Public Sector Reforms in Karnataka – A Case Study of the Turnaround of Mangalore Chemicals and Fertilizers through Strategic Partnership

Uma H. S.[1], Dr. Venkatesh B. S. [2]

1- Assistant Professor, 2-Associate Professor,

1-Vidhya Vardhaka Sangha First Grade College, Bangalore,

2- Maharani's college for Arts, Commerce and Management, Bangalore

Abstract

The article deals with the performance appraisal of Mangalore Chemicals and Fertilizers which was the very first state public sector unit in Karnataka to be privatized and its renewal through Strategic Alliance partnership by inducting the UB Group on its Board. The GOK should learn from its previous experiences that it is pertinent to take timely decisions and develop suitable modalities for disinvestment rather than let the SPSUs to be shut down.

This study based on Altmans' Z score analysis shows clearly that privatization has not only helped in the turnaround of the company but also has improved the operational efficiency.

Keywords: Public Sector Reforms, Privatization, Strategic Partnership, Z Score Analysis, Performance appraisal.

1. INTRODUCTION

Karnataka state has been a pioneer in the establishment of SPSEs. The erstwhile Mysore state launched various industrial ventures as Government undertakings to primarily exploit the available resources of raw materials and power in certain regions as well as to generate gainful employment opportunities. However in the recent years these SPSEs have become sick with the passage of time. The purpose for which some of the PSEs were started have lost its significance. The introduction of Economic Reforms in 1991 and the policies of privatization, globalization and liberalization sweeping the economy thereof necessitated the state Govt. to reconsider the justification of investments in the public sector. Added to this the increasing compulsions to spend on social sector induced a process of appraisal of PSEs on a case to case basis. After that, specific solutions like restructuring / merger and amalgamation / identification of strategic partner / strategic sale / privatization / closure has been recommended.

In this study an attempt has been made to analyze public sector reforms in Karnataka with special reference to disinvestment policy in case of select SPSUs. Although there are 6 different categories of enterprises the study confines to Manufacturing Sector only. This is because manufacturing enterprises being commercially oriented should be able to meet the market forces of competition to survive. While profitability should be a goal for all PSEs under the changed economic scenario it is more so for manufacturing concerns. The study could identify only two SPSEs which have been privatized in Karnataka viz: Vikranth Tyre and Mangalore Chemicals and Fertilizers Ltd (MCF). The objective of the study is to analyze the impact of Disinvestment on the performance of the chosen unit. The pre and post disinvestment performance appraisal of MCF is based on the statistical tool of Multiple Discriminant Analysis (MDA) also called as ' Z ' score analysis.

1.1 Brief profile of Mangalore Chemicals and Fertilizers

Initially called as Malabar chemicals and fertilizers private limited, it was incorporated in 1966 by Duggal enterprises to produce urea by using naphtha, a petrol based feedstock. In 1969 when Duggal enterprises withdrew from the project it was converted into a public limited company and renamed as Mangalore chemicals and fertilizers. The company produces a wide range of products in the present that include urea, di-Ammoninm phosphate, muriate of potash, granulated fertilizers, micro nutrients, soil conditioners etc. at its plant in Panambur in Mangalore. Infact it is the only fertilizer manufacturing enterprise in Karnataka.

The article covers only the case study of Mangalore chemicals and fertilizers which was the first state public sector unit(SPSU) to induct a strategic partner for the renewal of the company. Although the UB Group became a SAP in 1990 the revival of the company actually started only in 1996-1997 when the company's Managing Director was appointed by the UB group and the reigns of the company were taken over by the Group. Hence the study confirms to the period 1990-2.

MCF is a good example of turnaround of a public sector company through strategic partnership. Prior to the takeover by the UB group, the company's financial situation was weak on account of set-backs in production due to obsolete machinery, failure of plants which badly needed replacements, non -availability of raw materials and delays in supply due to govt. polices which resulted in low capacity utilization and a high cost of production. Besides the absence of an acceptable long term fertilizer policy that not only ensures a reasonable return to the industry but also assures the supply of the vital input at an affordable price was a major setback for the company. The introduction of a changed basis for determining the retention price in April, 1988 by the GOI further added to the company's burden. Due to the above developments, the company was forced to raise short term loans from banks at a high rate of interest to tide over the cash crunch in various years. To meet the debt commitments table.the company pledged all its movable and immovable properties to the FIs and raised loans to tune of 660 lakhs (IDBI - 330 lakhs, IFCI – 165 lakhs, ICICI – 165 lakhs).

