	
	Wheat	Rice
Sales quantity(L/T)	91.47	94.89
Cost of grains	325.31 (61.1%)	500.4 (75.2%)
Pooled cost of grains	73.04 (13.7%)	40.25 (6.1%)
Procurement incidentals	16.24 (3.1%)	(0%)
Carry over charges Paid to state agencies	117.44 (22.5%)	124.45 (18.7%)
Distribution cost	532.03	665.1
Economic cost	355.88	500.42
Sales realisation Subsidy	126.15	164.68
Carrying cost of buffer Stocks (Rs/ Qty)	81.9	137.15
Average buffer stocks (Lakh Tonnes)	38.45	67.84

Source:- Compiled from FCI Files and Annual Reports.

On an average the pooled cost of wheat works out to around 60% of the total economic cost while that of rice works out to about 75% of the economic cost. Procurement incidentals as a share of economic cost shows a rising trend with the figures for wheat being far higher than that of rice as already discussed in the section of purchase and purchase cost. Carry over charges paid to state agencies, as already discussed, does not apply in the case of rice. The same for wheat shows a declining trend since 1991-92 with the share reaching 3.1% of the economic cost in 1993-94.

The distribution cost for both wheat and rice has increased from Rs.76.33/qtl in 1989-90 to Rs.124.45/qtl for rice and

Rs.117.44/qtl for wheat in 1993-94. This indicates 63.04% increase in the distribution cost of rice (annual average 5.75) and 53.8% on an annual average of 10.5% for wheat. These have been discussed in an earlier section on distribution cost. The average sales realisation for both wheat and rice show an increase of 178% for wheat and 70% increase of rice. This has already been worked out in the section on sales.

The difference between economic cost per quintal and the sales realisation gives the subsidy for wheat and rice for each year. From a figure of Rs.106.9/qtl, subsidy for wheat has increased to Rs.176.15/qtl (69% in 1993-94 and an annual average of 14%). In the case of rice subsidy has increased from Rs.124.25/qtl to Rs.164/qtl in 1993-94 (32% and an average of 6.4%) per year.

The carrying cost of bufferstock has also increased from Rs.52.77/qtl in 1989-90 to Rs.81.9 and Rs.137.15/qtl for wheat and rice in 1993-94. Details of subsidy commodity wise shall be discussed.

Scheme-wise Subsidy

As already mentioned in Chapter three, Food Corporation of India issues foodgrains under different schemes such as public distribution system, Integrated Tribal Development Programme, Jawahar Rozgar Yojana etc.

Public Distribution System

The availability of essential commodities at reasonable prices is the main objective of the public distribution system in India where a large segment of the population continues to live below the poverty line. Apart from private trade channels essential commodities are supplied to the expanding network of Fair Price Shops and other out-lets. The public distribution system is meant to assist in raising the living standards and in reducing the regional disparities in development. The programme is essentially considered by government as in investment in human resources. The subsidy incurred for public distribution system over the years is given in Table 4.3.

Table 4.3
Subsidy Incurred under PDS

Year	Qty. Issued Lakh Tonnes		Subsidy Incurred Rs. Crores	
	Wheat	Rice	Wheat	Rice
1988-89	61.12	71.16	564.32	676.76
1989-90	63.62	62.09	651.05	705.67
1990-91	65.77	69.28	821.15	855.73
1991-92	83.23	90.17	1239.65	1101.03
1992-93*	61.94	75.21	1338.23	997.85
1993-94	41.42	65.85	791.99	980.75

* Revised Estimates
Source:- Computed from sales and subsidy figures.

As already seen in the section on sales the quantities issued of wheat and rice have increased to a peak level in 1991-92 after which it has continued to decline. In the case of rice, however, there has been a sharp fall in 1989-90 and a quick recovery to 90.17 lakh tonnes in 1991-92 after which it has continued to decline. The subsidy amount incurred has correspondingly changed to a peak of Rs.1338.2 for wheat in 1992-93 and 997.85 for rice in 1991-92. Issue prices on rice for PDS

wheat was sharply revised from Rs.280/qtl. in January 1993 to 230/qtl, and further to 402/qtl from 1.2.1994; the issue price on rice for PDS has also been sharply revised in 3 instalments since December 1991 as indicated below.

Issue prices for Rice	Common (Rs.)	Fine (Rs.)	Superfine (Rs.)
(a) From 25.01.1989	244	304	325
(b) From 25.06.1990	289	349	370
(c) From 28.12.1991	377	437	458
(d) From 11.01.1993	347	497	518
(e) From 01.02.1994	537	617	648

Source :- FCI

This fact accounts for the increasing values of subsidy during 1991-92 to 1993-94.

Revamped Public Distribution System and ITDP Scheme

The Government of India has identified 1700 remote socially and economically backward blocks in the country for the distribution of foodgrains at a specially subsidised rate. This is essentially an extension of the ITDP programme in existence to eradicate poverty among tribals, which the government devised specifically for tribal people from October - November 1985. Under this scheme, the issue prices of wheat and rice were fixed at prices lower than the normal issue prices under the Public Distribution System. In addition to foodgrains, other commodities like sugar, imported edible oils, controlled-price cloth and kerosene were also distributed through fair price shops. The scheme envisages adequate flow of commodities to the poor tribal people at specially subsidised rates.

Table 4.4 gives the quantity of wheat and rice sold as well as the amount of subsidy in each case for these special schemes.

Table 4.4: Subsidy on RPDS and ITDP Schemes

Year	Wheat		Rice	
	Qty.	Amt.	Qty.	Amt.
1989-90	7.91	122.43	11.65	205.07
1990-91	8.15	141.65	10.99	160.12
1991-92	8.26	160.68	13.66	255.11
1992-93	15.30	403.06	19.68	366.37
1993-94	17.77	423.41	23.71	481.41

Source: Computed from FCI files

As already discussed in the return on sales, the quantity of wheat sold under the R.P.D.F. and ITDP schemes has decreased during 1989-90, 1990-91 and 1991-92 as compared to 1988-89. But by 1992-93 it sharply increased and reached a peak level of 17.77 lakh tones in 1993-94. Similarly for rice the quantity declined during 1989-90 and 1990-91 but recovered sharply in 1991-92 and continued to rise thereafter reaching a record level of 23.71 lakh tonnes in 1993-94. Correspondingly the sales realisation had also increased but was not sufficient to offset the increase in economic cost for both wheat and rice. Therefore these subsidy amounts after a brief decline during 1989-90 for wheat and 1990-91 for rice, have tended to increase enormously reaching a peak level of Rs.423.41QH and Rs.481.41 for wheat and rice respectively showing an overall increase of nearly 250% for wheat (annual average 50%) and 134% for rice. This clearly brings out the fact that the increase in subsidy for wheat is far above that of rice supplied through the R.P.D.S. and ITDP schemes.

NREP/RLEGP/JRY Scheme

Unemployment and underdevelopment particularly affect the poorer segments of the rural population and have been a major contributory factors to the high incidence of poverty in rural areas notwithstanding the overall economic development during the past. In order to alleviate rural poverty the Government of India has adopted a strategy of reducing inequality in consumption in favour of poorer sections of the population by increasing employment opportunities in the rural areas. The Government of India has sponsored the scheme of NREP and RLEGP. The objective of these schemes is to provide productive employment to everyone seeking it and assigning priorities to activities which contribute most effectively towards this purpose. The basic objectives of the schemes are:

(1) generation of additional gainful employment for the unemployed and underemployed both men and women in the rural areas.

(2) creation of productive community assets for direct and continuing benefits for the poverty groups for strengthening rural economic and social infrastructure, and

(3) improvement in the overall quality of life in the rural areas.

