

MANAGERIAL EXCELLENCE IN IRON AND STEEL INDUSTRY OF INDIA

Dr Viplava Thakur, Assistant Professor, XISS, Ranchi

Abstract

The importance of indispensability of iron and steel in the modern human civilization is all too evident. We quite literally live on iron, for the core of the earth is largely made of it, and though there is not much iron in our body, we would soon die of hypo-chromic anemia, without the two or three milligrams of iron we need daily. Civilization largely depends on iron because of its cheapness and versatility, it is more important for the service of man among all the metals. "Locomotives and rails they run on the bridges they cross, ships motor-cars and bicycles, even wheel rims of the homely bullocks-cart are made of it, our clothes largely depends on textile machinery made of steel and the spinning wheel itself must have a spindle tipped with steel, our food grains would be less plentiful if there were no iron and steel for spades and hoes; our water less pure if there were no steel pipes.

Even the joys and graces of life; adventures into the sky and across the world through jumbo-jets and super sonic speed of communication, the vastly enlarged scope of recreation and delight, comforts slowly broadening down to the humble workers and peasants-take their origin from the successful manufacture of steel. Wherever we look we find the power of steel the typewriter and computer upon which this thesis was typed, the pins that kept the sheets of manuscripts together, the press in which it was printed, the electronic installations and even generators which supplied it power, diesel pumps and engines, fabrication for building frames whatever they may be – a thousand things in the life of to-day depends upon the iron and steel. And since we live in a world that is not yet fully civilized defense also must depend upon iron and steel.

Introduction

From a modest presence in 1947, the steel sector in India has acquired a significant place in the economy; 57 years down the line India is now currently ranked as the 10th largest producer in the world. The Supply of finished steel in India increased from a level of around 0.86 million tonnes in 1948, to around 23 million tonnes in 2001-02. The steel sector in India has a whole account of approximately 1 percent of India's GDP and 6 percent of manufacturing sectors output. Iron and steel contributes 2.4 percent of the weight in the wholesale price index and is one of the biggest revenue earners for the Indian Railways.

The Indian Steel sector comprises the integrated steel plants under steel Authority of India Limited (SAIL) which is the 9th largest steel company in the world. Tata Iron and Steel Company (TISCO) and Rashtriya Ispat Nigam Limited (RINL) besides a vast number of units operating as electric arc furnace units and re-rollers.

The Reforms of 1990s

The economic reforms introduced since 1991 have totally transformed the environment under which the steel sector had operated. Steel was removed from the list of industries reserve for the public sector. Price and distribution controls were disbanded in 1992. Removal of the Steel Development Fund and the levy on account of Engineering Goods Exports Assistance Fund constitute the other significant measures. The Steel sector has responded strongly to the positive stimulus of the reforms. In response to the Economic Liberalization a large number of green field capacities are getting

commissioned. Those already commissioned include Essar Steel Limited with a capacity of 2 million tonnes per annum, Lloyds Steel India Limited 6 mtpa, Jindal Stripes (1) Limited (5mtpa) etc. the total capacity of units at various stages of implementation or awaiting appraisal of financial institutions is around 13 million tonnes.

Growth Opportunity and Threat : -

The growth of Iron and Steel in India is of recent origin. In fact the establishment of Tata Iron and Steel Company in 1907 at Jamshedpur in Bihar currently in Jharkhand, was the beginning of Iron and Steel industry in India. Before Independence production of steel was roughly 1.5 million tonnes, subdivided as about a million ton in TISCO and about 500 thousand tonnes in Indian Iron and Steel Company and Mysore Iron and Steel Limited the other two steel plants. The Tempo of the expansion of steel started during the second five year plan with the construction of public sector Rourkela Steel Plant followed by Bhilai Steel Plant and Durgapur Steel Plant were sustained throughout the third and fourth five-year plan when another plant with an initial capacity of 4.0 million tonnes was setup at Bokaro in Bihar now in Jharkhand.

SAIL's four main integrated steel plants (ISP's) have a combined capacity of 10.2 MT of saleable steel (2) with the modernized units in these plants having stabilize of SAIL is in a position to supply superior grades of quality steel. The potential to increase the percentage of special / high value production in its product mixes remains and is being tapped aggressively. Given its wide product portfolio, SAIL has the advantage of meeting diverse customized requirements in the areas of Quality, Size, Type, Grade, Delivery etc.

All the Indians together shared about 5.6 MT of steel in 1965-66. Every Indian received just 11.6 KG of steel as his equal share. Even after 37 years the per capita consumption of steel in India is very low at about 26 kg compared to 132 kgs in China, implying an opportunity for significant growth in steel consumption. This should take care of the excess capacities in the industry over the medium run and provide the steel sector and SAIL a platform for growth. SAIL has exported around 8.5 lakhs tones in FY 03 with India's geographical proximity to the world's fastest growing market China. SAIL has tremendous opportunity to further improve exports.