In 1990 the company approached corporate bodies who could take part in the rehabilitation of the company and also participate in management and provide the necessary financial backing. GOK, IDBI; and Banks finally identified the UB Group for the purpose of rehabilitating the company. Thus the UB group was absorbed on the management of the company as a Strategic Alliance Partner (SAP) in 1990. After the induction of (SAP) a rehabilitation plan was drafted to revamp critical plant and machinery for urea production requiring capital expenditure to the tune of Rs73.4crs. Although the UB Group was willing to invest about Rs 35crs the remaining amount could not be mobilized. The bankers refused to provide additional accommodation due to its already high debt position.. Hence the plan could not be implemented.

Although the UB Group submitted a revised plan to FIs' in July 1993 there was no positive response to the commitment. Besides the industrial relations were very disturbed throughout Dec 1993 and Jan 1994 which made it impossible to take radical steps.The UB Group's proposal for a new revival package by inducting Southern Petro-Chemical Industries Corporation Limited (SPIC) and Emirates Trading Company as co-promoters was rejected by the GOK and GOI in 1994-95.MCF was referred to the BIFR in Oct 1994 since the net worth of the company was fully eroded. It was declared as a sick company and the IDBI was appointed as the operating agency for preparing a rehabilitation plan.

Since the plans to revive the company failed the BIFR directed the operating agency to issue an advertisement calling for bids to privatise the unit. Against the IDBI advertisement only one bid was received from KRIBHCO on 12.11.96 .by the BIFR. On the ground that the GOK did not agree to the substantial reliefs and concessions sought by KRIBHCO, the bid was rejected.

In its hearing in Mar 1999, the BIFR directed IDBI to consider the stand alone proposal for revival submitted by the company under the imitative of the UB group. The plan was finally accepted and implemented in the FY 1999- 2000.

As per the final plan of revival the UB Group entered into a onetime settlement with the financial institutions, (FIs), Banks and leasing companies, The total liabilities under the arrangement worked out to be Rs 206.7crs . In addition, the cost of revamping the aged plants worked out to be 175crs. The revamp was to be undertaken in two phases. In phase-1 of the revival plan the company invested Rs 53crs as capital expenditure. Of the total amount of 53crs, UB group invested 20 crs the remaining amount was to be financed by bankers. With this the UB Groups shareholding increased from 16.32% in 1991 to 30.44%. in 2001

The Phase-II Programme which involved the revamp of urea unit was completed by 2002 largely through resources from internal resource generation. The company simultaneously continued with its efforts to improve the performance of the company. The companies shares were enlisted in the FY 1997-98 in Bangalore, Mumbai and Chennai Stock exchanges.In 1998-99, the company undertook dematerialization of its existing shares as per the Depositaries Act of 1996. MCF introduced VRS Scheme in the FY 1998-99. This has enabled the company to reduce the number of permanent employees from 1250 in 1996 to 823 in 2005.

The study attempts to evaluate the pre and post privatization performance of the unit using Altman's 'Z" score analysis. The conventional "Ratio Analysis" used frequently to predict the financial performance of an enterprise is essentially univariate in nature and emphasis is placed on individual signals of impending problems. In general, studies based on ratio analysis emphasise the importance of different ratios as being the most effective indicators. There is no internationally accepted standard for financial ratios against which the results can be compared.

Therefore, Edwin. I. Altman (1968) used Multiple Discriminate Analysis (MDA) a statistical technique used to classify an observation in one of several a priori groupings dependent upon the observation's individual characteristics. The MDA technique has the advantage of considering an entire profile of characteristics common to the relevant firm. Combinations of rations can be analyzed together simultaneously in order to remove possible ambiguities.