The J.R.Y. scheme was introduced in 1989-90 merging the earlier NREP and RLEGP programmes into one for bringing about improvement in the living standard of the rural population.

Foodgrains issued and the special subsidy passed on to the consumers under these schemes are as shown in Table 4.5.

Table 4.5: Subsidy incurred under JRY Scheme

Qty : lakh tonnes
Amount : Rs.Crores

Year	Wheat		Rice	
	Qty.	Amount	Qty.	Amount
1989-90	2.51	25.70	1.96	26.45
1990-91	0.04	0.62	0.32	3.03
1991-92	0.04	0.54	0.20	2.00
1992-93	1.73	36.07	1.47	17.47
1993-94	1.80	35.10	2.22	35.71

Source:- FCI Files

Although the JRY scheme was introduced in 1989-90, With the change in the government and the economic crisis in 1991, it was marginalised. It was revived by the Congress Government in 1992-93 and its operations were steadily increased since then. The subsidy amount increased by about 50% for wheat during the five year period, while the actual quantity showed much smaller increase. When we compare rice, a similar trend is visible; but both the quantity and the amount have increased much more in the case of wheat than in the case of rice.

Region-wise/State-wise Distribution of Subsidy

As already seen in the section on sales and using the average subsidy for commodity wheat calculated earlier and presented in Table 4.2, the region-wise subsidy computed is given in Table 4.6.

TABLE 4.6

STATE - WISE SUBSIDY AVAILED BY CONSUMERS ON WHEAT

Qty. lakh tonnes.
Value Rs.crores.

	1988-89		1989-90		1990-91		1991-92		1992-93*		1993-94	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
J & K	2.02	17.58	1.47	15.00	1.32	15.13	1.84	24.91	1.50	32.62	1.88	33.65
PUNJAB	0.55	5.08	0.73	8.52	1.27	15.09	1.99	21.64	1.50	32.62	2.57	34.39
HARYANA	1.23	11.04	0.19	1.95	4.23	15.17	2.57	33.11	1.50	35.08	6.21	81.11
U.P	6.23	56.83	4.59	46.98	6.37	62.23	8.45	105.07	7.50	165.93	13.01	195.22
DELHI	6.78	57.27	6.11	62.43	7.31	81.73	8.64	108.52	7.50	163.29	5.90	110.50
RAJASTHAN	9.35	99.34	6.63	75.16	6.50	84.66	8.55	128.46	7.50	178.36	6.57	147.02
H.P	1.26	12.02	0.94	9.99	0.82	10.43	1.27	17.46	1.00	22.73	1.19	22.24
A.P	2.63	18.75	1.85	17.21	2.23	18.50	2.02	23.44	1.50	36.53	2.39	38.89
T. NADU	4.59	31.64	3.86	36.19	4.63	36.00	4.34	47.47	3.50	78.57	4.29	61.98
KARNATAKA	3.62	29.15	3.09	31.17	4.63	46.08	5.03	65.79	4.50	100.32	4.20	74.19
KERALA	2.21	18.99	2.33	23.81	2.93	32.14	3.85	50.99	3.50	79.56	3.32	61.28
P.O. MADRAS	0.19	1.95	0.00	0.00	0.10	1.39	0.61	9.95	3.50	11.44	0.34	5.63
P.O.VIZAG	0.00	0.00	0.16	1.72	0.02	0.06	0.26	4.35	0.20	4.84	0.13	1.52
M.P	3.59	41.90	4.10	47.51	3.47	45.22	4.19	60.92	3.50	80.05	4.32	80.31
MAHARASHTRA	12.34	113.05	18.06	136.13	13.80	155.64	15.52	233.12	12.50	291.28	7.59	136.96
GUJARAT	797.00	86.11	5.16	62.35	7.63	98.59	9.50	142.21	7.00	162.56	3.63	72.75
P.O.KANDLA	0.32	2.95	0.18	1.84	1.81	25.06	4.27	70.68	1.00	22.24	0.31	6.96
P.O CALCUTTA	0.83	5.49	0.46	4.40	0.68	5.47	0.55	5.05	0.50	11.86	2.05	36.20
ASSAM	2.55	19.12	2.22	23.22	2.61	31.64	3.09	45.90	2.00	44.97	2.74	52.21
BIHAR	7.41	71.00	6.16	66.75	5.28	69.50	6.36	85.66	5.00	115.61	6.63	121.77
ORISSA	3.04	28.24	2.75	29.69	3.08	39.30	3.46	48.17	2.60	56.33	2.99	56.12
NEF	0.90	8.24	1.58	21.94	1.67	26.24	1.68	30.32	1.30	31.21	1.30	28.43
W.BENGAL	9.89	96.64	9.65	102.03	9.54	221.17	9.29	136.45	7.00	158.00	7.76	149.11
H.QRS	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.90	0.00	0.00	0.15	2.83
TOTAL	89.52	832.38	77.27	826.04	88.93	1036.4	107.87	1564.0	84.00	1916.00	91.47	1611.3

Source:FCI files * Revised Estimates.

Table 4.7

STATE-WISE SUBSIDY AVAILED BY CONSUMERS ON RICE

Qty. Lakh Tonnes.
Value: Rs. Crores.

	1988-89		1989-90		1990-91		1991-92		1992-93*		1993-	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Valu
J & K	2.25	21.40	2.53	29.32	2.18	26.93	2.76	34.36	2.50	44.75	1.97	30.4
PUNJAB	0.90	4.66	0.44	5.34	0.40	5.14	0.43	5.91	0.50	7.30	0.95	29.3
HARYANA	0.37	3.46	0.36	4.64	0.20	2.85	0.29	3.54	0.30	6.15	0.26	4.7
U.P	4.11	39.09	3.42	38.87	2.67	33.18	4.16	49.16	3.35	54.39	2.81	50.5
DELHI	2.72	25.87	2.08	23.64	1.72	21.25	1.89	23.08	2.00	29.20	1.50	22.7
RAJASTHAN	0.21	2.60	0.19	2.59	0.24	3.38	0.38	5.61	0.30	5.48	0.25	4.2
H.P	0.66	6.36	0.56	6.43	0.56	6.93	0.73	8.98	0.60	11.00	0.78	11.6
A.P	8.54	91.22	9.10	111.39	14.53	182.65	22.99	293.23	22.00	348.62	23.04	372.5
T. NADU	7.66	73.35	7.17	83.42	7.47	95.51	9.90	229.73	9.00	140.17	8.75	135.9
KARNATAKA	5.84	61.51	5.89	72.40	6.33	66.77	6.24	80.35	6.00	101.90	6.33	107.5
KERALA	15.41	149.35	13.19	151.80	15.57	192.58	18.06	221.83	17.00	262.49	16.04	239.9
P.O. MADRAS	0.15	1.60	0.11	1.34	0.12	1.55	0.17	2.07	0.20	0.45	0.55	8.1
P.O.VIZAG			0.08	1.02								
M.P	2.41	31.57	2.46	34.37	1.87	26.42	2.72	40.97	2.50	47.48	2.49	42.6
MAHARASHTRA	7.85	78.66	7.05	83.13	6.12	76.64	7.42	95.29	7.00	114.82	6.53	104.6
GUJARAT	3.55	45.07	2.76	37.97	2.82	37.42	3.46	51.13	3.20	58.25	2.43	42.8
P.O.KANDLA	0.13	1.40	0.12	1.36	0.20	1.24	0.27	1.47	0.25	2.42	0.18	3.9
P.O CALCUTTA	0.86	10.81	0.77	10.86	0.81	11.42	1.04	16.68	1.00	16.16	1.25	19.8
ASSAM	5.37	60.19	4.98	63.78	4.97	61.39	5.45	77.09	5.45	101.54	5.09	83.8
BIHAR	0.54	6.48	0.47	6.97	0.28	3.70	1.04	14.48	1.05	18.70	1.30	20.9
ORISSA	2.57	37.12	1.89	30.29	1.87	29.83	3.25	52.11	3.30	63.63	2.18	41.3
NEF	4.99	77.85	5.11	81.12	5.16	72.20	5.95	100.31	5.50	114.38	5.49	106.7
W.BENGAL	8.40	83.10	5.54	66.11	6.10	76.22	7.16	90.99	7.00	117.72	4.64	77.0
H.QRS											0.15	1.1
TOTAL	85.07	912.72	76.32	948.16	81.19	1035.2	105.76	1390.4	100.00	1667.00	94.89	1562.