The steel sector in India is highly sensitive to general economic conditions and vulnerable to unpredictable business cycles. After going through a very difficult phase in last few years the sector saw an upturn in 2002-03. Domestic demand for steel improved with public sector steel plants showing signs of revival and upbeat in prospect.

However the low growth in per capita consumption is greatly affecting the growth prospects of Indian Steel Companies and more particularly of the public sector steel plants. Highly volatile international prices have direct bearing on domestic prices particularly of that product. Any decline leads to squeezed margins, Inadequate availability of key raw materials such as coal, anti-dumping measures adopted in the USA and European union manpower rationalization etc. or some of the threat the public sector steel plants are facing. To focus on Human resource the most important aspect of organizational dynamics and managerial excellence is one of the thrust areas of the present research work. Providing opportunity for open interaction, communication and feedback have been highlights the HRD intervention, in the public sector steel plants communication exercises have been accepted as a continuous process in all the units under SAIL to keep the employees informed of the challenges being faced by the public sector steel plants and also to motivate them to take up higher responsibilities and general economic environment.

A brief review of the research works done in Indian Steel sector amply shows that these work suffer from so many limitations. First no work fully covers the organizational and management aspects of the public sector steel plants and secondly these works have become now quite old and not very much relevant in the context Changing internal and external environment of the steel sector in India. In view of this we have taken up a study of organizational dynamics and managerial excellence in the public sector steel plants during post reforms era.

FINDINGS

Some economic and non-economic aspects of iron and steel industry of India have been discussed in the foregoing chapters. It is now proposed to summarize the decision herewith.

Technologically the level of iron and steel making in India was roughly at par with that of Europe till well into the 18th century but the picture changed completely converter in 1856 and the basic open-hearth process in 1878 transformed iron and steel making process from a village craft to a mass production modern industry. The long alien rule thwarted all attempts of Indian ironsmiths to introduce new technology of steel making in their backyard furnaces. Although attempts were made to not fructify. Thus three quarters of century passed by us before Modern Iron and Steel Company in 1907.

With rapid strides in the field of communication and information technology the world has become very small and resembles a single market place. Obviously efficient producers and their qualitatively superior products and services can only compete, thrive and grow in this apparently geographically reduced world market. Another significant features of modern times in the emergence of new markets, new alliances and new customers every-day. In this background a business has to develop a clear strategic focus for responding to this competitive market place. A process driven organizational structure is needed where manufacturing finance and marketing hitherto occupying predominant place should give place to product development rule, service delivery and customer satisfaction. Therefore along with the realignment of organizational structure and job enrichment the introduction of a system of participative management is needed to enhance organizational effectiveness. Day by day environment is becoming variable, complex and change prone. Organizations are required to respond to these changes, immediately and accurately with an appropriate strategy. Goals are to be redefined and policies are to be modified according to the demand of the situation frequently. The evolutions of organizational structures assume myriad patterns because of forces operating in the environment. Globalization is forcing firms to consider the levels of vertical differentiation and of horizontal and centralization to serve both domestic and foreign customers better. Existing organizations are finding it difficult to handle the new problems with the existing apparatus. Therefore new patterns in organization design like project organization, matrix organization, network organization have emerged.

The project organization permits the existing organization to continue to focus on its regular business without disrupting its normal life and the project management concentrates on its attention on special assignment to complete the project in time within the cost and project goals and in accordance with established standards.

A matrix organization is built around specific projects and is consequently a web of relationships aimed at starting and completing specific projects. This arrangement combines project management and functional departmentalization giving the organization advantages of both the advantage of improved co-ordination especially the matrix form is a structural design geared to meet two primary organizational needs, first the need to specialize activities into functional departments that develop technical expertise and provide a permanent norm base for employees and second the need the have units that integrate the activities of these specialized departments on a programme, project, product or systems basis.

Thus it is a compromise between the traditional functional organization and the autonomous project organization.

The volume of working capital of SAIL also grew steadily. It increased rapidly during the financial year 1991-1992 and 1992-1993 but the volume of working capital declined by 8 % over the previous year in the year 1993-1994 and the trend continued up to 1996-1997.