Altman combined a number of accounting rations - liquidity, leverage, activity and profitability to form an index of profitability which proved to be an effective indicator of corporate performance for predicting bankruptcy. over the years many studies have adopted the Altman model for assessing the general performance of enterprises or individual units or corporate failure as for instance- Bevar (1966), Argenti John (1976), Gupta (1979) ,Ohison (1980) ,Sastry (1994), Dr.Vijayakumari.A (2004)

The data collected was first analyzed with the help of five accounting ratios. These different rations were then combined into a single measure – 'Z' score . The formula used to evaluate the 'z' score as propounded by Altman is

$Z = 0.012.x_1 + 0.014x_2$ to $0.033x_3 + 0.006x_4 + 0..999x_5$
Where, Z is the overall index.
X_i = working capital / total assets.
X_2 = Related earnings / total Assets.
X_3 = Earnings before interest and taxes / Total assets
X_4 = Market value of equity / Book value of total debt.
X_5 = Sales / Total Assets.
According to Altman (1968) The financial status of a company can be ascertained on the basis of its 'z' score .Infact he concluded in his eminent work that three different situations can be identified based on multiple discriminate analysis.

Table. 1 Altman's classification based on 'Z' score

No.	'Z' Score	Financial Status	Conclusion about the financial health
I	Below 1.8	Bankrupt zone	certain to fail
II	1.8 – 2. 99	Healthy zone	Uncertain to predict
III	Above2.99	Non Bankrupt zone	Financially very sound

The studies there afterwards have used the MDA model for largely assessing corporate performance, quality of credit , inter- firm performance comparisons etc. The objective of this study is to assess the financial performance of MCF before and after privatization.

2. RESULTS & DISCUSSION

The 'Z' scores with respect to Mangalore chemicals and fertilizers before and after privatization have been computed and presented in table (2) and (3). Table. (2) makes it clear that the 'Z' scores of the company show a marked change from 1997-98 onwards. Infact the 'Z' score being less than the threshold limit of 1.81 the company falls into the bankrupt zone prior to 1997-98. This was due to several internal problems such as negative profits, low sales, low capacity utilization due to power problems, non-availability of raw materials, labour strikes and frequent breakdown of machinery.

Table. 2 Data from Mangalore Chemicals & Fertilizers Ltd [Calculated on the basis of Prowess data base]

Month/Year	EBIT/Total Assets	Net Sales/Total Assets	Market Value of Equity/Total Liabilities	Working Capital/Total Assets	Retained Earnings/Total Assets	Altman's Score
Dec-90	-0.02	1.06	0.03	0.48	-0.19	1.32
Dec-91	-0.01	0.35	0.03	0.39	-0.06	0.71
Dec-92	0.02	0.74	0.02	0.34	-0.05	1.15
Dec-93	0.1	0.77	0.02	0.42	0.01	1.64
Dec-94	-0.15	0.65	0.02	0.24	-0.23	0.14
Dec-95	-0.07	0.95	0.03	0.11	-0.16	0.65
Dec-96	0	0.95	0.03	0.04	-0.09	0.86
Dec-97	0.07	1.1	0.02	-0.06	0	1.27
Dec-98	0.12	1.42	0.02	-0.01	0.05	1.88
Dec-99	0.14	1.38	0.01	0.05	0.08	1.99
Dec-00	0.49	1.74	0.01	0.29	0.48	4.36
1-Dec	0.14	2.16	0.02	0.38	0.1	3.21
2-Dec	0.08	1.59	0.01	0.26	0.03	2.19
3-Dec	0.05	1.16	0.01	0.25	0.03	1.66
4-Dec	0.05	1.16	0.01	0.22	0.03	1.62
5-Dec	0.07	1.58	0.02	0.35	0.04	2.31

The real recovery of the company started with the induction of the Managing Director by the UB Group in 1996-97 and the reigns of the Company being taken over by the company. The reconstitution of the Board of Directors with not less than 50% of the BODs comprising of Non-executive Directors and only 2 Directors (unlike 14-16 members earlier) to be appointed by GOK has brought in more professionalism in the management of the company. The changes inducted in the BODs has facilitated quick and timely decisions

Post-1997 the 'Z' scores fall generally in the healthy zone barring 2003 and 2004. The scores post-privatisation needs a close examination. In 1999-2000 the 'Z' score is 4.36 which needs to be specially analysed since the 'z' score is 1.99 in 1998-99.table(2) This is because the BIFR approved rehabilitation package came into implementation in the FY 1999-00. As a result the company entered into a onetime settlement with the consortium of Bankers. The total crystallised debts to be repaid to the banks as per the package totaled Rs 210 crs. The Bankers on the other hand agreed to release 5% retention of earnings of the company that was annually deposited by the company against its dues. The accumulated sum under the account amounted to 114crs. The gross profit for the year was 57.42.crs. The two sums up to a high of 171 crs As a result EBIT/total assets ratio as well as Retained earnings to Total assets ratio have a high scoring in the year. Thus the 'Z" score appears to be unduly high . However the net profit for the year is actually only 34.84.crs. The financial adjustments as a result of the onetime settlement enabled the company to solve the burden of accumulated debts.