Source: FCI files

* Revised estimates.

The difference in average subsidy rates across states depends upon the actual cost and off-take related to supplying the quantities in each region under various schemes and therefore various prices. This has been computed from region wise details of annual sales under various schemes in each region.

The per capita ration quota and retail price of rice and wheat vary from state to state. The sale of FCI's foodgrains depends upon the off-take which in turn depends upon local market conditions like price, availability and local demand. Table 4.6 and 4.7 gives details of the subsidy availed by different states for these two main commodities.

Chapter V

FINANCIAL PERFORMANCE

5.1 Introduction

In the preceding chapters, operational performance with emphasis on operational cost details was analysed with the limited data that was made available from F.C.I. In this chapter, however, the financial performance of F.C.I. is analysed mainly using ratio analysis method using the financial date available from the audited Annual Reports.

Audited financial statements reveal how business has prospered as they are the medium of evaluation of management performance. Financial statements are of vital importance for those who study the management of organizations whose activities may be connected with trading, manufacturing or investment.

Economists and investment analysts use the audited financial statements enclosed in annual reports. Such analysts are interested in factual data together with the company's profitability and growth factors. An analysis of the financial and other related data presented in the annual reports is a valuable document of facts and figures. However, the audited financial statements or the annual report do not provide all the relevant facts and figures required for a full-fledged study. Supplementary information is therefore sought to enable a full-fledged study. Financial statements are prepared and presented with a view to recording, reporting and reviewing the progress

made on the results achieved by the organization, reflecting or focusing on a combination of facts and figures which are based on the recording of business transactions, accounting principles and conventions, soundness of management judgements and competence of the administrators. The main financial statements used to investigate the financial position and soundness of the enterprise are profit and loss account, balance sheet, funds flow statement and profit and loss appropriation account. Such financial statements provide a snap-shot of the financial position of the enterprise which together gives an overall picture of the operation of the enterprise.

5.2 Trend Analysis

I. Funds flow Analysis

Sources of funds

An analysis of the funds shows that borrowing constitute the major source for F.C.I., followed by share capital and then to a very meagre extent by reserves and surplus. The reliance on borrowing is almost to the extent of 90 per cent, followed by share capital at around 10 per cent and reserves and surplus at never more than 0.5 per cent.

A closer analysis of the time series data on the various sources brings forth the following observations:

(i) Share capital

The subscribed share capital of the corporation shows an increasing trend in absolute terms and has peaked at

Rs.95,098 lakhs (refer table 1A) in 31st march 1993. But its relative share in the total funds employed has been coming down sharply and at the end of 1992-93 it was only 10.72 per cent. Reduced reliance on share capital as a source is a good sign for any corporation provided:

(i) the existing capital invested is used more optimally to boost returns and at least to sustain profits; and
(ii) if it is not at the cost of increase in other external sources of finance which are cost bearing.

But unfortunately at F.C.I. this is not the case. The reduced reliance on share capital has only contributed to greater reliance on the external sources of financing through borrowals. Consequently, the cost of external funds, especially the interest burden has zoomed over the years and stands at 34.96 per cent of the total expenses in 1992-93, as could be seen in table 5.2. Further more, the operational results very clearly establish that money has been pumped in through the borrowal route to off-set accumulated losses. Thus, reduced reliance on share capital and subsequent turn towards debt capital was the first step that triggered financial indiscipline.

(ii) Borrowings

Borrowing, both in the form of secured loans and unsecured loans has been the main source of funds the Corporation seems to have pursued. Analysis of data over the years shows that the dependence on secured loans as a means of finance has been increasing sharply from 1988-89, and at the end of 1992-93, it

accounted for 75.57 per cent of the total funds employed. These are loans and advances obtained from the banking sector against hypothecation of stocks of food grains, fertiliser, sugar etc. On the other hand, unsecured loans are loans from government of India and other scheduled commercial banks including State Bank of India. The data on unsecured loans (which has a relatively low cost) shows that it has come down from 42.54 per cent in 1989-90 to 13.70 per cent in 1992-93. This is also a cause for concern in so far as the loan servicing is concerned, since the funding structure is injecting a high cost on the funds sources and the relatively cheaper options seem fast drying up.

(iii) **Reserves and Surplus:**

This is a cost-free, internally generated source of finance. The financial performance of the Corporation clearly establishes the fact that reserves has never been the stronger point of the Corporation and it appears that except for the purpose of statutory minimum there is nothing left under that head for use in the operations. It could be gauged from table 5.I that reserves at the end of 1992-93 contributed only 0.001 per cent to the funds employed in the corporation.

Use of Funds:

The use pattern of funds of the Corporation highlights the following facts:

(i) **Fixed assets:**

The fixed assets show a decreasing trend not only in real terms but also in absolute terms, especially in the past four years. The fixed assets turn over ratio is none too encouraging

either (this is elaborated in the section on ratio analysis in this chapter).

(ii) Investments:

The Corporation being in the severe grip of cash losses, the investments seem to have been stabilised at a meagre 0.01 lakhs in the last six years of the study (refer item number 2 in table 5.1).

(iii) Net Current Assets:

The net current assets of the Corporation basically comprises stock of food grains, fertilisers, sugar at closing stock value after providing for depreciation which shows sharp fluctuations during the period (this could be observed in item number 3 of table 5.1).

II. Operating statement analysis

1. Sales

Though the turn over of the Corporation has been going up and has peaked at Rs.748719 lakhs it shows an inconsistent trend. An important point to be noted is that sales as a percentage of the total income has been declining over time from 72.15 per cent in 1983-84 to only 65.81 per cent at the end of 1992-93, as could be seen in item number 1 of table 5.2. The trade off here seems to be the counter effect contributed by increase in consumer subsidy which has almost reached 35 per cent in 1992-93. It could be seen clearly from table 5.2 that the increase in sales has in no way reduced the loss position of the Corporation.

2. Consumer subsidy

A close look at subsidies and other incomes shows a continuous increasing trend from Rs.136261 lakh in 1983-84 to Rs.388974 lakh in 1992-93. The contribution of subsidies to the total income was 34.19 per cent in 1992-93.(refer item no:2 of Table 2). Despite the increased level of subsidies, they hardly cover the interest out flow or the freight handling charges of the Corporation, a fact which could be inferred from table 5.2.

3. Cost of Sales

The figure of cost of sales which is normally calculated by opening stock plus purchases minus closing stock shows a persistingly increasing trend and has all along been more than the sales figures for the respective years. Interesting to note here is the fact that the ratio of sales to cost of sales is 0.96:1 in 1976 which has subsequently slipped to only 0.89 : 1 in 1994 as could be seen from item No.5 of Table 5.3. It should also be noted that the Corporation manages to cover this cost of sales components by using the consumer subsidy and other miscellaneous income from operations thereby keeping itself afloat. The long term sustainability of such an existence very much impinges on the various policy level decisions which have direct impact on the operations of the Corporation. This aspect is also discussed in detail in the Section on ratio analysis.