Fixed capital of SAIL consisted of fixed assets, intangible assets and miscellaneous expenses including deferred revenue expenditure. The amount of fixed capital has been rising upward. As on

March 1993 it was Rs 865 million. It reached the level of Rs 7,912 million by the end of March 1998 and Rs 14,192 million by the end of March 1999 and registered more than 125% increase in 1986-1987 when the fixed capital of SAIL stood at Rs 35,601 million. The share of fixed capital was 79.43% of the total capital in 1967. It came down to 69.53% in the year 1999-2000 and 74.67% in the year 1996-1997 owing to huge employment of fixed capital in the capital structure of SAIL, the company had to pay a substantial amount as depreciation which could have added to the volume of net profit. The total capital of private sector company TISCO at the end of March 1990 was Rs 2,357 million. The share of loan capital and equity capital was Rs 847.3 million and Rs 1,509.7 million respectively. Their respective percentage share was 36 percent and 64 percent. The percentage share of loan continued to rise up to 1994-1995. The total capital at the end of March 1985 was Rs 7007.8 million out of which loan capital contributed Rs 3985.2 million and the equity capital Rs 3,022.6 Million. Their percentage share was 57% and 43% respectively.

The proportion of debt in the capital structure of SAIL should be reduced. The company should be provided with more equity. Efforts should be made to meet the requirements or working capital through short-term overdraft.

The profitability status of the public sector steel industry is very poor. The financial performance of HSL has been quite unsatisfactory since the year of its inception. The company incurred heavy losses in all year except 1964-1965 and 1965-1966. During these two years only small profits of Rs 21 and 17 million were earned. Even in matters of non-computed social and economic benefits of the community as a whole, HSL proved itself to be extremely inefficient in comparison with two plants, which were in private sector TISCO, and IISCO. The heavy losses of HSL were due to certain associated factors. Firstly the operating expenses on raw materials, finished and semi-finished products rose rapidly. Secondly, the other important factor was the provision of depreciation. SAIL paid a large portion of its gross profit to depreciation found owing to its high capital block per ton being about Rs 2000-2300 per ton.

Thirdly, the company also suffered from the heavy burden of interest as the company largely depended upon loan financing. About 55% of the total capital employed was financed through loans. The profitability status of SAIL is not much better than HSL. The company suffered losses in her initial year of 1992-1993 and 1993-1994. From 1994-1995 onwards the company earned good profits except for 1992-1993 and 1993-1994 when her losses stood at Rs 105.76 and Rs 214.53 crores.

The slightly better profitability status of SAIL can be attributed to external factors such as better debt equity ratio, series of price hike in steel prices from 1982 onwards, better investment as well as profit and loss pattern set for SAIL etc. nevertheless, SAIL has been able to transform the Image of public sector steel industry from a perpetual losing concern to that of profit making unit.

Taking into account the consistent profit making record of TISCO and rise in steel prices at regular intervals the profits of SAIL should have been much higher than what stands today. But like her erstwhile counterparts, SAIL too suffers from the problem of rapidly increasing operating expenses, burden of depreciation, burden of interest and under utilization of rated capacity.

In order to ameliorate the position, in the first place, a well-equipped material management board should be constituted and empowered to control the different stages of material employment. Secondly, secondly expenditure on remuneration and benefits to employees should be reduced. Thirdly, the capital block per ten should be minimized in order to reduce the heavy burden on depreciation. Fourthly, the use of loan financing should be restricted to a certain limit. The amount of share capital should be increased to meet the growing financial needs of the company. Reducing the volume of loan can minimize the heavy burden of interest. Finally, all efforts should be made to secure economy in operations by full utilization of capacity.

Steel is the backbone of industrial development. Stability of steel prices ensures stability in the price in general. It helps to contain inflation and stimulate growth. Steel is such a widely used material that its price stability serves as a discipline to other competing materials such as aluminum. Steel prices, are of such a vital importance to the economy that even in countries where free market conditions prevail regulation of its prices is deemed necessary in public interest.

In India, the price and distribution control over iron and steel has a long history. In 1939 control was introduced for the first time over supplies of iron and steel for war requirements. The iron and steel control order of 1941 provided for fixation of quotes on priorities, control of rolling program and distribution through licensed agencies. However for most part of the war period, there was no statutory price control over commercial supplies of steel, the prices were fixed only for war supplies by agreement between the main producers and the government. The period between 1941 and 1946 more or less was a period of complete control. The bulk of supplies were utilized by defense service, railways and other departments connected with war efforts. During 1991-1992 the system of issue of license of quota-holding departments to individual customers was abolished. All restriction on stockholders, except price control, was withdrawn. Only the restriction on procedures was restrained which meant that all indents were required to be routed through the iron and steel controller, control over pig iron and pipes was completely withdrawn. The result of decontrol however was not what was expected and the procedures piled up huge backlog of order. A system of decentralized control was, therefore, introduced.