The decreased values in 2003 & 2004 are largely the outcome of changes in government. policies for fertilizers. The retrospective recovery effected by the GOI for the 7th and 8th pricing periods, the change over from erstwhile unit retention price to group weighted average price implemented from 1.4.2003 adversely affected efficient companies like MCF as caps were put on urea production which resulted in costly shut downs and loss of production . Besides the sales declined from Rs. 571crs in 2001- 2002 to Rs. 564 crs in 2002-03 because of two successive years of drought in the state. Thus the unit has a 'Z' score in general between 1.8 and 3 after 1996-1997.Hence its financial viability as per Altman's Analysis can be considered healthy post-privatization .

Although the scores show fluctuating tendency the company's financial status is undoubtedly impressive in the present. Various physical indicators - production, sales / turnover and capacity utilization used in the study also further strengthen the analysis. The company has no accumulated debts or losses table (5). The table makes it clear that the interest burden is considerably high till 1995-1996. Interest burden constitutes as much as 96.34% of loss in 1995-1996, however the positive earnings from 1996-1997 onwards has not only taken care of the interest burden but also the working capital needs and capital expenses. MCF shows sustained improvement in turnover, sales and profits as shown in table (4) . The sales value has increased from 78Crs 1990-1991 to 879 Crs 2004- 2005 and from negative earnings it has made operating profits to the tune 41.05Crs. The down turn in the sales in 2001-2002 & 2002 - 2003 is because of severe drought conditions in Karnataka. Nearly 66% of the company's' sales being in Karnataka its sales were adversely affected. Fertilizer industry is still a highly regulated sector . The market area , farmer price and dealer margins of different fertilizers are determined by the GOI . The policies generally have been retrogressive and have not helped the growth of the industry. Although the retention price is expected to fetch 12% post tax return to the return to the manufacturer, given the cost escalation and the vigourous norms, the return is lower than the assured percentage. The industry as a whole has suffered on account of frequent changes in policy norms particularly in the 90s. the deeper has been the impact of these changes on naphtha based plants like MCF. Table.3 shows that the company's sales value has increased from 312crsin 1996-97 to 879.36 crs in 2004- 05, an almost three fold increase which strongly supports the findings . pbit also impressively changed.

Table. 3 Profit before interest and tax and sales value for MCF between 1990-91 and 2004-05. (Amount in crs)

Year	Sales value	PBIT
1990-91	78.41	-2.76
1991-92	224.73	6.74
1992-93	208.16	27.72
1993-94	164.51	-36.97
1994-95	218.83	-15.29
1995-96	219.95	-0.78
1996-97	312.79	20.38
1997-98	451.74	37.71
1998-99	520.26	52.37
1999-00	615.81	171.63 (Actual 57.42)
2000-01	680.8	44.77
2001-02	571.36	27.75
2002-03	564.03	24.58
2003-04	615.95	25.48
2004-05	879.36	41.05

Table. 4 Profit before interest and tax and sales value for MCF between

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Table. 5 Borrowing and interest burden of MCF between 1990-91 and 2004-05. (Amount in crs)

Year	Borrowings	Interest (crs)	Loss/profit (Crs)	% of Interest burden in Loss
1990-91	180,87	10.81	-73,98	14.61
1991-92	194,60.	21.49	-88.73	24.21
1992-93	210,70	23.69	-84.7	27.97
1994-95	236,63	21.92	-143,67	15.26
1995-96	263.90.	20.51	-21.29	96.34
1996-97	275.57	20.2	0.16	NIL
1997-98	29,5.91	20.38	17.33	NIL
1998-99	316,87	21.68	24.74	NIL
1999-00	97.67	0.81	34.84	NIL
2000-01	59,62	5.39	40.15	NIL
2002-03	49,52	7.71	20.58	NIL
2003-04	67.94	3.8	20.78	NIL
2004-05	47.91	3.02	22.45	NIL