4. Expenses

The analysis on expenses is covered at length under the section on ratio analysis in this chapter.

5.3 Ratio Analysis

To get the inner significance of the figures appearing in these statements as well as to get an inside view of the financial soundness and the relationship between two or more figures appearing in such financial statements, a tool and technique known as financial ratio analysis is employed. Along with ratio analysis of a single period in order to get an idea of the financial position it is necessary to make ratio analysis for a number of years. Trend analysis along with financial ratio analysis studied in conjunction helps in reviewing and judging financial soundness of an enterprise. Ratios are employed to analyse, test, measure and interpret solvency, stability, profitability, turn over, liquidity, operational efficiency and management of corporate finance. The main objectives of ratio analysis are to measure performance as a cause and effect relationship, to diagnose business situations and for future planning. The objective of ratio analysis can be broadly be classified into performance ratio, financial status ratio, and investment ratio. These ratios are important numerical indicators in judging the corporate, financial and operational performance. The main point lies with the selection of ratios. To be really helpful and practically useful the package of ratios has been designed as small simple and logically consistent, so that valid and fair comparisons can be made and useful results obtained.

I. Profitability ratios:

The profitability ratios calculate the profitability performance of enterprise in terms of gross profit, net profit,

net profit after tax (PAT), profit before tax (PBT) etc. with normally sales, assets etc. as the base. This gives rise to profitability performance ratios in the form of gross profit ratio, net profit ratio and the like. In this specific case since the Corporation has been reeling under severe losses for a continuous period, profitability ratios are irrelevant (in fact it shows a negative trend) which could be seen in item No. 1 and 2 of table 5.3)

II. Performance Ratio

(a) Asset Turnover:

The asset turnover ratio during the years under consideration in this study shows a very inconsistent trend which could be gathered from item No.3 of Table 5.3. Closer analysis indicates that the ratio has picked up in recent years. The organisation being of a unique nature with high fixed assets and operating stocks (including buffer stocks) the industry norms of the ratio are not applicable exactly.

(b) Debtors Turnover:

The ratio indicates the relationship between debtors position and the sales of the enterprise. Table 5.3 clearly shows that debtors position is alarming during most of the years and has been inconsistent during the period under consideration. The Corporation seems to be reeling under poor receivables management practices. Gearing up recovery with a well-thought-out collection mechanism is an a indispensable avenue that needs to be pursued. One of the reasons found for the poor rate of collection is the phenomenal outstanding from the state governments and the central

government towards the supplies made to public distribution system (PDS) and other schemes like JRY, ITDP, RPDS etc. The delay in getting the subsidies, reimbursements and regularisation of losses are also some of the pointers in this direction.

(c) Sales/Cost of Sales:

The ratio between sales and cost of sales rather shows a very peculiar trend. Item No. 5 of table 5.3 clearly shows that in a sale of Rs.1, more than 95 paise aggregates to the cost of sales. Thus, making it thrive mainly on subsidies. This is rather a very dangerous trend that has come in to focus of the analysis.

(d) Working Capital Turnover Ratio:

Working capital is the life line of any enterprise. Investing and re-investing working capital cycles and its effects on performance is part and parcel of the finance manager's job in the exercise of keeping the organisation alive. Any outside agency like banks, financial institutions, and other donor agencies who have committed funds, precisely bother about this. But unfortunately the Corporation seems fast getting into a squeeze which could be seen from item No. 6 of Table 5.3. The data shows a fluctuating trend and has in fact exceeded the turnover during some of the years under consideration. These are clear signals which could lead the company to a trap. Addressing working capital requirements by properly assessing the cycles is the need of the hour to get out of the morass.

(e) **Finished goods to sales:**

The Corporation being in the business of stock trading maintains high levels of finished goods obviously higher than the sales figure during most of the years under consideration. This is not a healthy trend since holding stocks in the finished goods form is actually money blocked in stocks which again prevents it being used in other cycles of the business process. There is also a fixed cost involved in carrying huge stocks and the analysis concerning this has been made under the earlier chapters on storage and stocks.

(f) **Depreciation to fixed assets:**

The ratio of depreciation to fixed assets is almost to the tune of 10 per cent. There again it behaves in a very inconsistent trend and in the later part of the years under consideration it has been increasing. The policy level changes and the peculiar forms of providing for depreciation could be some of the reasons.

III. Financial Status Ratios

Financial status ratios implies the relationship between key variables like net worth profit, capital employed, current assets, current liabilities, debt, equity, sales etc. The objective is to arrive at the factors like stability, liquidity, realisable worth, return on investment, solvency etc.

(a) **Profit to Capital Employed:**

As mentioned earlier, any profitability based comparison may not make sense for analysis in this study of the Corporation.

Thus invariably profit to capital employed and profit to net worth ratios are either negative or very negligible, close to zero.

(b) Current Ratio:

It is a very important ratio which establishes the relationship between current assets and current liabilities and gives an estimate of the liquidity of the enterprise. But the general form of current ratio would not be suitable for a Corporation in which stocks are their main stay, or so to say a fixed asset rather than a current asset. Hence, to make the interpretation meaningful the stocks have been excluded from current assets and bank borrowing have been included in the current liabilities to obtain the current ratios. Only in such an improvised form the current ratio shows a trend in the region of 1:2. But even here it is far above the ideal limits.

(c) Debt-equity ratios:

The debt-equity ratio is basically a long-term stability ratio that establishes the relationship between outside liabilities and sources in the form of equity. This shows a huge fluctuating trend in the period under consideration and is close to 10:1. However, it seem to have reached tolerable levels in the late' eighties when it touched 2.5:1. This trend has been fuelled mainly due to the high external borrowing. Servicing the debt has also become very difficult in the compelling circumstances. Prima facie, it seems that the Corporation has gone much below the level to make it a bankable proposition.

That would be one reason why government guarantees have become sine qua non in its borrowing in recent years.

(d) Sales to current assets:

The ratio of sales to current assets also shows a very inconsistent trend, often sales going below the level of current assets. This is not good news for the Corporation which should take up the asset management function a lot more seriously.

IV. Expenses Ratio

The expenses ratio establishes the relationship between expenses on account of freight, handling charges, manpower, interest cost, depreciation, etc., to sales. It throws more light on the cost control factor in the managerial decision making. This has been analysed in a disaggregated fashion in Chapters 2 and 3 under the respective sections.

(a) Freight Expenses:

The freight expenses as a percent of turnover has been showing a bullish trend all through and has touched 11 per cent in March 1994 as could be seen from item No.14 of the Table 5.3.

(b) Handling expenses

The handling expenses which was 2 per cent of sales in March 1976 has almost doubled at the end of March 1993.

(c) Manpower Expenses:

There is no let up on this either. The manpower cost which was around 3 per cent in March 1976 have almost tripled and is

hovering around 8 per cent in the early' nineties (refer Table 5.3).

There seems to be no comparison which we can make since the manpower cost is very much above the industry norms and practices.

(d) Interest cost:

The interest cost is the biggest outflow for the Corporation. It has touched 15 per cent of sales by March 1994 (refer item No.17 of Table 5.3) and the Corporation is finding it very difficult to service the debts. One can imagine the return the Corporation may have to come out with to arrive at an adequate debt-servicing level/viability.

(e) Depreciation to Sales:

Depreciation with the rules and provisions in force for the corporation adds upto only around 1% of the sales, which could be noted from item No.18 of Table 5.3.