During 1952-1955, certain categories like bars and structural were selected for decontrol at all levels. The result was not very satisfactory. It was found that producers had booked order mostly from stockiest for bar and structural to cover their production for several year. They were unable to deliver materials against fresh order even from priorities consumers like railways. The relaxations, were therefore, withdrawn in November 1955.

During 1984-1985, with increase in domestic production, the supply of certain categories and sections like bars and rods cased, as a result of which their sale through stockiest was relaxed. In other respects, there was complete control over the producers, stockholders and prices. During 1984-1987, the Raj committees report was received. The period, which covers the movement of steel prices from March 1964- December 1967 marked the end of retention prices and emergency of new period witnessing production decontrol of steel. The period marked the formation of joint plant committee on the recommendation of the Raj committee.

JPC had been formed since March 1964 to deal specially with the decontrolled items of steel. The controlled items of steel were put under the preview of iron and steel controller.

With the lifting of price and distribution control on all categories of steel by the government of India, JPC is now looking after the pricing and distribution of all categories of steel and pig iron with effect from May 1987.

In accordance with the announcement made by JPC on July 30, 1988 prices of various categories of steel were revised upward on account of increase in price of coal and other raw materials. At the instance of newly formed steel authority of India limited (SAIL) in 1983 the government granted a major revision in steel prices. A dual price formula was introduced whereby certain category of steel used by priority sectors were made available at a low price while other categories were allowed high prices. Thus heavy structural flats and railway materials saw virtually no increase in prices whereas substantial price increase were allowed on other items to eliminate the premium margins that had till been reaped by the traders.

During the period 1984-1988 there were again some revision in the base prices by Rs 175 per ton and government also imposed development surcharge of Rs 100 per ton.

In 1989 the prices were hiked again due to the government decision to augment the steel development. The prices were again revised in 1990, although there is no direct controls over the price of steel by the government the main producer comply with the wishes of the government. The most recent price hike was in December 2000.

The steel price and control over distribution has go multiple effects on our economy. Therefore, in the interest of the national development and maximum utilization of materials the price of steel should be determined after through and careful consideration. Cost reduction is the need of hour. The control on distribution plays an important role in curling comparatively less essential demands and brings temporary balance between demand and supply, but what had been happening in the field of steel control is amply demonstrated be the absence of any long term policy on the general field of controls.

SUGGESTIONS

Indian steel Industry has witnessed an eventful transition during the post independence period. The industry was chosen as a vehicle for all round economic development by founding fathers of independent India. Large-scale capacity creation in the integrated plants was reserved for the public sector. Prices and distribution of the integrated plants including the private unit of TISCO were also controlled. The industry was deregulated in 1992. The erstwhile mechanism founded on the four basic precepts of state regulation on capacity creation, import and export, price and distribution for the major producer were dismantled paving the way for a market generic industry. In view of the above background the suggestions to restructure the industry to achieve organizational dynamics and managerial excellence may be cited as follows:

Structural changes in the supply side of The Indian steel industry in terms of whole hearted participation of private capital and state-of-the art technologies require that the organizational structure are reshaped into a mixture of project and horizon corporations.

Organization at the plant level as well as the apex level has to become a learning organization-all organization involved in paradigm shifts, continuous improvement and continuous learning at individual group and organization levels. Management levels have to be curtailed down to make communication more effective. Authority levels are to be more flattened and more decentralized.

The mission of the organization must be very clear and well communicated to the employees of public sector steel plants. This may bring resistance from some quarters that are part of the old systems. To avoid this situation, management at plant level should involve all the employees in the process of change and redefine the mission unambiguously in changed scenario, empower the employees and let them take responsibility.

Human resource development in the steel sector is not up to the mark on account of inadequate programs for staff and executive development. In the private sector plants HRD has received the needed focus in the recent years.

Top and middle level managers in the public sector steel plants should strive for attitudinal change for creating an environment conducive to improving self-image, confidence and trust. In the current economic environment there is a need to build team based organization in the public sector steel plants. Excellence demands creation of conditions that motivates ones intellectual, emotional and moral grown also. Executive development programs should be frequently organized at the industry level of steel plants to develop the above virtues among executives. There is a need to boost consumption of steel at the domestic level by cutting down the cost and availability of cheaper steel in the domestic market. Marketing strategy of the Indian steel plants require rebuilding and adjustment with global trend. Efforts should be made to export scenario from "importer pull" to "exporter push" to derive the real benefits of globalization.

Indian steel industry should take cognizance of the fact that production of steel through very small sized units is not economical. The industry should make all out efforts to improve the quality of its products substantially and get into the production of high value products. The areas of restructuring in the Indian steel industry should include optimization of resources especially productive assets; energy optimization, technology and VAT based production duties.

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