Source : complied from the Annual Repots of MCF

* IC-Installed capacity (physical parameter)

*AP – Actual Production

* DAP & NP - Complex fertilizers

Table. 6 Capacity Utilization of MCF between 1990-91 to 2004-05

Year	Ammonia		Urea		Di-ammonium Phosphate		Ammonium Bi-Carbonate	
	IC	AP	IC	AP	IC	AP	IC	AP
1990-91	217800	88954	340000	140447	63500	36219	3600	2750
1991-92		152122	340000	262123	63500	146887	3600	5218
1992-93		119888		207738	63500	89896	3600	3906
							20;20:0	2527
1993-94		111628		189418		64949	3600	4616
							20:20.0	6095
1994-95		145203		250570		102740	3600	5268
							20:20.0	NIL
1995-96		137985		233032		84364	3600	5268
1996-97		199390		342343		130773	3600	7524
1997-98		159998		274509		151869	3600	5164
1998-99		198506		356797		171366	3600	8383
1999-2000		157375		288102	1,38,043	168465	3600	6681
2000-2001		191125		340,050	138,043	180229	3600	9,170
2001-02		197202		340002	DAP&NP	144642	3600	10,237
2002-2003		220377	380000	380000	220000	129965	15330	11037
2003-04		1,86,580		335030		92,742	15330	11309
2004-05		1,88,244		3,35,785		206,867	15330	11246

The capacity utilization has increased remarkably and additional capacity has been created for all fertilizers as shown in table (6). In fact MCF achieved 100% capacity utilization in urea production for the first time in 1996-1997. It is regarded as a milestone in the company history. The company has achieved more than 100% capacity utilization in case of urea, di-ammonium phosphate(DAP) and ammonium carbonate (ABC) . This was imperative since the subsidy on fertilizers as per the recommendations of Gokak committee is based on energy efficiency levels and feed stock differentials.

The energy consumption norms set for urea units can be achieved only when capacity utilization is more than 85%. Hence the company has devised various strategies such as fine tuning of operations of critical equipments like the reformer in urea production to prevent break downs and imports ammonia rather than manufacture it since the import price is lower. Consequently urea production has gone up. The Power problems has been tackled through captive power generation and reducing dependence on State Power Board . MCF has entered into an agreement with Office Cherifien Des phosphate (OCP), a Government of Morracco company, the largest producer of phosphatic acid in the world for the supply of phosphoric acid needed in DAP production which has reduced uncertainties of supply . Considerable effort has been put in to cut down operational expenses and finance capital needs through internal sources.

Industrial relations have turned out to be healthy. MCF witnessed a series of strikes and lock outs in 1990s. until 2001 the company had lost about 330 days of production on account of strikes and "Go-slow" tactics. Unions were affiliated to various political parties and union leaders exerted political pressures for wage hikes and incentives. However these problems have been tactfully resolved either by alienating problematic leaders or through VRS.A disciplined and committed workforce has been created through organisational changes , redeployment and retraining . These proofs further show that the company is on a sound footing after the takeover by UB group.

The company's growth trajectory is a light bearing experience. While the GOK has been speaking about its conviction to the policy of public sector reforms, not much has been achieved in reality. Although the process of reforms seems to have gained momentum after 2000 it has gone into cold storage after 2005. Excessive politicization, lack of transparency, years of neglect, delay in decision making and refuge in maintaining "Status quo" has resulted in large scale closure of enterprises including reputed enterprises like NGEF and Mysore Lamps. The revival of MCF through the induction of SAP is a classic example for what privatization can do for revival of State Public Enterprises.

The case study of MCF and its performance appraisal using various financial parameters proves beyond doubt that the company has not only been able to tide over the crisis it confronted in the early 90s successfully but also has been triumphant in its efforts to bring a turnaround of the company. The company shows a consistent improvement in its performance despite various constraints affecting the entire industry. It has successfully implemented the Revival scheme of the BIFR (dt-Dec 2000) and much of the financial commitments have been met through internal resource generation. The transformation of the company from a sick company to one with a net profit of 22.31Crs in less than 10years is no mean achievement. All these developments would have been impossible but for the financial prudency of the UB Group, the Strategic Alliance partner (SAP).

2. CONCLUSIONS

This study based on Altmans' Z score analysis shows clearly that privatization has not only helped in the turnaround of the company but also has improved the operational efficiency.

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