(f) Other expenses:

The quantum of other expenses to sales is to the tune of 3 to 4% during the time series of the study which also add upto 80% of the operating cost.

(g) Operating cost ratio:

The operating cost ratio aggregates the expenses and finds the relationship with sales as the denominator. It is very clearly visible from item No. 20 of Table 5.3 that from an

operating cost of 17% on sales in March 1976 the cost levels have shot up to 39% in November 1994. Thus it shows no economising has been done on any front to boost the viability factor.

V. Stability Ratios

Basically, these are ratios that forge the relationship between stability parameters, like sales, net-worth, capital employed, fixed assets, etc.

(a) Sales to net-worth:

The sales to net-worth ratio behaves in an inconsistent way recording 11.25:1 at the end of March 1994. There are definite signals that show erosion across the years.

(b) Sales to Capital employed:

Item No.22 of table 5.3 clearly shows that the sales to capital position has been coming down drastically, which is a cause for grave concern for the long term stability of the enterprise. The fixed assets to capital employed position is also perched in the same plane.

VI. Productivity Ratios

It tries to arrive at ratios by taking into account the productivity indices/parameters.

(a) Sales/No.of Employees:

The number of employees for a given sales figure shows an adverse trend and it has reached 11% in March 1993 from 4 per cent in March 1984. (Refer item No.24 of Table 5.3). This is a

clear case to indicate that productivity is coming down at the aggregate level.

(b) Sales/employee costs:

This is again an important measure of productivity where the cost parameters are concerned. It tallies with the earlier analysis in Section 5 of Chapter III. Item no. 25 of table 5.3 clearly shows that it has been going down steadily from March 1984. The average employee cost ends up as a fraction in the analysis as could be seen from item no.26 of Table 4.3.

TABLE 5.1

FUNDS FLOW

Details	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94
ASSETS									
Fixed Assets	9256.71	4427.33	941	-1385.91	-1706.34	-666.12	-1574.97	-343.36	-907.38
Investments	0	92.4	-92.4	0	0	0	0	0	0
Net Current Assets									
a.Closing Stock	-4340.13	8132.95	-173854.45	-36759.71	145083.39	189162.3	-92160.5	177064.71	379146.36
b.Opening Stock	-931.34	15860.48	22160.87	-50048.48	-25931.49	14526.98	111844.83	55015.34	-139155.85
TOTAL ASSETS	3985.24	28513.16	-150844.98	-88194.1	117445.56	203023.16	18109.36	231736.69	239083.13
LIABILITIES									
Borrowings									
Secured	-5030.23	-98159.63	-154108.82	-96373.26	57780.69	248524.6	34762.9	227742.98	234806.42
Unsecured	-33036.35	120000	0	6243.08	58431.06	-46902.24	-17273.6	1080.97	124.67
Total Borrowings	-38066.58	21840.37	-154108.82	-90130.18	116211.75	201622.36	17489.3	228823.95	234931.09
Net Worth									
Subscribed Capital	42016.35	6800	3800	2775	2375	2332	1500	2749	1900
Reserves & Surplus	35.47	-127.21	-536.16	-838.92	-512.21	-2.33	-13.14	-4.21	-4.66
Total	42051.82	6672.79	3263.84	1936.08	1862.79	2329.67	1486.86	2744.79	1895.34
Loss	0	0	0	0	-628.98	-928.81	-866.83	167.92	2256.7
Total (Net)	42051.82	6672.79	3263.84	1936.08	1233.81	1400.86	620.03	2912.71	4152.04
Total Funds Employed	3985.24	28513.16	-150844.98	-88194.1	117445.56	203023.22	18109.33	231736.66	239083.13

TABLE 5.2

COMPARATIVE SUMMARY OF PROFIT & LOSS ACCOUNT (1984-85 TO 1993-94)

Sl.No	Details	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
1.0	Sales	475235.23	452686.03	549223.64	735422.70	748719.42	902300.89
	%ge of total	69.8%	66.9%	65.7%	66.9%	65.8%	66.3%
2.0	Consumer Subsidy and Others	205375.19	224114.32	286275.80	363713.81	388973.98	459425.90
	%ge of total	30.2%	33.1%	34.3%	33.1%	34.2%	33.7%
	Total (1+2)	680610.42	676800.35	835499.44	1099136.51	1137693.40	1361726.79
3.0	Cost of Sale						
3.1	Opening Balance	220281.32	183185.32	328295.63	517449.85	425271.36	602368.73
3.2	Purchases	493647.14	671212.64	820732.06	763586.97	1054977.73	1388822.70
	Total	713928.46	854397.96	1149027.69	1281036.82	1480249.09	1991191.43
	Less: Closing Stock	183185.32	328295.63	517449.85	425271.36	602368.73	981566.58
	Cost of Sale	530743.14	526102.33	631577.84	855765.46	877880.36	1009624.85
4.0	Gross Income [(1+2)-3]	149867.28	150698.02	203921.60	243371.05	259813.04	352101.94
5.0	Expenses						
5.1	Freight	50694.64	56530.14	67536.51	69689.20	64657.12	102743.50
	%ge of total	33.7%	37.2%	33.0%	28.6%	24.9%	29.2%
5.2	Handling Expenses	14084.93	15159.58	20093.15	25821.23	24779.60	29269.85
	%ge of total	9.4%	10.0%	9.8%	10.6%	9.5%	8.3%
5.3	Employees Remuneration and benefit	38646.64	29005.21	34762.12	36386.32	58316.81	51167.83
	%ge of total	25.7%	19.1%	17.0%	14.9%	22.4%	14.5%
5.4	Interest	26058.86	30770.52	62967.62	89816.71	90857.32	138755.68
	%ge of total	17.3%	20.3%	30.8%	36.8%	35.0%	39.4%
5.5	Depreciation	4722.97	4781.38	3371.18	3792.74	3589.33	3733.83
	%ge of total	3.1%	3.1%	1.6%	1.6%	1.4%	1.1%
5.6	Others	16412.09	15560.88	15985.84	18536.91	17724.67	26422.04
	%ge of total	10.9%	10.3%	7.8%	7.6%	6.8%	7.5%
6.0	Total (5.1 to 5.6)	150620.13	151807.71	204716.42	244043.11	259924.85	352092.73
7.0	Profit/Loss before Taxation (4-6)	-752.85	-1109.69	-794.82	-672.06	-111.81	9.21
8.0	Investment Allowance						
9.0	Provision for Tax	-86.07	-31.50	-136.32	-207.91		
10.0	Refund of Tax for earlier years					275.52	
11.0	Net Profit/Loss	-838.92	-1141.19	-931.14	-879.97	163.71	9.21

TABLE - 5.3 FINANCIAL RATIOS

Years --> As on 31st March	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PROFITABILITY RATIOS:												
PAT / Fixed Assets	17.19	17.05	12.48	14.74	13.31	14.93	12.30	12.26	15.15	21.20	21.80	26.99
PAT/Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Performance Ratios:												
Assets Turnover	17.19	17.05	12.48	14.74	13.31	14.93	12.30	12.26	15.15	21.20	21.80	26.99
Debtors Turnover	1.07	0.93	0.65	1.13	1.10	1.88	2.09	1.32	1.01	1.31	0.95	0.88
Sales/Cost of Sales	0.95	0.92	0.91	0.94	0.92	0.90	0.90	0.86	0.87	0.86	0.85	0.89
W.C Turnover	0.98	0.86	0.61	0.97	0.94	1.48	1.51	1.05	0.86	1.13	0.85	0.80
Fin.goods/Sales*12	9.98	10.16	14.78	9.07	9.09	4.42	4.63	8.71	11.31	6.94	9.66	13.06
Deprn./ F. Assets	0.05	0.05	0.05	0.05	0.06	0.12	0.12	0.13	0.09	0.11	0.10	0.11
Fin.Status Ratios:												
Profit/ Cap. Employe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Profit/ Net Worth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Current Ratio	1.13	1.74	1.86	2.60	0.95	1.12	0.86	0.74	0.83	1.36	1.56	-
Debt-Equity Ratio	11.19	13.73	15.88	6.19	5.93	3.81	2.65	3.89	6.01	6.10	8.33	10.59
Sales/ C. Assets	0.90	0.81	0.58	0.92	0.89	1.41	1.36	0.95	0.79	1.03	0.78	-
Expenses Ratios:												
Fr. Exps./ Turnover	0.09	0.08	0.09	0.10	0.11	0.11	0.11	0.12	0.12	0.09	0.09	0.11
Hanl.Exps./Turnover	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.03	0.03
M.P Exps./Turnover	0.03	0.04	0.05	0.03	0.03	0.03	0.08	0.06	0.06	0.05	0.08	0.06
Int.Cost/ Turnover	0.11	0.12	0.19	0.14	0.13	0.08	0.05	0.07	0.11	0.12	0.12	0.15
Depcn./ Sales	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Other Exps./ Sales	0.02	0.03	0.03	0.04	0.04	0.02	0.03	0.03	0.03	0.03	0.02	0.03
Oper. Cost Ratio	0.28	0.29	0.39	0.33	0.35	0.29	0.32	0.34	0.37	0.33	0.35	0.39
Stability Ratios:												
Sales / Networth	9.89	12.79	14.49	16.84	7.89	7.64	9.65	8.32	9.67	10.49	10.23	11.25
Sales/Cap. Employed	1.29	2.22	4.00	2.40	0.96	0.68	0.94	0.75	0.89	1.41	1.14	0.99
F.Assets/Cap.empl.	0.09	0.12	0.22	0.13	0.05	0.04	0.04	0.04	0.05	0.06	0.05	0.04
Productivity Ratios:												
Sales/ No.of Empl.	0.04	0.05	0.04	0.07	0.07	0.09	0.07	0.07	0.08	0.11	0.11	0.14
Sales/ Empl.Cost	38.62	43.77	40.75	44.26	39.64	31.46	36.50	29.24	30.07	33.24	29.94	29.93
Avr. Employee Cost	0.00148	0.00174	0.00208	0.00232	0.00241	0.00282	0.00552	0.00418	0.00507	0.00535	0.00875	0.00787

Chapter VI

SUMMARY AND CONCLUSIONS

The major objectives of the study, as outlined in the introduction are to understand the nature and costs of various operations of the Food Corporation of India, to aggregate the operational costs and other items included in the computation of food subsidy and to analyse regionwise, commoditywise and schemewise subsidy. These analyses of physical performance is supplemented by an enquiry into the financial performance of FCI, based on ratios and trends. The methodology is essentially informed by simple statistical techniques to understand physical and financial performance. This study apart from relying on available published secondary materials, bases itself on a set of disaggregated unpublished information collected from FCI. Thus the study updates data used in other studies and enhances the analytical coverage by processing and inferring from hitherto un used material.

Food Corporation of India procures wheat, paddy and coarse grains directly from farmers who bring their harvested produce to nearby Mandis or collection centres. However rice is mainly procured as a levy from rice millers who purchase paddy from farmers.

Although the quantity of wheat procured by Food Corporation of India has varied from year to year, indirect purchase or lifting of stocks held by state procurement agencies for the Central pool helped FCI to maintain adequate stocks in consuming centres. The

increase in direct procurement by FCI has been low in comparison with state procurement agencies which have shown good performance in terms of quantity procured. Punjab, Haryana, UP and Rajasthan supply 90% of the entire wheat procured by all agencies.

Procurement of rice shows an almost steady increase from 1988-89 to 1993-94. Andhra Pradesh, Punjab, Haryana and U.P. together supplied 89% of the total rice procured for the Central pool in 1993-94. FCI procured 88.21% of this quantity.

Superior varieties of paddy are preferred for procurement by FCI as paddy is directly procured. But the levy rice from the millers clearly indicate that inferior varieties are being offered to FCI for levy procurement. Region-wise analysis of varieties of rice shows Punjab and Haryana supplying over 90% of super fine rice whereas eastern states of West Bengal, Orissa and Assam offer 90% common variety of rice. UP has shown a shift from 75% common variety in 1989-90 to 89% common variety in 1993-94. Andhra Pradesh, the largest rice supplying state offers 70% fine variety.

Procurement of coarse grains has been marginal because the procurement prices offered by procuring agencies is less than the market price of these commodities prevailing at the end of Kharif harvesting season and the quality of grains offered to government agencies is unacceptable.

Procurement costs or procurement incidentals include non controllable statutory and obligatory cost items viz. (a) controllable cost items including mandi charges purchase tax and gunny cost, (b) controllable cost like mandi labour forwarding

charges and internal movement and (c) charges to be paid to state agencies which includes storage charges, interest charges, administrative charges and guarantee fee. The total statutory cost (mandi charges + purchase tax) comes to about 10% of the total procurement price, and gunny cost varies from year to year. The controllable costs[5] are usually fixed by open tenders and most favourable rates are finalised. Hence in a sense these are also difficult to be cut down. Controllable item of cost are higher for other agencies than for FCI in all the states. The non-controllable costs[6] are similar for both FCI as well as the other agencies. Comparative analysis of incidentals in the four main wheat producing states shows that the figures for FCI are considerably lower than those for the other state agencies.

In the procurement of rice, there is no mandi charge or mandi labour cost since rice is directly levied from rice millers. Forwarding charges in Punjab and Andhra Pradesh are higher, internal movement charges in Uttar pradesh is high and the gunny cost is high in A.P, Tamil Nadu and Karnataka. Purchase tax at Rs.20.07 per quintal is the highest in U.P. and M.P. (Rs.11.47 per quintal) due to which procurement incidental charges are highest for U.P and M.P.

Procurement charges for paddy is high in Punjab (Rs.72.30 per quintal) compared to U.P (Rs.37.97 per quintal). Mandi charges in Punjab and Haryana compared to U.P and A.P. are also very high. The same is the case with purchase tax. Thus the high procurement incidental taxes for Punjab and Haryana may be attributed largely to these non controllable procurement costs.

Procurement prices for wheat, paddy and rice have increased by an annual average of 18%. The procurement cost increased more rapidly than procurement prices till 1991-92 after which procurement price has shoot up much faster than procurement cost. Reduction in fertilizer subsidy and increase in fertilizer price since 1991-92 have been considered while fixing the procurement price. Thus although most of the non controllable items of procurement are advalorem based, the other incidentals have been well under control of FCI indicating better performance.

Non controllable items of cost have shown an annual average increase of about 10% for both wheat and rice while that of paddy was 22%. Mandi cost in particular increased by 35%, purchase tax 18% and gunny cost 9% - rather high when compared to wheat and rice. Share of controllable cost began to show a marginal decreasing trend since 1991-92. Share of controllable cost for wheat to procurement cost rose to a peak of 23.80% in 1991-92 and gradually declined. The total cost of procurement has increased by 65.5% indicating an annual average of 11%. The controllable cost has increased at an annual average rate of 14.5%. Non-controllable costs had increased gradually by 61% (annual average of 10%).

In the case of rice controllable cost in total procurement cost shows a gradual but definite increasing trend. The non-controllable cost for rice is less than that for wheat as it avoids mandi charges. Forwarding charges as well as internal movement charges which form part of controllable costs show an increasing trend (annual average of 22% compared to non-controllable items of cost). This indicates poor performance of FCI in this regard.

The total sales for wheat on the whole except for the extreme fluctuations between 1989-90, and 1991-92, has kept within 10% of the base year figure. The share in the sale of wheat as percentage of total sales indicates a peak of 83.16% in 1989-90 and a low of 45.82% in 1993-94. The sharp decline in P.D.S. sales of wheat is due to sharp increase in issue price and easy availability in open market. To optimise stocks an unprecedented high quantity of 28.73 lakh tonnes was sold through open market sales.

I.T.D.P/R.P.D.S sales touched 11.56 lakh tonnes in 1993-94. Minor quantities of grain are exported as bilateral aid, or gift of the Government of India.

In case of rice, stable figures of sales are observed. In 1991-92 sales of rice reached the maximum mainly due to high open market price for rice which gradually declined with sharp increase in issue prices in 1993-94. Except for the decreasing years of 1992-93 and 1993-94 the P.D.S. share of total sales has remained around 83%.

Region-wise analysis of the sales turnover of wheat indicate that Maharashtra was the biggest consumer of wheat upto 1993, but Uttar Pradesh became the largest consumer in 1993-94.

In the case of rice Kerala was the single largest consumer in 1989-90 with a share of around 17% of the total rice sold by FCI but by 1993-94, A.P. which is a major producer of rice became the major consumer too. This is attributed to the high state subsidy

for rice in A.P. where the price of subsidized rice has become a politically sensitive issue.

Distribution cost consists of all items of cost from the end of procurement operation stage to the final sales from FCI godowns. Distribution cost have increased sharply between 1991-92 and 1992-93 touching 5% over base period cost (1989-90), Rs.78.33 per quintal, at an average annual increase of 11.5%.

Freight by far is the single largest component of distribution cost but its share in the total distribution cost has declined by about 4% during the 5-year period under consideration, indicating more efficient transport Planning and management. Interest charges (about 30% of distribution cost) have increased sharply with increased procurement prices and huge stocks by 1993-94. Storage charges had decreased both in absolute values as well as in percentage terms indicating better performance. Stable but slow, handling expenses also shows declining trend. Both storage and transit shortages have however increased during the period from 1989-1992 after which it shows a decline.

Foodgrains procured from surplus states mainly in northern India and A.P. are moved over long distances. Foodgrain is one of the main commodities carried by Indian Railways. The total quantity of grain moved by rail or road within or outside the state is observed to be more than the quantity procured in each year. Percentage of total movement to total purchase varied from 153 in 1988-89 to 111 in 1993-94 while the percentage of total movement to

total sales varied from 141 downward to 77 in 1991 and then increased to 149 by 1993-94.

Commodity wise analysis of percentage of movement to purchase of rice and wheat shows wider fluctuations for rice. The percentage of movement to sales of rice compared to that of wheat is higher and shows a steady trend. In short these percentages pertaining to rice is higher than that for wheat. Intra region transport from one storage depot to another, within the same region is mainly by road.

Average lead of rail movement which depends upon quantities procured, quantities distributed, and the locations for storage godowns indicates better performance, particularly after 1990-91. Quantity moved by rail increased from 180.96 lakh tonnes in 1988-89 to 240.04 lakh tonnes in 1993-94 and percentage quantity moved by rail increased from 73.49% in 1988-89 to 83.43 % in 1992-93 indicating increased usage of the cheaper rail mode of transport.

Substantial increase in the movement of foodgrains by rail Ex-M.P and A.P. is observed from 1991-92 onwards, and is reflected in low freight in movement cost figures for rice in comparison with wheat during the period. The cost of rail movement accounts for an increase in share of 84.94% of the total cost of grain movement in 1993-94 from 80.63% in 1988-89. Consequently the share of road freight has declined from 11.38% to 9.87% during this period. Commodity wise although the trend is similar for both wheat and rice the former shows a marginally faster pace of increase. Rail

demurrage, although is less than 2% of total transport expenditures shows a disconcerting upward trend. Diversion fees for diversion of rakes from central locations to nearby locations where stocks are to be stored as also railway siding charges indicate improvement in operational efficiency. The average cost for transport of rice is considerably higher than that of wheat mainly because it has to be transported over longer distances from producing areas to consuming areas in South and North-Eastern India. Secondary movements are also more for rice particularly since paddy in terms of rice rather than actual quantities is included with rice. Unit cost of movement for rail shows a rising trend particularly in 1993-94 when it shoots up mainly due the hike in rail freight rates.

The stock of wheat compared to rice has always been lower on 31st March as the procurement period for rice immediately precedes and procurement period for wheat is awaited at that time. Hence, analysis of closing stock position is irrelevant. Notionally stock of wheat and rice held by the corporation is divided into operational stocks which correspond to four months sales requirement and the rest as buffer stocks.

The age wise composition of stock does not reveal any trend as such.

The quantity of deteriorated categories of grain (C and D) on the whole has been kept under strict control. Damaged stock of food grains unfit for human consumption shows wide fluctuation

particularly in the stocks of below D category of wheat, performance in this regard is unsatisfactory.

The storage capacity of own covered category has gradually increased from 118.6 lakh tonnes in 1989 to 122.5 lakh tonnes in 1994. Paucity of funds from Government allocation is mainly cited as the main reason. The percentage of covered storage to total storage varies upto 94% in some years.

Storage capacity utilization depends upon the type of capacity available, the level of procurement and offtake. Therefore, seasonal fluctuations are very common. The average capacity utilization particularly of CAP which is not the preferred form of storage has vastly improved over the years - better physical performance. Storage cost has increased in absolute terms with increase in own storage capacity and depreciation.

Repairs and maintanence shows a fluctuating trend where as stores and spares shows considerable increase (per quintal cost has increased from Rs.5.55 in 1989-90 to Rs.11.32 in 1993-94). Rent on hired godowns is about 16% of total storage cost in 1993-94 whereas the same for 1989 works out to 15% of total storage cost and 88.17 lakh tonnes capacity or 40% of total storage capacity. Thus no relative increase in the component of rent among the other elements of storage cost is observed. It is clear that FCI's own storage facility costs are almost as high as that of rent for private hired godowns - poor performance. Apart from the right location and standard specifications of FCI's own godowns there seems to be no

rationale in building up storage capacity if private hired godowns facilities are available as and when required.

Handling costs incurred at mandis form part of procurement cost and handling at ports as port clearance charges for imports and direct cost of export operations. Handling at railheads and depots along with road movement from and to depots/railhead as well as inter depot movements are considered as part of distribution cost.

Different types of labour handling systems exist. Handling contract system is the predominant system with over 70% of total handling capacity each year. Departmentalisation of contract labour is an ongoing programme. The incidence of handling cost is partly fixed and partly variable in the case of departmental labour and direct labour payment system; whereas contract labour cost varies completely with volume of operations. Upgradation of workers as a direct payment scheme labourers and departmentalisation of contract labour in some hired godowns has resulted in major changes in the break-up of handling expenses among the different modes of labour in godowns. The handling expenses per quintal shows a clear rising trend from Rs.1.85 per quintal in 1989-90 to Rs.3.08 per quintal in 1993-94, ie. an annual average increase of 13% which does not contribute towards improving performance, if not worsen it.

Interest cost which is a major item in the distribution cost has been increasing at a very fast pace. Interest on bank borrowings which constitutes the bulk of all interest costs (92% in 1993-94) has increased from Rs.120.94 crores to Rs.1288.56 crores in 1993-94. This increase is due to the steep increase in procurement prices, volume of procurement and quantum of stocks as well as increasing dependence on costly bank borrowings.

Losses on shortages of foodgrains are of two types - transit shortages and storage shortages. Transit shortages are more than two-thirds of total shortages. The Transit shortages are more for rice than for wheat. An interesting point is that negative loss on net gain of wheat is observed almost every year. This is attributed to severe quality cuts at procurement centres, unlike rice which is procured from millers who supply FAQ grains and do not give room for any quality cuts.

Recoveries effected show an increasing trend in the case of millers and FCI staff while it shows a declining trend for railway claims on wheat. The unregularised shortages in absolute terms and as percentage of total shortages shows a rising trend. In 1993-94 it has aggregated to 77% of total shortages compared to the 14 year average of 39%. This indicates poor performance.

Cost of Carrying Buffer Stocks is accounted separately, distinguishing it from distribution costs. Average storage cost as a percentage of total cost works out to about 33%. Interest charges, has emerged as the single largest component of total cost of carrying buffer stocks (53.74%) by 1993-94 from a mere 16.4% in

1989-90. This is due to the rising quantum of buffer stocks. Administrative overheads and handling expenses show an increasing trend in absolute figures but a decreasing trend in percentage shares in total cost. In fact, the performance in this area has been poor.

Among the four categories of staff, category III account for over half while category IV accounts for over 35% of total staff cost. The staff strength has been decreasing during this six year period. The most drastic fall in staff strength, proportionately and in absolute numbers has been in category IV (9.2% fall). It is interesting to note that even as the scale and magnitude of the corporations operations were increasing, it functioned in various operations with less number of employees.

Although the staff strength has fallen, staff costs have sharply increased since 1992-93. The average monthly salary per employees or per capita staff cost per month per employee has gone up relative to average total cost by an annual difference in rates of 1.36%. This is further evident from the productivity in physical terms per employers (increasing from 516 metric tonnes per employer in 1988-89 to 701 metric tonnes per employers in 1993-94) in comparison with the administrative cost per quintal which has increased form Rs.2.64 in 1988-89 to Rs.7.06 ie. an annual increase of 27% in 1993-94. Storage establishment cost contribute almost half of the staff cost. Steep increases in employee cost figures appeared since the 1991-92 settlement of pay arrears.

In short, FCI exhibits good physical performance but poor financial performance in this regard.

From the Analysis of Consumer Subsidy it is clear that the economic cost of operations for wheat has increased by 73.7% and [illegible] for rice by 59.1%

On an average, the pooled cost of wheat works out to 60% of economic cost while the same for rice was 75%. Procurement incidentals as a share of economic cost shows a rising trend. Carry over charges paid to state agencies for wheat shows a decreasing trend since 1991-92 with the share reaching 3.1% of economic cost in 1993-94. Distribution cost for both wheat and rice have increased at an annual average of 5.75% for rice and 10.5% of wheat. Sales realisation also shows a rise for both wheat and rice.

Consumer subsidy for wheat has increased to Rs.176.15/quintal at an annual average of 14%. In the case of rice subsidy has increased to Rs.164 per quintal at an average 6.4%.

The scheme wise subsidy shows the same for rice is higher than that for wheat and the quantities of grains involved have also steadily increased.

Region-wise analysis of common subsidy shows U.P. having emerged on the main beneficiary in the case of wheat pushing behind Maharashtra. In the case of rice, Andhra Pradesh and Kerala are the main beneficiaries of Consumer subsidy. Thus, the physical

performance of FCI during the period 1989-94 suggests a mixed trend in terms of the different indicators that have been discussed. Analysis of financial performance has been used to supplement the study on physical aspects, taking a larger time period, namely 1983-1994. The results show a comparatively dismal picture.

Trend Analysis of financial data from audited financial statements reveal the following.

Although Subscribed capital shows an increasing trend in absolute term, its relative share in the total funds employed has come down sharply and at the end of 1992-93 was only 10.72 per cent. Reduced reliance on share capital has led to increased reliance on other expensive external funds causing interest burden to increase upto 34,96 per cent of total expenditure. In the short period between 1989-90 and 1993-94, the share of unsecured loans, from government and State Bank of India, which have relatively lower cost when compared to secured loans from the commercial banking sectors against hypothecation of foodgrain stocks, has come down from 42.54% to 13.70%. Thus, it is clear that the root cause of poor financial performance is the nature and structure of capital employed.

Fixed assets show a decreasing trend since the last four years, investments remain negligible and net current assets (stocks) shows a fluctuating trend, clearly indicating the beginning of poor financial performance.

Sales as a percentage of total income has been declining from 72.15% in 1983-84 to 65.81% in 1992-93. Increase in sales in absolute terms has in no way reduced the loss positions. Dependence on consumer subsidy is clear, although this amount is insufficient to cover even interest cost. Ratio of sales to cost of sales has come down to 0.89 in 1993-94 from 0.96 in 1975-76. Such a long term continuous decreasing trend raises questions of sustainability. Once again long term dependence on increasing consumer subsidy is evident. This is poor financial planning and cause for future poor performance.

Since there is no question of profit, profitability ratios are irrelevant. However, performance ratios are key to financial analysis of such an organisation. The Corporation shows poor performance in collecting receivables mainly from state governments for supplies made to PDS and from Central government for supplies made towards special schemes. Delay in obtaining subsidy amounts, reimbursements and regularisation of losses is clear indication of poor financial management.

Working capital management is yet another area of poor performance as it exceeds turnover in some years. Large quantities of working capital are often held down by buffer stocks. Along with poor receivables management this is financially not a good practice. Ways and means to optimise stocks needs to be probed.

Financial status ratios are analysed to arrive at factors like stability, liquidity, realisable worth, relevance on investment, solvency etc.

Current Asset - Current Liability ratio has been adjusted to suit FCI which has large stocks almost like fixed asset rather than current asset. Thus excluding stocks and including bank borrowings in the liabilities has been the practice. Even then the ratio often exceeds 1:2 - far above ideal limits.

Debt-Equity Ratio is closes to 10:1 in 1992-93 after it had reached tolerable limits of 2.5:1 in the late eighties. This is clear deterioration in the financial status of the Corporation. Increasing need for government guarantee for availing loans is a clear indication of this deterioration.

Poor asset management is evident from sales often going below current assets.

Expenditure Ratios reinforce analysis results obtained in chapter II and III. Freight-Turnover ratio has touched 0.11, handling expenses - Sales percentage has doubled to 4% by 1993 from the 1976 figure; manpower costs have increased three-fold during the same period although staff number show a decline, of late. Interest cost-sales percentage has touched 15%, depreciation - sales is hardly 1% and other expenses - sales percentage touched 4% - clear indicators of poor performance.

Stability ratios like Sales-Networth behaves in an inconsistent way and recording 11.25:1 at the end of 1993-94 indicating erosion over the years, declining sales to capital employed figures as well as low fixed assets to capital employed clearly indicate low stability.

Employee productivity ratios indicate that although physical (Employee-Quantity of stock handled) indicators has shown improvement, financial indicators show an adverse trend. Sales-Number of Employees figure has reached 11% in 1993 from 4% in 1984 and Sales-Employee costs have also declined.

Thus, the financial analysis and financial performance of FCI indicate poor performance on the whole. It is observed that the operational performance is also not very satisfactory. Under these circumstances, it could be summarised that the present operational practices and financial management are thoroughly inadequate to equip FCI to undertake the major tasks the organisation is conceived to perform. This is particularly true of the financial aspects since both the procurement price as well as issue price continue to be administered. Coming to the operational performance of the FCI, improvements are necessary and possible within the existing framework. Mapping the set of policy options before FCI and government falls outside the scope and objectives of this study. However, this study indicates the need for further enquiries in this direction.

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